

78 LOCKWOOD ROAD DATA CENTRE

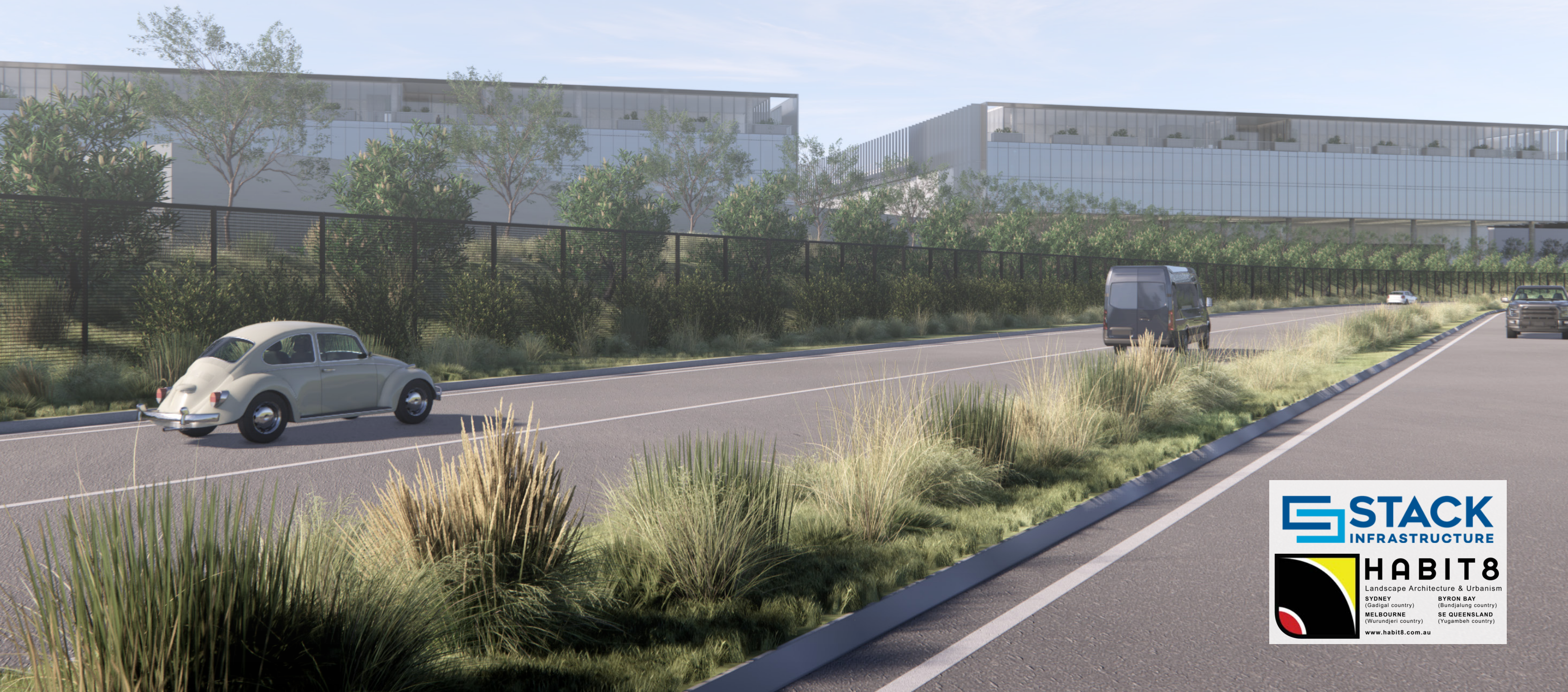
78 LOCKWOOD ROAD, ERSKINE PARK, NSW 2759

LANDSCAPE CONCEPT PLAN

DATE: 30 OCTOBER 2025

ISSUE I

SSDA SUBMISSION



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Prepared by



For:



PROJECT SUMMARY

This Landscape Concept Report has been prepared by Habit8 on behalf of STACK Infrastructure to accompany a State Significant Development Application (SSDA) for a proposed data centre development at 78 Lockwood Road, Erskine Park (the site).

The site is located in the Penrith Local Government Area (LGA) and is approximately 40km west of the Sydney Central Business District (CBD), 20km west of the Parramatta CBD, and 10km north-east of the future Western Sydney International Airport.

The site is an irregular shaped 7.7-hectare lot bounded to the north by Lenore Drive and to the east by an E2 Environmental Conservation corridor that follows Ropes Creek. The site relies upon access from a cul-de-sac at the eastern end of Lockwood Road at the site's southern boundary.

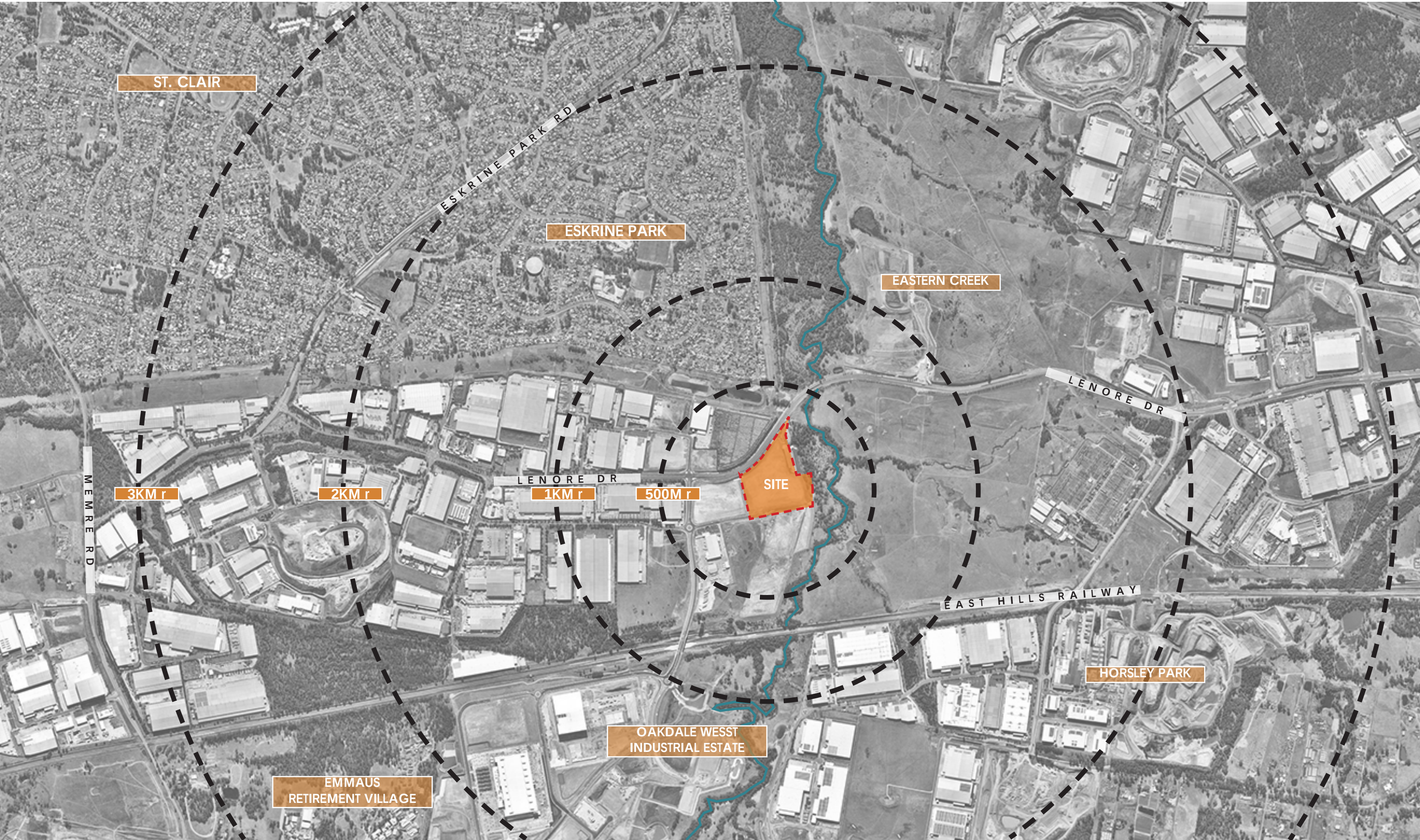
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All landscape design documentation prepared by Habit8 Pty Ltd, under the direction of David Vago, reflects our professional expertise and industry best practices. Where our recommendations are overridden or modified by third parties, including but not limited to Local and State Government, against our professional judgment, Habit8 Pty Ltd accepts no responsibility or liability for any resulting failures, loss of plantings, decline in tree health, or degradation of the landscape.

Should any damage, failure, or cost be incurred as a direct consequence of actions, directions, or imposed conditions that contradict our professional advice, Habit8 Pty Ltd reserves all rights to seek full recovery of associated costs, damages, or losses from the responsible party.

This disclaimer forms part of the official documentation and must be read in conjunction with all design reports and documentation.

SITE CONTEXT



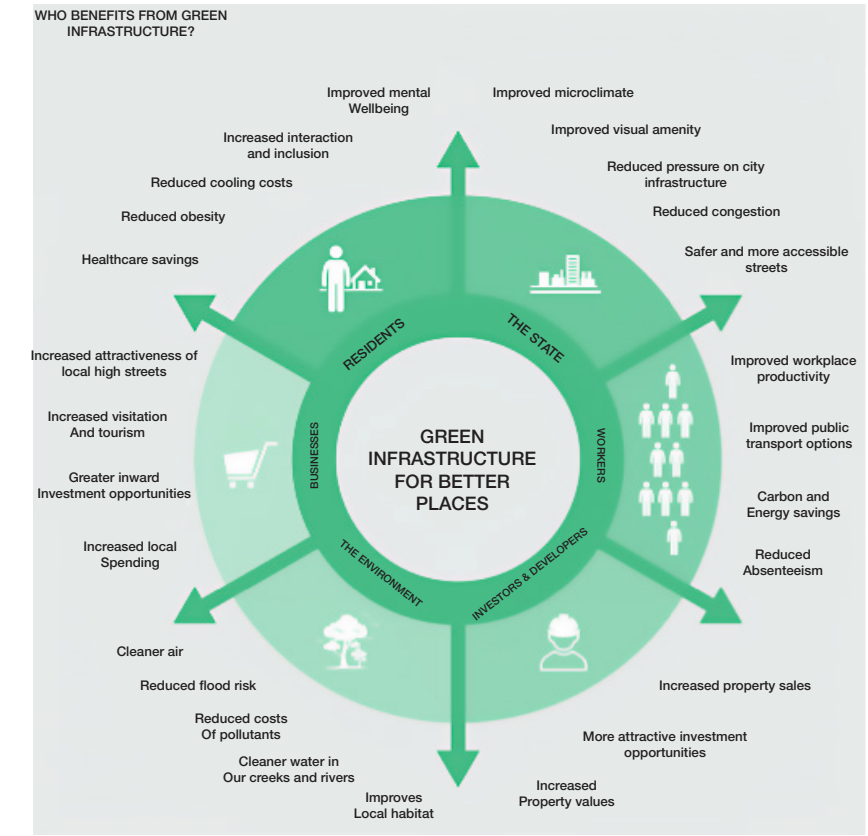
SITE CONTEXT: AERIAL PHOTO



LANDSCAPE DESIGN PHILOSOPHY

Green Infrastructure is the network of green spaces, natural systems and semi-natural systems including parks, rivers, bushland and private gardens that are strategically planned, designed and managed to support a good quality of life in an urban environment.

Green Infrastructure should be envisioned as a three-dimensional envelope that surrounds and connects buildings, streets and utilities. The concept of landscape as Green Infrastructure provides a framework for integrating the work of designers, planners, developers and policy makers, and leveraging this collaboration to achieve larger local or state goals.



