



29/10/2025

Moorebank Avenue Realignment (SSI-10053)

**Urban Design and Landscape Plan (UDLP) with revised Appendix A Landscape Design Plans
Conditions E61-E64**

Dear Mr Owers

I refer to the UDLP with the revised Appendix A Landscape Design Plans (LDP) submitted to the Planning Secretary under condition E63 of SSD-10053. I also acknowledge and thank you for your response to the Department's request for additional information.

I note the revised Appendix A Landscape Design Plans:

- were reviewed by the Proponent, and no issues were raised to the Department;
- have been updated because of further consultation with Transport for NSW (TfNSW) and ESR Australia and New Zealand;
- relate to limited changes to the retaining wall amendments, intersection curb realignment, and southern section realignment and have been signed off by TfNSW on 26 March 2025;
- do not result in any other changes to the original UDLP with accompanying Tree Survey approved by the Department under SSI-10053-PA-46 on 8 January 2025;
- maintain the information required under the relevant conditions of approval; and
- have been submitted to the Department for approval as a requirement of the original UDLP approval letter dated 8 January 2025 under PA-46.

Accordingly, as nominee of the Planning Secretary, I approve the Urban Design and Landscape Plan revised Appendix A Landscape Design Plans, Issue 2 dated 21 February 2025, updated by National Intermodal, under condition E63 of SSI-10053.

I remind you that the approved UDLP must be implemented in accordance with condition E64. If there are any further revisions to the approved UDLP and Appendix A LDP because of further consultation with TfNSW and Liverpool City Council, you are required to submit the revised UDLP and/or revised LDP to the Department for approval.

Also, I remind you that if any further comments are received by the Registered Aboriginal Parties that require updates to the approved UDLP and approved Appendix A LDP, the revised UDLP and/or revised LDP is to be submitted to the Department for information.

Please note that if there are any inconsistencies between the approved revised Appendix A LDP and the conditions of approval, the conditions will prevail.

Also, please make the UDLP and the revised Appendix A LDP with the Department approval letter publicly available on the project website at the earliest convenience.

If you have any questions, please contact Matt Wood at matthew.wood@dpie.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Shiraz Ahmed', with a long, sweeping horizontal stroke extending to the right.

Shiraz Ahmed
Team Leader - Social Infrastructure Projects Unit
Infrastructure Management

As nominee of the Planning Secretary

The Planning Secretary
The Department of Planning, Housing and Infrastructure
4 Parramatta Square, 12 Darcy Street
Parramatta, NSW, 2150

29 August 2025

Dear Planning Secretary,

RE: Moorebank Avenue Realignment (SSI-10053) Urban Design and Landscape Plan - Updated Landscape Plans

On 8 January 2025 the Planning Secretary for the Department of Planning, Housing and Infrastructure (DPHI) approved the Urban Design Landscape Plan (UDLP), under Conditions E61-67 of the Moorebank Avenue Realignment (SSI-10053). The approval correspondence stated the following:

If there are any revisions to be made to the approved UDLP with accompanying landscape plans because of further consultation with TfNSW and LCC, you are required to submit the revised plans to the Department for approval.

The Landscape Plans (submitted as Appendix A of the UDLP) have since changed (the Updated Landscape Plans) as a result of further discussions with Transport for NSW (TfNSW) and ESR. The Updated Landscape Plans have been signed off by TfNSW on 26 March 2025 and provided within **Attachment A**.

The changes to the plans are detailed design related and generally do not relate to landscape features (i.e. landscaping locations, species type or sizing). The key changes to the Updated Landscape Plans, from the Landscape Plans approved by the Planning Secretary within the UDLP are as follows:

- Intersection redesign – curb realignment for all four intersections and intersection A driveway realignment driven by TfNSW safety requirements.
- Southern realignment – road carriageway realigned within the existing embankment requested by TfNSW to future proof the road for interface with the potential Cambridge Avenue upgrade.
- Removal of a retaining wall – multiple retaining walls removed (or optimised) and replaced with swales/batters driven by ongoing value engineering refinement and ESR engagement.

The Updated Landscape Plans provided within **Attachment A** of this correspondence are proposed to replace those in Appendix A of the UDLP. No changes to the UDLP¹ or the Tree Survey (condition E65) are proposed and therefore these documents have not been resubmitted.

National Intermodal seeks approval of the Updated Landscape Plans (replacing Appendix A of the UDLP) by the Planning Secretary in accordance with condition E63 (SSI 10053). Note that the update of this plan has been prompted by TfNSW (and ESR) engagement, which is consistent with the requirements of E62.

¹ Where there is any inconsistency between the UDLP and the updated Landscape Plans (Attachment A) these plans prevail to the extent of this inconsistency.

Please do not hesitate to contact the undersigned should you have any further questions. We look forward to hearing from you in relation to this matter.

[REDACTED]

[REDACTED]

[REDACTED]

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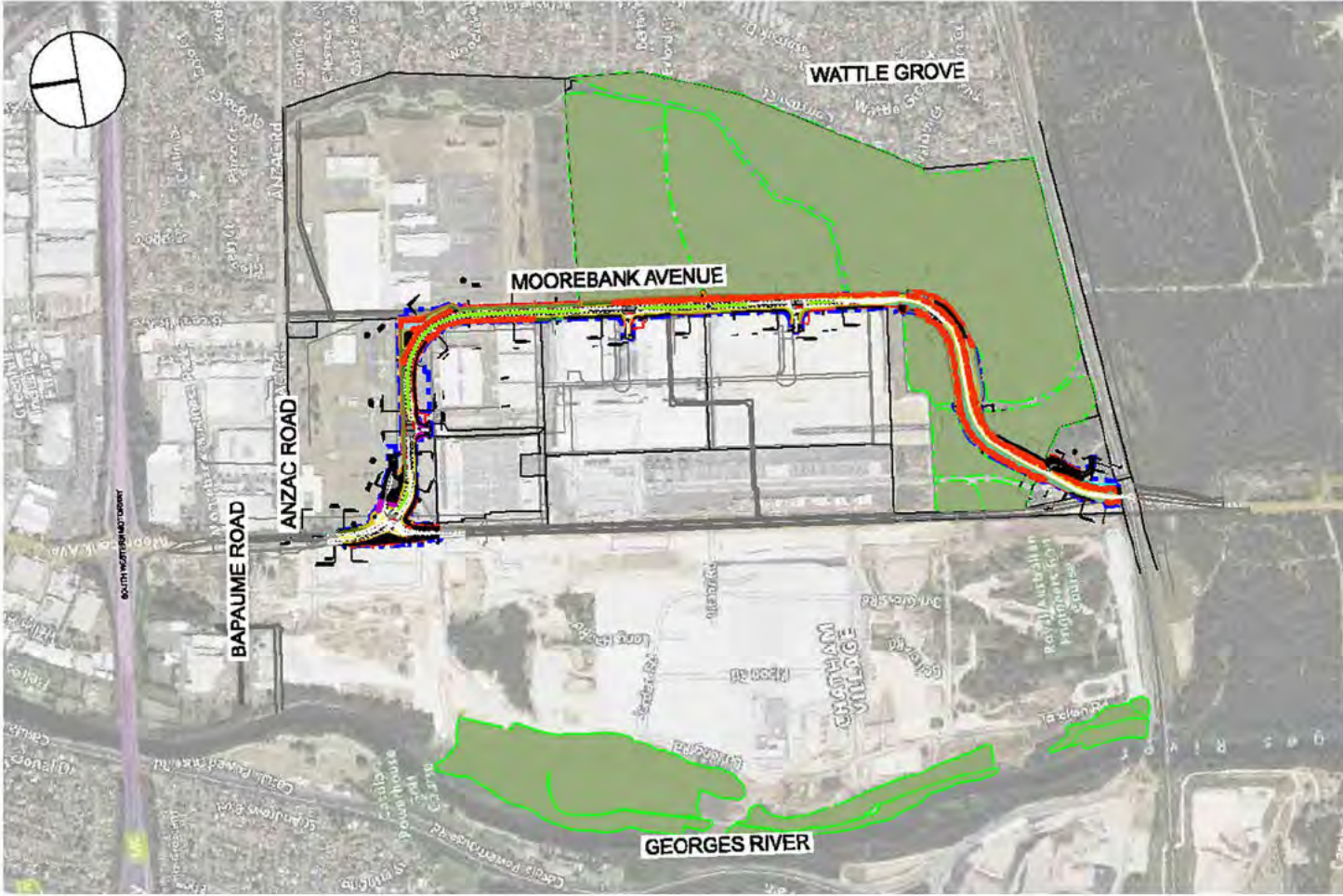
[REDACTED]

Enclosed:

Attachment A: Updated Landscape Plans

Attachment A: Updated Landscape Plans

MOOREBANK AVENUE REALIGNMENT WORKS (MARW) LANDSCAPE DESIGN



LOCALITY PLAN
N.T.S

OFFICIAL

FOR CONSTRUCTION

Transport for NSW These plans are accepted for construction. Nouhad Farah A/ Developer Works Leader Date 26/03/2025		Client NATIONAL INTERMODAL		Status FOR CONSTRUCTION		Project MOOREBANK AVENUE REALIGNMENT WORKS (MARW)		ARCADIS Arcadis Australia Pacific Pty Limited Level 5, 225 St Georges Terrace PERTH WA 6000 ABN 78 104 485 288 Tel No: +61 8 9213 6700 www.arcadis.com/au	
2 TCS DESIGN UPDATE		21.02.2025		Scales 1:1000		Current Issue Signatures		Title	
1 ISSUED FOR CONSTRUCTION		17.01.2025		Original Size A3		Drawn MG		TITLESHEET	
				Height Datum AHD		Designed MN		SHEET 1 OF 2	
				Grid MGA94 - 56		Checked ME		LANDSCAPE DESIGN	
				Filename: MARW-TRA-LA-DD-DWG-0001.Dgn		Approved DK		Drawing No. MARW-TRA-LA-DD-DWG-0001	
Issue Description		Date						Issue 2	

GENERAL

- THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH RELEVANT SPECIFICATIONS AND ENGINEERING REQUIREMENTS INDICATED ON PLAN.
- THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH, BUT NOT LIMITED TO DRAWINGS FROM THE FOLLOWING RELEVANT DESIGN DISCIPLINES: BRIDGES, GEOTECHNICAL, MISCELLANEOUS STRUCTURES, RETAINING WALLS, GEOMETRY, ALIGNMENT AND EARTHWORKS, DRAINAGE DESIGN, PAVEMENT DESIGN, FENCING, UTILITIES
- ALL VEGETATION OUTSIDE OF THE PROJECT CONSTRUCTION CLEARING AREA AND IDENTIFIED IN SPECIFICATIONS AND DRAWINGS IS TO BE PROTECTED AND RETAINED IN ACCORDANCE WITH CLAUSE 3.3 OF TfNSW SPECIFICATION D&C R179 'LANDSCAPE PLANTING'
- THE CONTRACTOR WILL ENSURE THAT PROPOSED LANDSCAPE TREATMENTS ALLOW ACCESS TO FINAL LOCATIONS OF ALL SERVICES INCLUDING MANHOLES, VALVES, FIRE HYDRANTS, SWITCHBOARDS, FIELD CABINETS AND ALL OTHER RELEVANT SERVICES.
- IMPORTED TOPSOIL SHALL COMPLY WITH THE REQUIREMENTS SET OUT UNDER CLAUSE 2.13 OF TfNSW SPECIFICATION D&C R178 IMPORTED TOPSOIL.
- ANY AREA NOT SHOWN AS REVEGETATION ON THE LANDSCAPE PLANS WHICH IS DISTURBED DURING PROJECT CONSTRUCTION IS TO BE REINSTATED WITH THE REVEGETATION MIXES. REFER TO PLANT SCHEDULES AND REINSTATEMENT DETAILS.

SITE CLEARING

- PROTECT FROM DAMAGE ALL EXISTING TREES, FENCES, BUILDINGS, OTHER STRUCTURES AND SITE FURNITURE IN ACCORDANCE WITH THE QA SPECIFICATION G40 SITE CLEARING.
- ALL VEGETATION OUTSIDE OF THE PROJECT CONSTRUCTION CLEARING AREA AND DRAWINGS IS TO BE PROTECTED AND RETAINED IN ACCORDANCE WITH CLAUSE 3.3 OF TfNSW SPECIFICATION D&C R179 'LANDSCAPE PLANTING'
- TREE PROTECTION SHOULD BE BASED ON ASSESSMENT OF TPZ AND EXTENT OF INCURSION AS DETAILED IN LA - DRG - 0201. WORKS WITHIN TPZ TO BE SUPERVISED BY A QUALIFIED PROJECT ARBORIST AS PER AS 4970:2009.
- ENSURE SOIL TESTING OF TOP SOILS AND SUBSOILS IS UNDERTAKEN AND AMELIORATION UNDERTAKEN IN ACCORDANCE WITH SOIL SCIENTIST'S RECOMMENDATIONS AS DEFINED IN R178 AND R179.

UTILITIES

- LOCATE AND PROTECT ALL UNDERGROUND UTILITIES PRIOR TO ANY EXCAVATION. MAKE GOOD ALL DAMAGE TO EXISTING WORKS CAUSED BY THE ACTIVITY OF THESE WORKS.
- GENERALLY TREES AND SHRUBS GREATER THAN 5.0M IN HEIGHT MUST NOT BE PLANTED OR SEEDED WITHIN A MINIMUM OF 5.0M OF OVERHEAD POWER LINES FOR 66KV AND 11KV LINES AN EASEMENT OFFSET OF 15M OR 10M RESPECTIVELY IS REQUIRED EITHER SIDE OF THIS. CONFIRMATION IN WRITING, AS TO OFFSETS, SHOULD BE GAINED FROM AUTHORITY PRIOR TO INSTALLATION.
- THE CONTRACTOR WILL ENSURE THAT PROPOSED LANDSCAPE TREATMENTS ALLOW ACCESS TO FINAL LOCATIONS OF ALL SERVICES INCLUDING MANHOLES, VALVES FIRE HYDRANTS, SWITCHBOARDS, FIELD CABINETS AND ALL OTHER RELEVANT SERVICES

DRAINAGE

- DRAINAGE CHANNELS HAVE BEEN DEFINED AS VEGETATED (ORGANIC FIBRE MESH LINED) OR ROCK OR CONCRETE CHANNELS. THESE ARE INDICATED DIAGRAMMATICALLY ON PLANS.
- FOR VEGETATIVE TREATMENTS TO DRAINAGE LINES, REFER TO DRAINAGE PACKAGE SM-01 FOR GEOMETRY AND SETOUT, AND LANDSCAPE DRAWINGS FOR SOIL PREPARATION AND SEEDING /PLANTING TREATMENTS.
- FOR ROCK OR CONCRETE TREATMENTS, REFER TO DRAINAGE PACKAGE SM-01 FOR GEOMETRY AND SETOUT

LANDSCAPE REQUIREMENTS

- ALL LANDSCAPE RE-VEGETATION AND PLANTING WORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH PLANS AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE TfNSW SPECIFICATION R178 AND R179.
- THE EXTENT OF WORKS SHOWN ON LANDSCAPE PLANS IS INDICATIVE ONLY BASED ON ENGINEERING DESIGN AND CLEARING EXTENTS. ALL DISTURBED AREAS ARE TO BE RE-VEGETATED IN ACCORDANCE WITH THE DOCUMENTATION AND WHERE GREATER THAN INDICATED ARE TO USE THE RELEVANT NATIVE COMMUNITY AS RELEVANT. PASTURE GRASSES ARE NOT TO BE USED.
- PLANTING AND SEEDING MIX REQUIREMENTS ARE SHOWN IN RELEVANT SCHEDULES ON DRAWING MARW-TRA-LA-DD-DWG-0122
- TREES ARE TO BE PLANTED OR SEEDED ONLY WHERE THEY ARE BEYOND CLEARANCES PER AUSTROADS GUIDELINES OR DEFLECTION ZONES OF BARRIERS. A MINIMUM OFFSET OF 3M FOR TREE PLANTING IS TO BE ADOPTED FROM THE REAR OF ALL BARRIERS INCLUDING GUARD RAILS AND WRSB
- TREES SHOW AS 0 ON PLANTING SCHEDULE ARE OPTIONAL SPECIES IN CASE THE NOMINATED ARE UNABLE TO BE PROCURED.
- HYDROMULCH ALONG BOUNDARY / FENCING IS ONLY TO BE UNDERTAKEN IN LOCATIONS WHERE EXISTING VEGETATION IS CLEARED AND SOIL EXPOSED. A MINIMUM WIDTH OF 3M IS TO BE PROVIDED. HYDROMULCH MAY BE SUBSTITUTED WITH 100MM SITE MULCH LAYER WHERE ADJOINING VEGETATION IS RETAINED.

SITE PREPARATION

- HERBICIDE APPLICATION FOR TREATMENT OF WEEDS WITHIN 10M OF WATERWAYS WILL BE CARRIED OUT WITH LOW TOXICITY HERBICIDES THAT WILL HAVE A LOW IMPACT ON THE ENVIRONMENT. SELECTED HERBICIDE FOR THESE AREAS SHALL COMPLY WITH THE REQUIREMENTS OF G36 ENVIRONMENTAL PROTECTION AND WILL BE PROVIDED BY THE PROJECTS ENVIRONMENTAL OFFICER PRIOR TO ITS APPLICATION

SPECIFICATIONS

- TfNSW SPECIFICATIONS R178 AND R179 ARE APPLICABLE.

