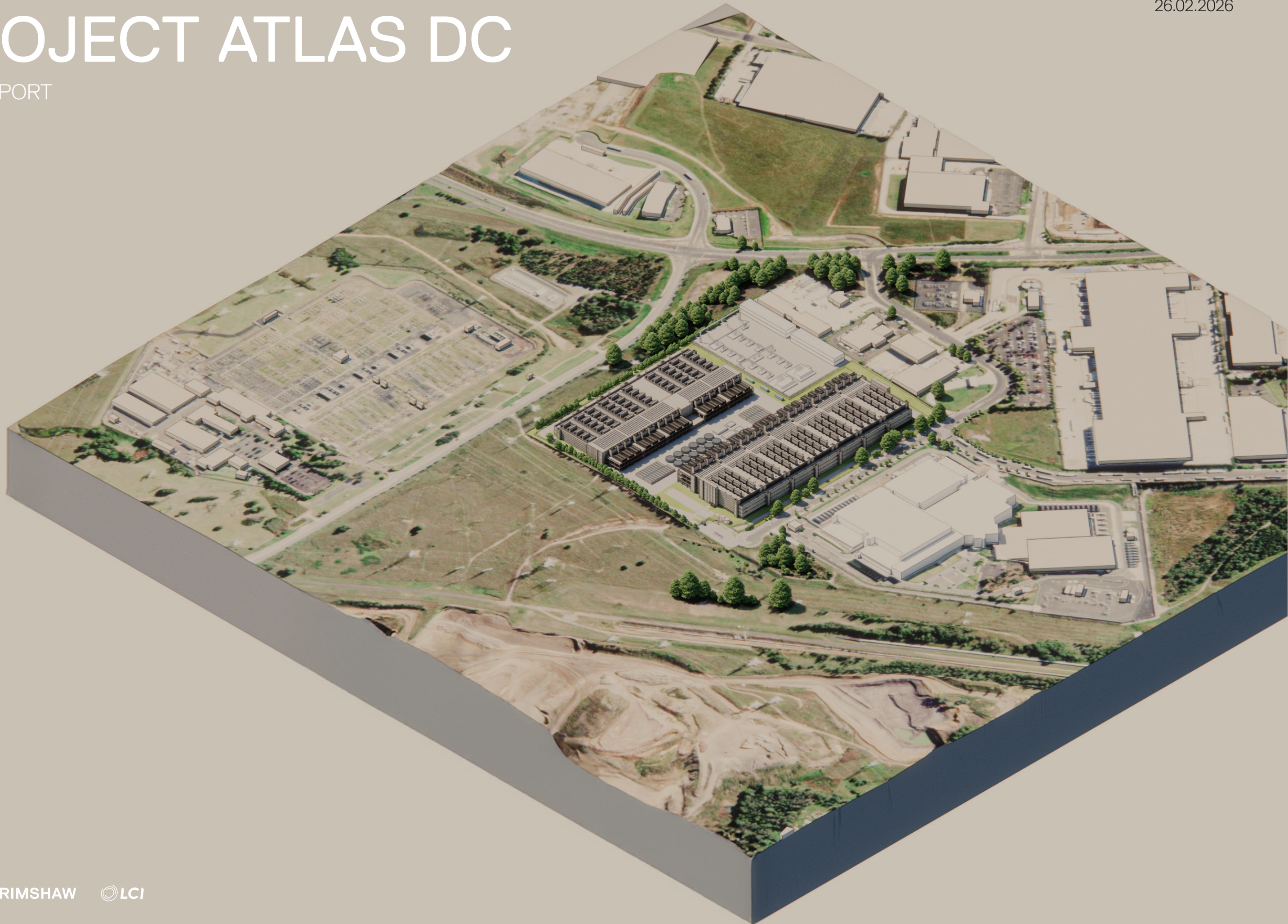
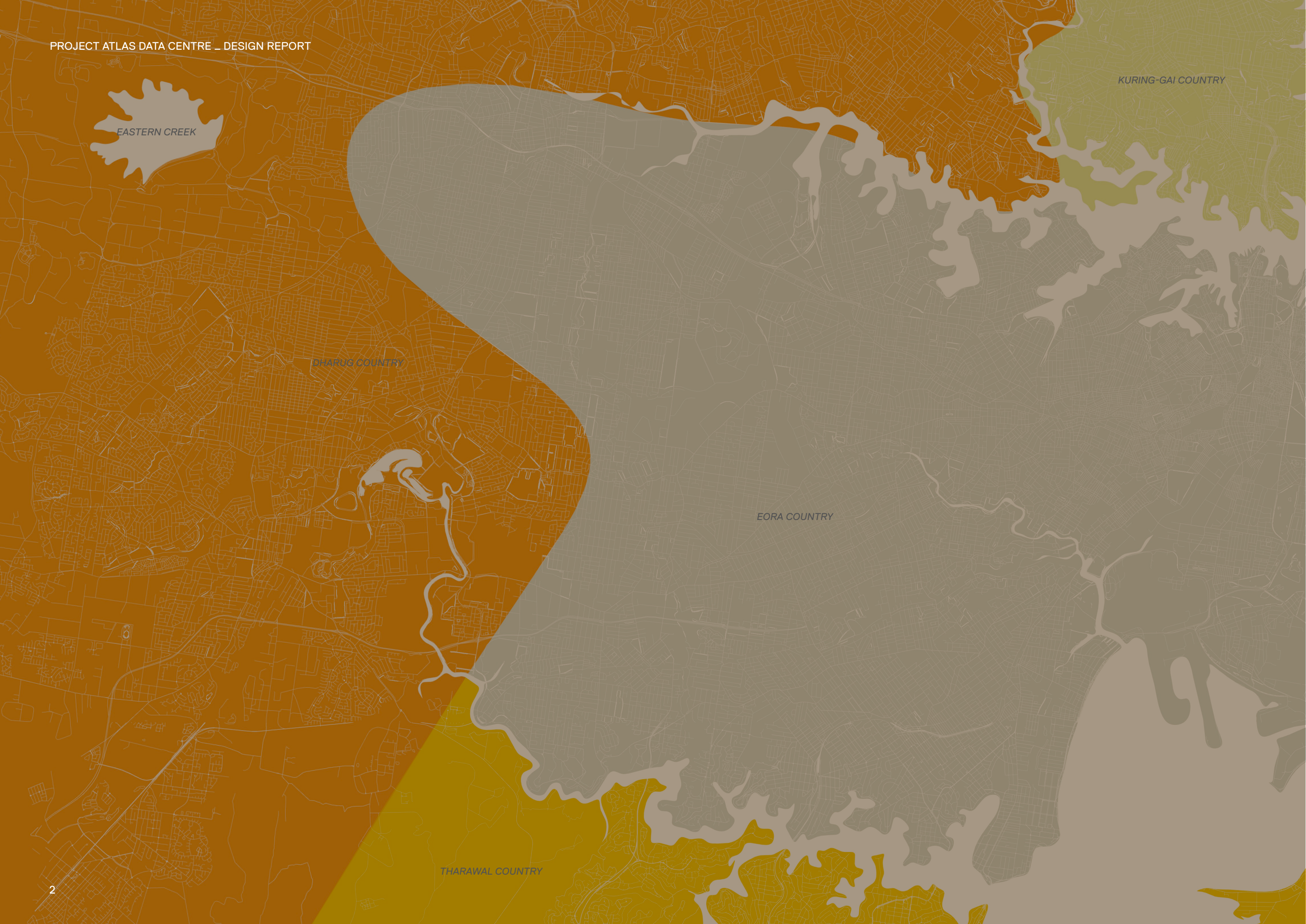


PROJECT ATLAS DC

SSDA REPORT

26.02.2026





EASTERN CREEK

KURING-GAI COUNTRY

DHARUG COUNTRY

EORA COUNTRY

THARAWAL COUNTRY

Acknowledgment to Country

We acknowledge the Dharug people as the Traditional Custodians of the land on which this project is located. We pay our respects to Dharug Elders past, present and emerging.

Our team is committed to working with Traditional Custodians on matters of land, water, language and cultural heritage.

Project Name	10 Roberts Road, Eastern Creek
SSD Code	
Document Name	Project Atlas DC - SSDA Design Report
Document ID	

Revision	Date	Comments	Approver
A	26/02/2026	For SSDA submission	EE

CONTENTS

1.0	EXECUTIVE SUMMARY	7	3.0	SITE & BRIEF RESPONSE	41
1.1	DEVELOPMENT SUMMARY	8	3.1	SITING	42
1.2	PROPOSAL OVERVIEW	10	3.2	RESPONSE TO SITE CONDITIONS	44
1.3	RESPONSE TO PLANNING INSTRUMENTS	12	3.4	SITE INFRASTRUCTURE	46
2.0	CONTEXT	17	3.5	BOH + STORAGE	48
2.1	COUNTRY	18	3.6	RESIDUAL AREA	49
2.2	SYDNEY STRATEGIC PLANNING	20	4.0	DESIGN RESPONSE	51
2.3	STRATEGIC CONNECTION	21	4.1	DESIGN QUALITY	52
2.4	GREATER CONTEXT	22	4.2	KEY MOVES	54
2.5	EASTERN CREEK	24	4.3	SITE CONSTRUCTION STAGING DIAGRAM	60
2.6	PLANNING CONTEXT - LEP 2021, DCP	26	4.4	SITE SECURITY DIAGRAM	61
2.7	TRANSPORT	27	4.5	SECURITY & ENTRY SEQUENCE	62
2.8	LOCALITY	28	4.6	LANDSCAPE VISION - ARCADIA	64
2.9	SENSITIVE RECEIVERS	29	4.7	BOUNDARY CONDITIONS	66
2.10	SITE CONTEXT	30	4.8	MATERIALITY AND ARCHITECTURAL EXPRESSION	68
2.11	CONTEXT PHOTOS	32	4.9	OFFICE TENANCIES - BUILDING 1	72
2.12	SOLAR ACCESS	33	4.10	PARKING + EOT	76
2.13	EXISTING ROADWAYS	34	4.11	ESD + COMFORT	78
2.14	SITE VEGETATION	35	5.0	DRAWINGS	81
2.15	SITE FLOOD RISK	36			
2.16	SITE TOPOGRAPHY	37			
2.17	EXISTING DEVELOPMENT	38			
2.18	SITE FEATURES	39			

1.0 EXECUTIVE SUMMARY

1.1 DEVELOPMENT SUMMARY

This Architecture Design Report has been prepared by Grimshaw to accompany a State Significant Development Application (SSDA) for the construction and ongoing operation of a data centre facility and associated Offsite Enabling Infrastructure (OEI) at 10 Roberts Road, Eastern Creek within in the Blacktown Local Government Area (“LGA”). The site is legally described as Lot 553 in Deposited Plan 1110447.