NSW GAO - Greener Places Policy 2020

Green Infrastructure is as crucial to the city as transport, cultural and communications infrastructure. It delivers a range of benefits including:

- Healthy living
- Mitigating flooding
- Improving air and water quality
- Cooling the urban environment
- Encouraging walking and cycling
- Enhancing biodiversity and ecological resilience
- Absorbing and transforming waste.

The four main principles associated with the draft NSW Greener Places Policy prepared by the Government Architect NSW (2017) are:

- a) Principle 1: Integration:** We propose a multi-purpose infrastructure strategy that mimics nature, provides critical ecosystem services and promotes healthy and active living. We propose to combine green space with urban development and WSD infrastructure.
- b) Principle 2: Connectivity:** We aim to create a network of high quality open streetscape and spaces that connect with each warehouse and office, public transport hubs. The network includes physical and functional connections that benefit people, wildlife and the logistics nature of the estate.
- c) Principle 3: Multifunctionality:** Our proposed green space infrastructure is designed to be high quality and high performing, producing ecological, social, environmental and economic benefits. The multifunctionality of our design proposal allows the sites green infrastructure to deliver multiple ecosystem, environmental and other services simultaneously.
- d) Principle 4: Participation:** We have followed a planning process that has been open to all, transparent and incorporates the knowledge and needs of all interested and diverse parties. The process has involved stakeholders in development, NSW Government Penrith Council and the industrial open market through tenants and the companies they represent. The process has incorporated local and state Green Infrastructure policies and actions.

The following design features reflect the project outcomes:

PROJECT OUTCOMES:

- 1. Conservation of the natural environment.**
 - This project will lead to the future enhancement of the increasing endemic canopy tree planting
 - Promotion of social, cultural, recreational, and educational opportunities within natural landscapes.
- 2. Increased access to open space**
 - Improved connections to local destinations
 - Quantity, quality, distribution, and accessibility of Industrial office green spaces enables the delivery of multifunctional spaces that promote healthy work environments
- 3. Improved connectivity to promote active living**
 - Improvements to the office communal areas and frontages that promote exercise and alternative modes of transport such as walking and cycling.
- 4. Increase urban greening to ameliorate climate extremes**
 - Design of green cover strategies including street trees, front setback canopy trees, cooler pavement materials and WSUD.
 - Provide benefits such as improved amenity, comfort, health, reduced stormwater run-off, improved air and water quality, and energy and resource efficiency

a) RE-VEGETATION STRATEGY

The strategy for re-vegetating the site focuses on canopy tree planting to reduce the “urban heat island effect”. We have proposed a mix of local endemic, native and exotic trees to strengthen the urban design principles and to comply with current sustainability guidelines. Street verges, buffer tree planting to boundaries and all road setbacks are densely planted with canopy trees ranging from 6m to 15m+ in height and canopy spread. Car parks hard surfaces are shaded by tree planting between car parking spaces. Cycleways and path systems are also shaded by canopy tree planting. WSUD principles including soft engineering through bio-swales, detention basins and grey water re-use (co-ordinated with the civil engineer) shall help in maintaining and managing the re-vegetation areas.

DESIGN PRECEDENT IMAGES

FRONT SETBACK



LANDSCAPE BUFFER



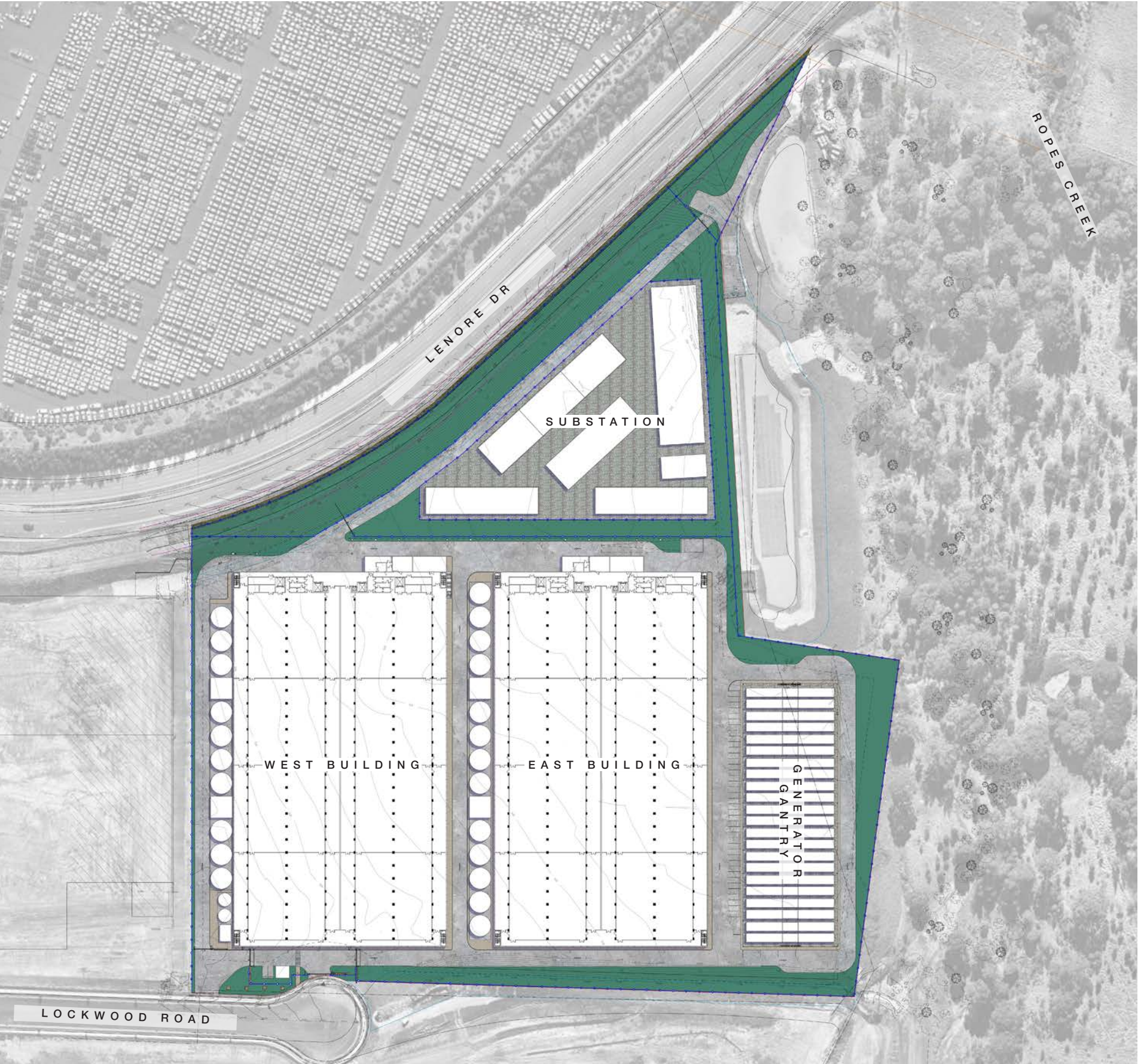


KEY

- ENTRY PLANTING**
 - *Angophora costata*
 - *Brachychiton acerifolium*
 - *Corymbia maculata*
 - *Cupaniopsis anacardioides*
 - *Magnolia 'Exmouth'*
- BOUNDARY BUFFER PLANTING**
 - *Eucalyptus crebra*
 - *Eucalyptus molucanna*
 - *Elaeocarpus reticulatus*
 - *Melaleuca decora*
- LENORE DRIVE SETBACK PLANTING**
 - *Corymbia citriodora 'Baby Citro'*
 - *Corymbia eximia 'Nana'*
 - *Cupaniopsis anacardioides*
 - *Eucalyptus ficifolia*
- CARPARK AND OFFICE PLANTING**
 - *Elaeocarpus reticulatus*
 - *Tristanopsis 'Luscious'*
 - *Waterhousea floribunda*
 - *Magnolia 'Coolwyn Gloss'*
- FLOOD CORRIDOR**
 - *Eucalyptus amplifolia*
 - *Glochidion ferdinandi*
 - *Melaleuca linariifolia*
 - *Melaleuca styphelioides*
- TURF AREA

NOTE:
REFER TO PLANT LIST ON DWG L20 FOR DETAILED SCHEDULE

DEEP SOIL PLAN



KEY

DEEP SOIL ZONE

TOTAL SITE AREA	77,241.97 m ²
DEEP SOIL AREA	14,733.80 m ²
DEEP SOIL PERCENTAGE	19.07%

LANDSCAPE MASTERPLAN



KEY

- 
SITE BOUNDARY
 - 
4100mm HT. SECURITY PERIMETER FENCE TO ARCHITECT'S DETAILS
 - 
PROPOSED TREE PLANTING
REFER TO PLANT SCHEDULE
 - 
MASS PLANTING BEDS
REFER TO PLANT SCHEDULE
 - 
TURF AREA
 - 
PAVED / TILED SURFACE
TO ARCHITECT'S DETAILS
 - 
CONCRETE SURFACE
TO ENGINEER'S DETAILS
 - 
CONCRETE EDGING
 - 
STEEL EDGING AROUND
TREE PLANTING
 - 
EASEMENT FOR
DRAINAGE
 - 
EASEMENT FOR
OVERHEAD POWERLINES
 - 
EASEMENT FOR
UNDERGROUND CABLES
 - 
UNDERGROUND
ELECTRICAL LINES
 - 
GRAVEL SURFACE



GREENER PLACES PRINCIPLES



PRINCIPLE 2.

Connectivity

PRINCIPLE 1

Integration

create an interconnected
network of open space

create an interconnected
network of open space

NSW GREENER PLACES POLICY (GAO 2020)