PLANTING NOTES

- PREPARE PLANTING HOLES IN ACCORDANCE WITH THE PLANTING HOLE DIMENSION SETOUT IN CLAUSE 3.6.1 OF TfNSW SPECIFICATION QA R179 'LANDSCAPE PLANTING'
- AT THE BOTTOM OF EACH PLANTING HOLE, INCORPORATE A SOIL CONDITIONER AND FERTILISER AND MIX WITH THE TOPSOIL. REFER TO CLAUSE 2.5 OF TfNSW SPECIFICATION QA R79 'LANDSCAPE PLANTING' FOR SOIL CONDITIONER REQUIREMENTS AND TO TABLE 1 FOR FERTILISERS.
- UNIFORMLY AND LIGHTLY COMPACT THE BACKFILLING AROUND EACH PLANT AND FINISH FLUSH WITH THE NATURAL SURFACE LEVEL.
- WATER EACH PLANT IMMEDIATELY AFTER THE PLANTING OPERATION IS COMPLETE. THEREAFTER AT THE REGULAR INTERVALS AND THE QUANTITY OF WATER SET OUT UNDER CLAUSE 3.6.4 OF TfNSW SPECIFICATION QA R179 'LANDSCAPE PLANTING'
- FOR MASS PLANTING AREAS, PLANTS TO BE SET OUT IN A STAGGERED ARRANGEMENT.
- STAKING AND TYING OF CONTAINER STOCK SHALL BE IN ACCORDANCE WITH CLAUSE 2.4 OF TfNSW SPECIFICATION QA R179 'LANDSCAPE PLANTING'.
- ALL HYDRO APPLICATIONS SHALL BE UNDERTAKEN AS PER THE TYPICAL DETAILS IN THIS PACKAGE AND AS LISTED WITHIN QA R178 R179.
- TREES PLANTED WITHIN MEDIAN ARE TO BE CR

MAINTENANCE

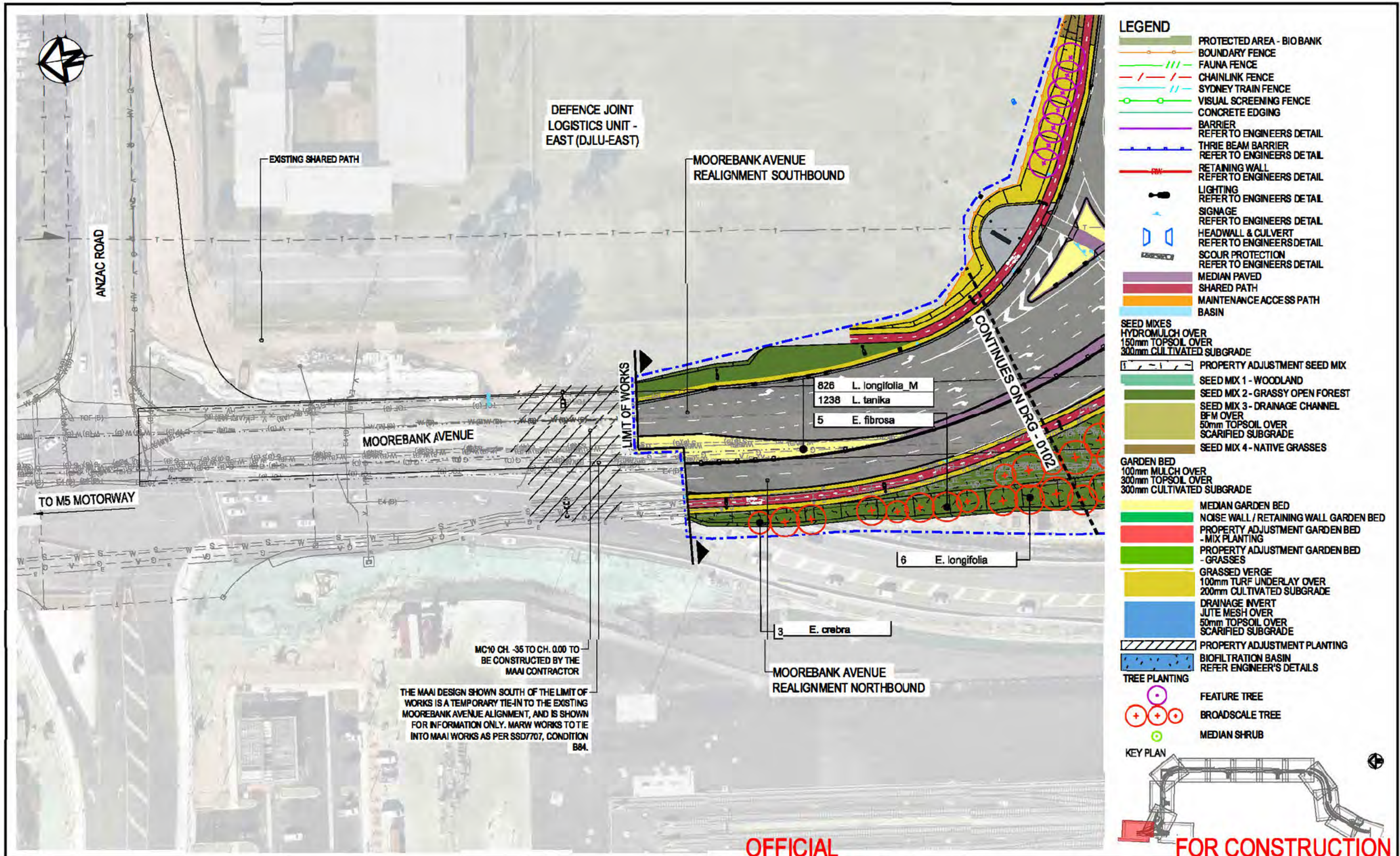
- WHERE GRASSES ARE PLANTED AROUND BRIDGE PIERS, SPECIES HAVE BEEN SELECTED TO PROVIDE A SUITABLE HEIGHT TO ASSIST IN SCOUR PREVENTION. GRASSES TO BE MAINTAINED AT A MINIMUM HEIGHT OF 0.5M

DRAWING NUMBER	DRAWING TITLE	SHEET NUMBER
MARW-TRA-LA-DD-DWG-0001	TITLE SHEET	01 OF 02
MARW-TRA-LA-DD-DWG-0002	NOTES AND DRAWING INDEX	02 OF 02
MARW-TRA-LA-DD-DWG-0101	GENERAL ARRANGEMENT PLAN	1 OF 14
MARW-TRA-LA-DD-DWG-0102	GENERAL ARRANGEMENT PLAN	2 OF 14
MARW-TRA-LA-DD-DWG-0103	GENERAL ARRANGEMENT PLAN	3 OF 14
MARW-TRA-LA-DD-DWG-0104	GENERAL ARRANGEMENT PLAN	4 OF 14
MARW-TRA-LA-DD-DWG-0105	GENERAL ARRANGEMENT PLAN	5 OF 14
MARW-TRA-LA-DD-DWG-0106	GENERAL ARRANGEMENT PLAN	6 OF 14
MARW-TRA-LA-DD-DWG-0107	GENERAL ARRANGEMENT PLAN	7 OF 14
MARW-TRA-LA-DD-DWG-0108	GENERAL ARRANGEMENT PLAN	8 OF 14
MARW-TRA-LA-DD-DWG-0109	GENERAL ARRANGEMENT PLAN	9 OF 14
MARW-TRA-LA-DD-DWG-0110	GENERAL ARRANGEMENT PLAN	10 OF 14
MARW-TRA-LA-DD-DWG-0111	GENERAL ARRANGEMENT PLAN	11 OF 14
MARW-TRA-LA-DD-DWG-0112	GENERAL ARRANGEMENT PLAN	12 OF 14
MARW-TRA-LA-DD-DWG-0113	GENERAL ARRANGEMENT PLAN	13 OF 14
MARW-TRA-LA-DD-DWG-0114	GENERAL ARRANGEMENT PLAN	14 OF 14
MARW-TRA-LA-DD-DWG-0121	PLANTING SCHEDULE	01 OF 02
MARW-TRA-LA-DD-DWG-0122	SEED MIX SCHEDULE	02 OF 02
MARW-TRA-LA-DD-DWG-0201	TREE PROTECTION DETAIL	01 OF 04
MARW-TRA-LA-DD-DWG-0202	MEDIAN PLANTING DETAIL	02 OF 04
MARW-TRA-LA-DD-DWG-0203	BROADSCALE PLANTING DETAIL	03 OF 04
MARW-TRA-LA-DD-DWG-0204	TYPICAL DRAINAGE	04 OF 04
MARW-TRA-LA-DD-DWG-0210	TYPE 1 RETAINING WALL DETAIL	01 OF 04
MARW-TRA-LA-DD-DWG-0211	TYPE 2 RETAINING WALL DETAIL	02 OF 04
MARW-TRA-LA-DD-DWG-0212	VISUAL SCREENING DETAIL	03 OF 04
MARW-TRA-LA-DD-DWG-0213	BASIN DETAIL	04 OF 04

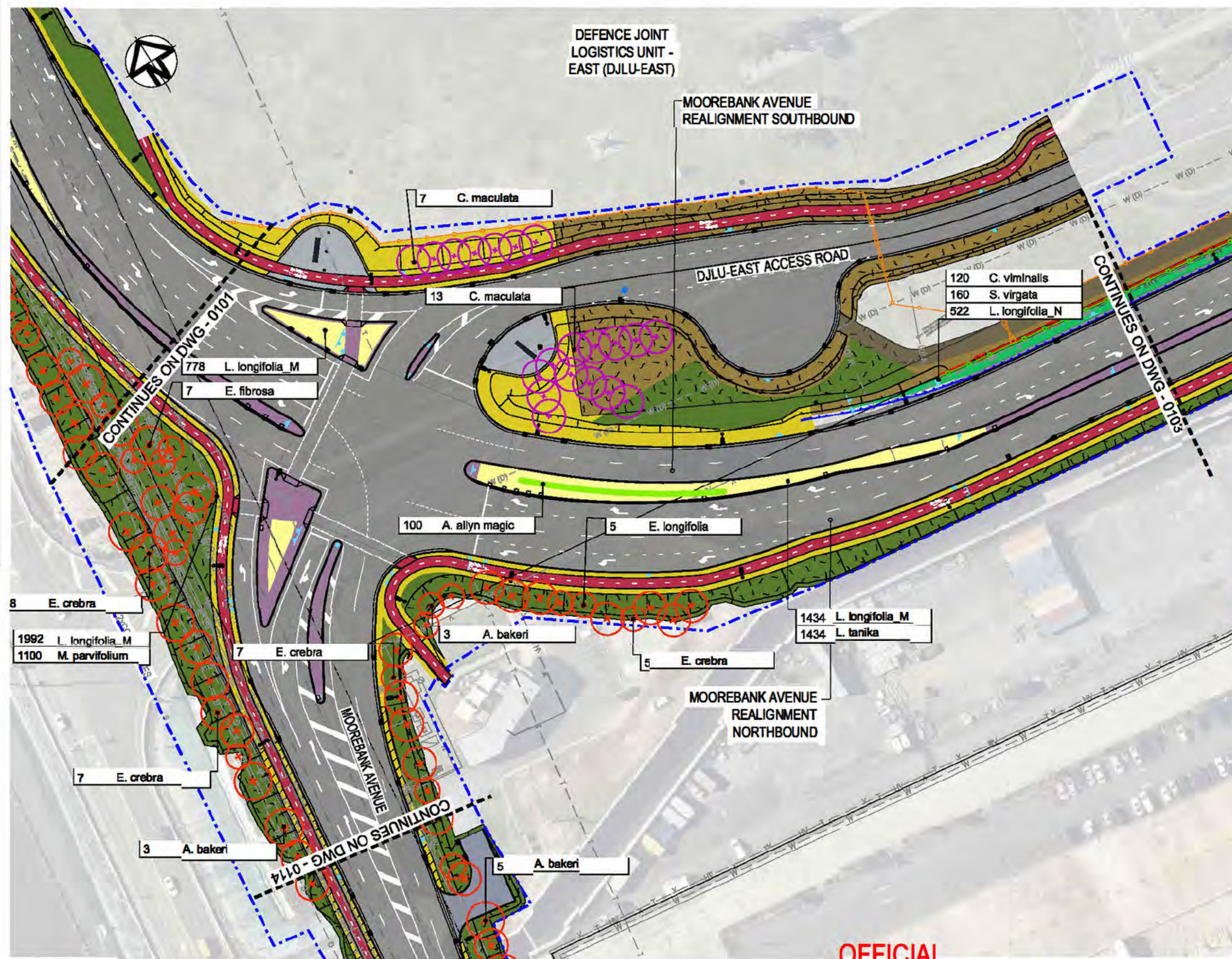
OFFICIAL

FOR CONSTRUCTION

 Transport for NSW These plans are accepted for construction. Nouhad Farah A/ Developer Works Leader Date 26/03/2025						Status FOR CONSTRUCTION Scales 1:1000 Current issue Signatures Drawn MG Designed MN Checked ME Approved DKI Original Size A3 Height Datum AHD Grid MGA94 - 56 Filename: MARW-TRA-LA-DD-DWG-0002.Dgn		Project MOOREBANK AVENUE REALIGNMENT WORKS (MARW) Title NOTES AND DRAWING INDEX SHEET 2 OF 2 LANDSCAPE DESIGN		 Arcadis Australia Pacific Pty Limited Level 5, 225 St Georges Terrace PERTH WA 6000 ABN 76 104 485 289 Tel No: +61 8 9213 6700 www.arcadis.com/au Project No. 30100351 Issue 2	
2	TCS DESIGN UPDATE	21.02.2025									
1	ISSUED FOR CONSTRUCTION	17.01.2025									
Issue	Description	Date									



Transport for NSW These plans are accepted for construction. Nouhad Farah A/ Developer Works Leader Date 26/03/2025 2 TCS DESIGN UPDATE 21.02.2025 1 ISSUED FOR CONSTRUCTION 17.01.2025 Issue Description Date	0 20 40m 1:1000	Client NATIONAL INTERMODAL	Status FOR CONSTRUCTION Scales 1:1000 Original Size A3 Height Datum AHD Grid MGA94 - 56 Filename: MARW-TRA-LA-DD-DWG-0101.Dgn Current Issue Signatures Drawn MG Designed MN Checked ME Approved DK	Project MOOREBANK AVENUE REALIGNMENT WORKS (MARW) Title GENERAL ARRANGEMENT PLAN SHEET 1 OF 14 LANDSCAPE DESIGN	ARCADIS Arcadis Australia Pacific Pty Limited Level 5, 225 St Georges Terrace PERTH WA 6000 ABN 78 104 485 288 Tel No: +61 8 9213 6700 www.arcadis.com/au Project No. 30100351 Drawing No. MARW-TRA-LA-DD-DWG-0101 Issue 2
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LEGEND

- PROTECTED AREA - BIO BANK
- BOUNDARY FENCE
- FAUNA FENCE
- CHAINLINK FENCE
- SYDNEY TRAIN FENCE
- VISUAL SCREENING FENCE
- CONCRETE EDGING
- BARRIER
- THREE BEAM BARRIER
- RETAINING WALL
- LIGHTING
- SIGNAGE
- HEADWALL & CULVERT
- SCOUR PROTECTION
- MEDIAN PAVED
- SHARED PATH
- MAINTENANCE ACCESS PATH
- BASIN

SEED MIXES
HYDROMULCH OVER
150mm TOPSOIL OVER
300mm CULTIVATED SUBGRADE

- PROPERTY ADJUSTMENT SEED MIX
- SEED MIX 1 - WOODLAND
- SEED MIX 2 - GRASSY OPEN FOREST
- SEED MIX 3 - DRAINAGE CHANNEL
- BFM OVER
50mm TOPSOIL OVER
SCARIFIED SUBGRADE
- SEED MIX 4 - NATIVE GRASSES

GARDEN BED
100mm MULCH OVER
300mm TOPSOIL OVER
300mm CULTIVATED SUBGRADE

- MEDIAN GARDEN BED
- NOISE WALL / RETAINING WALL GARDEN BED
- PROPERTY ADJUSTMENT GARDEN BED - MIX PLANTING
- PROPERTY ADJUSTMENT GARDEN BED - GRASSES
- GRASSED VERGE
- 100mm TURF UNDERLAY OVER
200mm CULTIVATED SUBGRADE
- DRAINAGE INVERT
- JUTE MESH OVER
50mm TOPSOIL OVER
SCARIFIED SUBGRADE
- PROPERTY ADJUSTMENT PLANTING
- BIOFILTRATION BASIN

TREE PLANTING

- FEATURE TREE
- BROADSCALE TREE
- MEDIAN SHRUB

KEY PLAN

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FOR CONSTRUCTION

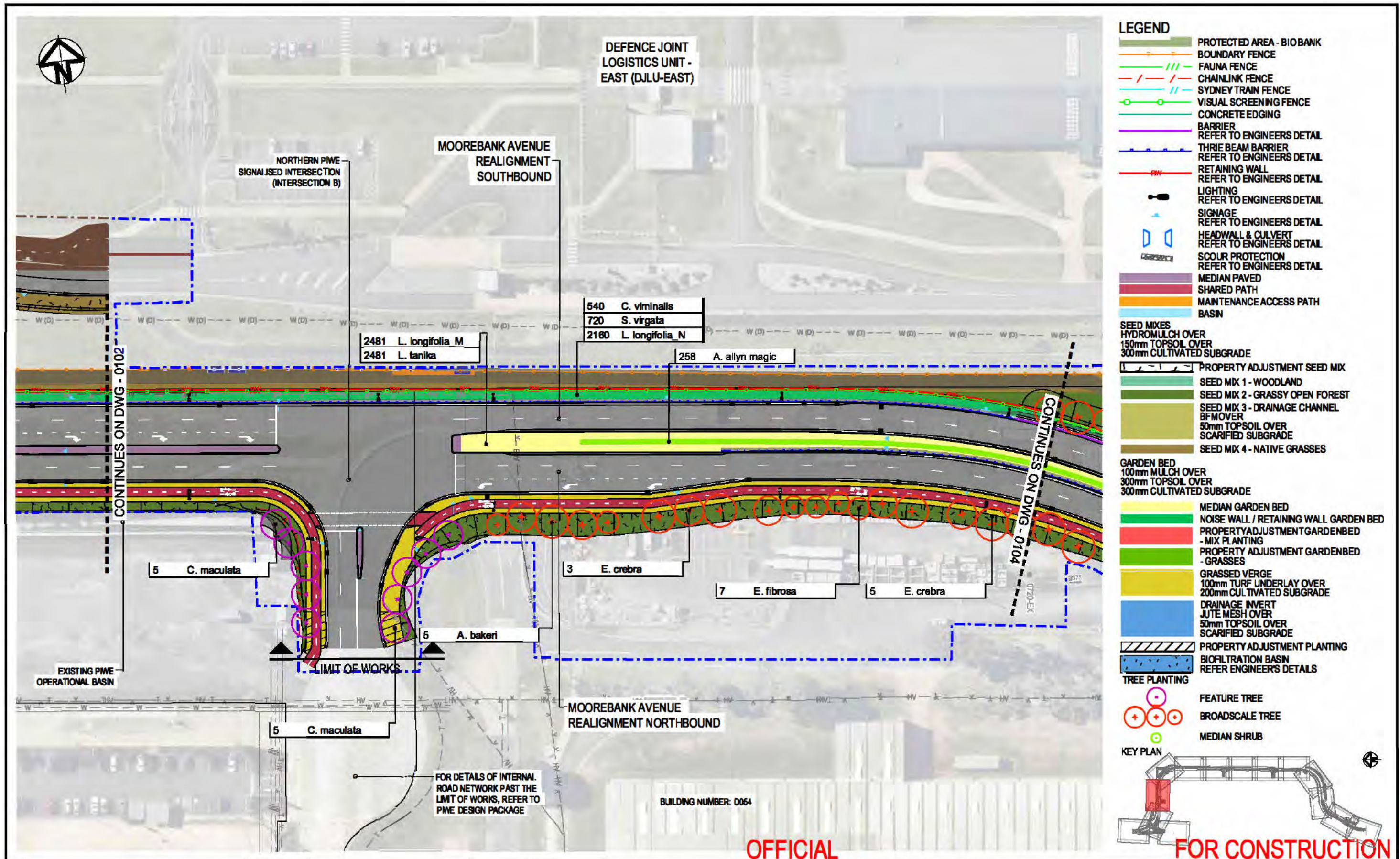
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2	TCS DESIGN UPDATE
1	ISSUED FOR CONSTRUCTION
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Date	

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Original Size	A3
Height Datum	AHD
Grid	MGA94 - 56
Filename	MARW-TRA-LA-DD-DWG-0102.Dgn