This report has been prepared to address the Secretary’s Environmental Assessment Requirements (SEARs) issued for the Project Atlas Data Centre (SSD - 101067971) date 16th January 2026.

A State Significant Development Application (SSDA) has been prepared to support a data centre at 10 Roberts Road, Eastern Creek and associated offsite enabling infrastructure.

The proposal will include:

- » Site preparation works including demolition, bulk excavation and removal of existing structures on the site, tree and vegetation clearing and bulk earthworks.
- » Construction, fit-out and 24/7 operation of a Data Centre
- » Offsite enabling infrastructure
- » 2 Data Centre Buildings
 - Building 1 - 2 Level + Rooftop Plant
 - Building 2 - 3 Level + Rooftop Plant
- » Ancillary office, EOT and amenity
- » Provision of required utilities including:
 - diesel storage tanks
 - water tanks
 - substations on site
- » Vehicle access for 20m articulated vehicles (semi-trailers)
- » Associated landscaping and site servicing
- » Installation of site services and drainage infrastructure

This report has been prepared to address the Secretary’s Environmental Assessment Requirements (SEARs) and accompanying cover letter issued for the Project Atlas Data Centre (SSD- 101067971) dated 16th January 2026.

SITE DESCRIPTION

The proposed Data Centre is located at 10 Roberts Road, Eastern Creek, legally referred to as Lot 553 DP1110447 with Offsite Enabling Infrastructure (OEI) proposed across Lot 21 DP1246626, Lot 20 DP1157491, and Lot 22 DP1246626 to connect to TransGrid’s Sydney West Substation & Switchyard (refer to Figure 1 below). The site is located on Country of the Dharug people within the local government area of Blacktown.

The site is identified as part of the Eastern Creek Precinct Stage 3 within the Western Sydney Employment Area. It is located approximately 35km of the Sydney Central Business District (CBD) and 5.1 km from Rooty Hill Train Station.

The site has a site area of approximately 14 hectares and is bounded by industrial development and has a primary frontage of 400m to Roberts Road. The existing site contains an industrial warehouse and surrounding hard-stand areas.

Surrounding land uses in the vicinity include:

Northeast: A range of mixed-use industry & commercial buildings

Southeast: Data Centre and substation

South, southwest and west: land primarily owned and operated by TransGrid Sydney

Northwest: Commercial industry and the Industrial Harvest cafe

The site is zoned IN1 General Industrial within Chapter 2 Western Sydney Employment Area of State environmental Planning Policy (Industry and Employment) 2021 (IESEPP). The proposal is permissible with development consent in the IN1 zone as per the State Environmental Planning Policy (Transport and Infrastructure) 2021 (TISEPP).

168,574M²

SITE AREA

0.6 : 1

FSR

99,144 M²

GFA

61,320 M²

WHITE SPACE

2,562 M²

OFFICE

150

STAFF & VISITOR CAR PARKING

3

ACCESSIBLE CAR PARKING

14

BICYCLE PARKING IN EOT

10 ROBERTS ROAD, EASTERN CREEK NSW

ZONE	IN1 General Industry zoning
FSR	No limit (Proposed 0.6:1)
HEIGHT LIMIT	No limit (Proposed 34.8m)



1.2 PROPOSAL OVERVIEW

Project Overview & Strategic Alignment

Project Atlas is proposed as a piece of critical infrastructure designed to support the expanding digital needs of Sydney and New South Wales. The campus is scaled to accommodate large cloud services and AI computation, positioning it as a significant contributor to the future digital economy.

The proposal has been developed in direct response to the Greater Sydney Region Plan: A Metropolis of Three Cities (2018). It reinforces the strategic identification of Eastern Creek as a “major industrial precinct” within the Central River City. By acting as an economic counterweight to residential expansion in the Blacktown LGA, Project Atlas ensures the retention of essential industrial land and guarantees the “buffer zones” required for 24/7 data centre operations, consistent with the site’s prohibition on residential re-zoning.

This document serves to support the State Significant Development Application (SSDA) and should be read in conjunction with the Environmental Impact Statement (EIS) prepared by Mecone and associated technical reports. The design responds comprehensively to the Site Specific Secretary’s Environmental Assessment Requirements (SEARs) received on 16th January, alongside relevant state and local planning instruments.

Site Context & Heritage

The site is ideally situated for high-capacity digital infrastructure, located adjacent to the Sydney West 330KV Substation with immediate access to fibre backbone connectivity linking Northern and Southern Sydney. The location benefits from a significant buffer from sensitive receivers, with the nearest residential dwelling located 1km away.

The proposal is deeply rooted in the layered history of the site. We acknowledge the ancient Indigenous heritage of the Cumberland Plains and Plumpton Ridge, specifically the local Dharug Country. Historically, this land was a source of silcrete and shale for crafting stone axes and tools, a place of production and exchange. Project Atlas interprets this history not just as a backdrop, but as a continuity of purpose: a site historically dedicated to the crafting of tools is reimagined for the “tools” of the modern digital age.

The design also respects the site’s colonial and industrial past, from early agricultural use to the installation of telegraph infrastructure

in the 1970s and its recent use as a logistics centre.

Architectural & Urban Design Response

Project Atlas challenges the prevailing typology of data centres as anonymous, impenetrable boxes. The design team has worked from first principles to create a facility that is legible, honest, and responsive to its setting, that moves beyond a simple wrap around engineering requirements. The architecture and engineering teams have worked in an integrated way to arrive at cohesive response.

Built Form & Materiality

The architecture draws from the vernacular of Sydney’s industrial heritage. By celebrating the modular, rhythmic façade driven by structural and manufacturing logic, the building avoids “facadism” in favour of an honest expression responding to engineering in a creative and restrained way. This modularity ensures the asset is flexible, adaptable and reconfigurable in response not only to future technological shifts but also to react appropriately to social shifts, preventing obsolescence.

Landscape & Topography

Rather than imposing a generic structure, the design responds to the undulating topography of the site. The building sits slightly elevated according to existing site levels to minimise earthworks and stormwater management, and in recognition of the view corridors while softening the mass within the landscape. The proposal significantly reduces existing hardstand areas in favour of expanded soft landscaping, including a 15m landscape buffer and 36m building setback to the Northwestern boundary.

Amenity & Community

Recognizing that data centres are secure microcosms, the design prioritizes high-quality amenity for the workforce. The campus features “neutral ground”, communal areas that foster connection between potential operators. Furthermore, the design ensures dignity for all users, including support staff and security personnel, by integrating their operational spaces with landscape and natural light.

Construction & Staging

To manage the scale and complexity of the delivery, construction will be staged (up to 5 stages), moving from north to south. This

approach allows for speed to market, without compromising the integrity of the architectural outcome. The structural grid is engineered to accommodate this phasing, allowing for seamless expansion and reconfiguration.

Sustainability & ESD Initiatives

Project Atlas addresses the inherent tension between a data centre’s substantial environmental footprint and the imperative to care for Country through an innovative, whole-of-life approach. The proposal targets a benchmark-setting Power Usage Effectiveness (PUE) of 1.3—significantly outperforming the national average of 1.55—to support a target rating of 5 Stars under NABERS Energy for Data Centres. This commitment to efficiency is reinforced by a Net Zero strategy that includes the procurement of 100% renewable electricity for non-IT operational energy, the maximizing of roof space for PV panels, and the selection of low Global Warming Potential (GWP) chiller plants.

Beyond energy, the design aggressively targets water conservation and material circularity. By utilizing air-cooled heat rejection in Building 1 and hybrid cooling systems in Building 2, the facility drastically reduces reliance on potable water, a strategy further supported by drought-tolerant, endemic native landscaping that requires minimal irrigation. Construction methodologies prioritise embodied carbon reduction through the use of structural steel with high recycled content and pre-cast concrete incorporating supplementary cementitious materials. Furthermore, the structural systems are designed for disassembly and reuse, ensuring the asset remains adaptable to the circular economy and future-proofed against the rapid evolution of digital technologies.

Conclusion

Project Atlas seeks to raise the benchmark for industrial architecture in Eastern Creek. By demonstrating that critical infrastructure can be visually compelling, highly functional, and environmentally responsible, the development acts as a catalyst for high-quality investment in the precinct. This is a proposal that looks to the future of the digital economy while remaining firmly grounded in the history and landscape of Western Sydney.



1.3 RESPONSE TO PLANNING INSTRUMENTS

The development of Project Atlas has been driven by a rigorous engagement with the statutory planning framework, ensuring that the architectural response aligns with the precinct’s standards. To facilitate a seamless assessment of the Development Application, the following Planning Compliance Matrix has been assembled to act as a navigational tool for the Design Report.

These tables cross-reference specific controls—ranging from Built Form and Urban Design and External Building Materials to operational specifics like Signage and Lighting —directly against the relevant report sections. This matrix demonstrates the project’s comprehensive adherence to the Secretary’s Environmental Assessment Requirements (SEARs) and local planning instruments, ensuring clarity and ease of reference for the consent authority.