TREE CANOPY COVER

TREE NO.	TREE CANOPY	CANOPY AREA (m ²)	TOTAL CANOPY COVER (m ²)
32	3m	7	224
59	6m	28	1652
46	8m	50	2300
60	10m	78	4680

TOTAL SITE AREA 77,241.97 m²

TOTAL TREE NO.	197
TOTAL SQM CANOPY COVER	8,856 m ²
TOTAL CANOPY COVER PERCENTAGE	11.46%

DCP REQUIREMENT 10.00%

DESIGN NOTES

1. SITE ENTRY FEATURE

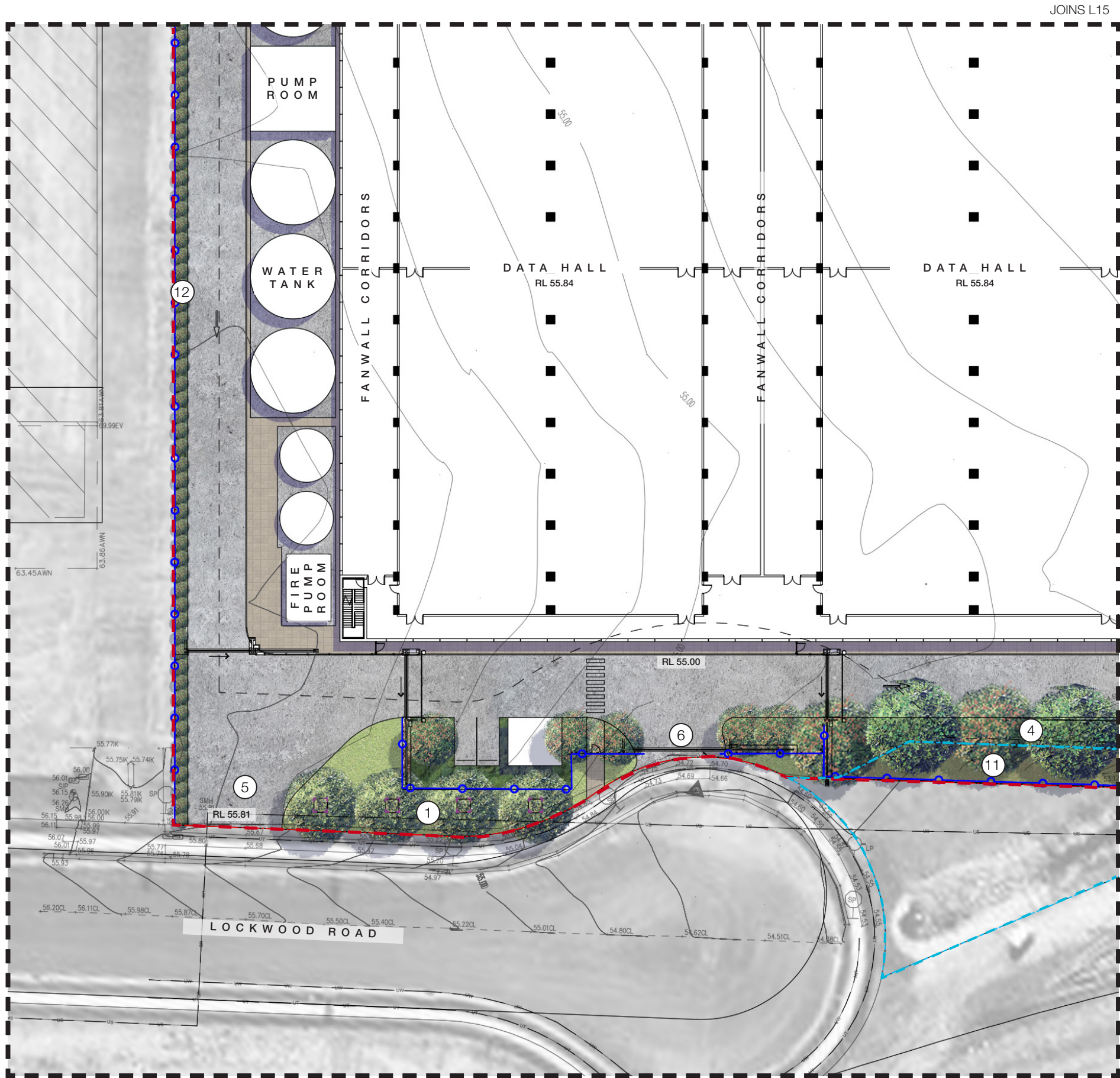
- Feature tree (@5m OC) and shrub planting
- 2. EASEMENT PLANTING (LENORE DRIVE SETBACK)**
- Canopy trees with non-invasive root systems (15m ht-20m ht + @8m OC)
To Bushfire Management Spacing
 - Native grasses and groundcovers
- 3. OVERFLOW LAND ZONE**
- Grasses and groundcovers
 - Rows of screening shrubs on sides of fence (2-3m HT)
- 4. BOUNDARY BUFFER PLANTING (TREES: 15m HT+)**
- 5. TRUCK ENTRY / EXIT**

6. CAR ENTRY / EXIT

7. EASEMENT PLANTING (DETENTION POND)

- Native grasses and groundcovers
- 8. GENERATOR GANTRY**
- 9. FLOOD CORRIDOR (VEGETATED RIPARIAN ZONE)**
 - Native grasses and groundcovers
 - Canopy trees (Endemic)
 - To Bushfire Management Guideline
- 10. RAMP TO UPPER GROUND CAP**
- 11. EASEMENT PLANTING (DRAINAGE)**
 - Native grasses and groundcovers
- 12. BOUNDARY PLANTING**
 - Hedge planting
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KEYPLAN

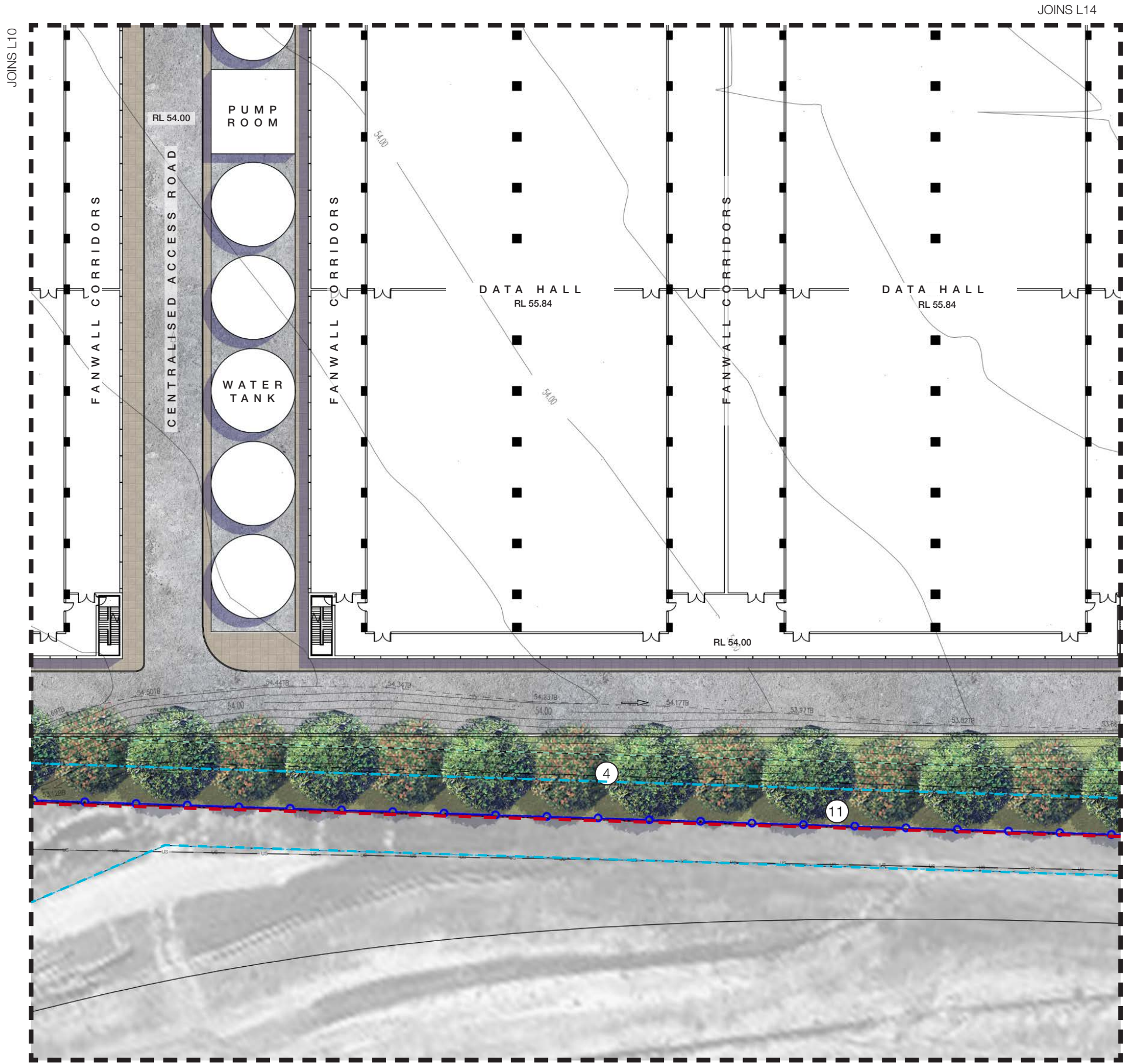
KEY

- SITE BOUNDARY
- 4100mm HT. SECURITY PERIMETER FENCE TO ARCHITECT'S DETAILS
- PROPOSED TREE PLANTING REFER TO PLANT SCHEDULE
- MASS PLANTING BEDS REFER TO PLANT SCHEDULE
- TURF AREA
- PAVED / TILED SURFACE TO ARCHITECT'S DETAILS
- CONCRETE SURFACE TO ENGINEER'S DETAILS
- CONCRETE EDGING
- STEEL EDGING AROUND TREE PLANTING
- EASEMENT FOR DRAINAGE
- EASEMENT FOR OVERHEAD POWERLINES
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- UNDERGROUND ELECTRICAL LINES
- GRAVEL SURFACE

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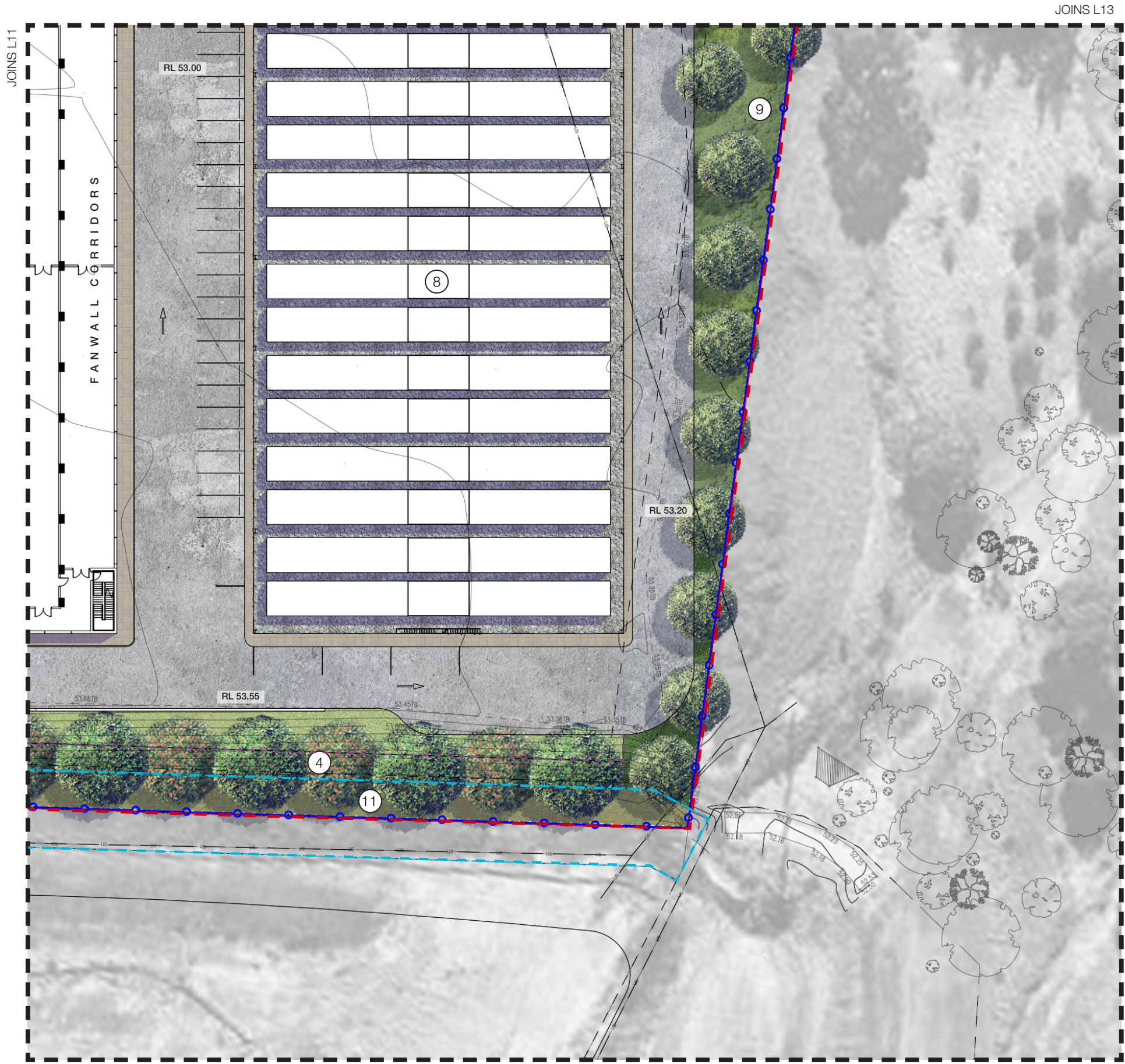