MOOREBANK AVENUE REALIGNMENT WORKS (MARW)	
GENERAL ARRANGEMENT PLAN	
SHEET 2 OF 14	
LANDSCAPE DESIGN	

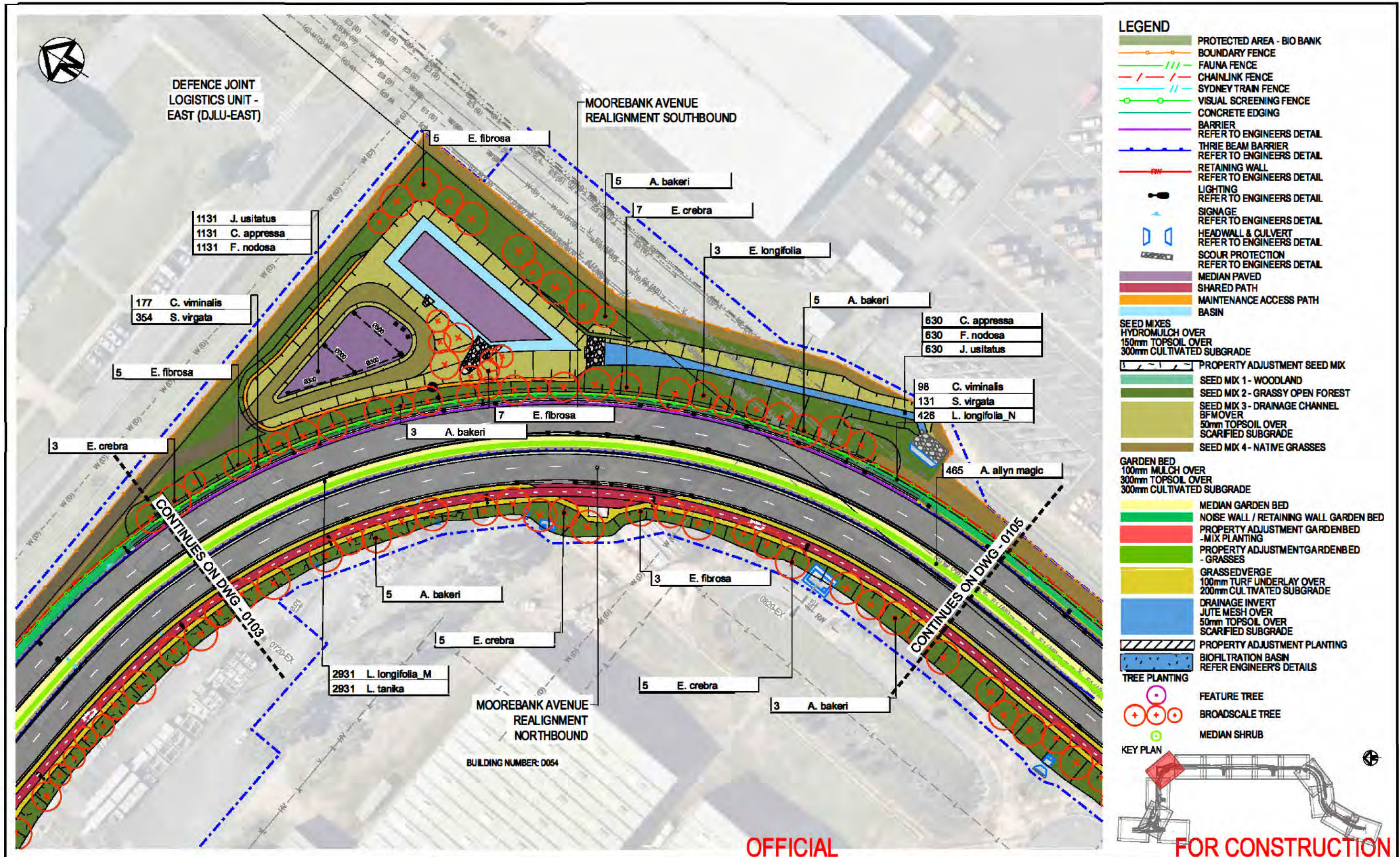
Arcadis Australia Pacific Pty Limited Level 5, 225 St Georges Terrace PERTH WA 6000 ABN 78 104 485 288 Tel No: +61 8 9213 6700 www.arcadis.com/au	
Project No.	30100351
Drawing No.	MARW-TRA-LA-DD-DWG-0102
Issue	2



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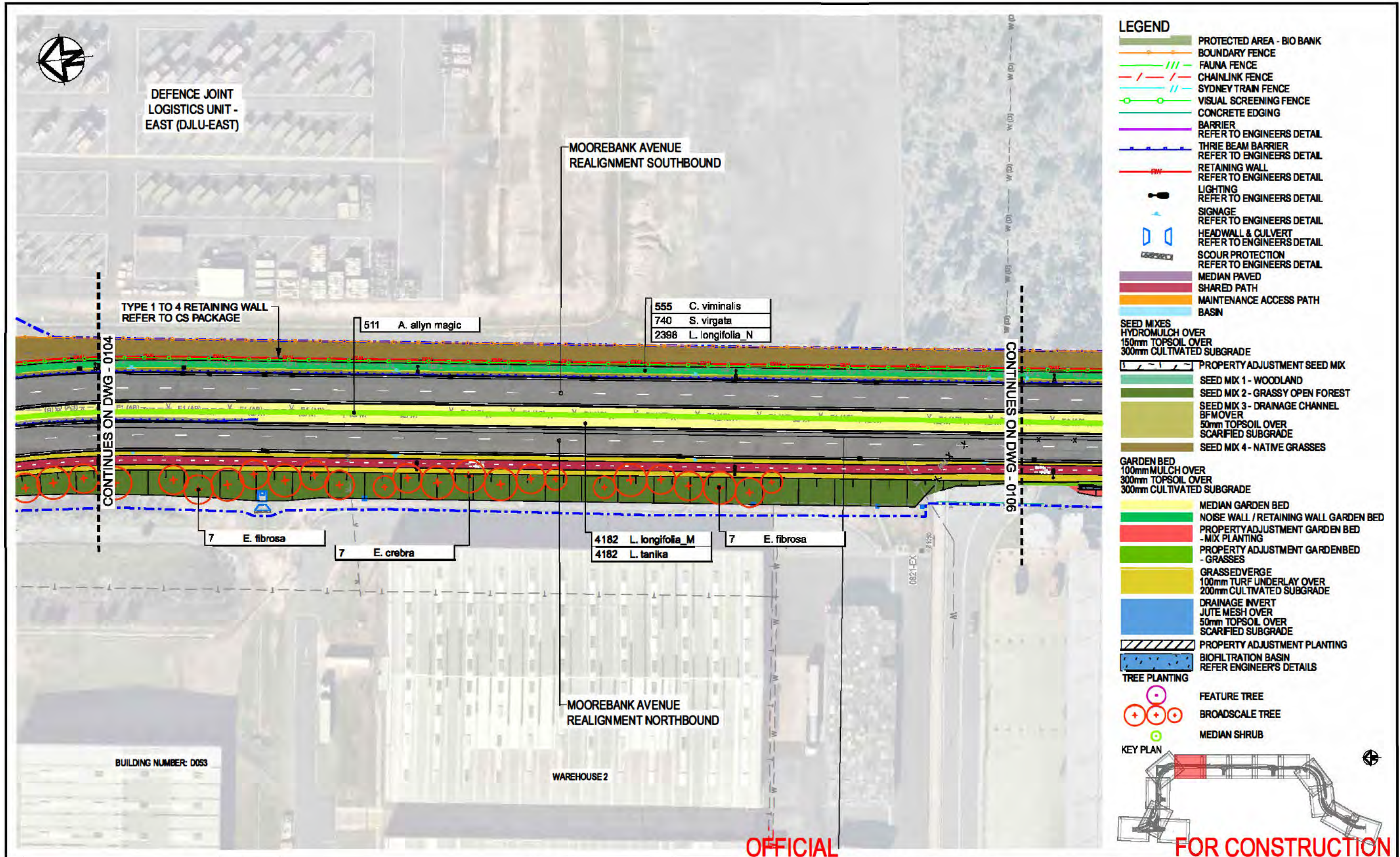
NSW Transport for NSW These plans are accepted for construction. Nouhad Farah A/ Developer Works Leader Date 26/03/2025	2 TCS DESIGN UPDATE 21.02.2025 1 ISSUED FOR CONSTRUCTION 17.01.2025	Client NATIONAL INTERMODAL	Status FOR CONSTRUCTION Scales 1:1000 Original Size A3 Height Datum AHD Grid MGA94 - 56 Filename: MARW-TRA-LA-DD-DWG-0103.Dgn	Project MOOREBANK AVENUE REALIGNMENT WORKS (MARW) Title GENERAL ARRANGEMENT PLAN SHEET 3 OF 14 LANDSCAPE DESIGN	ARCADIS Arcadis Australia Pacific Pty Limited Level 5, 225 St Georges Terrace PERTH WA 6000 ABN 76 104 485 289 Tel No: +61 8 9213 6700 www.arcadis.com/au Project No. 30100351 Drawing No. MARW-TRA-LA-DD-DWG-0103 Issue 2
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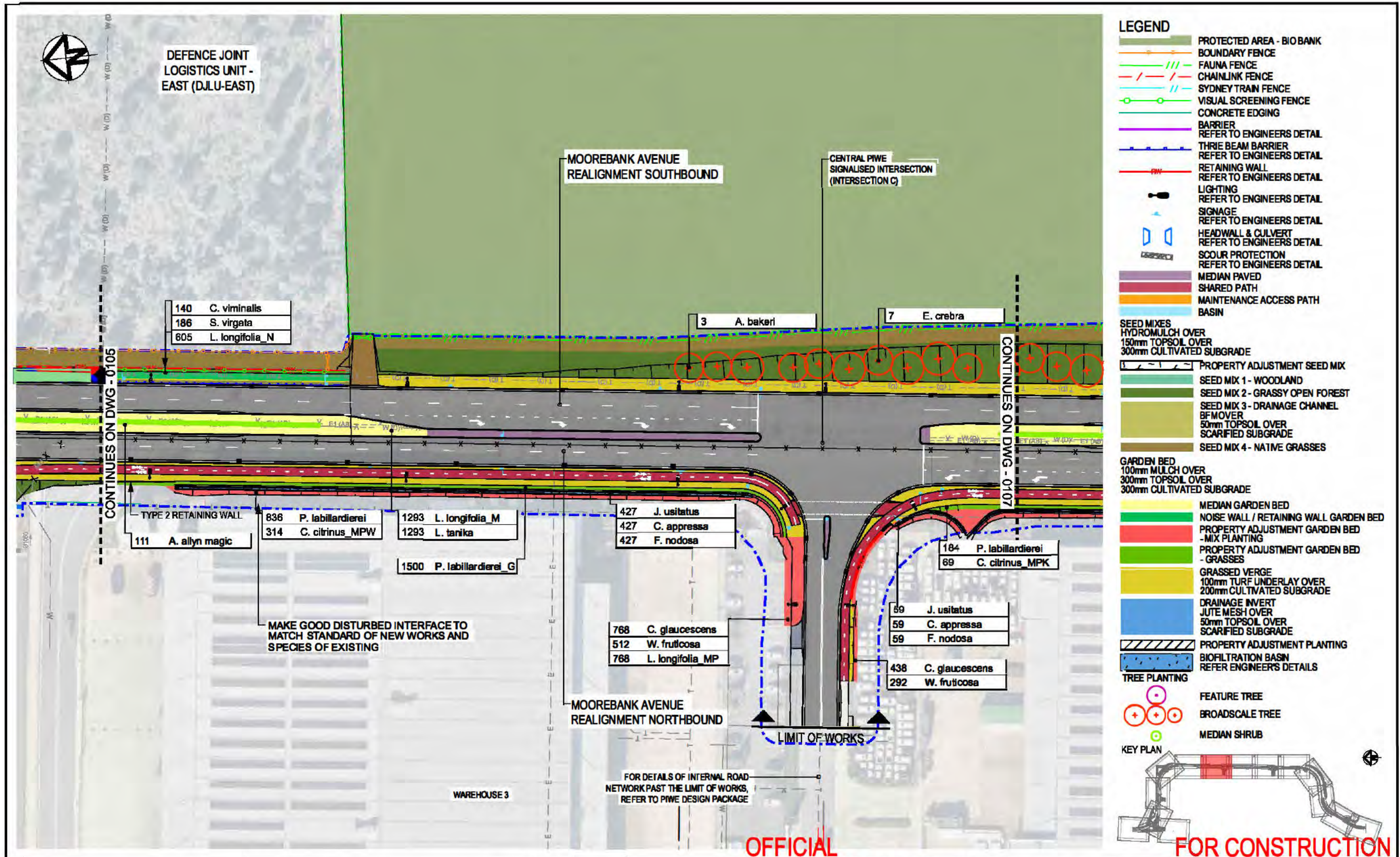
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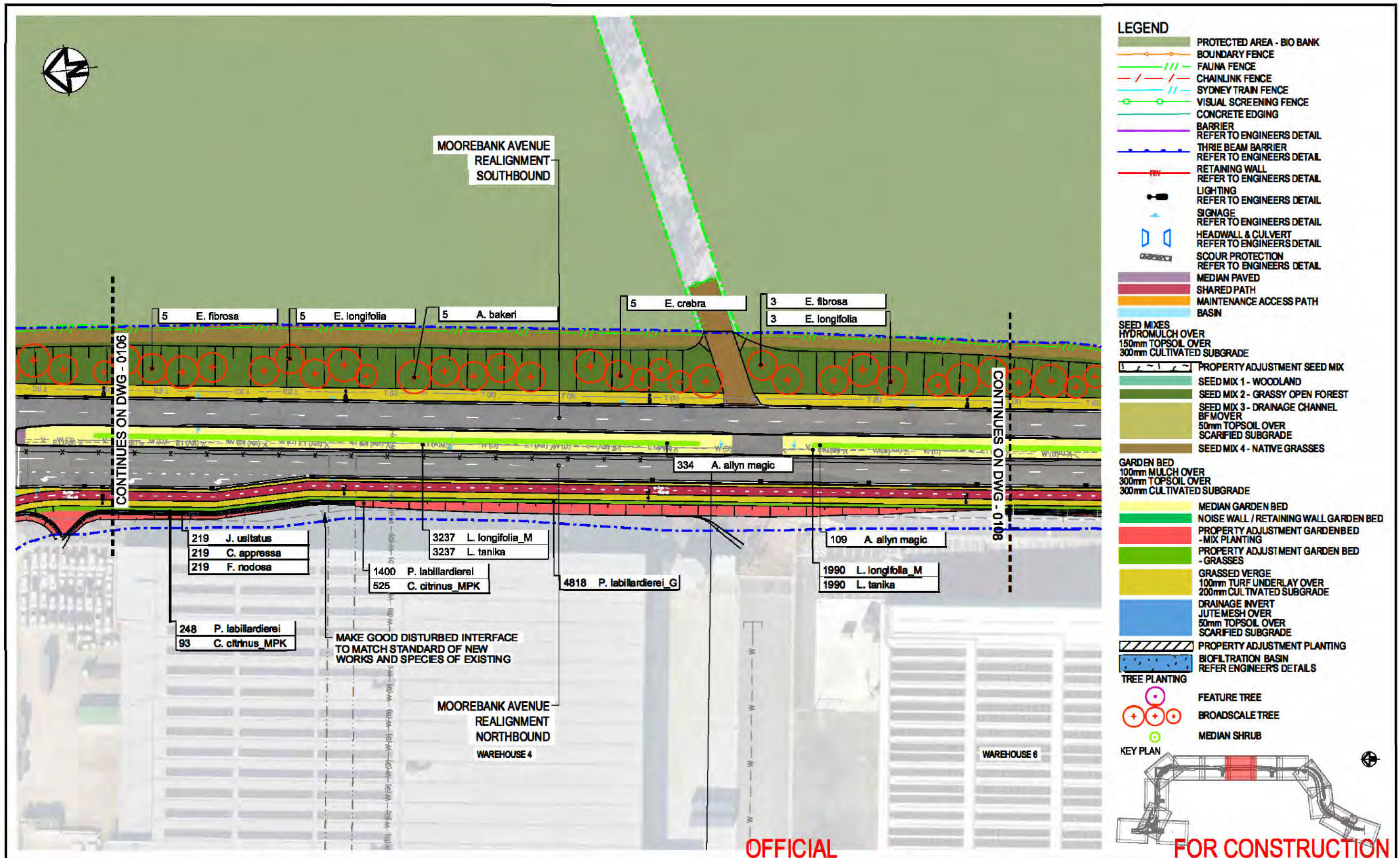
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2 TCS DESIGN UPDATE 21.02.2025 1 ISSUED FOR CONSTRUCTION 17.01.2025	Date	Date Plotted: 7 Sep 2005 - 07:08PM File Name: T:\Projects\SYD\2023\223-0027-00 - Moorebank Avenue Realignment Works\1 - (Sub-Project Name)\DR-Drawing Set (100-999)\MARW-TRA-LA-DD-DWG-0105.Dgn	50mm on Original	50mm on Original	50mm on Original



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LEGEND

- PROTECTED AREA - BIO BANK
 - BOUNDARY FENCE
 - FAUNA FENCE
 - CHAINLINK FENCE
 - SYDNEY TRAIN FENCE
 - VISUAL SCREENING FENCE
 - CONCRETE EDGING
 - BARRIER
 - REFER TO ENGINEERS DETAIL
 - THREE BEAM BARRIER
 - REFER TO ENGINEERS DETAIL
 - RETAINING WALL
 - REFER TO ENGINEERS DETAIL
 - LIGHTING
 - REFER TO ENGINEERS DETAIL
 - SIGNAGE
 - REFER TO ENGINEERS DETAIL
 - HEADWALL & CULVERT
 - REFER TO ENGINEERS DETAIL
 - SCOUR PROTECTION
 - REFER TO ENGINEERS DETAIL
 - MEDIAN PAVED
 - SHARED PATH
 - MAINTENANCE ACCESS PATH
 - BASIN
- SEED MIXES**
HYDROMULCH OVER
150mm TOPSOIL OVER
300mm CULTIVATED SUBGRADE
- PROPERTY ADJUSTMENT SEED MIX
 - SEED MIX 1 - WOODLAND
 - SEED MIX 2 - GRASSY OPEN FOREST
 - SEED MIX 3 - DRAINAGE CHANNEL
 - BFMOVER
 - 50mm TOPSOIL OVER
 - SCARIFIED SUBGRADE
 - SEED MIX 4 - NATIVE GRASSES
- GARDEN BED**
100mm MULCH OVER
300mm TOPSOIL OVER
300mm CULTIVATED SUBGRADE
- MEDIAN GARDEN BED
 - NOISE WALL / RETAINING WALL GARDEN BED
 - PROPERTY ADJUSTMENT GARDEN BED
 - MIX PLANTING
 - PROPERTY ADJUSTMENT GARDEN BED
 - GRASSES
 - GRASSED VERGE
 - 100mm TURF UNDERLAY OVER
 - 200mm CULTIVATED SUBGRADE
 - DRAINAGE INVERT
 - JUTE MESH OVER
 - 50mm TOPSOIL OVER
 - SCARIFIED SUBGRADE
 - PROPERTY ADJUSTMENT PLANTING
 - BIOFILTRATION BASIN
 - REFER ENGINEER'S DETAILS
- TREE PLANTING**
- FEATURE TREE
 - BROADSCALE TREE
 - MEDIAN SHRUB

KEY PLAN



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FOR CONSTRUCTION	
Scales	1:1000
Original Size	A3
Height Datum	AHD
Grid	MGA94 - 56
Filename	MARW-TRA-LA-DD-DWG-0108.Dgn
Current Issue Signatures	
Drawn	MG
Designed	MN
Checked	ME
Approved	DKI