SEARS Requirement	Report section
12. Built Form and Urban Design a design report that– identifies design options considered during the iterative design process and demonstrates the proposed development has been optimised to provide an integrated landscape design and minimises amenity impacts by having regard to the relevant evaluation criteria in Better Placed (GANSW, 2017)	Design Quality Key Moves
– demonstrates how the building design will deliver a high-quality development, including consideration of façade	Materiality
– assesses how the development complies with relevant accessibility requirements.	Security & Entry Sequence Parking Office Tenancies
SEPP 59	Report section
10.6 Off Street parking	Parking
11.3 (a) The entrance to the Precinct should be clearly visible, well sign posted, well lit and landscaped. (b) Entry to buildings should be clearly visible to pedestrians and be integrated into the form of the building. (c) Architectural features are to be provided at ground level giving an entrance element to the building and addressing the primary street frontage. (d) All entrance treatments, such as Precinct directory boards, must be located on private property, with appropriate positive covenants and restrictions on title to ensure that the ongoing management of such treatments. (e) No form of advertising will be permitted on any entrance treatment facility.	Planning Controls Overlay Security & Entry Sequence
11.4 (a) No building or hardstand area (concrete or bitumen pavement) shall be erected on any land within: (iii) 7.5m of the primary front property boundary of any other road; (v) 3m of side and rear boundaries for any building and 2m for any hardstand area; (b) The site coverage of the footprint of all buildings and canopy areas (excluding hardstand areas) to the area of the allotment on which it is to be situated shall not exceed 65% of the site area. (c) All setback areas should be landscaped in accordance with the Landscape Controls outlined in this Plan, and maintained as open space.	Planning Controls Overlay
1.5 Building Heights and Design (a) Council encourages high aesthetic standards for building design. Applicants are encouraged to consider variations in fascia treatments, facade treatments, rooflines and section of building materials to achieve an attractive design. (b) Applicants must give consideration to the following: (i) integration of building design with landscape elements; (ii) the impact of building heights on district views; (iii) building orientation and siting to optimise the use of natural elements, including topography, wind and sunlight, and maximise aspect and views; (iv) the articulation of building facades to provide visual relief from the public domain by using architectural elements such as: • external structures, finishes, etchings and recessed patterns;; • decorative features, textures and colours; or locating offices and highlighting entries within front facades to reduce the apparent bulk and scale of the structure; and • prevention of blank building facades. (v) building design to incorporate a hierarchy of spaces so as to assist in the legibility of the building and give significance to areas of importance; (vi) buildings on lots that have dual road frontage should be designed to ensure: • the building addresses the road frontage from which vehicular access is gained; • distinctive identifying architectural elements are incorporated to provide sufficiently and varied facades; and • blank walls are avoided on the secondary road frontage. (vii) amenity of any adjoining conservation areas, and open space areas; (viii) the location of roller shutters, loading docks and other building openings so they do not detract from the overall appearance of the building. Where possible, roller shutters and the like should not be located on the principal street frontage; and (ix) roof design to ensure visual interest and compatibility with the overall building design especially in areas of high visibility. Where visible from a public area, all rooftop or exposed structures including lift motor rooms, plant rooms etc, together with air conditioning, satellite dishes, ventilation and exhaust systems, are to be suitably screened and integrated with the building in order to ensure a properly integrated overall appearance. Natural lighting should also be incorporated into the roof design for large span buildings. (x) the location of above ground water tanks to ensure that they are not located forward of the front facade of the primary industrial building, and are not visible from the public domain. Water tanks must be screened with an extended fin wall or sited in a solid enclosure, surrounded by mature vegetation. Details (including elevations) of all water tanks must be submitted with the Development Application.	Key Moves Materiality BOH + Storage Office Tenancies Security & Entry Sequence See SSDA A07 Drawings Key Moves Materiality BOH + Storage

SEARS Requirement	Report section
11.6 External Building Materials and Colour (a) Applicants are required to submit a panel of external finishes and detail of coloured elevations when lodging a Development Application. A condition of development consent will refer to the approved schedule of finishes. (b) External finishes should be constructed of durable, high-quality and low maintenance materials. (c) All external walls of buildings used for office/showroom purposes should be constructed of brick, glass, steel, concrete, textured block work, pre-cast exposed aggregate panels or other materials approved by Council. (d) External materials including masonry block work, galvanized iron, zincalum, timber or fibre cement should be painted or rendered. (e) External finishes should contain a combination of materials (f) Where a side or rear elevation is visible from the public domain, the use of metal cladding must only comprise 50% of that walls building material. The use of metal cladding is discouraged on the front elevation of a building, unless it can be satisfactorily demonstrated that it forms part of an architectural design solution, in association with masonry, glass, and other high quality materials, and is on the office component only. (g) Any wall visible from the public domain must be finished with a suitable material that creates an attractive appearance to that facade of the building. (h) Roofs should be either pre-coloured coated masonry tiles or pre-coloured metal. (i) Building materials should be selected such that reflection is minimised and will not adversely affect adjacent development, vehicular traffic and public domain areas.	Materiality
11.7 Ancillary Buildings, Storage and Service Areas (a) Council encourages the provision of storage areas within the confines of the primary industrial building. (b) Council will not accept open storage areas that are visible from the public domain. (c) Where any materials are to be stored outside the primary industrial building, the storage areas are to be fully enclosed with solid fencing, surrounded by mature vegetation, and sited as part of the primary industrial building. (d) Open storage areas should not compromise truck or vehicle manoeuvring, and should not compromise the car parking provisions of this Precinct Plan. (e) Ancillary buildings and storage sheds are to be located behind the setback lines and be consistent with the design of the main building to provide cohesion to the development appearance. (f) Details of any proposed ancillary buildings, open storage and services areas must be submitted with all Development Applications.	BOH + Storage
11.8 Cut and Fill (a) Buildings should be designed to minimise the amount of cut and fill. (c) Any embankment batters from the property boundary must be no greater than a grade of 3m in length to 1m in height, and landscaped to reduce erosion and provide suitable screening. (d) Retaining wall elements must be no greater than 3m in height. All retaining walls must be screened by vegetation. Where filling requires a retaining wall element to be greater than 3m in height, the retaining wall shall be terraced to allow for a ratio of 3m in height to 1.5m in length. The 1.5m terraced area must be provided with suitable landscaping to screen the height of the retaining wall. (e) Notwithstanding (d), Council may consider a retaining wall element higher than 3m where it can be demonstrated that the retaining wall is structurally sound, is not visible from the public domain, and where it will not detract from the overall appearance of the development. (f) Appropriate soil erosion and siltation measures are to be implemented on site. Details of the proposed measures are to be provided with the Development Application. (g) A Development Application that includes cut and fill on a site adjoining a conservation area, open space area, or trunk drainage area is to address the potential environmental impacts of the proposed works on those areas.	Landscape - Arcadia Boundary Conditions
11.9 Fencing (a) In general, no fencing other than a low feature wall may be erected at the entry driveway on any site within the Precinct. These walls should be used for retaining purposes, as garden beds or as landscaped features and should be integrated into the overall design of the development. (b) Where front fencing is required for safety and security it should be setback a minimum of 1 metre from the front boundary with landscaping placed between the fence and the street boundary. The fencing should consist of a decorative 2.1m high open wrought iron ‘diplomat’ style fence, finished, or similar, in either bottle green or black, and designed to integrate into the overall design of the development . (c) All fencing materials used shall be to Council’s satisfaction. Pre-painted solid metal fencing and solid fencing are not acceptable to Council. (d) Fencing along side boundaries may comprise chain wire mesh or similar, no greater than 2.1m in height, which is to be plastic coated dark green or black in order to allow visual surveillance of the setback areas.	Site Security Diagram Boundary Conditions

SEARS Requirement	Report section
1.10 Signage and Lighting (a) Signage within the Precinct should be kept to a minimum, relate only to the use occurring on the respective property, and should identify the relevant business name. (b) Business identification signage should generally be attached to the wall of the main building and be designed to complement the architectural style of the building. Free standing signs will only be permitted where signs are integrated with the landscaping and where it is satisfactorily demonstrated that the proposed signage will not result in a detrimental impact on the visual character of the site and surrounding area. (c) Directional signs for car parking areas, loading docks, delivery areas and the like should be designed in an attractive manner and should be located at a convenient point close to the main access to a development site. The design, colouring, type and scale of signage erected within individual properties should also be considered to ensure consistency within the development. (d) Signage is only to display the corporate logos and company names, and is not to occupy more than 10% of any facade or wall of a building, unless it can be satisfactorily demonstrated that the unique characteristics of the site or the building require a larger area of signage and that the signage will not result in a detrimental impact on the visual character of the site and surrounding area. (e) Details of all signage must accompany Development Applications for a proposed building, including both free standing, facia, and wall signs.	Security & Entry Sequence See SSDA A09 Drawings
11.11 Private Open Space (a) Each development shall be provided with at least 1 private open space area for the use and enjoyment of all employees of that development. The private open space area shall be suitably landscaped and directly accessible from the main office component of the development. (b) The private open space area shall be provided at a rate of 5% of the total gross floor area of the office component of the development or a minimum of 50 square metres, whichever is the greater, to a maximum area of 100 square metres. (c) In the case of a Strata or Community titled development, a common private open space area shall be provided at a rate of 5% of the cumulative total gross floor area of the office components within the development or a minimum of 50 square metres, whichever is the greater, to a maximum area of 100 square metres. (d) Within the main private open space area a minimum square of 7m x 7m must be provided. The remaining area must have a minimum dimension in any direction of 2.5m. The area shall not be disproportionately elongated in shape. (e) Small pockets of open space designed to enhance the appearance of the development will not be counted in the private open space allocation, neither will car parking areas, manoeuvring areas, nor landscaped setback areas. (f) The private open space area shall be embellished with appropriate landscaping, paving, tables, chairs, and the like for the use and enjoyment of employees. (g) In locating the private open space area consideration should be given to the outlook, natural features of the site, neighbouring buildings and open space in order to maximise the use and enjoyment of the area. (h) The private open space area shall be relatively flat and not contain impediments which unnecessarily divide the area or cause physical barriers to the full use of the area as a whole. (i) The area should be screened in such a manner that it is not directly visible from the public domain and to ensure that adequate sunlight access is provided to the area.	Office Tenancies

2.0 CONTEXT

2.1 COUNTRY

Custodianship & Engagement Framework

Project Atlas has been developed through a rigorous “Connecting with Country” framework, facilitated by a partnership between Grimshaw and Arcadia. This process has been guided by engagement with Dharug Knowledge Holders, including Paul Webb and Aunty Thelmerie. Their insights have been instrumental in grounding the proposal within the specific cultural landscape of the Wawarawarry clan of the Dharug Nation, ensuring that the design moves beyond tokenism to embed authentic Indigenous narratives into the built environment.

A Landscape of Production and Exchange

The site is situated within a landscape characterized by deep historical layers of industry, exchange, and movement. The proposal interprets these ancient uses to establish a continuity of purpose for the new development:

The nearby ancient silcrete quarry serves as a profound historical precedent. Traditionally used for the crafting of stone axes and tools for trade across the Cumberland Plain, this history recontextualizes the site. It frames Project Atlas not as a new imposition, but as the modern evolution of the site’s function: a place where the “tools” of the future are processed and exchanged.

Rooty Hill is recognized as a significant resting place for Dharug people traversing between the mountains and the coast, the area’s history as a node of connectivity parallels the site’s current strategic role in digital connectivity.