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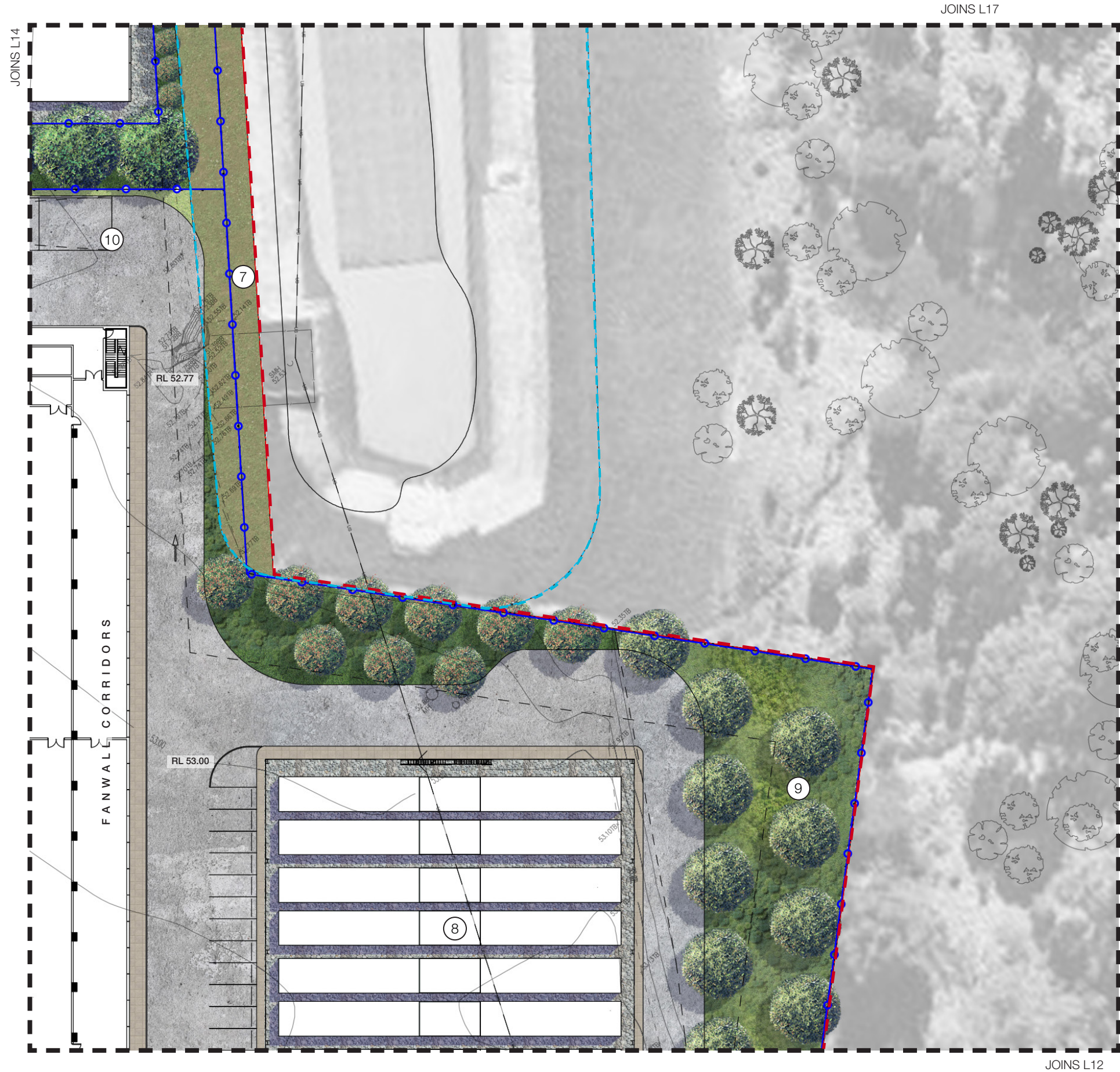
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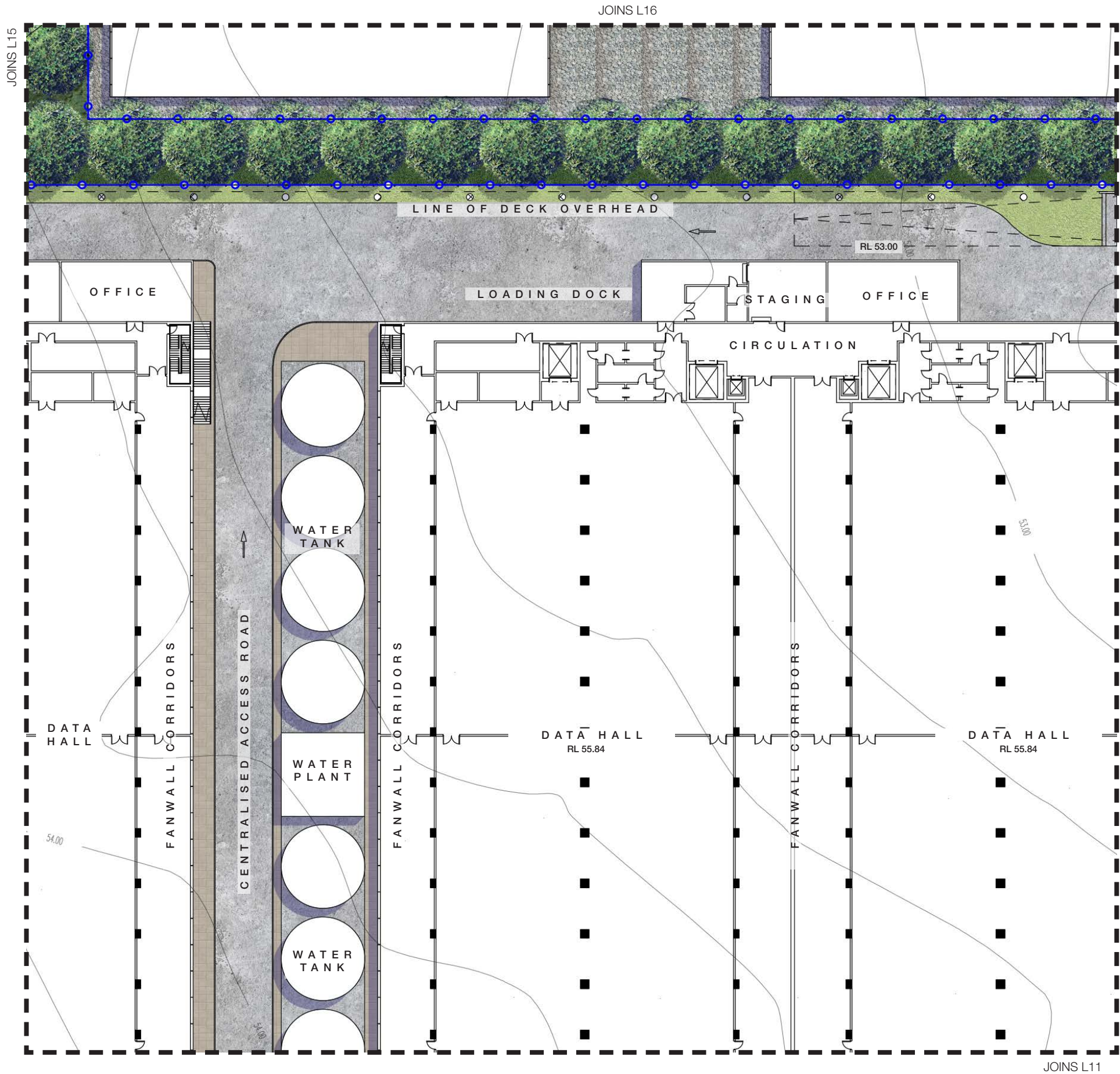