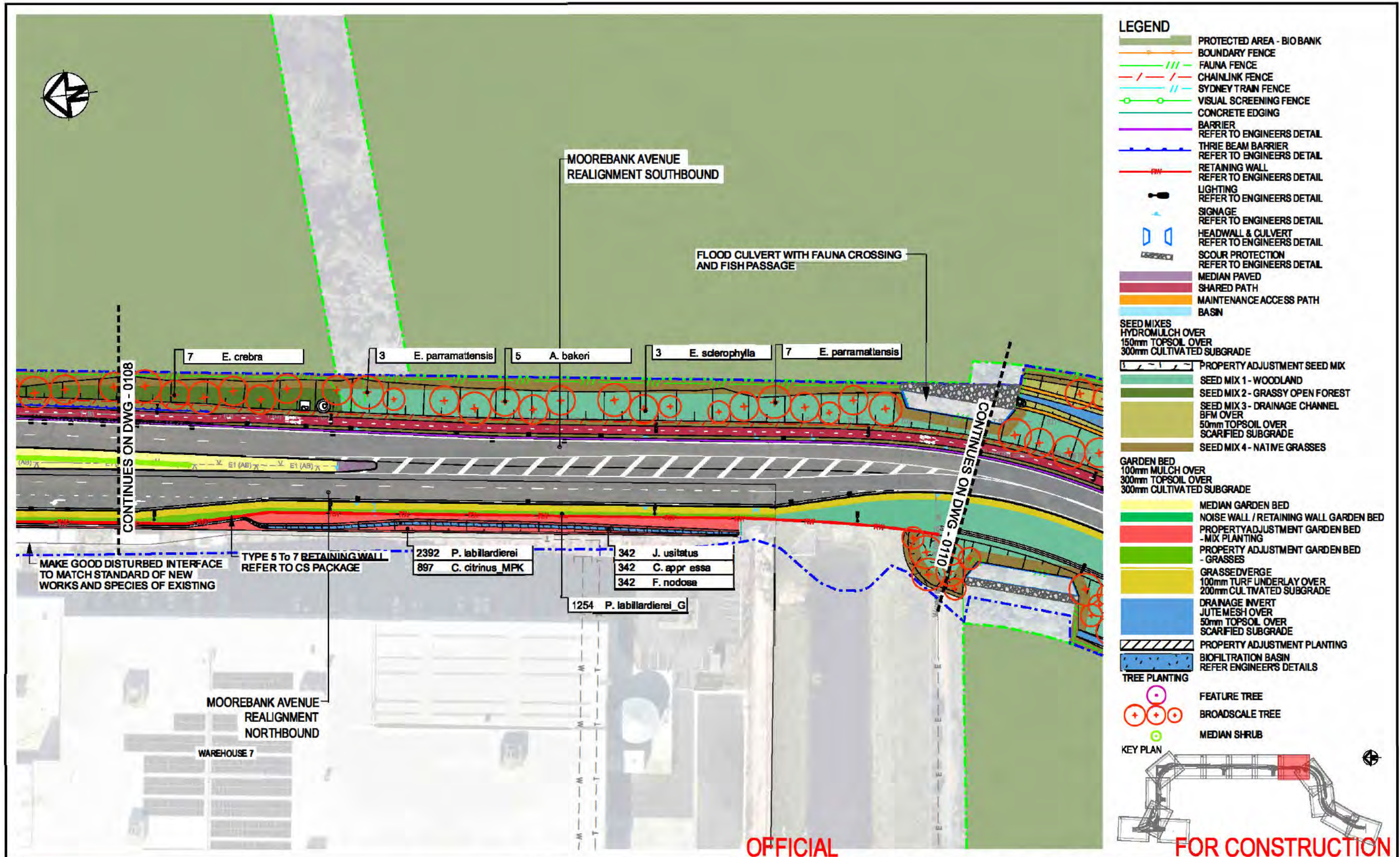
Project	MOOREBANK AVENUE REALIGNMENT WORKS (MARW)
Title	GENERAL ARRANGEMENT PLAN SHEET 8 OF 14 LANDSCAPE DESIGN

ARCADIS	
Arcadis Australia Pacific Pty Limited Level 5, 225 St Georges Terrace PERTH WA 6000 ABN 78 104 485 289 Tel No: +61 8 9213 8700 www.arcadis.com.au	
Project No.	30100351
Drawing No.	MARW-TRA-LA-DD-DWG-0108
Issue	2

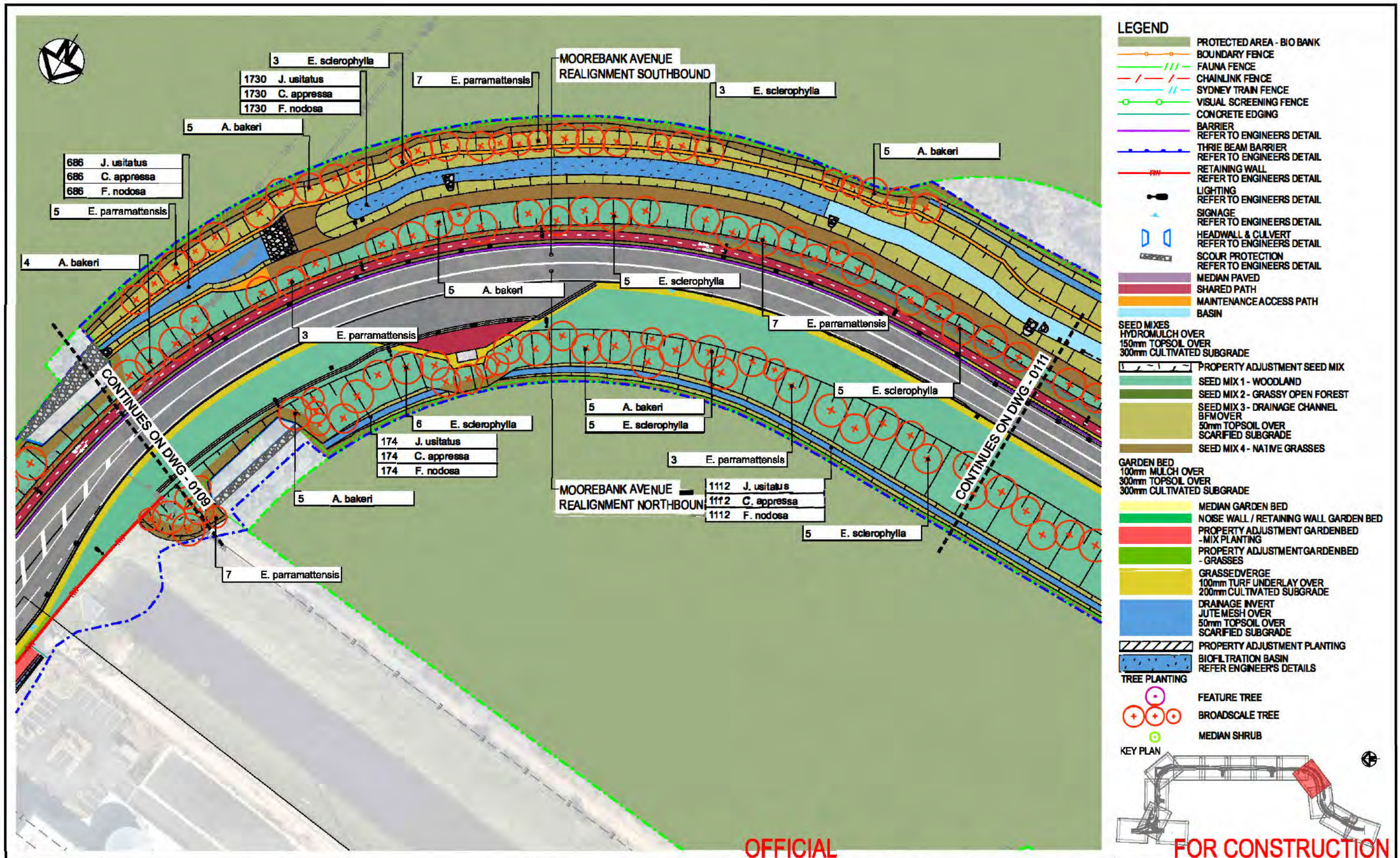
 Transport for NSW These plans are accepted for construction. Nouhad Farah A/ Developer Works Leader Date 26/03/2025	
2	TCS DESIGN UPDATE
1	ISSUED FOR CONSTRUCTION
Issue	Description
Date	
21.02.2025	
17.01.2025	

 1:1000	
Client	
	

Date Plotted: 7 Sep 2005 - 07:08PM	
File Name: T:\Projects\SYD\2023\223-0027-00 - Moorebank Avenue Realignment Works\1 - (Sub-Project Name)\VDR-Drawing Set (100-999)\MARW-TRA-LA-DD-DWG-0108.Dgn	



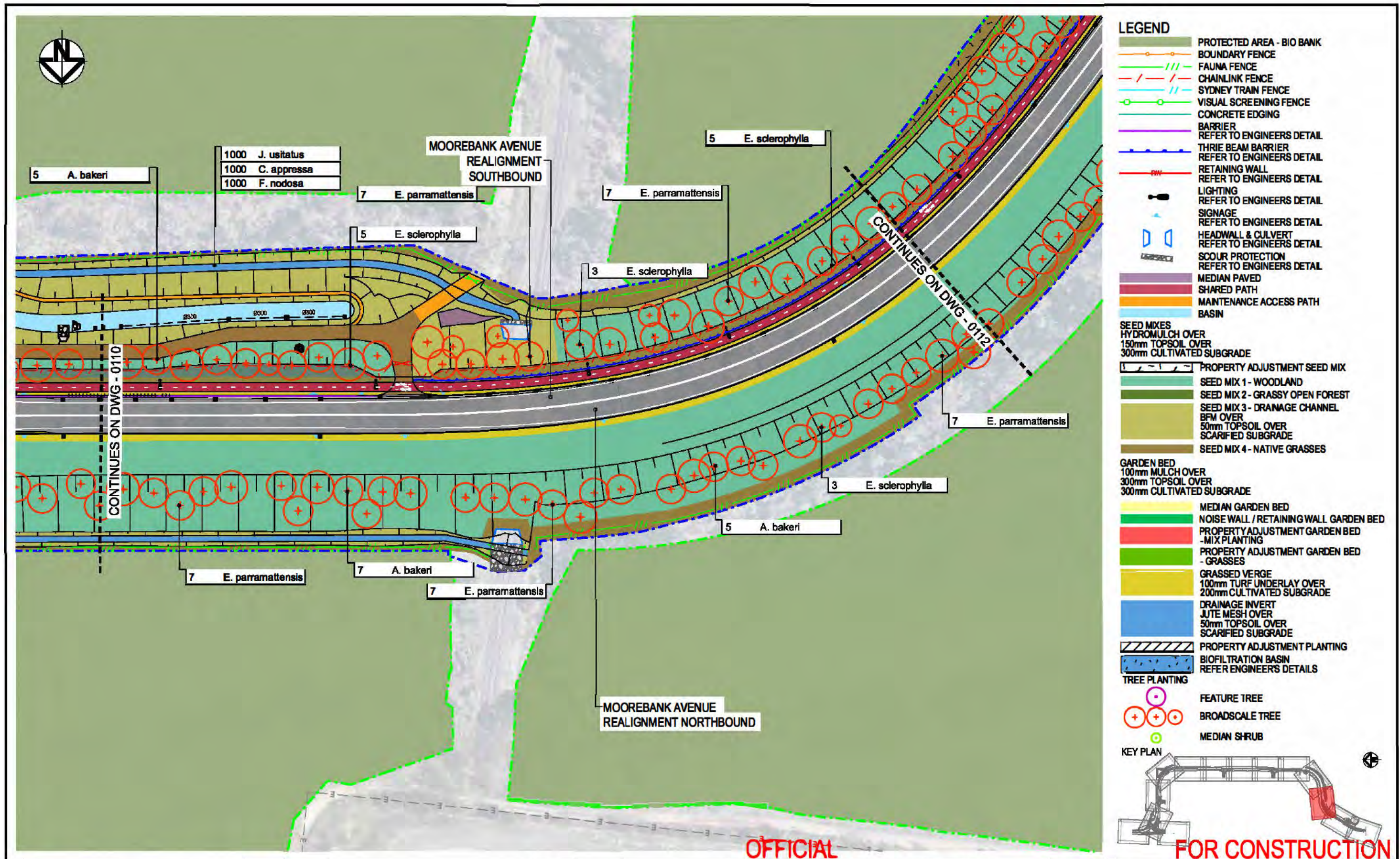
NSW Transport for NSW These plans are accepted for construction. Nouhad Farah A/ Developer Works Leader Date 26/03/2025	2 TCS DESIGN UPDATE 21.02.2025 1 ISSUED FOR CONSTRUCTION 17.01.2025	Client NATIONAL INTERMODAL	Status FOR CONSTRUCTION Scales 1:1000 Original Size A3 Height Datum AHD Grid MGA94 - 56 Filename: MARW-TRA-LA-DD-DWG-0109.Dgn	Project MOOREBANK AVENUE REALIGNMENT WORKS (MARW) Title GENERAL ARRANGEMENT PLAN SHEET 9 OF 14 LANDSCAPE DESIGN	ARCADIS Arcadis Australia Pacific Pty Limited Level 5, 225 St Georges Terrace PERTH WA 8000 ABN 78 104 485 289 Tel No: +61 8 9213 6700 www.arcadis.com.au Project No. 30100351 Drawing No. MARW-TRA-LA-DD-DWG-0109 Issue 2
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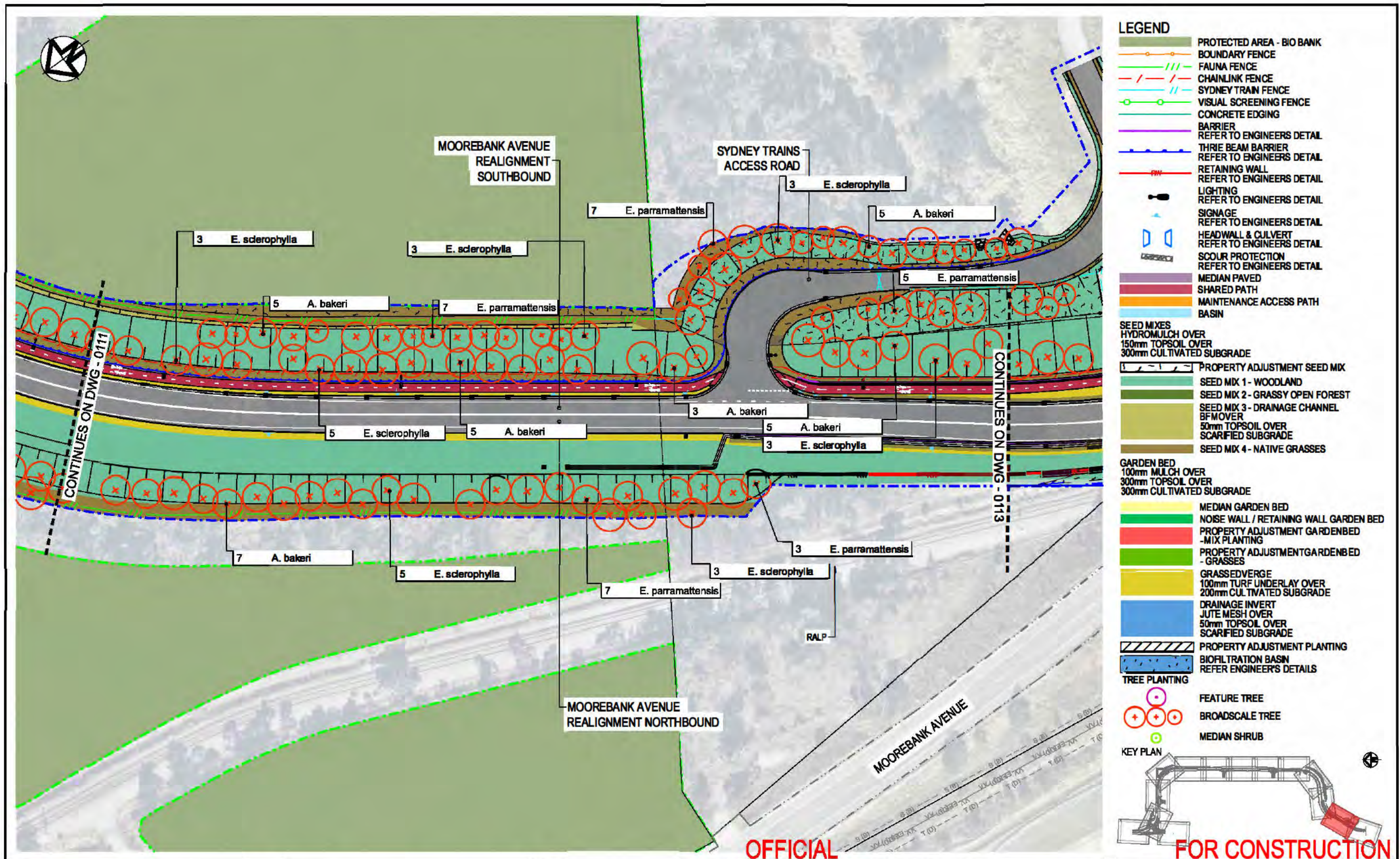
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NSW Transport for NSW These plans are accepted for construction. Nouhad Farah A/ Developer Works Leader Date 26/03/2025	2 TCS DESIGN UPDATE 21.02.2025 1 ISSUED FOR CONSTRUCTION 17.01.2025	Client NATIONAL INTERMODAL	Status FOR CONSTRUCTION Scales 1:1000 Original Size A3 Height Datum AHD Grid MGA94 - 56 Filename: MARW-TRA-LA-DD-DWG-0110.Dgn	Project MOOREBANK AVENUE REALIGNMENT WORKS (MARW) Title GENERAL ARRANGEMENT PLAN SHEET 10 OF 14 LANDSCAPE DESIGN	ARCADIS Arcadis Australia Pacific Pty Limited Level 5, 225 St Georges Terrace PERTH WA 6000 ABN 78 104 485 289 Tel No: +61 8 9213 6700 www.arcadis.com/au Project No. 30100351 Drawing No. MARW-TRA-LA-DD-DWG-0110 Issue 2
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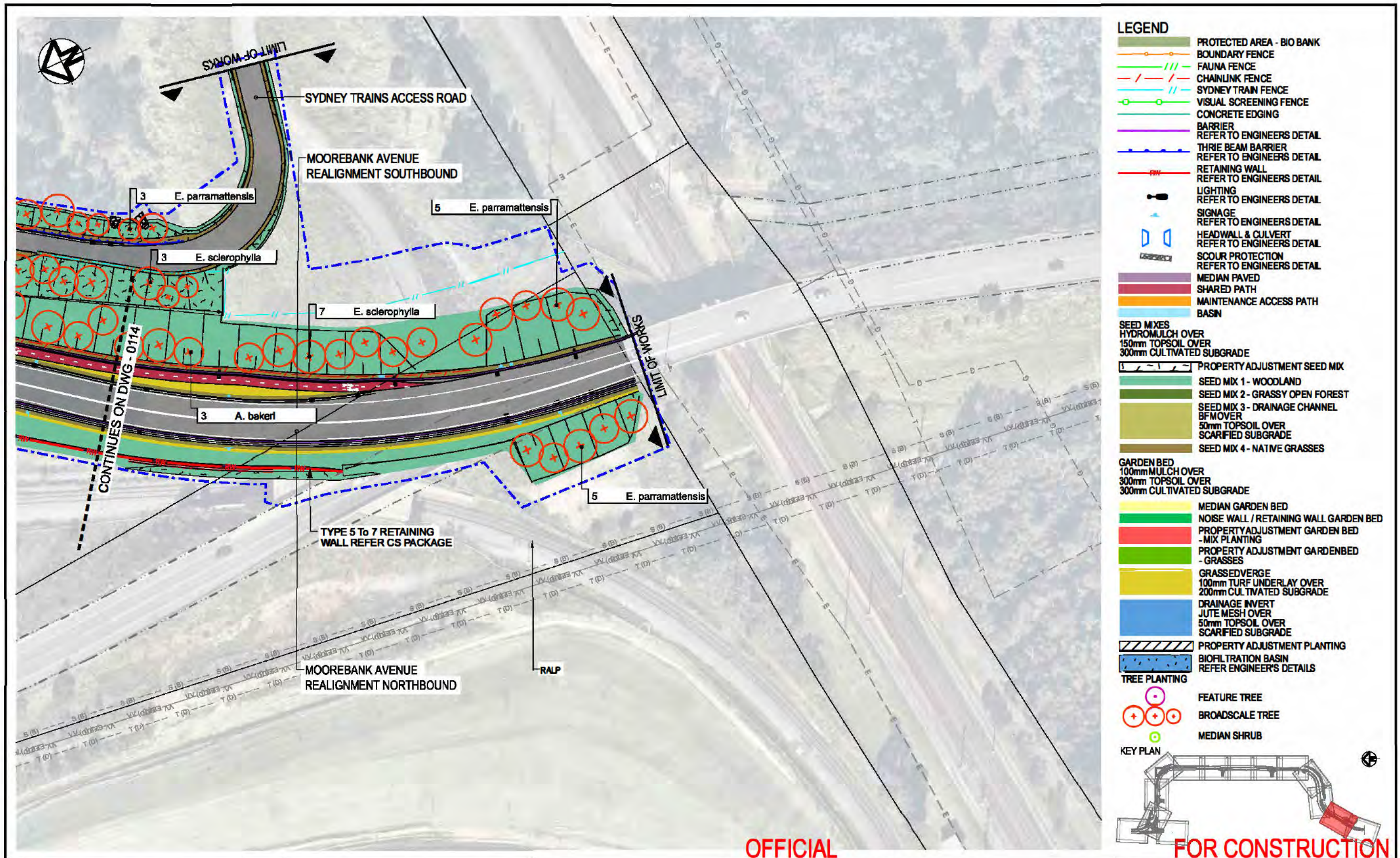
Transport for NSW These plans are accepted for construction. Nouhad Farah A/ Developer Works Leader Date 26/03/2025	0 20 40m 1:1000	Client NATIONAL INTERMODAL	Status FOR CONSTRUCTION Scales 1:1000 Original Size A3 Height Datum AHD Grid MGA94 - 56 Filename: MARW-TRA-LA-DD-DWG-0111.Dgn Current Issue Signatures Drawn MG Designed MN Checked ME Approved DK	Project MOOREBANK AVENUE REALIGNMENT WORKS (MARW) Title GENERAL ARRANGEMENT PLAN SHEET 11 OF 14 LANDSCAPE DESIGN	ARCADIS Arcadis Australia Pacific Pty Limited Level 5, 225 St Georges Terrace PERTH WA 6000 ABN 78 104 485 289 Tel No: +61 8 9213 6700 www.arcadis.com/au Project No. 30100351 Drawing No. MARW-TRA-LA-DD-DWG-0111 Issue 2
2 TCS DESIGN UPDATE 21.02.2025 1 ISSUED FOR CONSTRUCTION 17.01.2025	Date	Date Plotted: 7 Sep 2005 - 07:08PM File Name: T:\Projects\SYD\2023\223-0027-00 - Moorebank Avenue Realignment Works\1 - (Sub-Project Name)\DR-Drawing Set (100-999)\MARW-TRA-LA-DD-DWG-0111.Dgn	50mm on Original	50mm on Original	50mm on Original