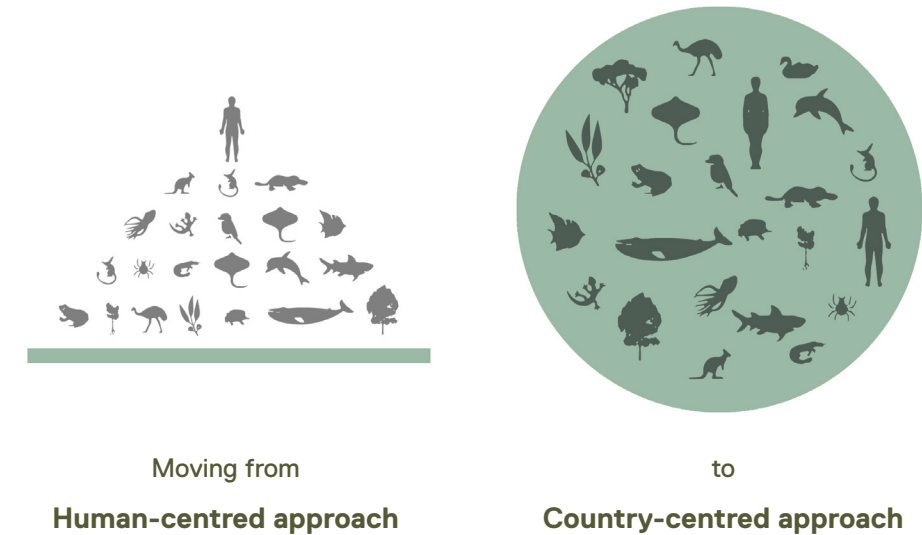
To the west of the subject site the former Blacktown Native Institute site stands as a testament to the complex colonial history of assimilation, and its subsequent return to community as a place of healing. Project Atlas responds to this by prioritizing “neutral

grounds” and spaces for reflection within the campus.

The design response acknowledges the site’s relationship to Prospect Reservoir and the broader hydrological systems of Western Sydney. Understanding the movement of water across the landscape has driven a design approach that privileges natural drainage and habitat regeneration. This fosters a reciprocal relationship with the environment, ensuring the architecture sits lightly within the country rather than dominating it.

Methodology & Ongoing Commitment

The Connecting with Country process has been integrated from the earliest phases to establish design principles that act as a “cultural compass” for the project. This framework ensures that the integrity of the original cultural intent is preserved through all stages of design and construction. Ongoing consultation with Traditional Custodians will continue to refine these narratives, ensuring the final built outcome is a meaningful, responsive, and dignified contribution to Dharug Country.





2.2 SYDNEY STRATEGIC PLANNING

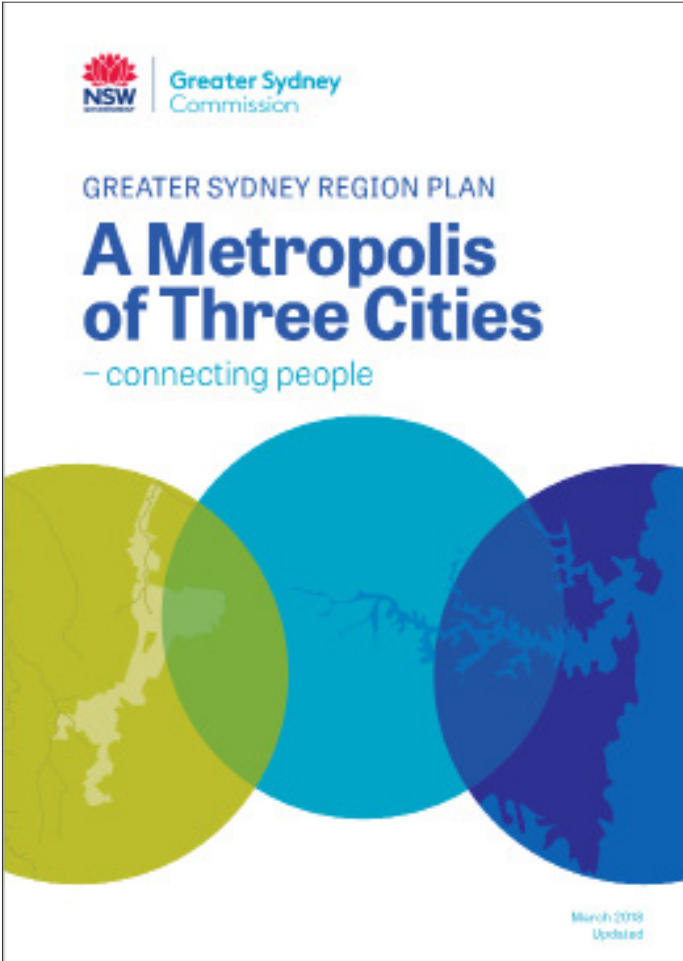
Greater Sydney Region Plan: A Metropolis of Three Cities (2018)

Objective 23: Industrial and Urban Services Land is Planned, Retained and Managed

- » Identifies Eastern Creek as a “major industrial precinct” within the Central River City, explicitly prohibiting re-zoning for residential purposes.
- » Acts as an economic counterweight to the residential expansion in the Blacktown LGA, ensuring local employment.
- » The retention policy guarantees the necessary “buffer zones” required for 24/7 data centre operations, preventing future conflict with residential neighbors regarding cooling plant noise or visual impact

The 30-Minute City (Infrastructure & Collaboration)

- » Designates the area as a critical service hub that must be accessible to the Central City population within 30 minutes.
- » Shifts focus from pure manufacturing to “advanced manufacturing” and high-tech urban services.
- » Classifies data storage as a “critical urban service” rather than just a commercial activity; mandates that these facilities be located near the population centers (Parramatta/Blacktown) they serve to minimize latency and transmission costs.



State Environmental Planning Policy (Industry and Employment) 2021

Chapter 2: Western Sydney Employment Area (WSEA) – Zoning

- » Zones the majority of the precinct as IN1 General Industrial (or equivalent Employment zones).
- » Secondary point: Establishes Precinct 2 specifically for high-order industrial uses, differentiating it from the recreational uses in Precinct 4 (Motorway).
- » Explicitly defines “Electronic Data Storage Facilities” as permissible with consent in IN1 zones, removing ambiguity found in older Local Environmental Plans (LEPs) and creating a clear legal pathway for digital infrastructure.

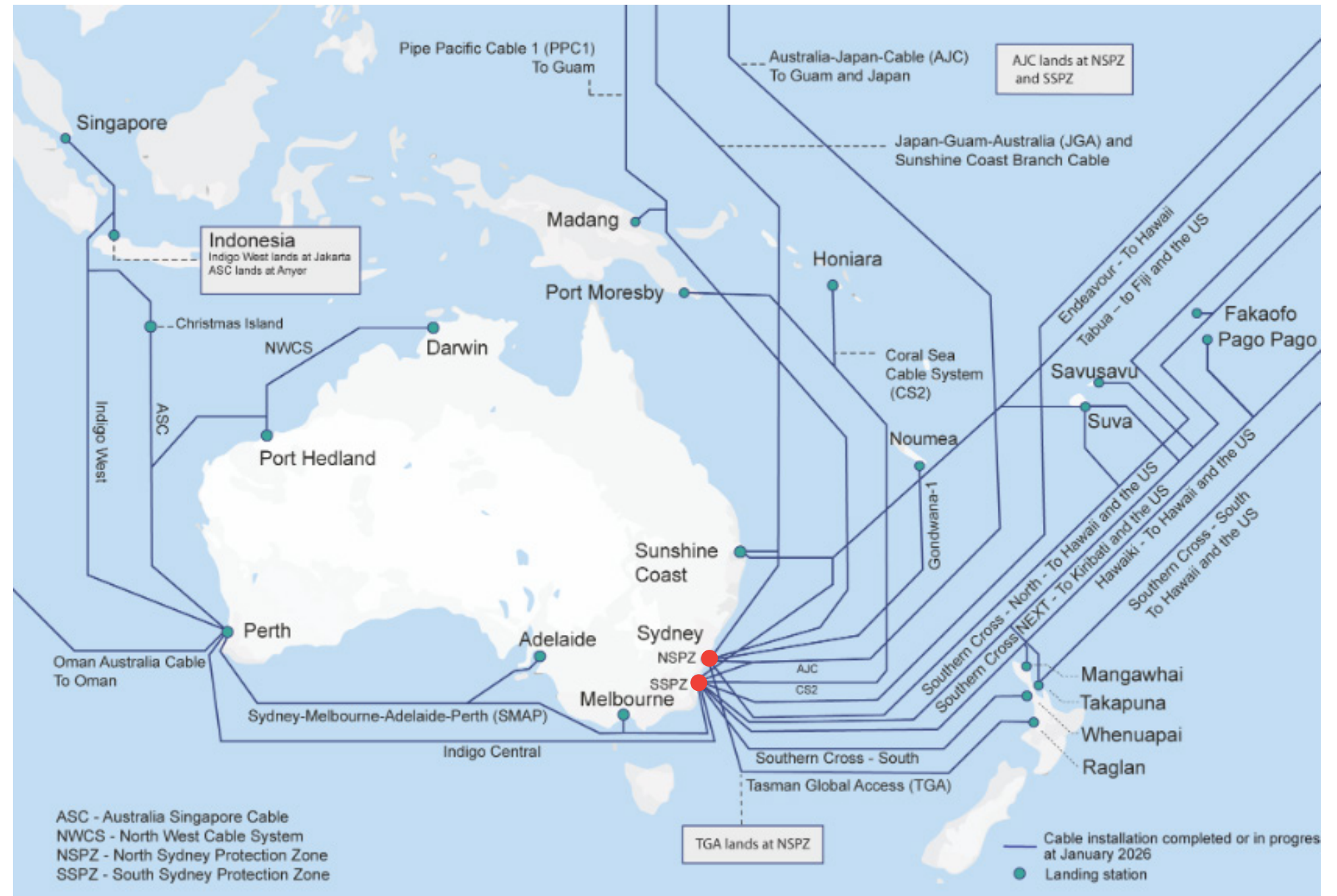
Development Standards (Height & Floor Space Ratio)

- » Removes standard residential-style Floor Space Ratio (FSR) caps and strict height limits for industrial builds in this precinct.
- » Relies on visual impact assessments and setbacks rather than rigid building envelopes.
- » Enables the development of multi-story data halls (typically 2-4 levels) and high-density racking configurations required for hyperscale facilities, which would otherwise be constrained by standard commercial FSR limits.

2.3 STRATEGIC CONNECTION

The Positioning of Eastern Creeks allows for distinct geographic path diversity, enabling independent connections to coastal infrastructure via separate motorway corridors to Sydney's two designated submarine Cable Protection Zones (CPZs) ;

- » NSPZ - North Sydney Protection Zone
- » SSPZ - South Sydney Protection Zone



2.4 GREATER CONTEXT

Eastern Creek’s Position within Greater Sydney

Eastern Creek is located approximately 35 kilometres west of Sydney CBD within the Blacktown Local Government Area, forming part of the Western Sydney Employment Area. The distance also crosses the boundary between the indigenous nations of the Dharug and Eora people. Located at the Light Horse Interchange - where the M4 and M7 motorways intersect - provides direct access to Sydney’s entire metropolitan network with 30 minute travel times to the CBD.