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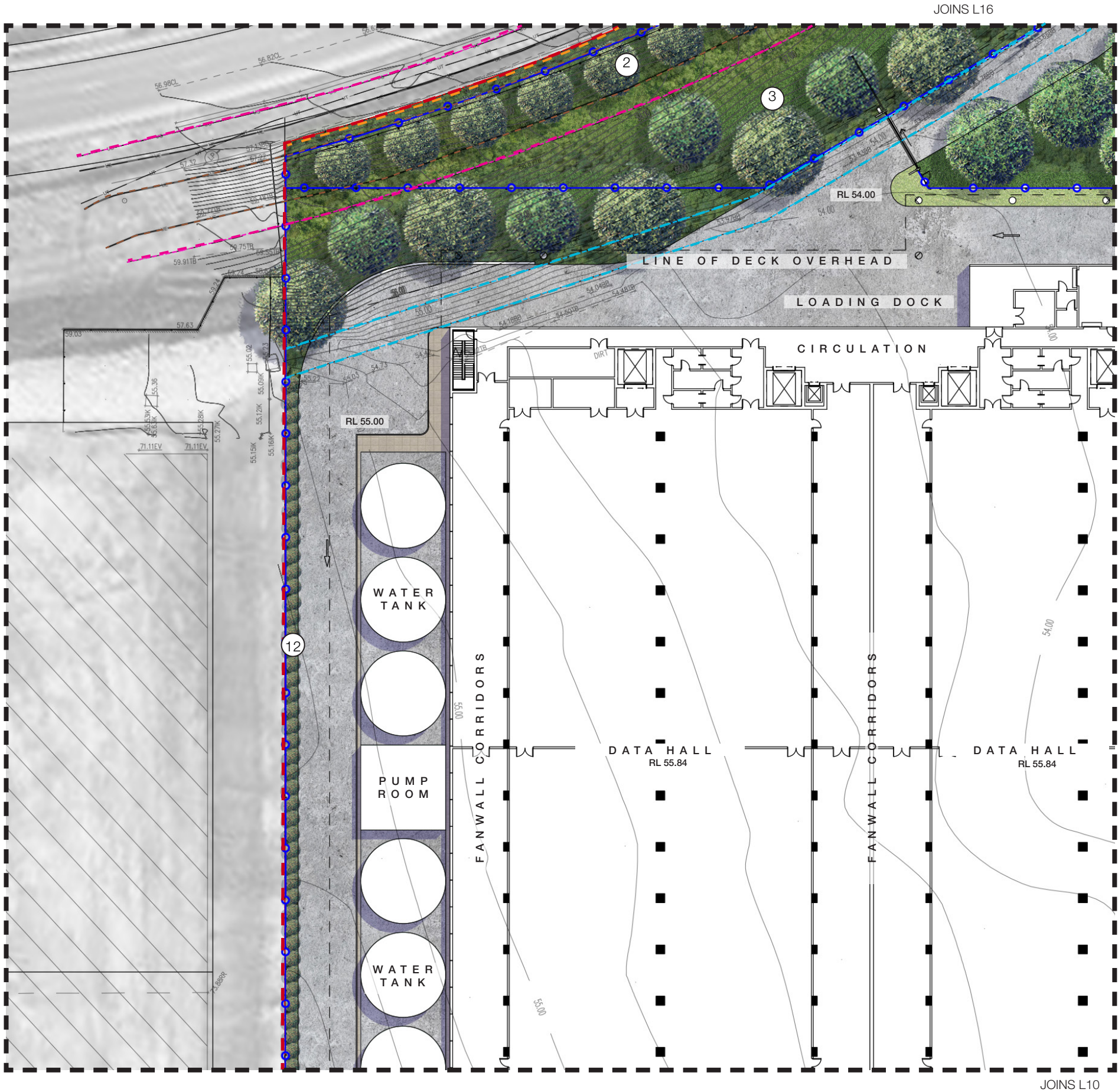
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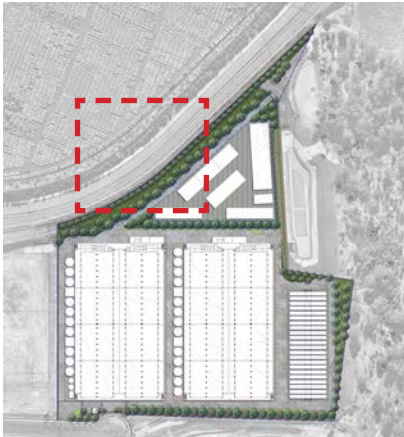
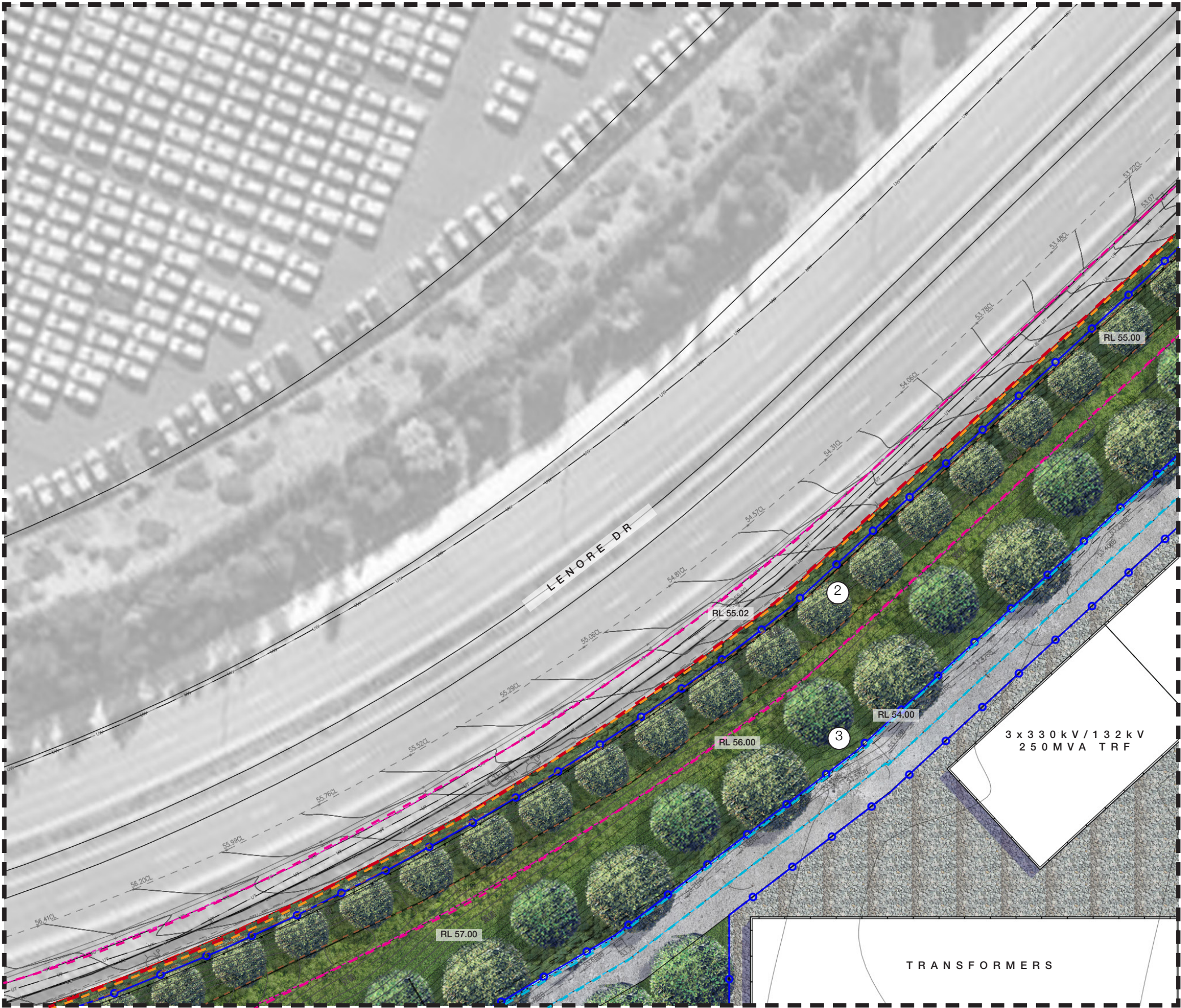
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 - Canopy trees (Endemic) To Bushfire Management Guidelines

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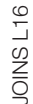
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LANDSCAPE PLAN 08



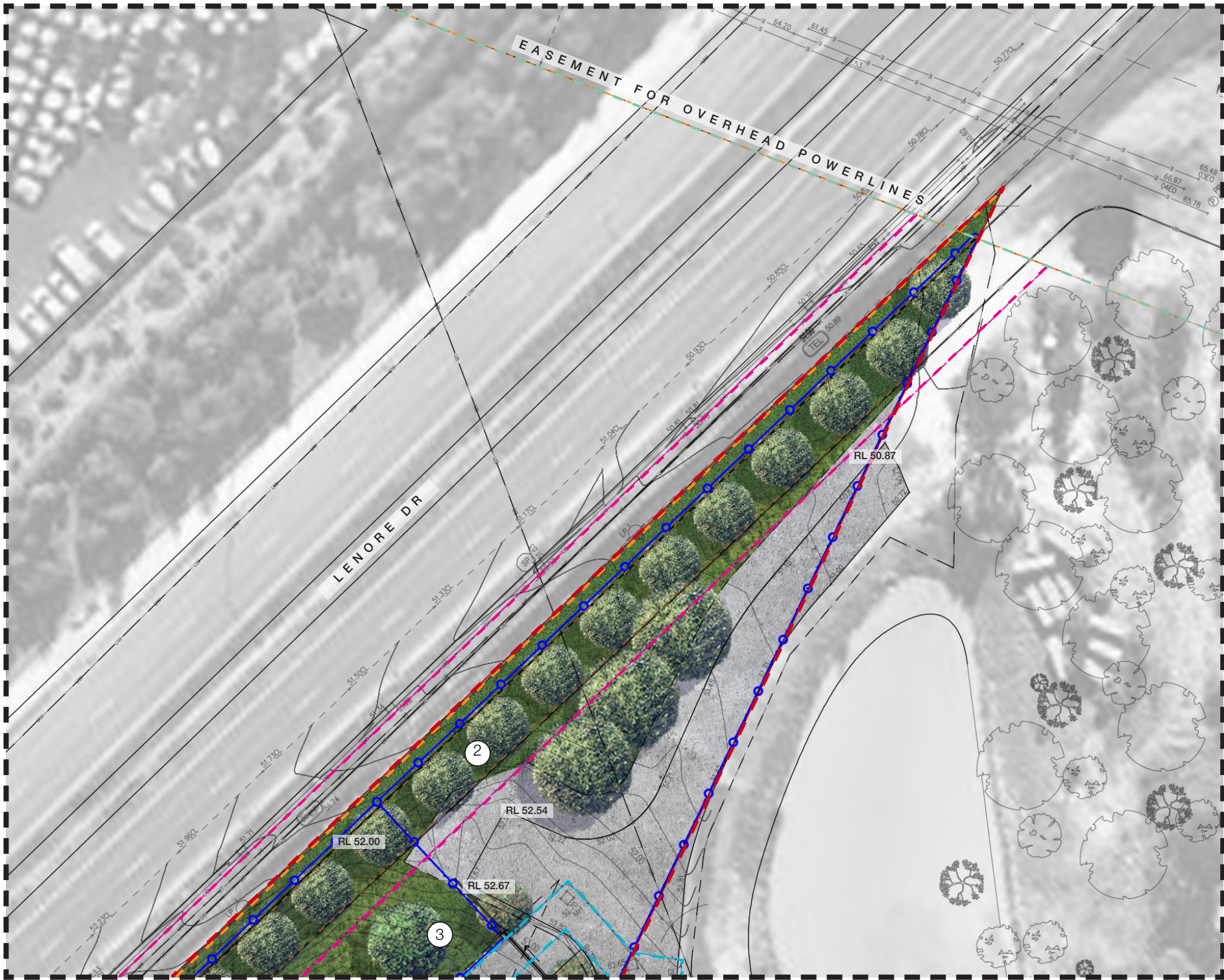
KEY

- Legend for the site plan:

 - SITE BOUNDARY**: Represented by a thick red dashed line.
 - 4100mm HT. SECURITY PERIMETER FENCE TO ARCHITECT'S DETAILS**: Represented by a blue line with circles at intervals.
 - PROPOSED TREE PLANTING REFER TO PLANT SCHEDULE**: Represented by a cluster of green, rounded tree symbols.
 - MASS PLANTING BEDS REFER TO PLANT SCHEDULE**: Represented by a row of green, rounded shrub symbols.
 - TURF AREA**: Represented by a solid green rectangular area.
 - PAVED / TILED SURFACE TO ARCHITECT'S DETAILS**: Represented by a rectangular area with a light brown grid pattern.
 - CONCRETE SURFACE TO ENGINEER'S DETAILS**: Represented by a rectangular area with a grey, textured pattern.
 - CONCRETE EDGING**: Represented by a thick orange dashed line.
 - EASEMENT FOR DRAINAGE**: Represented by a thick cyan dashed line.
 - EASEMENT FOR OVERHEAD POWERLINES**: Represented by a thick green dashed line.
 - EASEMENT FOR UNDERGROUND CABLES**: Represented by a thick magenta dashed line.
 - UNDERGROUND ELECTRICAL LINES**: Represented by a thick brown dashed line.
 - GRAVEL SURFACE**: Represented by a rectangular area with a grey, pebbly texture.