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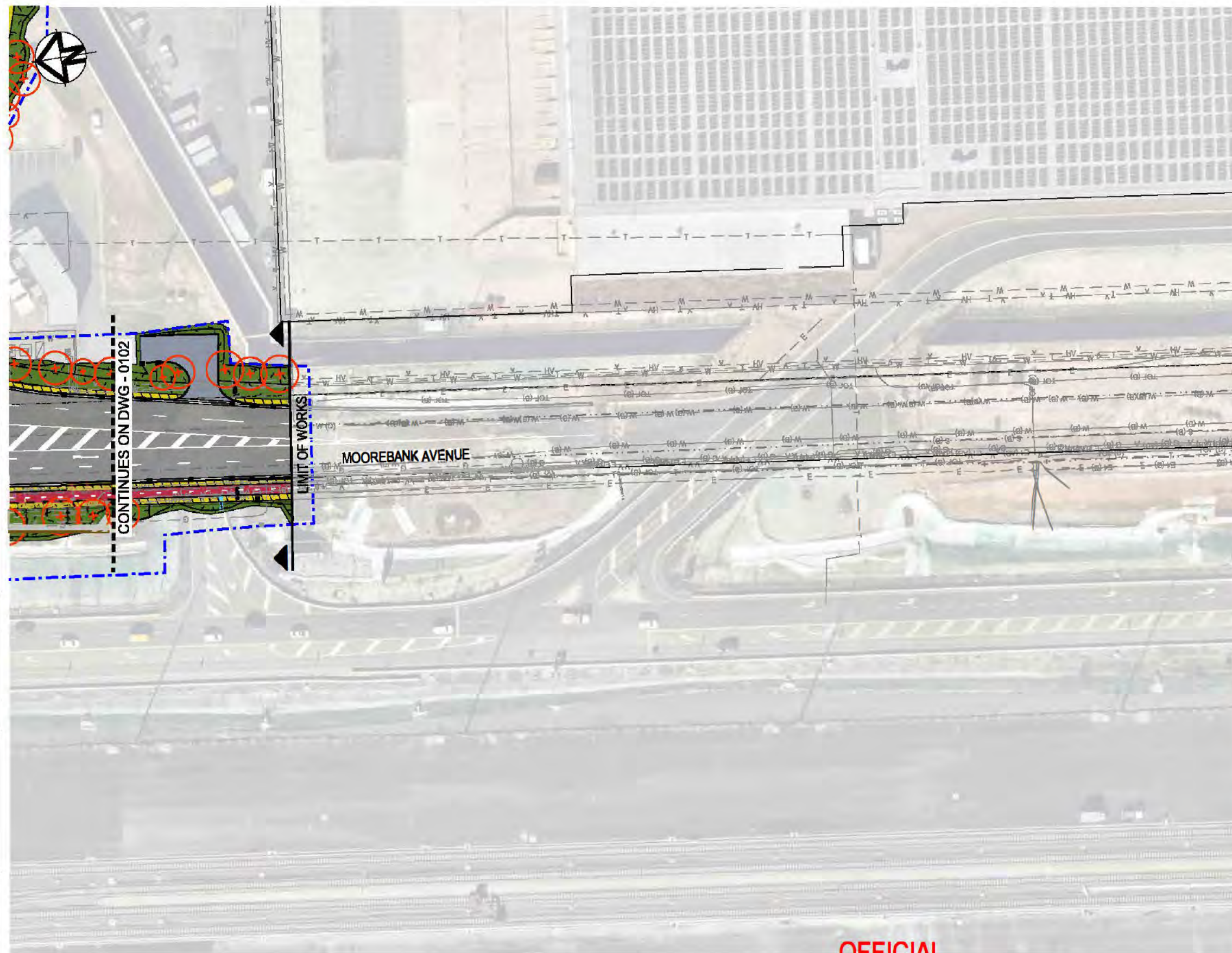
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Transport for NSW These plans are accepted for construction. Nouhad Farah A/ Developer Works Leader Date 26/03/2025 2 TCS DESIGN UPDATE 21.02.2025 1 ISSUED FOR CONSTRUCTION 17.01.2025 Issue Description Date	0 20 40m 1:1000 Client NATIONAL INTERMODAL	Status FOR CONSTRUCTION Scales 1:1000 Original Size A3 Height Datum AHD Grid MGA94 - 56 Filename: MARW-TRA-LA-DD-DWG-0113.Dgn	Project MOOREBANK AVENUE REALIGNMENT WORKS (MARW) Title GENERAL ARRANGEMENT PLAN SHEET 13 OF 14 LANDSCAPE DESIGN	ARCADIS Arcadis Australia Pacific Pty Limited Level 5, 225 St Georges Terrace PERTH WA 6000 ABN 78 104 485 289 Tel No: +61 8 9213 6700 www.arcadis.com/au Project No. 30100351 Drawing No. MARW-TRA-LA-DD-DWG-0113 Issue 2
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- LEGEND**
- PROTECTED AREA - BIO BANK
 - BOUNDARY FENCE
 - FAUNA FENCE
 - CHAINLINK FENCE
 - SYDNEY TRAIN FENCE
 - VISUAL SCREENING FENCE
 - CONCRETE EDGING
 - BARRIER
 - REFER TO ENGINEERS DETAIL
 - THREE BEAM BARRIER
 - REFER TO ENGINEERS DETAIL
 - RETAINING WALL
 - REFER TO ENGINEERS DETAIL
 - LIGHTING
 - REFER TO ENGINEERS DETAIL
 - SIGNAGE
 - REFER TO ENGINEERS DETAIL
 - HEADWALL & CULVERT
 - REFER TO ENGINEERS DETAIL
 - SCOUR PROTECTION
 - REFER TO ENGINEERS DETAIL
 - MEDIAN PAVED
 - SHARED PATH
 - MAINTENANCE ACCESS PATH
 - BASIN
- SEED MIXES**
HYDROMULCH OVER
150mm TOPSOIL OVER
300mm CULTIVATED SUBGRADE
- PROPERTY ADJUSTMENT SEED MIX
 - SEED MIX 1 - WOODLAND
 - SEED MIX 2 - GRASSY OPEN FOREST
 - SEED MIX 3 - DRAINAGE CHANNEL
 - BFMOVER
50mm TOPSOIL OVER
SCARIFIED SUBGRADE
 - SEED MIX 4 - NATIVE GRASSES
- GARDEN BED**
100mm MULCH OVER
300mm TOPSOIL OVER
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- MEDIAN GARDEN BED
 - NOISE WALL / RETAINING WALL GARDEN BED
 - PROPERTY ADJUSTMENT GARDENBED
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100mm TURF UNDERLAY OVER
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JUTE MESH OVER
50mm TOPSOIL OVER
SCARIFIED SUBGRADE
 - PROPERTY ADJUSTMENT PLANTING
 - BIOFILTRATION BASIN
REFER ENGINEER'S DETAILS
- TREE PLANTING**
- FEATURE TREE
 - BROADSCALE TREE
 - MEDIAN SHRUB
- KEY PLAN**

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FOR CONSTRUCTION

 Transport for NSW These plans are accepted for construction. Nouhad Farah A/ Developer Works Leader Date 26/03/2025		02040m 1: 1000		Client 		Status FOR CONSTRUCTION Scales1:1000 Current Issue Signatures Original SizeA3 Height DatumAHD GridMGA94 - 56 Filename:MARW-TRA-LA-DD-DWG-0114.Dgn Drawn MG Designed MN Checked ME Approved DK Project MOOREBANK AVENUE REALIGNMENT WORKS (MARW) Title GENERAL ARRANGEMENT PLAN SHEET 14 OF 14 LANDSCAPE DESIGN		 Arcadis Australia Pacific Pty Limited Level 5, 225 St Georges Terrace PERTH WA 8000 ABN 78 104 485 289 Tel No: +61 8 9213 6700 www.arcadis.com/au Project No. 30100351 Drawing No. MARW-TRA-LA-DD-DWG-0114 Issue 2	
2	TCS DESIGN UPDATE	21.02.2025							
1	ISSUED FOR CONSTRUCTION	17.01.2025							
Issue	Description	Date							

50mm on Original

Date Plotted: 7 Sep 2005 - 07:08PM File Name: T:\Projects\SYD\2023\223-0027-00 - Moorebank Avenue Realignment Works\1 - (Sub-Project Name)\DR-Drawing Set (100-999)\MARW-TRA-LA-DD-DWG-0114.Dgn

Moorebank Avenue Realignment Works
PLANTING SCHEDULE

CODE	BOTANIC NAME	COMMON NAME		MATURE SIZE H x W	INSTALL SIZE	QUANTITY
TREES						
BROADSCALE TREES						
A. bakeri	Angophora bakeri	Narrow-leaved Apple		10 x 6	Tubestock	132
E. crebra	Eucalyptus crebra	Narrow-leaved Ironbark		30 x 15	Tubestock	94
E. fibrosa	Eucalyptus fibrosa	Red Ironbark		35 x 10	Tubestock	80
E. longifolia	Eucalyptus longifolia	Woollybutt		35 x 10	Tubestock	22
E. parramattensis	Eucalyptus parramattensis	Parramatta Red Gum		15 x 6	Tubestock	119
E. sclerophylla	Eucalyptus sclerophylla	Hardy-leaved Scribbly Gum		20 x 10	Tubestock	86
TREE TOTAL						533
MEDIAN TREES						
A. allyn magic	Acmena smithii 'Allyn magic'	Lilly Pilly		0.5 x 1	140mm	2065
TREE TOTAL						2065
FEATURE TREES						
C. maculata	Corymbia maculata	Spotted Gum		30 x 15	45Ltr	30
TREE TOTAL						30
CODE	BOTANIC NAME	COMMON NAME	DENSITY	MATURE SIZE H x W	POT SIZE	QUANTITY
GARDEN BED						
DRAINAGE INVERT						
C. appressa	Carex appressa	Tall Sedge	8	/m ² 1 x 1	Tubestock	6464
F. nodosa	Picinia nodosa	Knobby Club-rush	8	/m ² 1 x 1	Tubestock	6464
J. usitatus	Juncus usitatus	Common Rush	8	/m ² 1.2 x 0.5	Tubestock	6464
SHRUB TOTAL						19392
MEDIAN GARDEN BED						
L. longifolia_M	Lomandra longifolia	Spiny-Head Mat-rush	6	/m ² 1.2 x 1	Tubestock	22674
L. tanika	Lomandra tanika	Mat-rush	6	/m ² 0.6 x 0.65	Tubestock	20316
M. parvifolium	Myoporum parvifolium	Creeping Boobialla	4	/m ² 0.3 x 3	Tubestock	1100
SHRUB TOTAL						44090
NOISE WALL / RETAINING WALL GARDEN BED						
C. viminalis	Callistemon viminalis	Callistemon 'Captain Cook'	1.5	/m ² 2 x 1.5	5Ltr	1630
L. longifolia_N	Lomandra longifolia	Spiny-Head Mat-rush	6	/m ² 1.2 x 1	Tubestock	6111
S. virgata	Sannantha virgata	Baeckea	2	/m ² 1 x 1.5	2.5Ltr	2291
SHRUB TOTAL						10032

CODE	BOTANIC NAME	COMMON NAME		MATURE SIZE H x W	INSTALL SIZE	QUANTITY
GARDEN BED - OUT OF PROPERTY BOUNDARY						
MIX PLANTING						
P. labillardierei	Poa labillardierei	Common Tussock-grass	4	/m ² 1.2 x 1	Tubestock	6420
C. citrinus_MPW	Callistemon citrinus	Callistemon White Anzac	1.5	/m ² 1 x 3	Tubestock	4956
C. citrinus_MPK	Callistemon citrinus	Kings Park Special	1.5	/m ² 3 x 2	Tubestock	2094
L. longifolia_MP	Lomandra longifolia	Spiny-Head Mat-rush	6	/m ² 1.2 x 1	Tubestock	768
C. glaucescens	Carpobrotus glaucescens	Angular Sea-fig	6	/m ² 0.3 x 2	Tubestock	1206
W. fruticosa	Westringia fruticosa	Aussie Box	4	/m ² 2 x 4	Tubestock	804
SHRUB TOTAL						16248
GRASSES						
P. labillardierei_G	Poa labillardierei	Common Tussock-grass	6	/m ² 1.2 x 1	Tubestock	9486
SHRUB TOTAL						9486
DRAINAGE INVERT						
C. appressa	Carex appressa	Tall Sedge	8	/m ² 1 x 1	Tubestock	1456
F. nodosa	Picinia nodosa	Knobby Club-rush	8	/m ² 1 x 1	Tubestock	1456
J. usitatus	Juncus usitatus	Common Rush	8	/m ² 1.2 x 0.5	Tubestock	1456
SHRUB TOTAL						4368
TURF						
Z. japonica	Zoysia japonica	Empire Zoysia			AREA TOTAL	16022
TURF - OUT OF PROPERTY BOUNDARY						
Z. japonica	Zoysia japonica	Empire Zoysia			AREA TOTAL	372

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FOR CONSTRUCTION

Status FOR CONSTRUCTION		Project MOOREBANK AVENUE REALIGNMENT WORKS (MARW)	
Scales NTS	Current Issue Signatures	Title PLANTING SCHEDULE SHEET 1 OF 2 LANDSCAPE DESIGN	
Original Size A3	Drawn MG		
Height Datum AHD	Designed MN		
Grid MGA94 - 56	Checked ME		
Filename: MARW-TRA-LA-DD-DWG-0121.Dgn	Approved DKI		
Arcadis Australia Pacific Pty Limited Level 5, 225 St Georges Terrace PERTH WA 6000 ABN 78 104 485 289 Tel No: +61 8 9213 6700 www.arcadls.com/au		Project No. 30100351 Issue 2	

 These plans are accepted for construction. Nouhad Farah A/ Developer Works Leader Date 26/03/2025		Client 	
2	TCS DESIGN UPDATE	21.02.2025	
1	ISSUED FOR CONSTRUCTION	17.01.2025	
Issue	Description	Date	

50mm on Original

Date Plotted: 7 Sep 2005 - 07:08PM File Name: T:\Projects\SYD\2023\223-0027-00 - Moorebank Avenue Realignment Works\1-01 - (Sub-Project Name)\DR-Drawing Set (100-999)\MARW-TRA-LA-DD-DWG-0121.Dgn

Landscape Treatment Types	Species	Application rates of seed kg/ha	Area to be hydromulched
Seed Mix 1 - Hard leaved scribbly gum- panamatta red gum heathy woodland			
Cover Crop	Echinochloa utilis (Sep-Mar)	10	25.6
	or		
	Lolium multiflorum (Apr - Aug)	10	25.6
	Secale cereale (Apr - Aug)		
	Cynodon dactylon	20	51.1
	Trifolium pratense	5	12.8
	Total volume of seed (kg)	45	115
Native Grasses	Microlaena stipoides	1.3	3.4
	Themeda australis	1.3	3.4
	Dianella caerulea	1	2.6
	Panax umbellata (Pomax)	1.3	3.4
	Goodenia bellidifolia subsp. Bellidifolia	1	2.6
	Total volume of seed (kg)	6.0	15
Native Shrubs and Groundcovers	Banksia spinulosa	0.6	1.5
	Bursaria spinosa	0.8	2.0
	Daviesia ulicifolia	0.8	2.0
	Hakea dactyloides	0.8	2.0
	Hakea sericea	0.8	2.0
	Kunzea capitata	0.8	2.0
	Leptospermum trinervium	0.8	2.0
	Melaleuca nodosa	0.6	1.5
	Total volume of seed (kg)	6	15
Seed Mix 2 - Broadleaved ironbark grey box melaleuca decora grassy open forest			
Cover Crop	Echinochloa utilis (Sep-Mar)	10	10.9
	or		
	Lolium multiflorum (Apr - Aug)	10	10.9
	Secale cereale (Apr - Aug)		
	Cynodon dactylon	20	21.8
	Trifolium pratense	5	5.5
	Total volume of seed (kg)	35	49
Native Grasses	Dianella caerulea	0.5	0.5
	Dichandra repens	0.7	0.8
	Entolasia stricta	0.8	0.8
	Goodenia hederacea subsp. hederacea	0.5	0.5
	Lepidosperma cf. laterale	0.5	0.5
	Lomandra longifolia	0.5	0.5
	Lomandra multiflora subsp. multiflora	0.5	0.5
	Microlaena stipoides	0.8	0.8
	Paricum simile	0.5	0.5
	Themeda triandra	0.8	0.8
	Total volume of seed (kg)	6.0	6
Native Trees, Shrubs and Groundcovers	Acacia falcata	0.5	0.5
	Baeckea discifolia	0.5	0.5
	Breytia oblongifolia	0.5	0.5
	Bursaria spinosa	0.5	0.5
	Dilwynia retorta	0.5	0.5
	Hakea sericea	0.5	0.5
	Melaleuca nodosa	0.5	0.5
	Melaleuca decora	0.5	0.5
	Persoonia linearis	0.5	0.5
	Pultenaea villosa	0.5	0.5
	Lissanthe strigosa	0.5	0.5
	Daviesia ulicifolia	0.5	0.5
	Total volume of seed (kg)	6.0	7
Seed Mix 3 - Drainage Channel			
Cover Crop	Echinochloa utilis (Sep-Mar)	10	7.3
	or		
	Lolium multiflorum (Apr - Aug)	10	7.3
	Secale cereale (Apr - Aug)		
	Cynodon dactylon	20	14.5
	Trifolium pratense	5	3.6
	Total volume of seed (kg)	45	33
Native Grasses	Carex appressa	2	1.5
	Fairliea nodosa	1.5	1.1
	Gahnia sieberiana	1.5	1.1
	Hardenbergia violacea	1.5	1.1
	Juncus nodulosus	1.5	1.1
	Total volume of seed (kg)	8.0	6