The area functions as Western Sydney’s industrial heartland within the largest industrial complex in the Southern Hemisphere, supporting over 200 major industrial operations and distribution facilities. Eastern Creek’s integration within the Greater Sydney Commission’s Western Parkland City designation positions it as a key node in the planned transformation of Western Sydney into Australia’s third major economic centre, alongside existing centres in Sydney CBD and Parramatta.

Strategic Infrastructure Advantages

The location offers exceptional advantages for critical infrastructure development through established utility networks and committed government investment. Eastern Creek benefits from high-voltage transmission power connectivity with established substations supporting existing data centre operations. The planned M12 Motorway will provide direct connection to Western Sydney International Airport upon completion.

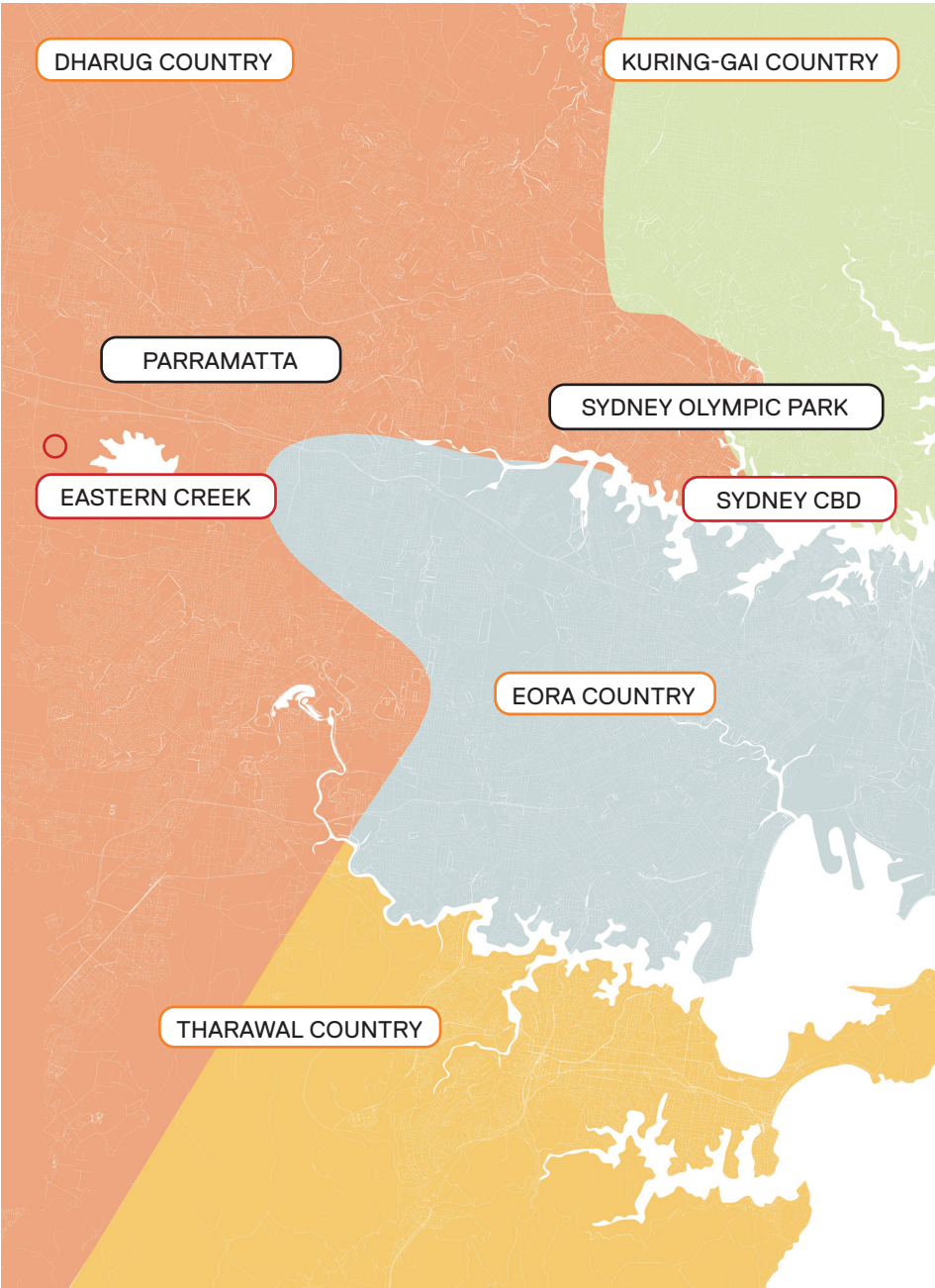
Major data centre operators have established significant presence in the area, with existing facilities demonstrating proven utility infrastructure adequacy and regulatory pathway feasibility. The area has established telecommunications infrastructure including multiple fibre optic networks.

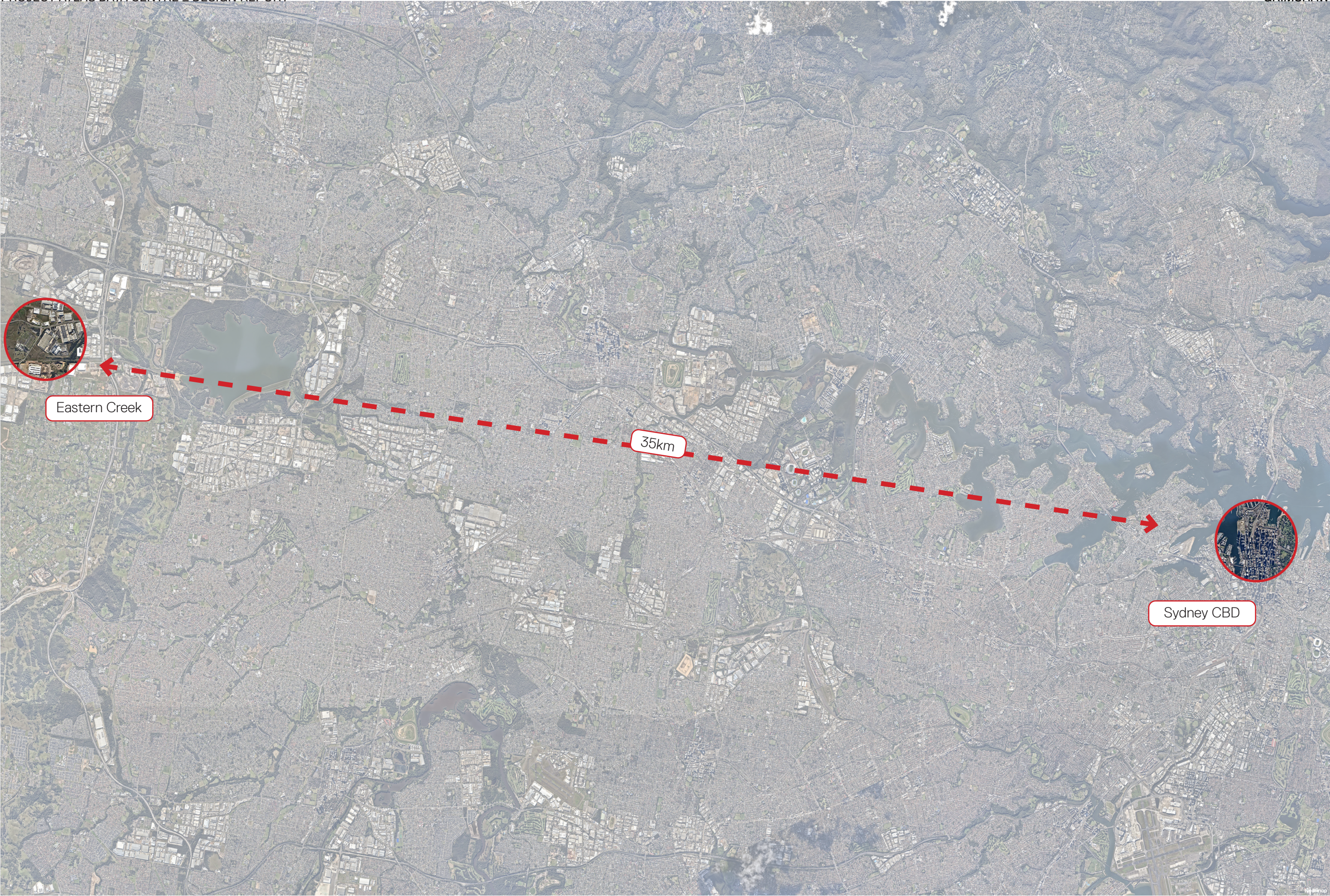
Historical Development Context

Eastern Creek’s development demonstrates systematic transformation from Aboriginal cultural landscape through agricultural settlement to strategic industrial precinct over two centuries. Dharug Aboriginal peoples occupied the area for over 35,000 years, practising sophisticated fire-stick farming that created the open woodland landscapes encountered by European settlers from 1791.

Colonial agricultural development from the 1860s established Eastern Creek Public School in 1866 and significant farming operations. The area’s strategic value was recognised through World War II military use at Wallgrove Army Base and major government facilities including the Eastern Creek Animal Quarantine Station (1979-2015). Modern development accelerated with Wonderland Sydney amusement park (1985-2004) and Sydney Motor-sport Park (opened 1990), demonstrating capacity for large-scale facilities.

This development stability across multiple decades provides confidence in continued government support and infrastructure investment, with the Western Sydney Infrastructure Plan committing substantial funding for regional transport and utility upgrades essential for supporting critical technology infrastructure.





2.5 EASTERN CREEK

Planning Framework and Regulatory Environment

Eastern Creek operates under the State Environmental Planning Policy (Industry & Employment) 2021, which consolidated previous planning instruments to provide streamlined approval pathways for industrial and employment development.

The site is within the Western Sydney Employment Area where development is controlled by the Eastern Creek Precinct Plan prepared under State Environmental Planning Policy (Industry and Employment) 2021 and reference to SEPP 59, and Blacktown Council’s Development Control Plan.

The broader Western Sydney Employment Area benefits from strategic planning coordination through various state and regional frameworks, including integration with the Greater Sydney Commission’s Western Parkland City planning objectives and alignment with major infrastructure investment programs. This multi-level planning approach provides regulatory certainty while supporting large-scale employment and infrastructure development aligned with regional growth strategies.

Industrial Character and Land Use Context

The immediate area comprises established industrial estates and distribution facilities that demonstrate the area’s capacity for large-scale operations. Major neighbouring facilities visible in the locality include the Amazon and Coles fulfilment operations, and various industrial and commercial precincts that support regional logistics and distribution networks.