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- 1. SITE ENTRY FEATURE**
 - Feature tree (@5m OC) and shrub planting
 - 2. EASEMENT PLANTING (LENORE DRIVE SETBACK)**
 - Canopy trees with non-invasive root systems (15m ht-20m ht + @8m OC)
To Bushfire Management Spacing
 - Native grasses and groundcovers
 - 3. OVERFLOW LAND ZONE**
 - Grasses and groundcovers
 - Rows of screening shrubs on sides of fence (2-3m HT)
 - 4. BOUNDARY BUFFER PLANTING (TREES: 15m HT+)**
 - 5. TRUCK ENTRY / EXIT**
 - POND)**
 - Native grasses and groundcovers
 - 8. GENERATOR GANTRY**
 - 9. FLOOD CORRIDOR (VEGETATED RIPARIAN ZONE)**
 - Native grasses and groundcovers
 - Canopy trees (Endemic)
To Bushfire Management Guidelines
 - 10. RAMP TO UPPER GROUND CARPARK**
 - 11. EASEMENT PLANTING (DRAINAGE)**
 - Native grasses and groundcovers
 - 12. BOUNDARY PLANTING**
 - Hedge planting
 - Grasses and groundcovers



KEYPLAN

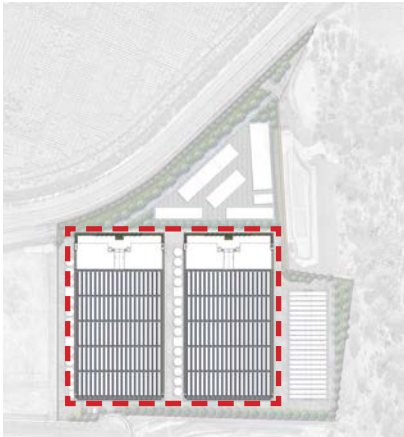
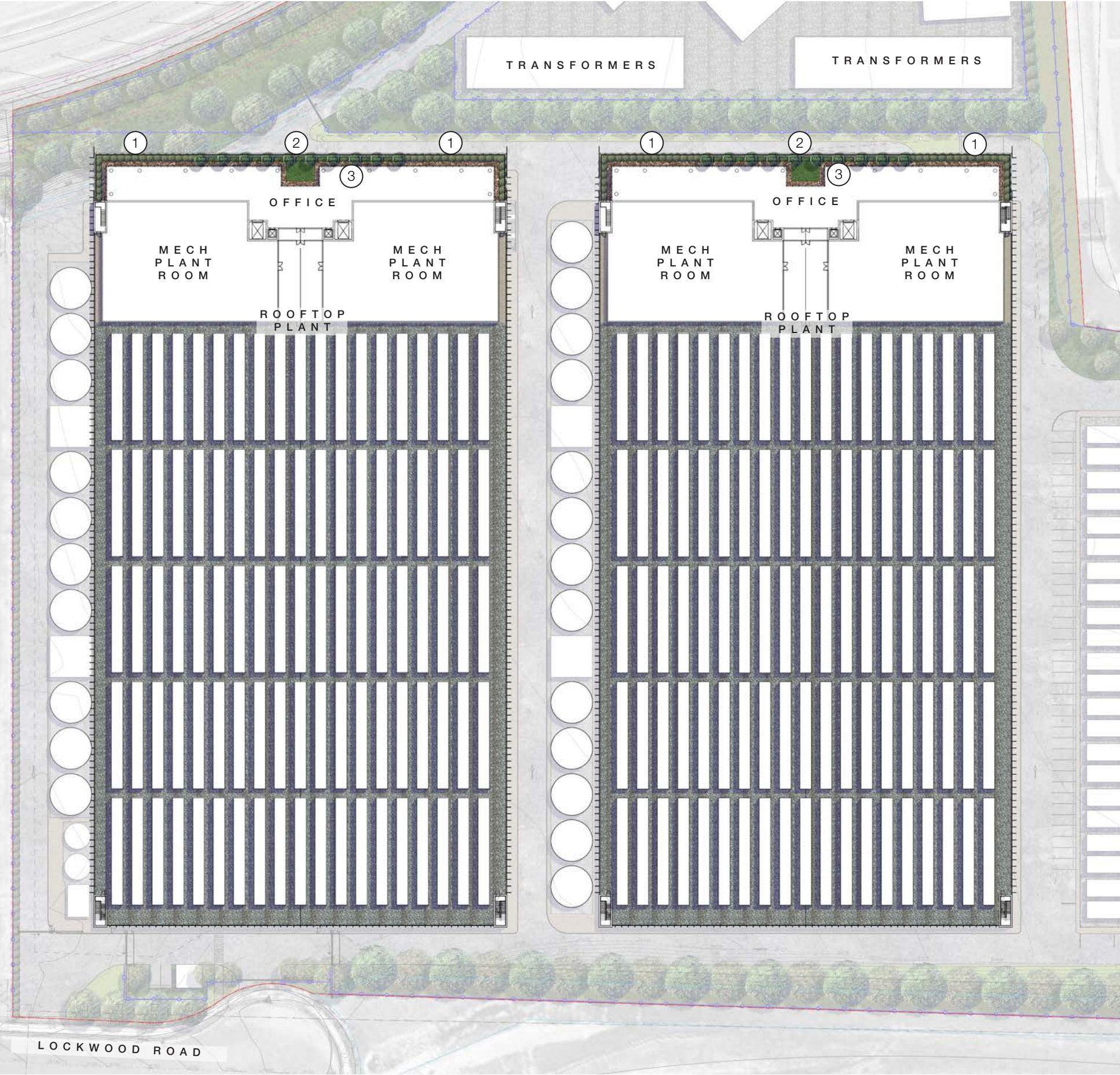
KEY

- SITE BOUNDARY
- 4100mm HT. SECURITY PERIMETER FENCE TO ARCHITECT'S DETAILS
- PROPOSED TREE PLANTING REFER TO PLANT SCHEDULE
- MASS PLANTING BEDS REFER TO PLANT SCHEDULE
- TURF AREA
- PAVED / TILED SURFACE TO ARCHITECT'S DETAILS
- CONCRETE SURFACE TO ENGINEER'S DETAILS
- CONCRETE EDGING
- EASEMENT FOR DRAINAGE
- EASEMENT FOR OVERHEAD POWERLINES
- EASEMENT FOR UNDERGROUND CABLES
- UNDERGROUND ELECTRICAL LINES
- GRAVEL SURFACE

DESIGN NOTES

- SITE ENTRY FEATURE**
 - Feature tree (@5m OC) and shrub planting
- EASEMENT PLANTING (LENORE DRIVE SETBACK)**
 - Canopy trees with non-invasive root systems (15m ht-20m ht + @8m OC) To Bushfire Management Spacing
 - Native grasses and groundcovers
- OVERFLOW LAND ZONE**
 - Grasses and groundcovers
 - Rows of screening shrubs on sides of fence (2-3m HT)
- BOUNDARY BUFFER PLANTING (TREES: 15m HT+)**
- TRUCK ENTRY / EXIT**
- CAR ENTRY / EXIT**
- EASEMENT PLANTING (DETENTION POND)**
 - Native grasses and groundcovers
- GENERATOR GANTRY**
- FLOOD CORRIDOR (VEGETATED RIPARIAN ZONE)**
 - Native grasses and groundcovers
 - Canopy trees (Endemic) To Bushfire Management Guidelines
- RAMP TO UPPER GROUND CARPARK**
- EASEMENT PLANTING (DRAINAGE)**
 - Native grasses and groundcovers
- BOUNDARY PLANTING**
 - Hedge planting
 - Grasses and groundcovers

LANDSCAPE PLAN - OFFICE ROOF LEVEL



KEYPLAN

KEY

- SITE BOUNDARY
- PROPOSED TREE PLANTING
REFER TO PLANT SCHEDULE
- MASS PLANTING BEDS
REFER TO PLANT SCHEDULE
- 1m WIDTH
MAINTENANCE ACCESS
- GRAVEL SURFACE

DESIGN NOTES

- 1. HEDGE PLANTING
- 2. PROPOSED LARGE SHRUBS / SMALL TREES
- 3. GRC PLANTING TROUGHS
 - 2000 x 1000 x 800mm HT

PROPOSED PLANT SCHEDULE

	CODE	BOTANICAL NAME	COMMON NAME	POT SIZE	DENSITY
	TREES				
*	ACA PAR	Acacia parramattensis	Sydney Green Wattle	100L	As Shown
*	ACE NEG	Acer negundo 'Sensation'	Sensation Box Elder	100L	As Shown
*	ANG COS	Angophora costata	Sydney Red Gum	200L	As Shown
*	ANG FLO	Angophora floribunda	Rough barked Apple	100L	As Shown
*	BAC CIT	Backhousia citriodora	Lemon myrtle	100L	As Shown
*	BRA POP	Brachychiton populneus	Kurrajong	100L	As Shown
*	BUC CEL	Buckinghamia celsissima	Ivory Curl Tree	100L	As Shown
*	CAL VIM	Callistemon viminalis 'Kings Park Special'	Bottlebrush	100L	As Shown
	COR BAB	Corymbia 'Baby Citro'	Dwarf Lemon-scented Gum	100L	As Shown
*	COR EXI	Corymbia eximia 'Nana'	Dwarf Yellow Bloodwood	200L	As Shown
*	COR MAC	Corymbia maculata	Spotted Gum	100L	As Shown
*	CUP ANA	Cupaniopsis anacardioides	Tuckeroo	200L	As Shown
	ELA EUM	Elaeocarpus eumundii	Eumundi Quandong	100L	As Shown
	ELA RET	Elaeocarpus reticulatus	Blueberry Ash	200L	As Shown
*	EUC AMP	Eucalyptus amplifolia	Cabbage Gum	100L	As Shown
*	EUC CRE	Eucalyptus crebra	Narrow-leaved ironbark	100L	As Shown
	EUC FIC	Eucalyptus ficifolia	Red Flowering Gum	200L	As Shown
*	EUC LEU	Eucalyptus leucoxylon	Yellow Gum	200L	As Shown
*	EUC MOL	Eucalyptus moluccana	Grey Box	200L	As Shown
*	EUC PUN	Eucalyptus punctata	Grey Gum	100L	As Shown
*	EUC TER	Eucalyptus tereticornis	Forest Red Gum	100L	As Shown
*	FRA GRI	Fraxinus griffithii	Himalayan ash	100L	As Shown
*	GLO FER	Glochidion ferdinandi	Cheese tree	100L	As Shown
*	KOE PAN	Koelreuteria paniculata	Golden Rain Tree	100L	As Shown
*	LAG IND	Lagerstroemia 'Indian Summer Range'	Crepe Myrtle	100L	As Shown
*	LOP CON	Lophostemon confertus	Queensland box	100L	As Shown
	MAG COL	Magnolia 'Coolwyn Gloss'	Southern Magnolia	100L	As Shown
*	MAG EXM	Magnolia 'Exmouth'	Evergreen Magnolia	100L	As Shown
*	MEL LIN	Melaleuca linariifolia	Narrow-leaved paperbark	100L	As Shown
*	MEL STY	Melaleuca styphelioides	Prickly paperbark	100L	As Shown
*	PYR CAL	Pyrus calleryana 'Bradford'	Bradford pear	100L	As Shown
*	TRI LAU	Tristaniaopsis laurina 'Luscious'	Water Gum	200L	As Shown
*	WAT FLO	Waterhousea floribunda	Weeping Lilly Pilly	100L	As Shown
*	ULM PAR	Ulmus parvifolia (cult)	Chinese Elm	100L	As Shown

	CODE	BOTANICAL NAME	COMMON NAME	POT SIZE	DENSITY
	SHRUBS				
*	ACM SMI	Acmena smithii 'Minor'	Dwarf Lilly Pilly	300mm	1/m²
*	BAN SER	Banksia serrata	Saw Banksia	200mm	2/m²
*	BAN SPI	Banksia spinulosa ' Birthday Candles'	Birthday Candles	200mm	2/m²
	CAL CAP	Callistemon 'Captain Cook'	Bottlebrush	300mm	2/m²
	CAL LIT	Callistemon 'Little John'	Dwarf Bottlebrush	200mm	2/m²
	DOR EXC	Doryanthes excelsa	GyMEA Lily	200mm	As Shown
	GRE ROB	Grevillea 'Robyn Gordon'	Grevillea	200mm	2/m²
	NAN SP	Nandina 'Blush'	Blush Pink Nandina	200mm	2/m²
	PHO TEN	Phormium tenax purpurea	Purple New Zealand Flax	200mm	1/m²
	PIT MIS	Pittosporum 'Miss Muffet'	Dwarf Pittosporum	200mm	3/m²
	SYZ RES	Syzygium 'Resilience'	Lilly Pilly Resilience	200mm	2/m²
	WES FRU	Westringia fruticosa	Coastal Rosemary	200mm	2/m²
	GROUNDCOVERS & GRASSES				
	CAR GLA	Carpobrotus glaucescens	Pigface	150mm	4/m²
*	DIA LON	Dianella longifolia	Blue berry lily	150mm	4/m²
*	DIA REV	Dianella revoluta	Black-anther Flax-lily	150mm	4/m²
*	DIC REP	Dichondra repens	Kidney weed	150mm	4/m²
*	HAR VIO	Hardenbergia violacea	Purple Coral Pea	150mm	4/m²
*	KEN RUB	Kennedia rubicunda	Coral pea	150mm	4/m²
*	LOM LON	Lomandra longifolia	Spiny-head Mat Rush	150mm	4/m²
	LOM TAN	Lomandra longifolia 'Tanika'	Mat-rush	150mm	4/m²
	MYO PAR	Myoporum parviflorum	Creeping boobialla	150mm	4/m²
*	POA LAB	Poa labillardieri 'Eskdale'	Blue Tussock Grass	150mm	4/m²
	SEN SER	Senecio serpens	Blue Chalksticks	150mm	4/m²
*	VIO HED	Viola hederacea	Australian violet	150mm	4/m²