Landscape Treatment Types	Species	Application rates of seed kg/ha	Area to be hydromulched
Seed Mix 4 - Native Grasses			
Cover Crop	Echinochloa utilis (Sep-Mar)	10	12.4
	or		
	Lolium multiflorum (Apr - Aug)	10	12.4
	Secale cereale (Apr - Aug)		
	Cynodon dactylon	20	24.8
	Trifolium pratense	5	6.2
	Total volume of seed (kg)	45	43
Native Grasses	Microlaena stipoides	1.3	1.7
	Dichandra repens	1.3	1.7
	Lomandra longifolia	1	1.2
	Themeda triandra	1.3	1.7
	Lepidosperma cf. laterale	1	1.2
	Total volume of seed (kg)	6.0	7.4
PROPERTY ADJUSTMENT SEED MIXES			
Seed Mix 1 - Hard leaved scribbly gum- panamatta red gum heathy woodland			
Cover Crop	Echinochloa utilis (Sep-Mar)	10	2.0
	or		
	Lolium multiflorum (Apr - Aug)	10	2.0
	Secale cereale (Apr - Aug)		
	Cynodon dactylon	20	4.1
	Trifolium pratense	5	1.0
	Total volume of seed (kg)	45	9
Native Grasses	Microlaena stipoides	1.3	0.3
	Themeda australis	1.3	0.3
	Dianella caerulea	1	0.2
	Panax umbellata (Pomax)	1.3	0.3
	Goodenia bellidifolia subsp. Bellidifolia	1	0.2
	Total volume of seed (kg)	6.0	1
Native Shrubs and Groundcovers	Banksia spinulosa	0.6	0.1
	Bursaria spinosa	0.8	0.2
	Daviesia ulicifolia	0.8	0.2
	Hakea dactyloides	0.8	0.2
	Hakea sericea	0.8	0.2
	Kunzea capitata	0.8	0.2
	Leptospermum trinervium	0.8	0.2
	Melaleuca nodosa	0.6	0.1
	Total volume of seed (kg)	6	1

Landscape Treatment Types	Species	Application rates of seed kg/ha	Area to be hydromulched
Seed Mix 2 - Broadleaved ironbark grey box melaleuca decora grassy open forest			
Cover Crop	Echinochloa utilis (Sep-Mar)	10	8.2
	or		
	Lolium multiflorum (Apr - Aug)	10	8.2
	Secale cereale (Apr - Aug)		
	Cynodon dactylon	20	16.4
	Trifolium pratense	5	4.1
	Total volume of seed (kg)	35	37
Native Grasses	Dianella caerulea	0.5	0.4
	Dichandra repens	0.7	0.6
	Entolasia stricta	0.8	0.6
	Goodenia hederacea subsp. hederacea	0.5	0.4
	Lepidosperma cf. laterale	0.5	0.4
	Lomandra longifolia	0.5	0.4
	Lomandra multiflora subsp. multiflora	0.5	0.4
	Microlaena stipoides	0.8	0.6
	Paricum simile	0.5	0.4
	Themeda triandra	0.8	0.6
	Total volume of seed (kg)	6.0	5
Native Trees, Shrubs and Groundcovers	Acacia falcata	0.5	0.4
	Baeckea discifolia	0.5	0.4
	Breytia oblongifolia	0.5	0.4
	Bursaria spinosa	0.5	0.4
	Dilwynia retorta	0.5	0.4
	Hakea sericea	0.5	0.4
	Melaleuca nodosa	0.5	0.4
	Melaleuca decora	0.5	0.4
	Persoonia linearis	0.5	0.4
	Pultenaea villosa	0.5	0.4
	Lissanthe strigosa	0.5	0.4
	Daviesia ulicifolia	0.5	0.4
	Total volume of seed (kg)	6.0	5
Seed Mix 4 - Native Grasses			
Cover Crop	Echinochloa utilis (Sep-Mar)	10	3.2
	or		
	Lolium multiflorum (Apr - Aug)	10	3.2
	Secale cereale (Apr - Aug)		
	Cynodon dactylon	20	6.5
	Trifolium pratense	5	1.6
	Total volume of seed (kg)	45	11
Native Grasses	Microlaena stipoides	1.3	0.4
	Dichandra repens	1.3	0.4
	Lomandra longifolia	1	0.3
	Themeda triandra	1.3	0.4
	Lepidosperma cf. laterale	1	0.3
	Total volume of seed (kg)	6.0	1.9

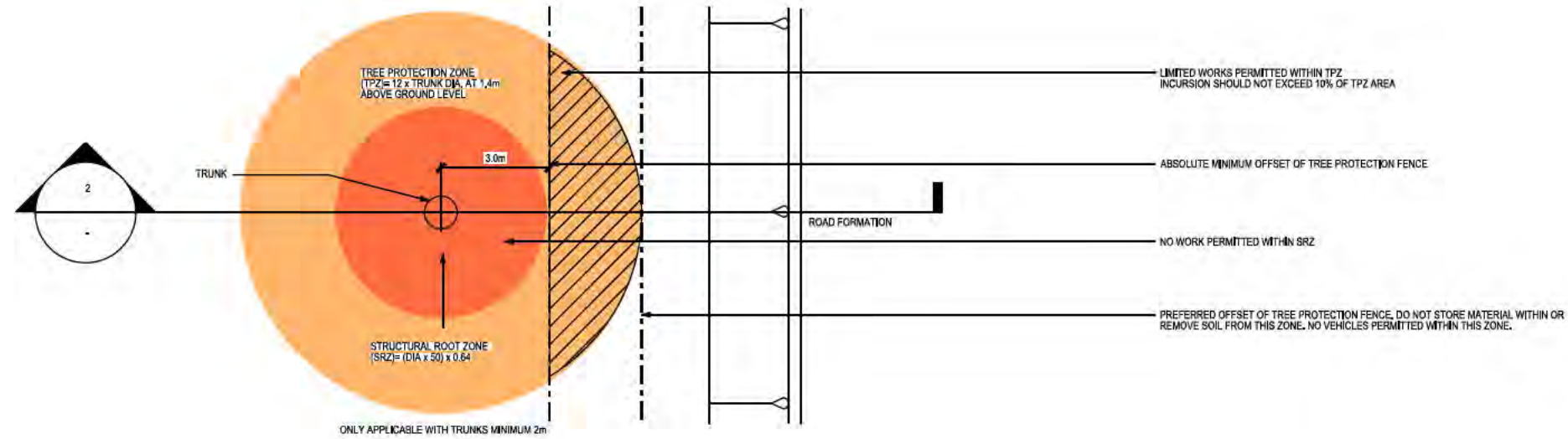
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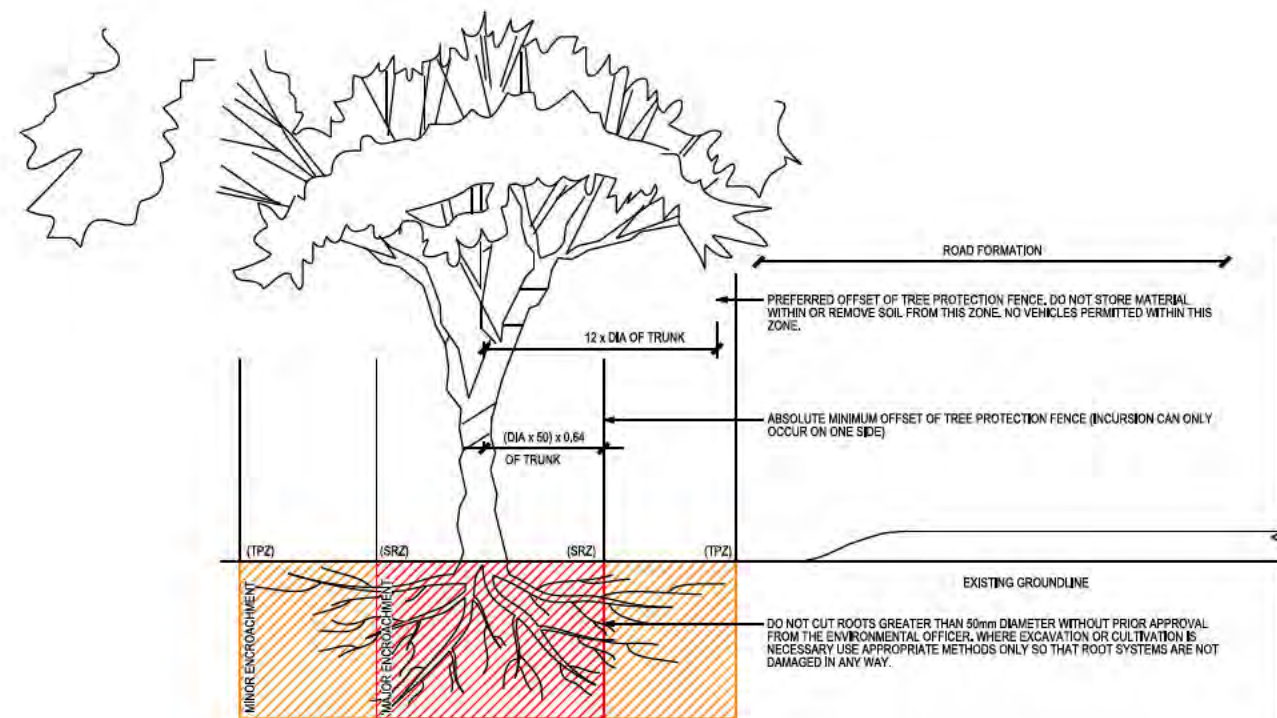
 Transport for NSW These plans are accepted for construction. Nouhad Farah A/ Developer Works Leader Date 26/03/2025					Status FOR CONSTRUCTION Scales NTS Current Issue Signatures Drawn MG Designed MN Checked ME Approved DKI Original Size A3 Height Datum AHD Grid MGA94 - 56 Filename: MARW-TRA-LA-DD-DWG-0122.Dgn	Project MOOREBANK AVENUE REALIGNMENT WORKS (MARW) Title SEED MIX SCHEDULE SHEET 2 OF 2 LANDSCAPE DESIGN	 Arcadis Australia Pacific Pty Limited Level 5, 225 St Georges Terrace PERTH WA 6000 ABN 78 104 485 289 Tel No: +61 8 9213 6700 www.arcadis.com/au Project No. 30100351 Drawing No. MARW-TRA-LA-DD-DWG-0122 Issue 2		
2	TCS DESIGN UPDATE	21.02.2025							
1	ISSUED FOR CONSTRUCTION	17.01.2025							
Issue	Description	Date							

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Date Plotted: 7 Sep 2005 - 07:08PM File Name: T:\Projects\SYD\2023\223-0027-00 - Moorebank Avenue Realignment Works\01 - (Sub-Project Name)\DR-Drawing Set (100-999)\MARW-TRA-LA-DD-DWG-0122.Dgn



1 TREE PROTECTION DETAIL PLAN N.T.S.



2 TREE PROTECTION DETAIL SECTION N.T.S.

NOTE:
THIS DETAIL APPLIES TO TREES OTHER THAN THOSE INDICATED WITH THEIR OWN EXCLUSION ZONE.

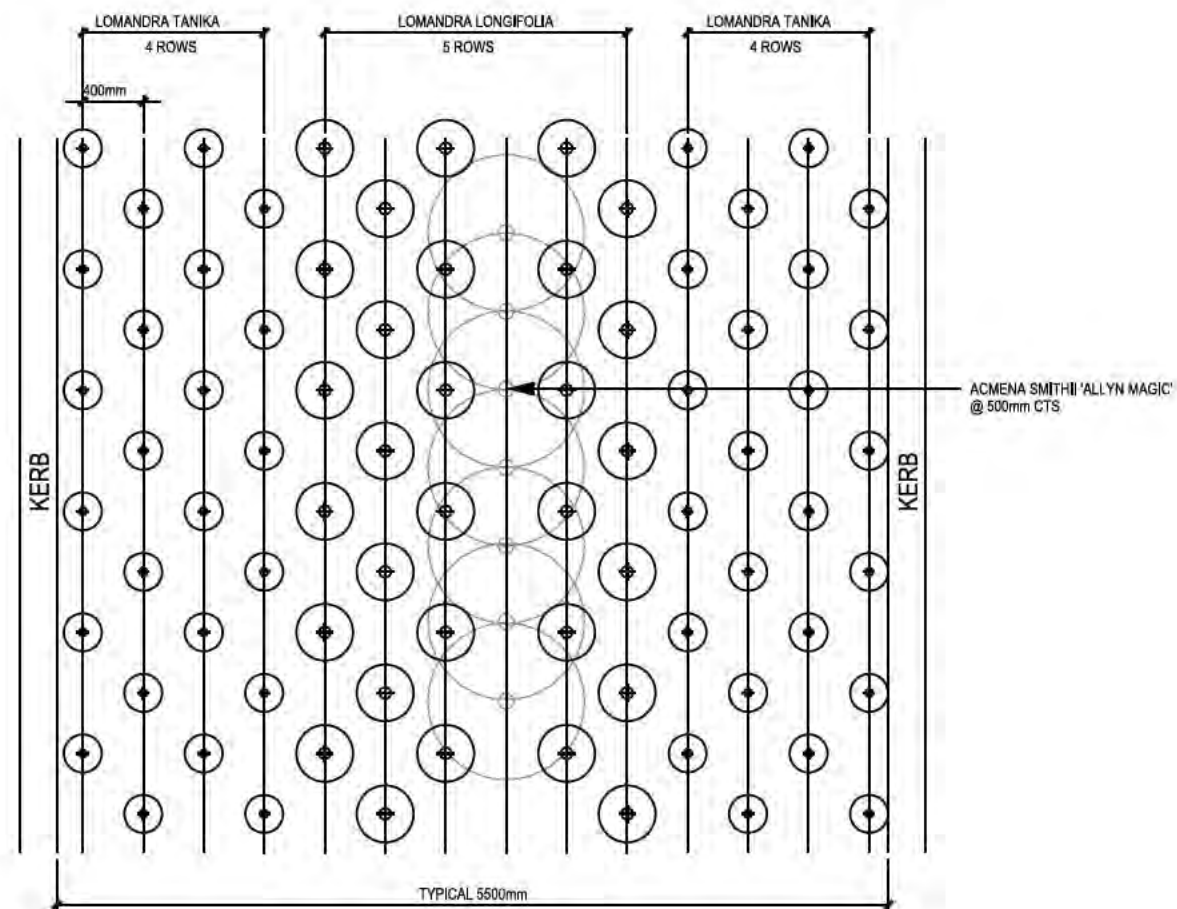
OFFICIAL

FOR CONSTRUCTION

 Transport for NSW These plans are accepted for construction. Nouhad Farah A/ Developer Works Leader Date 26/03/2025				Client 	Status FOR CONSTRUCTION Scales NTS Current Issue Signatures Drawn MG Designed MN Checked ME Approved DKI Original Size A3 Height Datum AHD Grid MGA94 - 56 Filename: MARW-TRA-LA-DD-DWG-0201.Dgn	Project MOOREBANK AVENUE REALIGNMENT WORKS (MARW) Title TREE PROTECTION DETAIL SHEET 1 OF 4 LANDSCAPE DESIGN	ARCADIS Arcadis Australia Pacific Pty Limited Level 5, 225 St Georges Terrace PERTH WA 6000 ABN 76 104 485 289 Tel No: +61 8 9213 6700 www.arcadis.com/au Project No. 30100351 Drawing No. MARW-TRA-LA-DD-DWG-0201 Issue 2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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1 MEDIAN PLANTING DETAIL
PLAN

N.T.S.

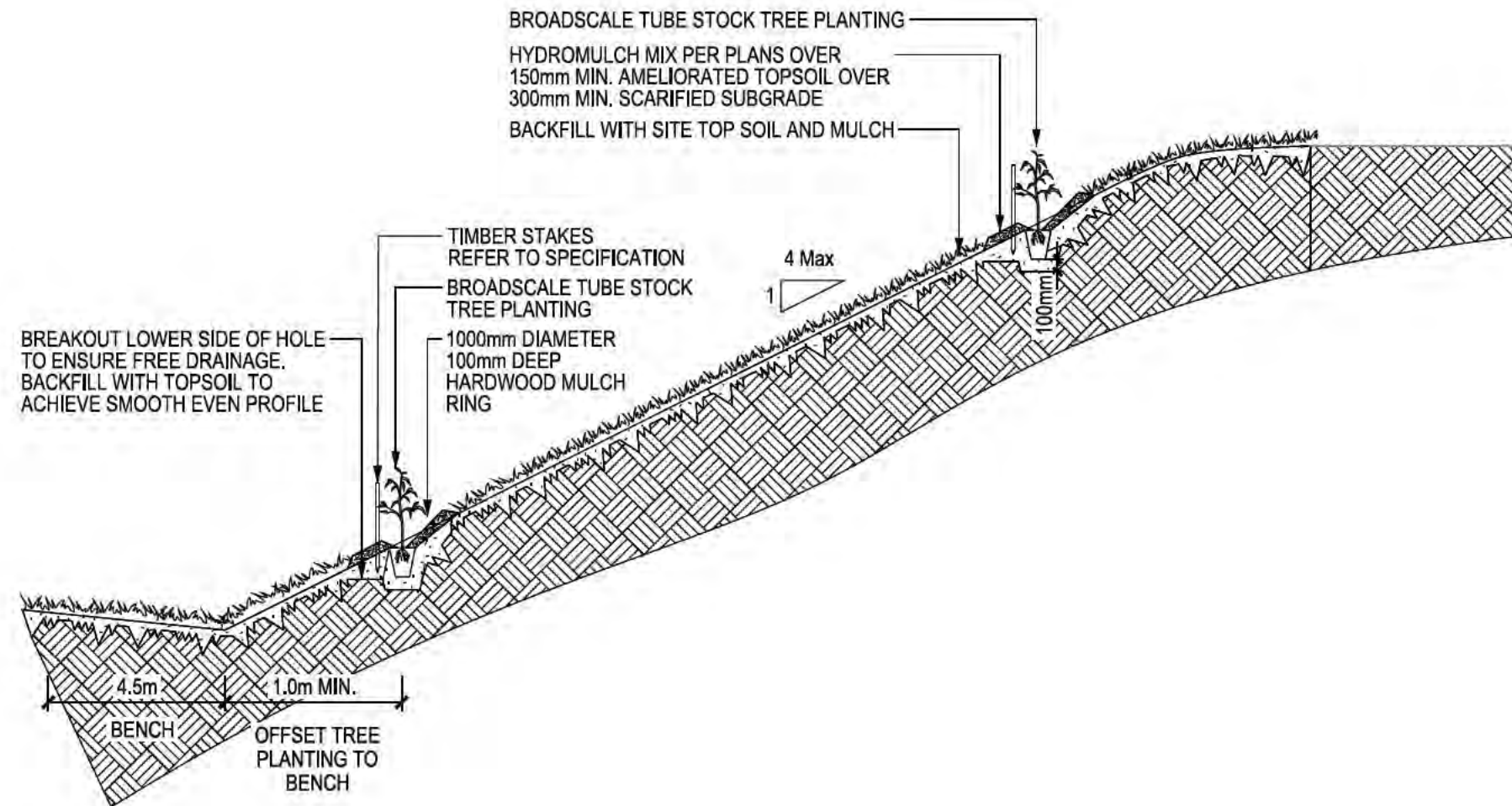
OFFICIAL

FOR CONSTRUCTION

 Transport for NSW These plans are accepted for construction. Nouhad Farah A/ Developer Works Leader Date 26/03/2025				Client  NATIONAL INTERMODAL	Status FOR CONSTRUCTION Scales NTS Current Issue Signatures Drawn MG Designed MN Checked ME Approved DKI Original Size A3 Height Datum AHD Grid MGA94 - 56 Filename: MARW-TRA-LA-DD-DWG-0202.Dgn	Project MOOREBANK AVENUE REALIGNMENT WORKS (MARW) Title MEDIAN PLANTING DETAIL SHEET 2 OF 4 LANDSCAPE DESIGN	 ARCADIS Arcadis Australia Pacific Pty Limited Level 5, 225 St Georges Terrace PERTH WA 6000 ABN 76 104 485 289 Tel No: +61 8 9213 6700 www.arcadis.com/au Project No. 30100351 Drawing No. MARW-TRA-LA-DD-DWG-0202 Issue 2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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1 BROADSCALE PLANTING DETAIL SECTION N.T.S.