The site is adjacent the Austral Bricks manufacturing plant to the south and benefits from proximity to the Western Sydney Park lands to the east, which provides environmental buffering. The broader industrial context includes the TransGrid Metropolitan Area Centre and various industrial/commercial precincts that support heavy vehicle access and 24/7 operational requirements.

Surrounding areas demonstrate mixed industrial-residential patterns with established transport corridors, utility infrastructure, and logistics networks that support the region’s role as a major distribution and manufacturing hub for western Sydney. This established industrial character provides operational compatibility essential for data centre operations requiring reliable utility access and minimal land use conflicts.



EXCAVATION IN PROGRESS, REPRESENTATIVE FROM LOCAL ABORIGINAL COMMUNITY. (SOURCE: CURIO PROJECTS 2015)

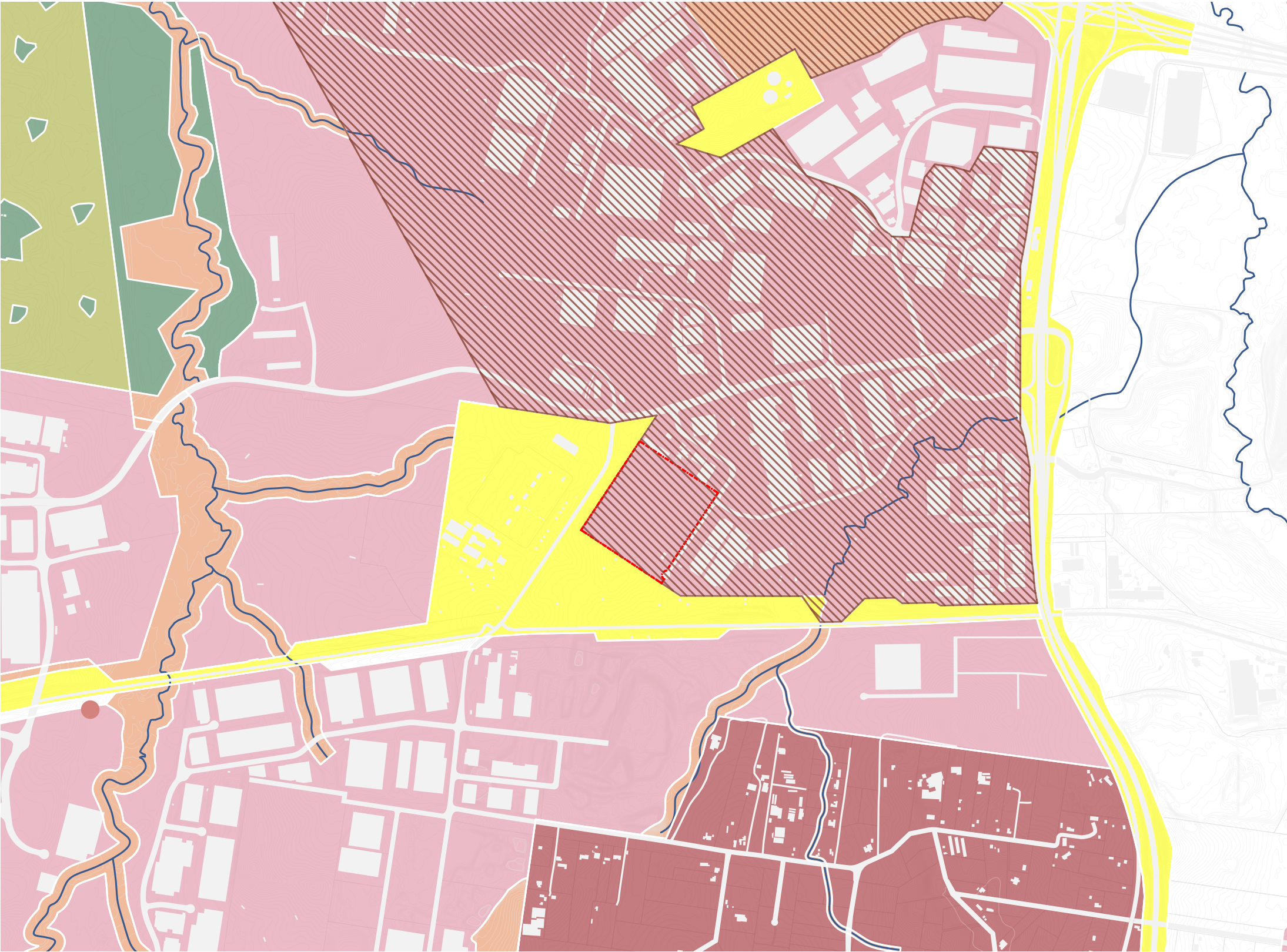


2.6 PLANNING CONTEXT - LEP 2021, DCP

Surrounding zoning controls:

- » Site zoned IN1 General Industry zoning
- » Strategic transport connectivity via Old Wallgrove Road to M7 Motorway - direct access to Sydney’s orbital motorway network
- » Optimal location for data centre construction and operations

	SP2 - INFRASTRUCTURE
	C2 - ENVIRONMENTAL PROTECTION
	RU4 - PRIMARY PRODUCTION SMALL LOTS
	IN1 - GENERAL INDUSTRY
	RE1 - PUBLIC RECREATION
	EASTERN CREEK PRECINCT
	E1 - LOCAL CENTRE
	2(A) LOW DENSITY HOUSING

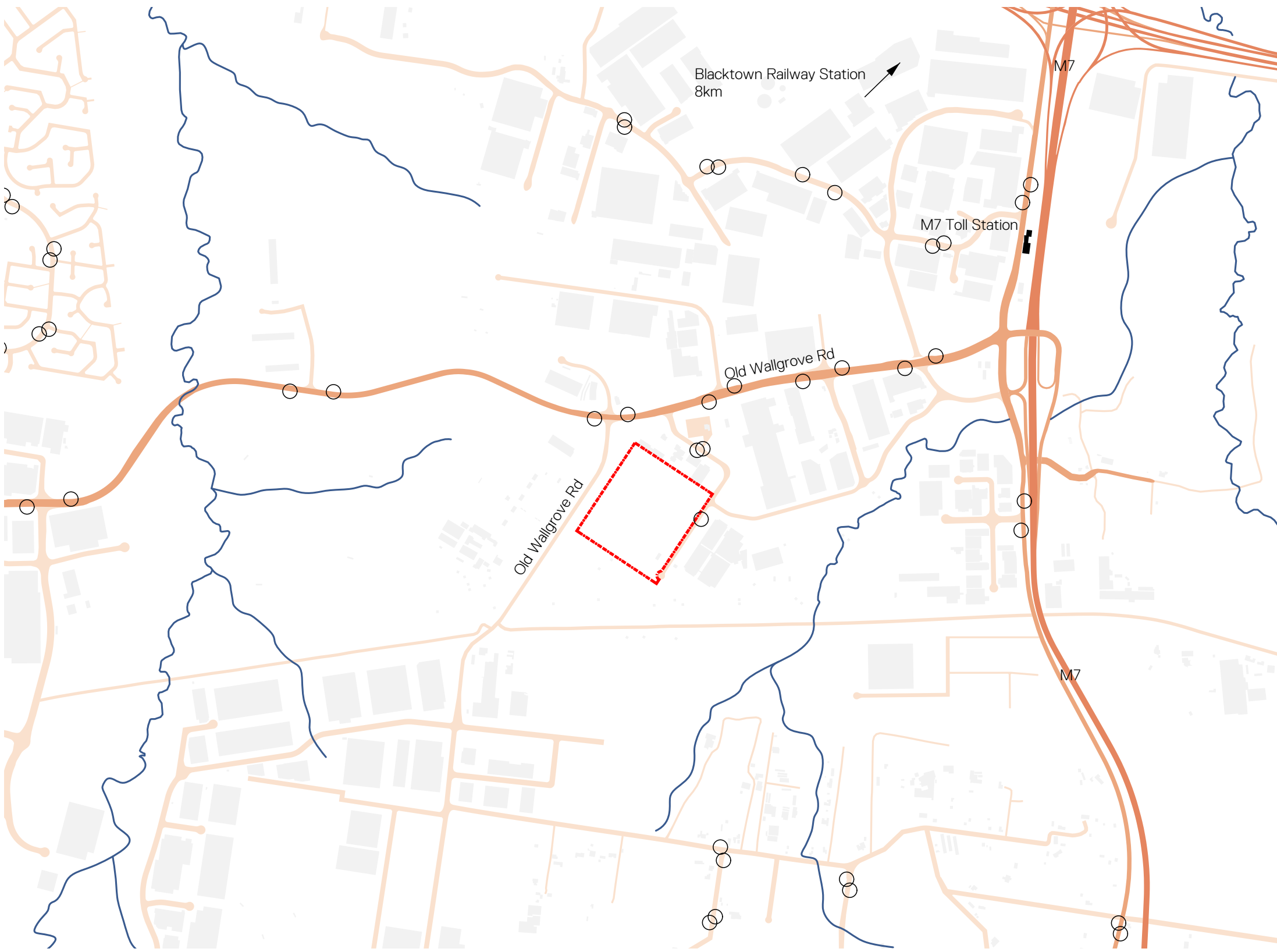


2.7 TRANSPORT

Primary, secondary, and tertiary roadways are highlighted to convey site access:

- » Strategic transport connectivity via Old Wallgrove Road to M7 Motorway - direct access to Sydney's orbital motorway network