	CODE	BOTANICAL NAME	COMMON NAME	POT SIZE	DENSITY
	WATER QUALITY PLANTING				
	JUN USI	Juncus usitatus	Slender rush	150mm	4/m²
	ISO NOD	Isolepis nodosa	Knobby club rush	150mm	4/m²
	DIA REV	Dianella revoluta	Blue berry lily	150mm	4/m²
	LOM LON	Lomandra longifolia	Basket Grass	150mm	4/m²
	KEN RUB	Kennedia rubicunda	Coral pea	150mm	4/m²

* PLANT SPECIES SOURCED FROM PENRITH CITY COUNCIL DCP

PLANT PALETTE



ACA PAR



ACE NEG



ANG COS



ANG FLO



BAC CIT



BRA POP



CUV CEL



CAL VIM



COR BAB



COR EXI



COR MAC



CUP ANA



ELA EUM



ELA RET



EUC MOL



EUC FIC



MAG EXM



TRI LAU



MEL LIN



MEL STY



BAN SPI



CAL CAP



CAL LIT



DOR EXC



GRE ROB



NAN SP



PHO TEN



PIT MIS



SYZ RES



WES FRU



CAR GLA



DIA LON



DIA REV



DIC REP



HAR VIO



KEN RUB



ACM SMI



BAN SER



LOM TAN



MYO PAR



POA LAB



SEN SER



VIO HED

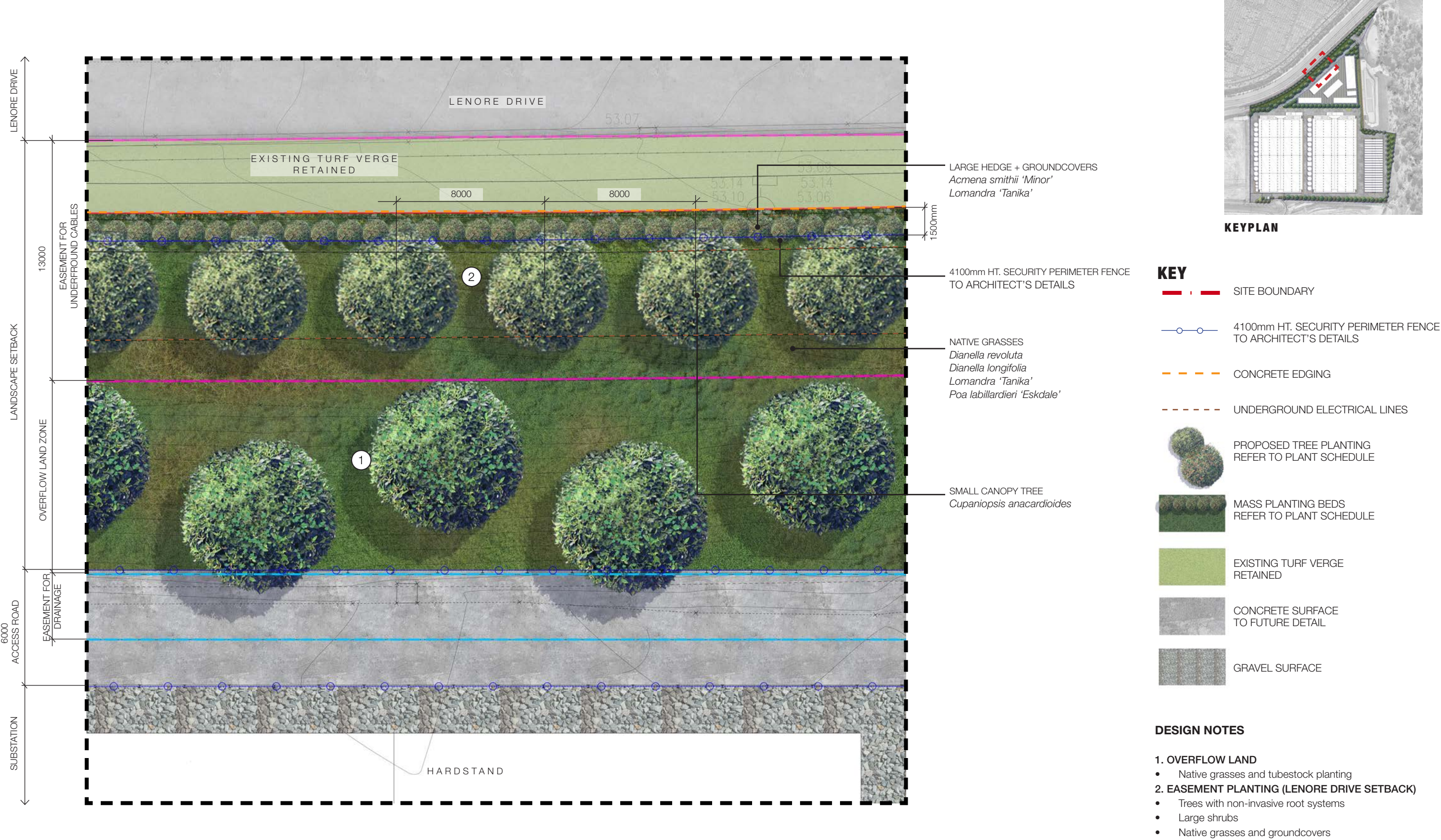


JUN USI



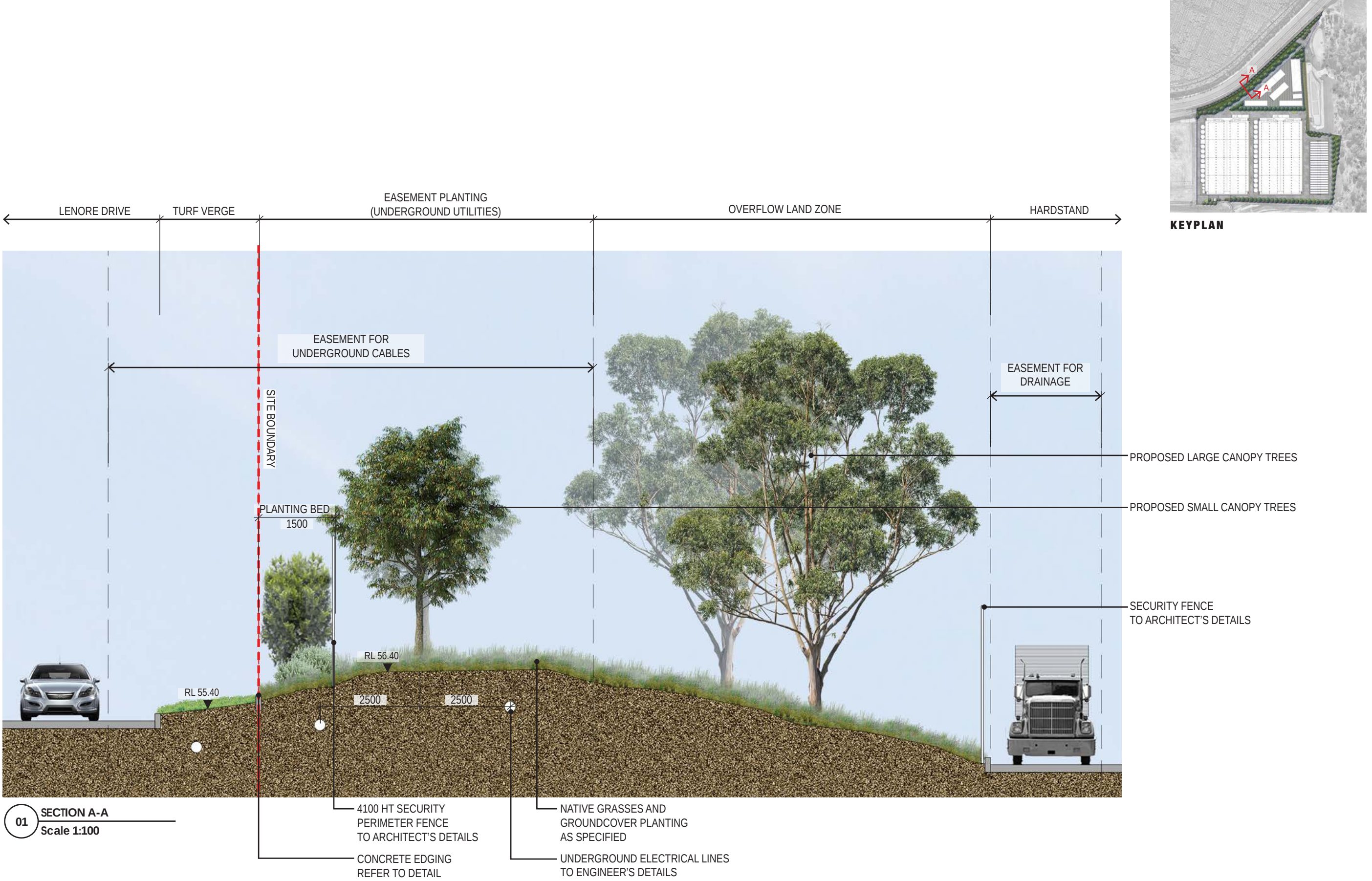
ISO NOD

DETAIL PLAN: TYPICAL SETBACK PLANTING

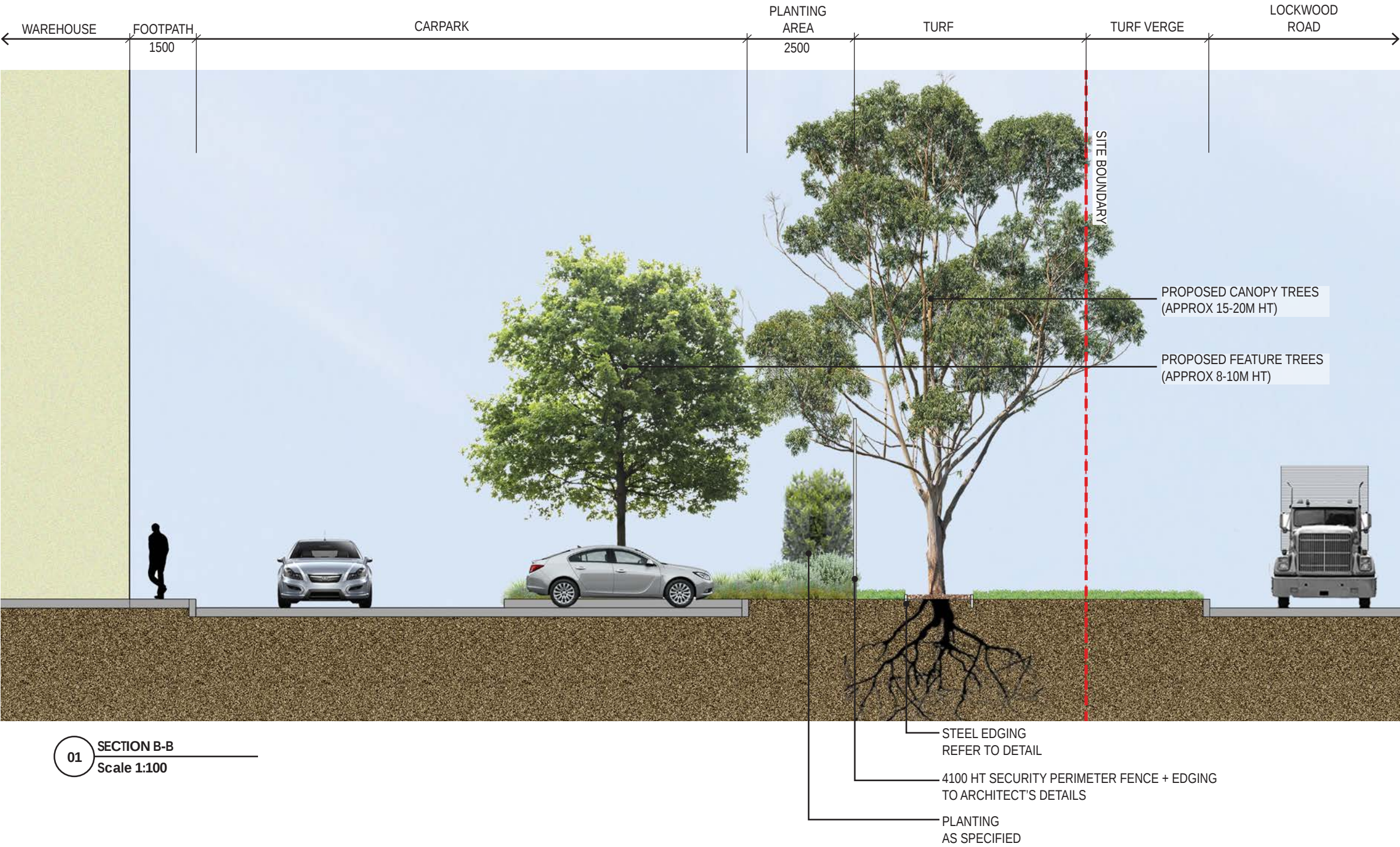


KEYPLAN

LANDSCAPE SECTION A-A



LANDSCAPE SECTION B-B



01 SECTION B-B
Scale 1:100

TYPICAL SPECIFICATION + MAINTENANCE NOTES

SERVICES

Before landscape work is commenced the Landscape Contractor is to establish the position of all service lines and ensure tree planting is carried out at least 3 metres away from these services. Service lids, vents and hydrants shall be left exposed and not covered by any landscape finishes (turfing, paving, garden beds etc.) Finish adjoining surfaces flush with pit lids.

PLANTING MIXTURE - (300mm DEPTH)

Imported Garden Mix.
Type: Premium
Available: Australian Native Landscapes (ANL)

TURF SOIL MIX (150mm DEPTH)

Type: Turf underlay
Available: Australian Native Landscapes (ANL)

MULCH

APPLICATION: Place mulch to the required depth, (refer to drawings) clear of plant stems, and rake to an even surface finishing 25mm below adjoining levels. Ensure mulch is watered in and tamped down during installation.
MULCH TYPE: (75mm DEPTH)
Type 1 (Base of Trees):
Pine bark: From mature trees, graded in size from 15mm to 30mm, free from wood slivers. Dark brown in colour and texture.
Type 2:
Batters and Edges Re-vegetation Mulch

COMPOST

Shall be “GO Compost” as available from Soilco or approved equal.

PLANT MATERIAL

All plants supplied are to conform with those species listed in the Plant Schedule on the drawings. Generally plants shall be vigorous, well established, hardened off, of good form consistent with species or variety, not soft or forced, free from disease or insect pests with large healthy root systems and no evidence of having been restricted or damaged. Trees shall have a leading shoot. Immediately reject dried out, damaged or unhealthy plant material before planting. All stock is to be container grown for a minimum of six (6) months prior to delivery to site.

FERTILISER

MASS PLANTING AREAS: Fertiliser shall be ‘Nutricote’ or approved equivalent in granule form intended for slow release of plant nutrients over a period of approximately nine months. Thoroughly mix fertiliser with planting mixture at the recommended rate, prior to installing plants.
TURF: Shall be Shirleys No. 17 or approved equal thoroughly mixed into the topsoil prior to placing turf.
TREES IN GRASS AND SUPER ADVANCED TREES: Pellets shall be in the form intended to uniformly release plant food elements for a period of approximately nine months equal to Shirleys Kokei pellets, analysis 6.3:1.8:2.9. Kokei pellets shall be placed at the time of planting to the base of the plant, 50mm minimum from the root ball at a rate of two pellets per 300mm of top growth to a maximum of 8 pellets per tree.

STAKING AND TYING

Stakes shall be straight hardwood, free from knots and twists, pointed at one end and sized according to size of plants to be staked.
a. 100-greater than 200litre 3x(1800x50x50mm)
Ties shall be 50mm wide hessian webbing or approved equivalent nailed or stapled to stake. Drive stakes a minimum one third of their length, avoiding damage to the root system, on the windward side of the plant.

TURF

Obtain turf from a specialist grower of cultivated turf. turf shall be of even thickness, free from weeds and other foreign matter; lay in stretcher pattern with joints staggered and close butted, perpendicular to gradient of FSL. Water immediately after laying.
TURF TYPE: Couch (Confirm with council prior to construction)

FURNITURE

GRC PLANTER TROUGHS
Type: Tall Rectangle (Custom)
Size: 2000L x 1000W x 800H
Available: Satu Bumi Ph: +61 3 5292 1001

LANDSCAPE MAINTENANCE PROGRAM

Maintenance shall mean the care and maintenance of the landscape works by accepted horticultural practice as rectifying any defects that become apparent in the landscape works under normal use. This shall include, but shall not be limited to, watering, mowing, fertilising, re-seeding, returfing, weeding, pest and disease control, staking and tying, replanting, cultivation, pruning, aerating, renovating, top dressing, maintaining the site in a neat and tidy condition as follows:-

GENERAL

The landscape contractor shall maintain the landscape works for the term of the maintenance (or Plant establishment) period to the satisfaction of the council. The landscape contractor shall attend to the site on a weekly basis. Landlord to maintain all landscape areas in perpetuity (life of the development).

WATERING

Grass, trees and garden areas shall be watered regularly so as to ensure continuous healthy growth.

RUBBISH REMOVAL

During the term of the maintenance period the landscape contractor shall remove rubbish that may occur and reoccur throughout the maintenance period. This work shall be carried out regularly so that at weekly intervals the area may be observed in a completely clean and tidy condition.

REPLACEMENTS