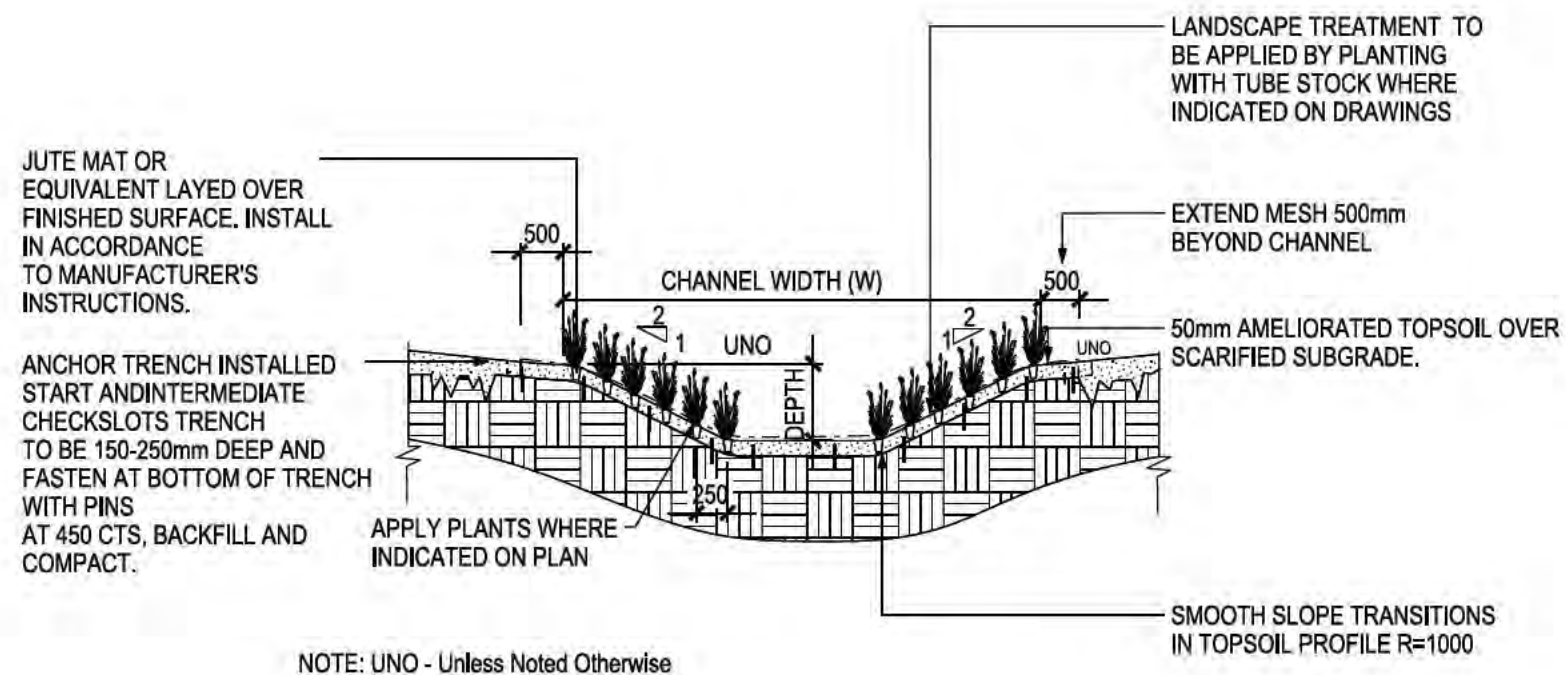
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FOR CONSTRUCTION

 Transport for NSW These plans are accepted for construction. Nouhad Farah A/ Developer Works Leader Date 26/03/2025				Client  NATIONAL INTERMODAL	Status FOR CONSTRUCTION Scales NTS Current Issue Signatures Drawn MG Designed MN Checked ME Approved DKJ Original Size A3 Height Datum AHD Grid MGA94 - 56 Filename: MARW-TRA-LA-DD-DWG-0203.Dgn	Project MOOREBANK AVENUE REALIGNMENT WORKS (MARW) Title BROADSCALE PLANTING DETAIL SHEET 3 OF 4 LANDSCAPE DESIGN	 ARCADIS Arcadis Australia Pacific Pty Limited Level 5, 225 St Georges Terrace PERTH WA 6000 ABN 78 104 485 289 Tel No: +61 8 9213 6700 www.arcadis.com/au Project No. 30100351 Drawing No. MARW-TRA-LA-DD-DWG-0203 Issue 2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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Date Plotted: 7 Sep 2005 - 07:08PM File Name: T:\Projects\SYD\2023\223-0027-00 - Moorebank Avenue Realignment Works\01 - (Sub-Project Name)\DR-Drawing Set (100-999)\MARW-TRA-LA-DD-DWG-0203.Dgn



1 TYPICAL DRAINAGE SECTION N.T.S.

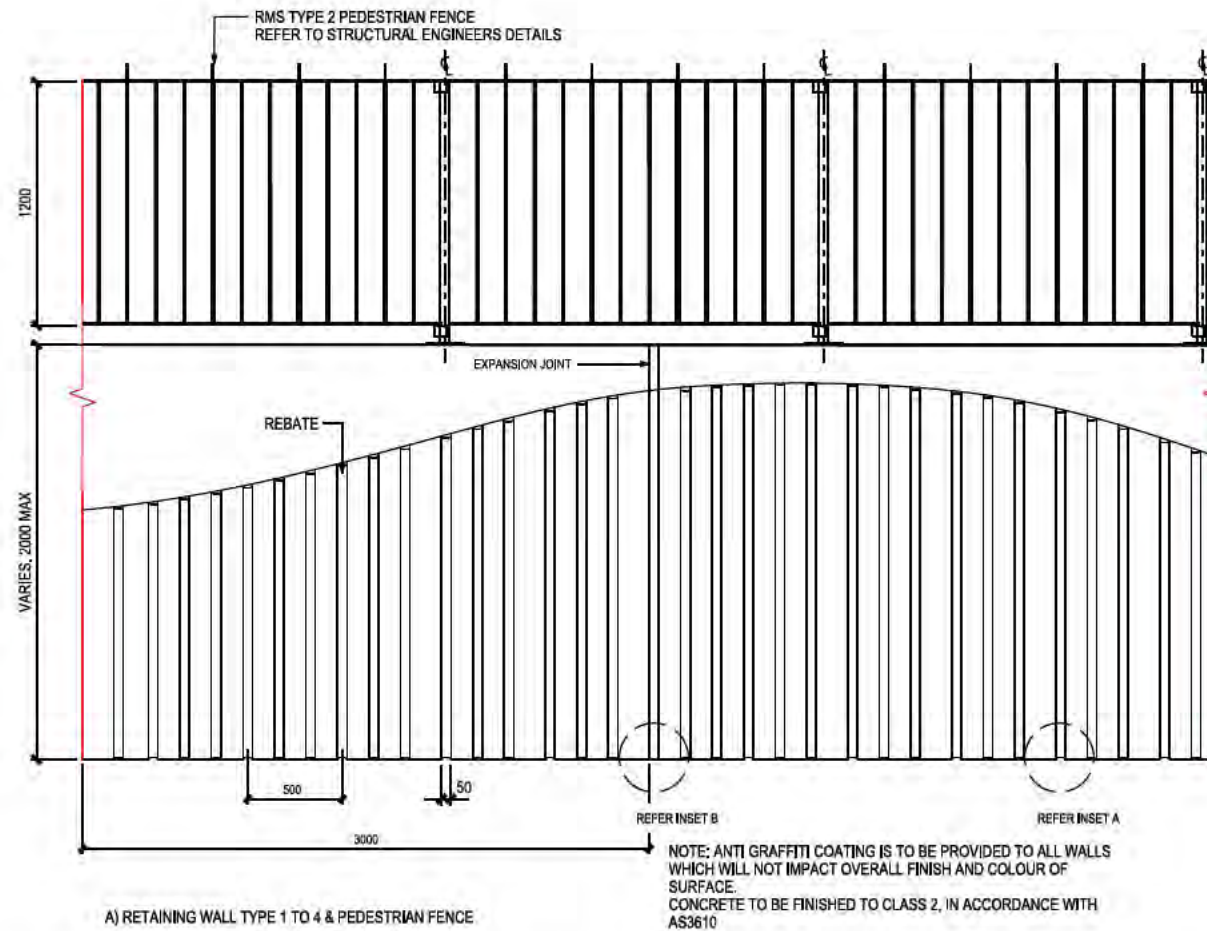
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FOR CONSTRUCTION

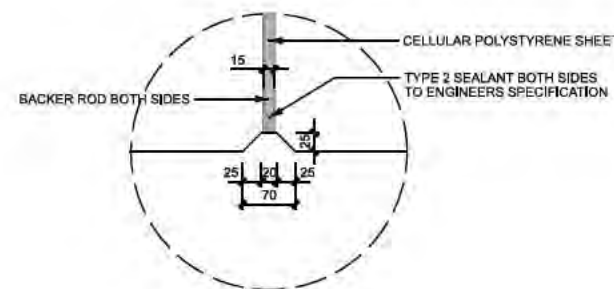
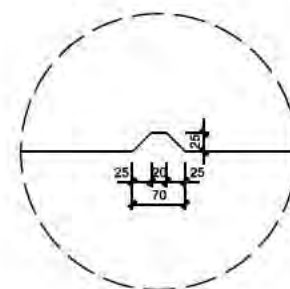
Transport for NSW These plans are accepted for construction. Nouhad Farah A/ Developer Works Leader Date 26/03/2025				Status FOR CONSTRUCTION Scales NTS Original Size A3 Height Datum AHD Grid MGA94 - 56 Filename: MARW-TRA-LA-DD-DWG-0204.Dgn		Project MOOREBANK AVENUE REALIGNMENT WORKS (MARW) Title TYPICAL DRAINAGE SHEET 4 OF 4 LANDSCAPE DESIGN		Arcadis Australia Pacific Pty Limited Level 5, 225 St Georges Terrace PERTH WA 6000 ABN 78 104 485 289 Tel No: +61 8 9213 6700 www.arcadis.com/au		Project No. 30100351
2	TCS DESIGN UPDATE	21.02.2025								
1	ISSUED FOR CONSTRUCTION	17.01.2025								
Issue	Description	Date								

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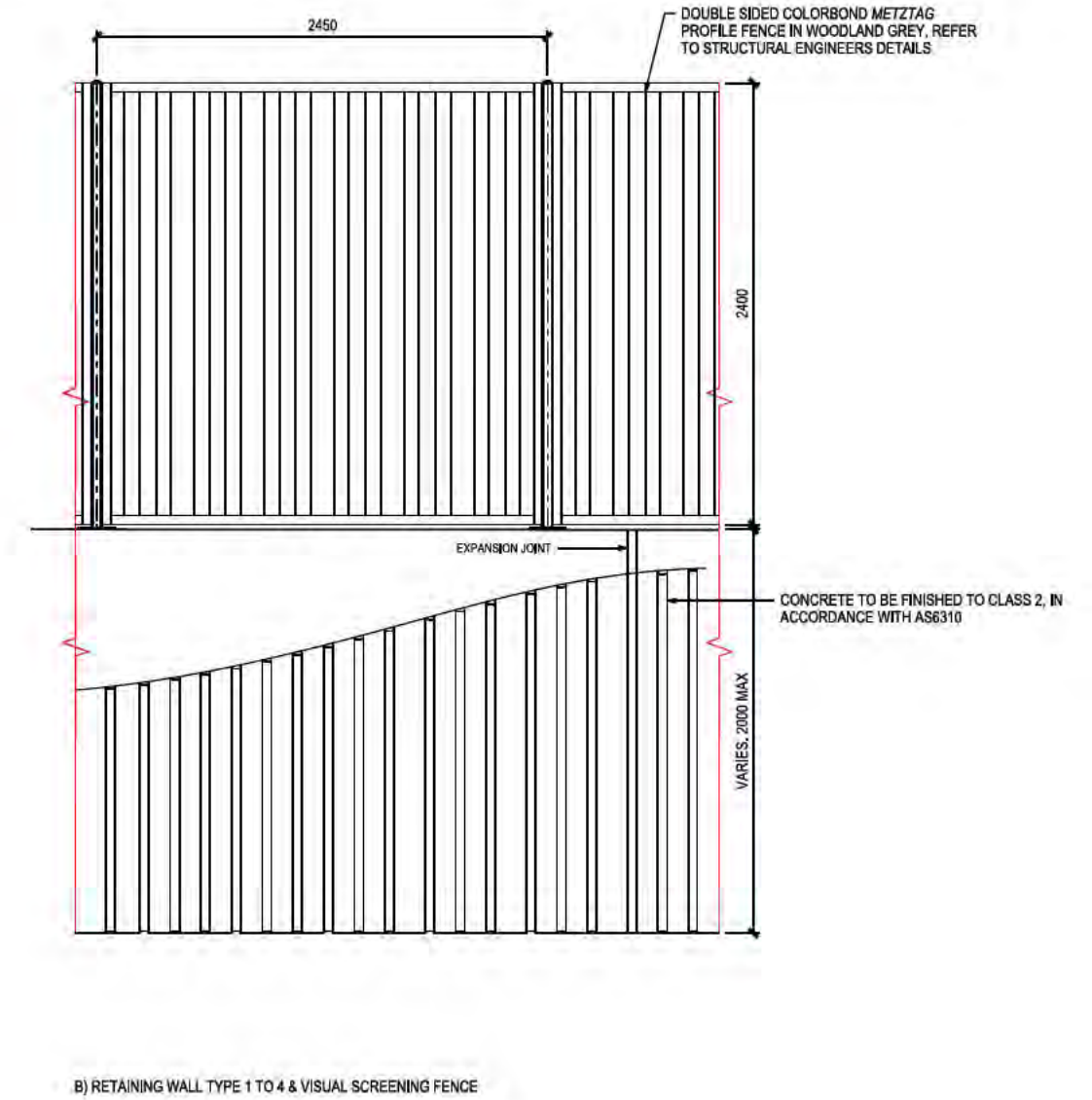
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1 RETAINING WALL TYPE 1 TO 4 DETAIL SECTION N.T.S.



2 JOINTS & REBATES SECTION N.T.S.



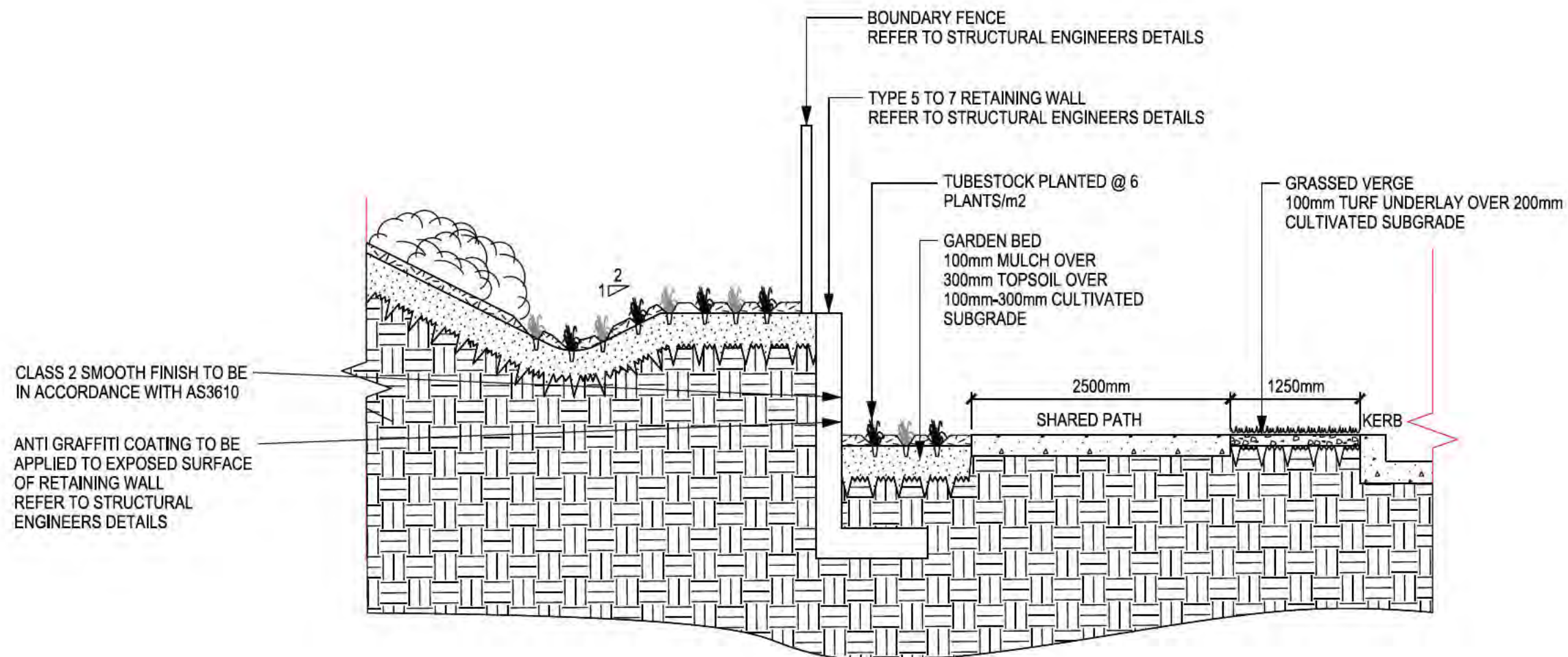
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FOR CONSTRUCTION