	PRIMARY ROADS
	SECONDARY ROADS
	TERTIARY ROADS
	BUS STOPS

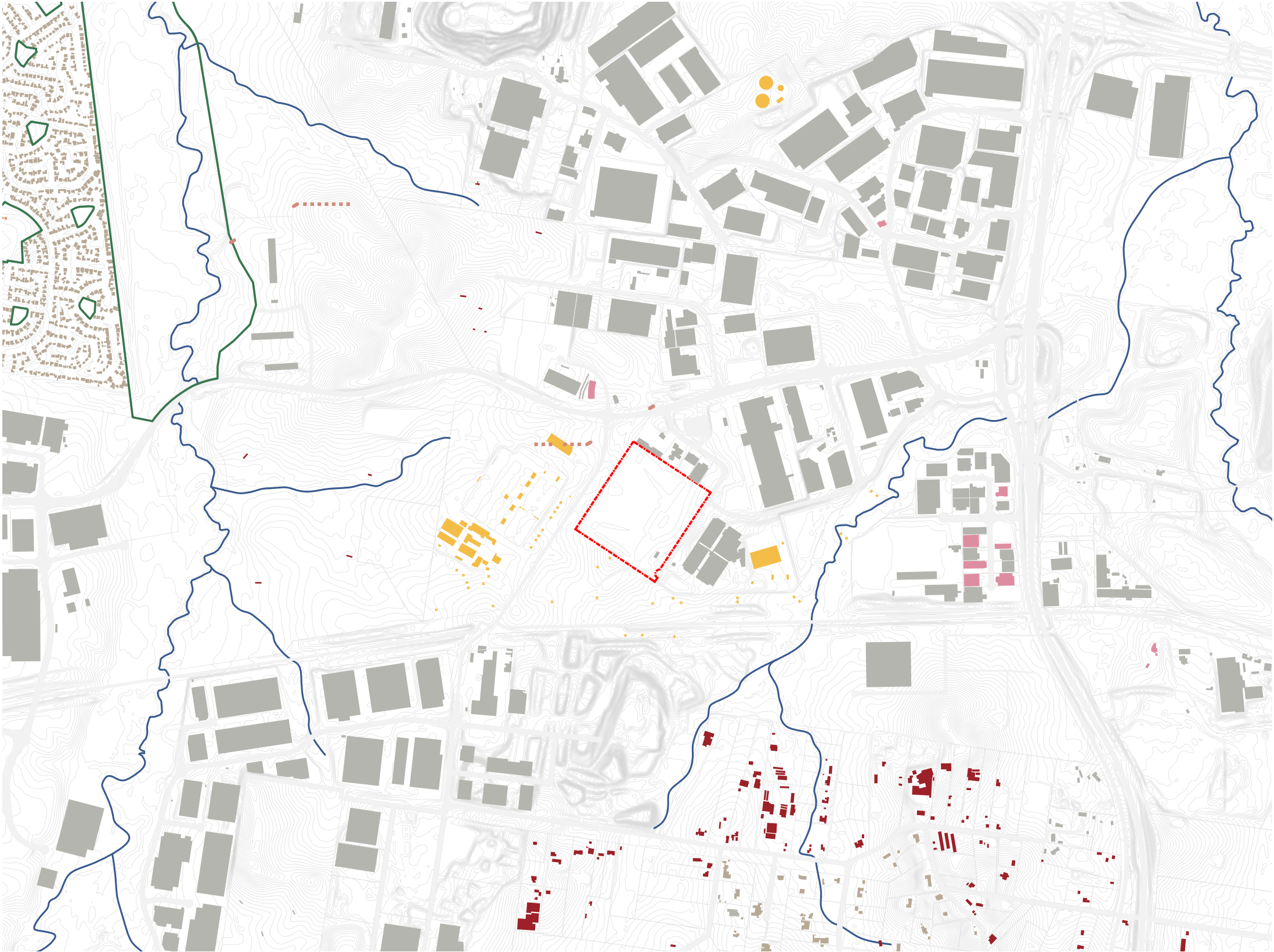


2.8 LOCALITY

The site context is well suited for data centre construction, with other nearby amenities to be noted:

- » General industry makes up majority of surrounding land use
- » Site immediately neighbours energy infrastructure
- » Farming & residential noted as nearby sensitive receivers
- » Site sits on Gandangara/Gundungurra and Dharug Country
- » Number of neighbouring waterways, parks & reserve

	GENERAL INDUSTRY
	RESIDENTIAL
	FARMING
	CIVIC & EDUCATION
	ENERGY & INFRASTRUCTURE
	COMMERCIAL & RETAIL
	RESERVES & PARKS
	FAITH
	WATERWAYS

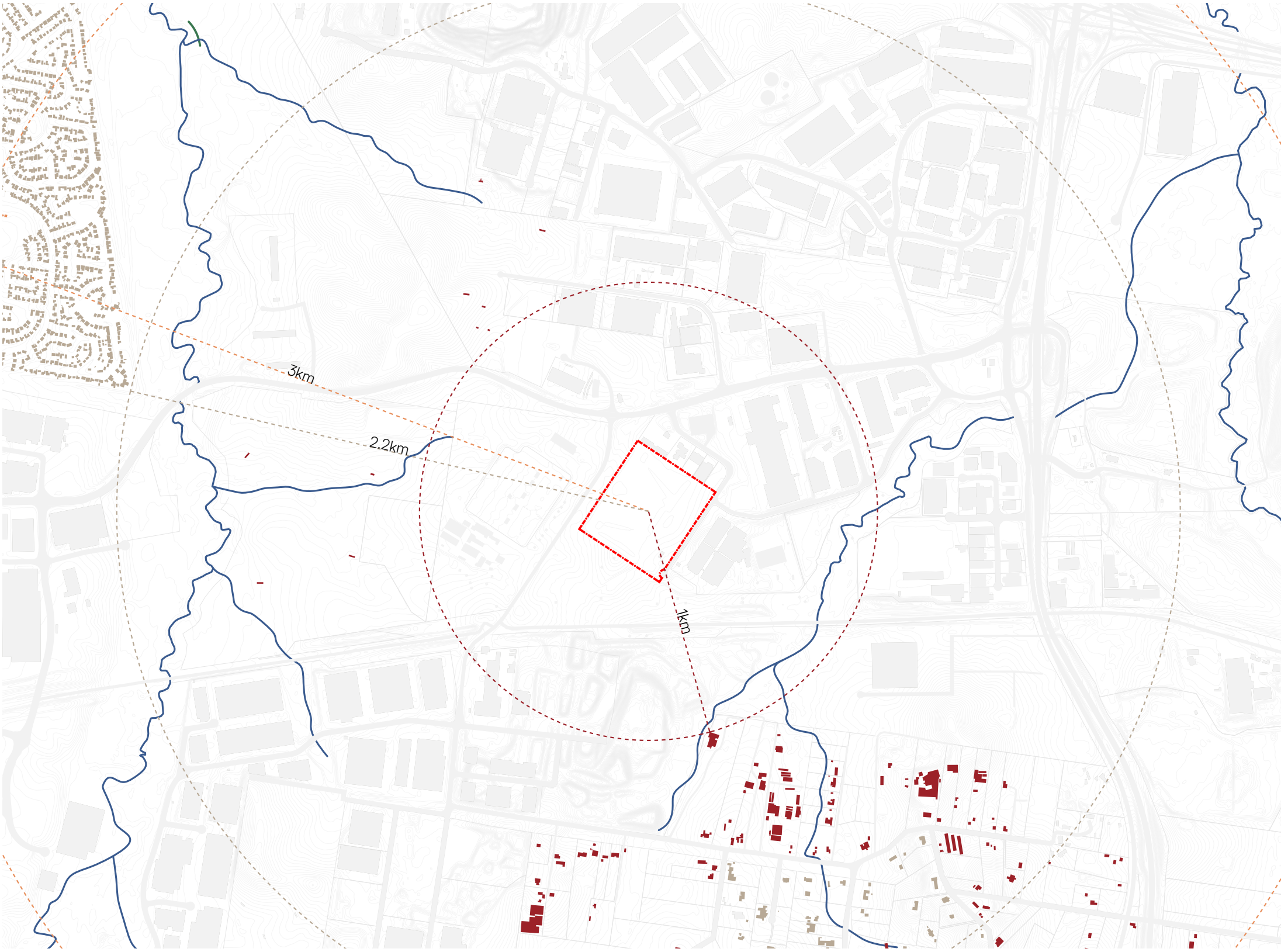


2.9 SENSITIVE RECEIVERS

Given the industrial nature of this area, noise levels are generally consistent with local infrastructure. There are, however, a small number of sensitive receivers to consider:

- » Primary Production Small Lots describes land zoned primarily for commercial agricultural production
- » Low density residential dwellings present in Erskine Park (west) and amongst farmland (south)
- » Civic, educational, and faith based facilities located 3km west of site
- » Refer to Renzo Tonin Noise and Vibration Impact Assessment

	PRIMARY PRODUCTION SMALL LOTS/FARMING
	RESIDENTIAL
	PUBLIC USE
	WATERWAYS



2.10 SITE CONTEXT

Architectural Analysis Methodology

The site context presented in this report is viewed specifically through an architectural lens. It represents a synthesis of physical conditions, spatial opportunities, and environmental constraints, distilled to inform the campus masterplan and built form strategy. The analysis captures the primary site characteristics—including solar orientation, view corridors, topographic undulations, and vegetation patterns—to establish a logic for the siting of the data halls and the arrangement of the “neutral ground” amenities. This approach ensures that the design response is not merely imposed upon the land but is derived from a forensic understanding of the site’s physical reality.

SSDA Technical Integration

This architectural report should be read in conjunction with the broader suite of documents submitted as part of the State Significant Development Application (SSDA). While the architectural narrative synthesises key constraints to justify the design intent, the quantitative validation and detailed statutory assessment of these factors are provided in the accompanying specialist reports.

The design has been developed through an iterative process of coordination with these technical disciplines. Reference should be made to the following appended reports for detailed technical data:

- » Surveying & Geotechnical
Detailed Survey and Geotechnical Assessment.
- » Water & Soil
Surface and Groundwater Assessment, Water Management Plan, Flood Risk Assessment, and Detailed Site Investigation Report.
- » Environment & Ecology
Biodiversity Development Assessment Report (BDAR).
- » Planning & Impact
Visual Impact Assessment and Transport and Accessibility Report.

Scope & Delineation

The analysis contained herein is intended to demonstrate the spatial implications of the technical data on the architectural outcome. It serves to support the Stage 2 option evaluation and concept design development. For definitive technical modeling, detailed contamination parameters, and specific engineering calculations, reliance should be placed on the specialist technical reports listed above.