The landscape contractor shall replace all plants that are missing, unhealthy or dead at the Landscape Contractor’s cost. Replacements shall be of the same size, quality and species as the plant that has failed unless otherwise directed by the Landscape Architect. Replacements shall be made on a continuing basis after the plant has died or is seen to be missing.

STAKES AND TIES

The landscape contractor shall replace or adjust plant stakes, and tree guards as necessary or as directed by the Landscape Architect. Remove stakes and ties at the end of the maintenance period if so directed.

PRUNING

General: Prune to reflect the natural growth flowering and regrowth habit of the individual species. Shrubs: Prune after flowering - Spring and Summer and on a spot basis as required.
Hedge trimming: Schedule trimming at times which will maintain the character and design of hedges. Allow up to three times per season.
Tip pruning: To encourage development of new shoots during the active growing season. Do not remove buds before the flowering season in those plants that have terminal flowers.
Radical pruning: To maintain a hedge or formal shape or when a particular problem, growth habit, damage, or disease requires branch removal.
Trees: Prune to eliminate diseased or damaged growth, avoid inter-branch contact and thin out crowns in a natural manner, maintain sight lines to signs and lights, or maintain visibility for personal security. Tree branch removal to AS 4373. Give notice and engage a suitably qualified ‘arborist’.

MULCHED SURFACES

All mulched surfaces shall be maintained in a clean and tidy condition and be reinstated if necessary to ensure that a depth of 75mm is maintained. Ensure mulch is kept clear of plant stems at all times. Remove all mulching materials off lawn or paved areas and maintain a clean and tidy appearance when viewed on a weekly basis.

PEST AND DISEASE CONTROL

The landscape contractor shall spray against insect and fungus infestation with all spraying to be carried out in accordance with the manufacturer’s directions. Report all instances of pests and diseases (immediately that they are detected) to the Landscape Architect.

GRASS AND TURF AREAS

The landscape contractor shall maintain all grass and turf areas by watering, weeding, re-seeding, rolling, mowing, trimming or other operations as necessary. Seed and turf species shall be the same as the original specified mixture. Grass and turf areas shall be sprayed with approved selective herbicide against broad leafed weeds as required by the Landscape Architect and in accordance with the manufacturer’s directions. Grass and turf areas shall be fertilised once a year in autumn with “Dynamic Lifter” for lawns at a rate of 20kg per 100m2. Fertiliser shall be watered in immediately after application. Irregularities in the grass and turf shall be watered in immediately after application.
Grass and turf areas shall be kept mown to maintain a healthy and vigorous sward. Mowing height: 30-50mm.

WEED ERADICATION

Eradicate weeds by environmentally acceptable methods using a non-residual glyphosate herbicide (eg. ‘Roundup’) in any of its registered formulae, at the recommended maximum rate. Regularly remove by hand, weed growth that may occur or recur throughout grassed, planted and mulched areas. Remove weed growth from an area 750mm diameter around the base of trees in grassed areas. Continue eradication throughout the course of the works and during the maintenance period.

SOIL SUBSIDENCE

Any soil subsidence or erosion which may occur after the soil filling and preparation operations shall be made good by the landscape contractor at no cost to the client.

MAINTENANCE PERIOD: (26 Weeks) - Confirm with Project Manager

IRRIGATION PERFORMANCE SPECIFICATION NOTES

IRRIGATION OVERVIEW - Confirm with Project Manager at tender stage

EXTENT (Setback and Carpark Landscape Areas)

All mass planting landscape areas and trees are to have full coverage by a fully automatic irrigation system. The design, materials and installation are to be in accordance with Sydney Water Codes and all relevant Australian Standards.

1. An automatic irrigation system is to be installed to all turf and garden bed areas.
2. The irrigation system shall be designed and installed by a licensed contractor to relevant Australian standards and Sydney water guidelines.
3. The irrigation system shall be connected into the rainwater tank system and pump

DRIPLINE

Provide 13mm dripline to all garden bed areas with appropriate 13mm joiners. Dripline to be Toro drip or similar with 400mm centre drippers.
Install line at 500mm spacings with the first line to be 150mm in from edge. Install dripline after planting and prior to mulching to allow for an adequate mulch cover. Anchor at 1.5m maximum intervals with u-shaped stakes. Dripline pattern to suit planting.

CONTROL VALVES

24v solenoid actuated hydraulic valve with flow control. Control valves to be Toro ezflow series solenoids 25mm or approved equal. Provide a gate valve of the same size immediately upstream of each valve. House both valves in a high impact plastic valve box with a high impact plastic cover at finished ground level. Support the box with bricks on each side. Controller to be Toro greenkeeper or approved equal with a rain switch.
Install a master valve/pressure regulating valve equal to Toro p220 with exreg pressure regulation valve. Filter to be installed equal to Toro y filter 75mm screen filter.

CONTROL WIRES

Connect the control valves and soil moisture sensor to the controller with double insulated underground cables laid alongside piping where possible. Lay intertwined for their full length without joints except at the valves and branches off common wires. Provide waterproof connectors.

Provide a backflow prevention device to Sydney water standards AS 3500.

RELEVANT AUSTRALIAN STANDARDS

Soil: AS4419, AS3743, AS4454.
Mulch: AS4454.
Tree Stock: AS2303.
Pruning: AS4373.
Tree Protection: AS4970.
Contractors to comply with the above Australian Standards.