 Transport for NSW These plans are accepted for construction. Nouhad Farah A/ Developer Works Leader Date 26/03/2025			Client 	Status FOR CONSTRUCTION ScalesNTS Current Issue Signatures Original SizeA3 Height DatumAHD GridMGA94 - 56 Filename:MARW-TRA-LA-DD-DWG-0210.Dgn Drawn MG Designed MN Checked ME Approved DK	Project MOOREBANK AVENUE REALIGNMENT WORKS (MARW) Title TYPE 1 RETAINING WALL DETAIL SHEET 1 OF 4 LANDSCAPE DESIGN	 Arcadis Australia Pacific Pty Limited Level 5, 225 St Georges Terrace PERTH WA 6000 ABN 78 104 485 289 Tel No: +61 8 9213 6700 www.arcadis.com/au Project No. 30100351 Drawing No. MARW-TRA-LA-DD-DWG-0210 Issue 2
2	TCS DESIGN UPDATE	21.02.2025				
1	ISSUED FOR CONSTRUCTION	17.01.2025				
Issue	Description	Date				

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Date Plotted: 7 Sep 2005 - 07:08PM File Name: T:\Projects\SYD\2023\223-0027-00 - Moorebank Avenue Realignment Works\1-01 - (Sub-Project Name)\DR-Drawing Set (100-999)\MARW-TRA-LA-DD-DWG-0210.Dgn



1 RETAINING WALL TYPE 5 TO 7 DETAIL SECTION N.T.S.

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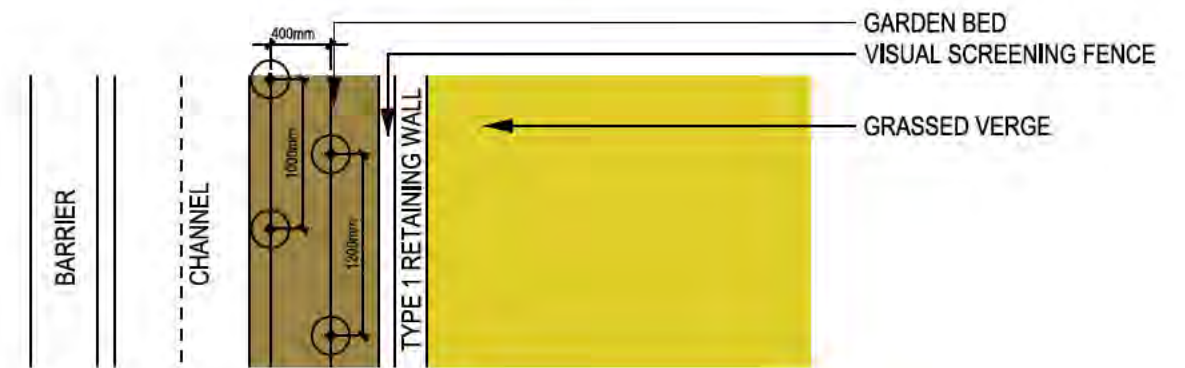
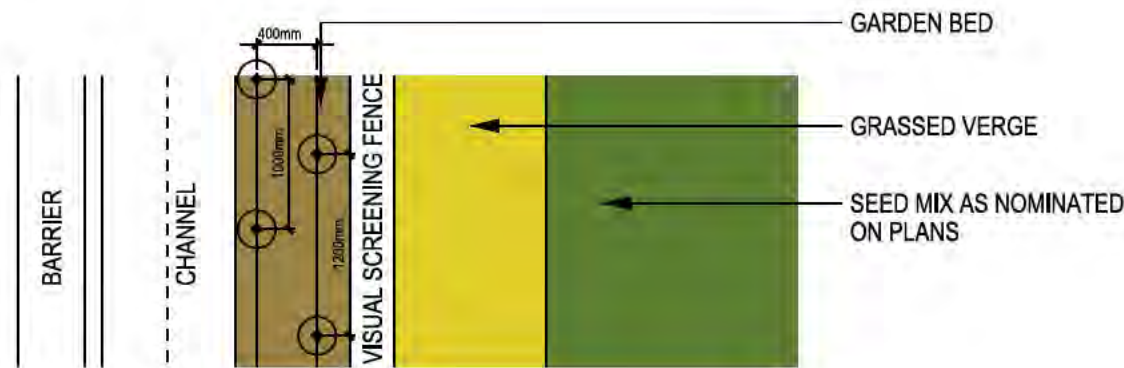
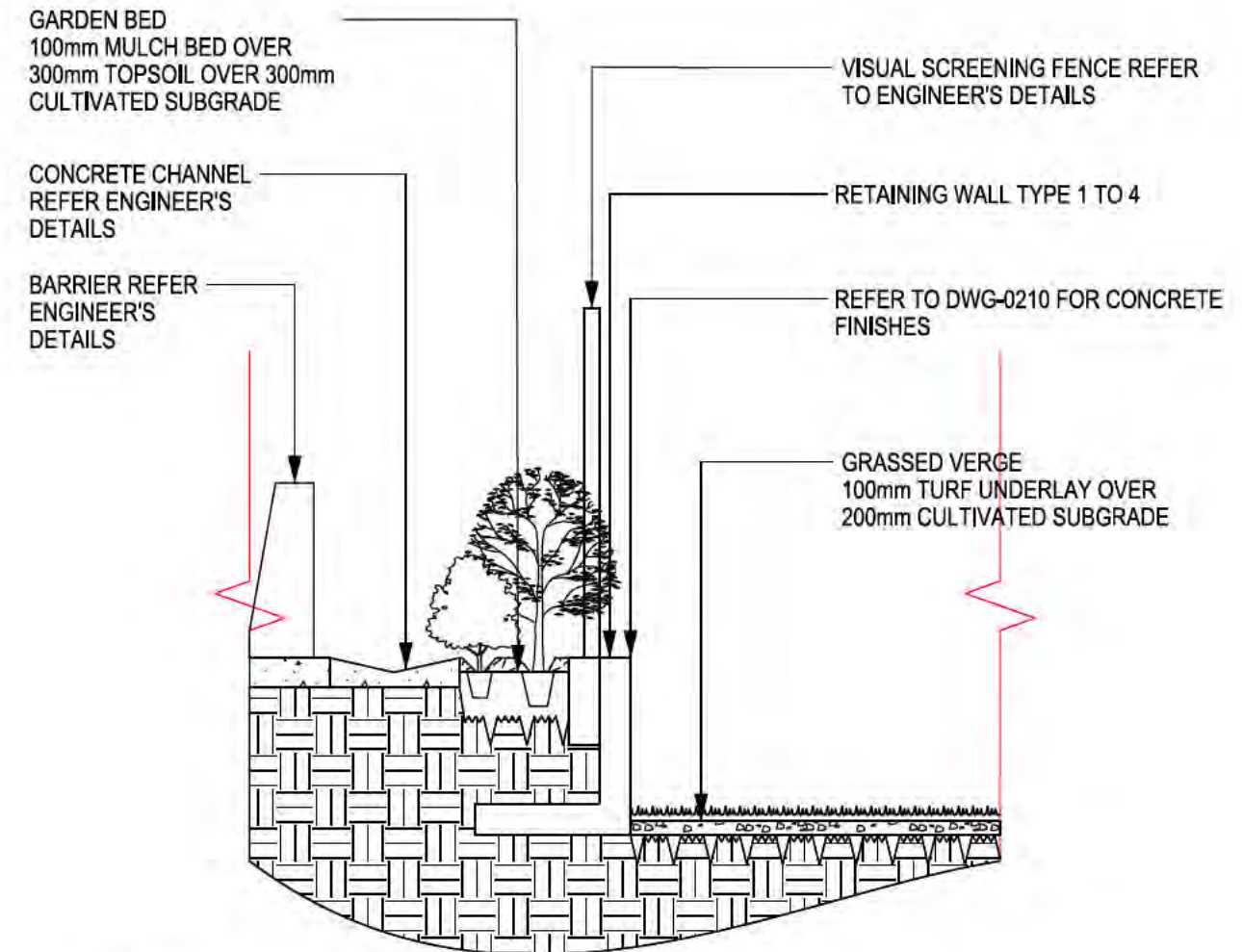
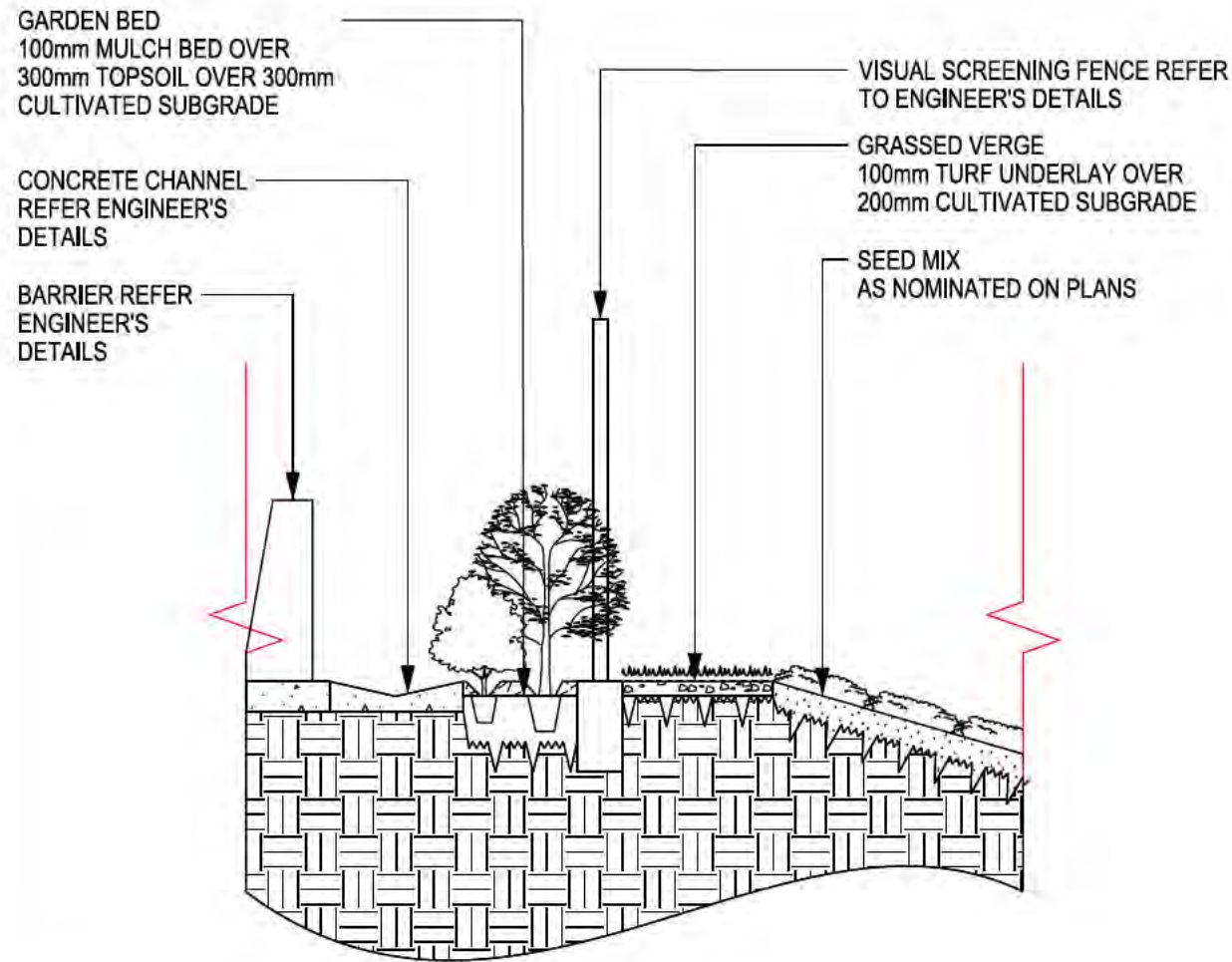
 Transport for NSW These plans are accepted for construction. Nouhad Farah A/ Developer Works Leader Date 26/03/2025				Client 	Status FOR CONSTRUCTION <table><tr><td>Scales</td><td>NTS</td><td colspan="2">Current Issue Signatures</td></tr><tr><td>Original Size</td><td>A3</td><td>Drawn MG</td><td></td></tr><tr><td>Height Datum</td><td>AHD</td><td>Designed MN</td><td></td></tr><tr><td>Grid</td><td>MGA94 - 56</td><td>Checked ME</td><td></td></tr><tr><td>Filename:</td><td colspan="3">MARW-TRA-LA-DD-DWG-0211.Dgn</td></tr></table>	Scales	NTS	Current Issue Signatures		Original Size	A3	Drawn MG		Height Datum	AHD	Designed MN		Grid	MGA94 - 56	Checked ME		Filename:	MARW-TRA-LA-DD-DWG-0211.Dgn			Project MOOREBANK AVENUE REALIGNMENT WORKS (MARW) <table><tr><td>Title</td><td>TYPE 2 RETAINING WALL DETAIL SHEET 2 OF 4 LANDSCAPE DESIGN</td></tr></table>	Title	TYPE 2 RETAINING WALL DETAIL SHEET 2 OF 4 LANDSCAPE DESIGN	 Arcadis Australia Pacific Pty Limited Level 5, 225 St Georges Terrace PERTH WA 6000 ABN 78 104 485 289 Tel No: +61 8 9213 6700 www.arcadis.com/au <table><tr><td>Project No.</td><td>30100351</td></tr><tr><td>Drawing No.</td><td>MARW-TRA-LA-DD-DWG-0211</td></tr><tr><td>Issue</td><td>2</td></tr></table>	Project No.	30100351	Drawing No.	MARW-TRA-LA-DD-DWG-0211	Issue	2
Scales	NTS	Current Issue Signatures																																	
Original Size	A3	Drawn MG																																	
Height Datum	AHD	Designed MN																																	
Grid	MGA94 - 56	Checked ME																																	
Filename:	MARW-TRA-LA-DD-DWG-0211.Dgn																																		
Title	TYPE 2 RETAINING WALL DETAIL SHEET 2 OF 4 LANDSCAPE DESIGN																																		
Project No.	30100351																																		
Drawing No.	MARW-TRA-LA-DD-DWG-0211																																		
Issue	2																																		
2	TCS DESIGN UPDATE	21.02.2025																																	
1	ISSUED FOR CONSTRUCTION	17.01.2025																																	
Issue	Description	Date																																	

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Date Plotted: 7 Sep 2005 - 07:08PM File Name: T:\Projects\SYD\2023\223-0027-00 - Moorebank Avenue Realignment Works\L-01 - (Sub-Project Name)\DR-Drawing Set (100-999)\MARW-TRA-LA-DD-DWG-0211.Dgn

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Date Plotted: 7 Sep 2005 - 07:08PM File Name: T:\Projects\SYD\2023\223-0027-00 - Moorebank Avenue Realignment Works\1-01 - (Sub-Project Name)\DR-Drawing Set (100-999)\MARW-TRA-LA-DD-DWG-0211.Dgn



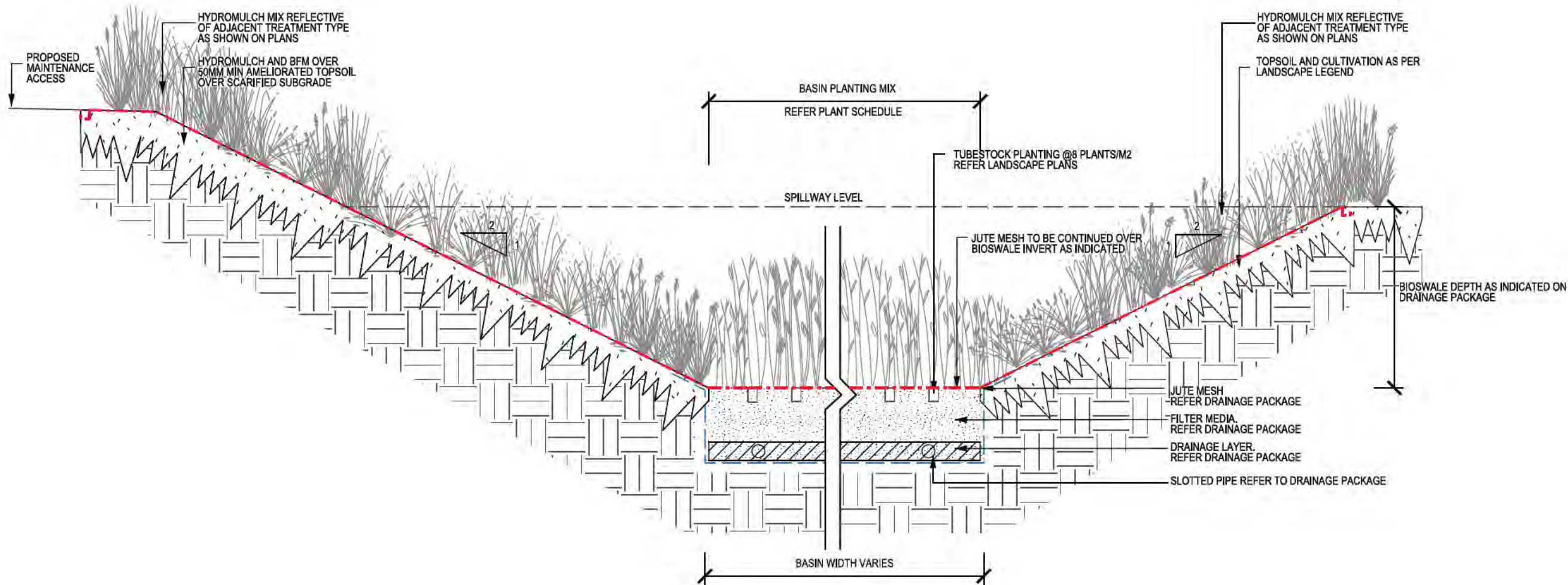
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NSW Transport for NSW These plans are accepted for construction. Nouhad Farah A/ Developer Works Leader Date 26/03/2025		Client NATIONAL INTERMODAL	Status FOR CONSTRUCTION Scales NTS Original Size A3 Height Datum AHD Grid MGA94 - 56 Filename: MARW-TRA-LA-DD-DWG-0212.Dgn	Project MOOREBANK AVENUE REALIGNMENT WORKS (MARW) Title VISUAL SCREENING DETAILS SHEET 3 OF 4 LANDSCAPE DESIGN	ARCADIS Arcadis Australia Pacific Pty Limited Level 5, 225 St Georges Terrace PERTH WA 6000 ABN 76 104 485 289 Tel No: +61 8 9213 6700 www.arcadis.com.au Project No. 30100351 Drawing No. MARW-TRA-LA-DD-DWG-0212 Issue 2
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Date Plotted: 7 Sep 2005 - 07:08PM File Name: T:\Projects\SYD\2023\223-0027-00 - Moorebank Avenue Realignment Works\1-01 - (Sub-Project Name)\DR-Drawing Set (100-999)\MARW-TRA-LA-DD-DWG-0212.Dgn



1 BIOFILTRATION BASIN DETAIL SECTION N.T.S.

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 These plans are accepted for construction. Nouhad Farah A/ Developer Works Leader Date 26/03/2025			Status FOR CONSTRUCTION		Project MOOREBANK AVENUE REALIGNMENT WORKS (MARW)	 Arcadis Australia Pacific Pty Limited Level 5, 225 St Georges Terrace PERTH WA 6000 ABN 76 104 485 289 Tel No: +61 8 9213 6700 www.arcadis.com/au
			Scales NTS	Current Issue Signatures		
2 TCS DESIGN UPDATE	21.02.2025		Original Size A3	Drawn MG	Drawing No. MARW-TRA-LA-DD-DWG-0213	Issue 2
1 ISSUED FOR CONSTRUCTION	17.01.2025		Height Datum AHD	Designed MN		
Issue	Description		Date	Grid MGA94 - 56		
			Filename: MARW-TRA-LA-DD-DWG-0213.Dgn			