Immediate context

The site context is primarily industry and infrastructure. Surrounding the site:

- » To the northeast, a range of mixed use industry & commercial buildings, including a Coles CDC & Telstra NBN
- » To the southeast, CDC Data Centre and substation
- » South, southwest, and west of the site consists of land primarily owned and operated by Transgrid Sydney
- » To the Northwest, more commercial industry, and the Industrial Harvest cafe



CDC DATA CENTRE



2.11 CONTEXT PHOTOS



01 AERIAL VIEW LOOKING TOWARDS SOUTH EAST FROM ROBERTS ROAD



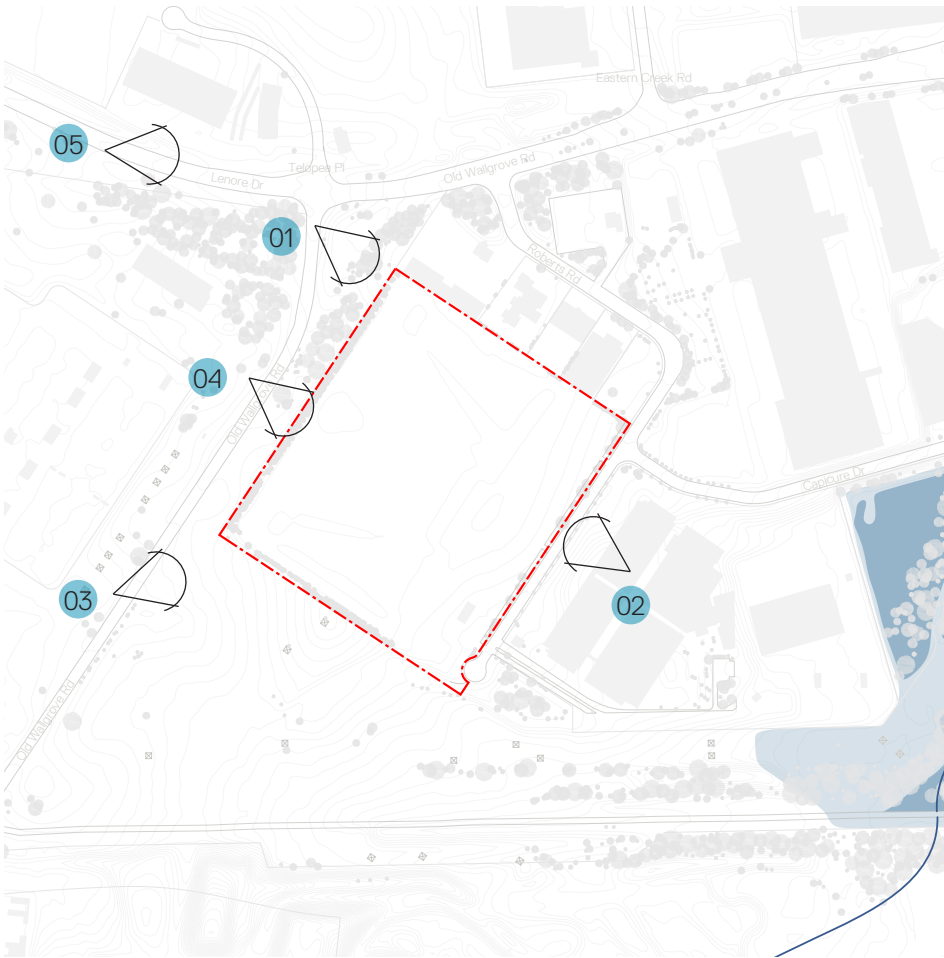
02 STREET VIEW LOOKING TOWARDS NORTH WEST FROM ROBERTS ROAD



03 STREET VIEW LOOKING TOWARDS NE FROM OLD WALLGROVE ROAD



04 STREET VIEW LOOKING TOWARDS SE FROM OLD WALLGROVE ROAD



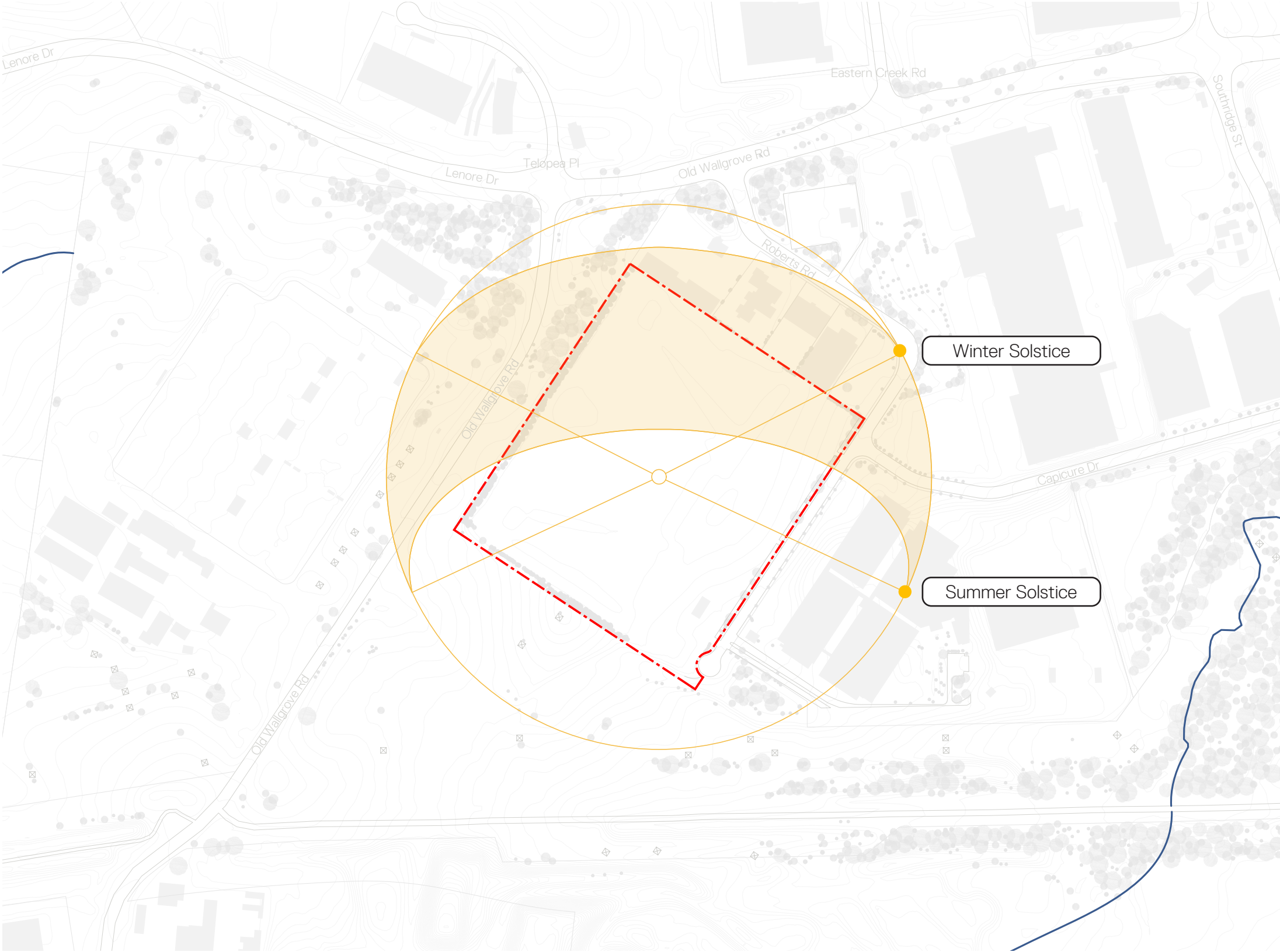
SITE MAP



05 AERIAL VIEW LOOKING TOWARDS EAST FROM OLD WALLGROVE ROAD

2.12 SOLAR ACCESS

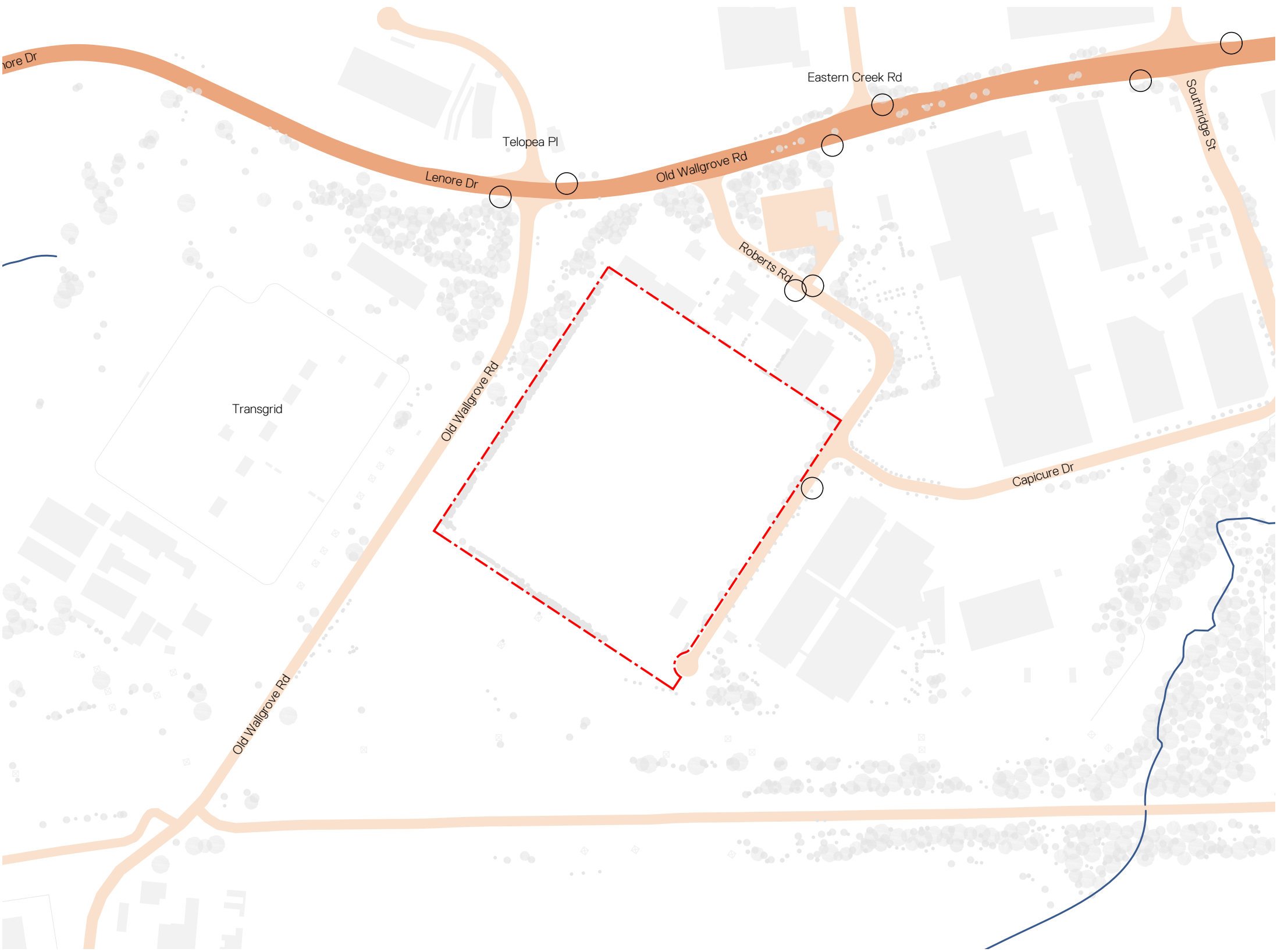
Site oriented about 45 degrees counter clockwise off north, for consideration to amenity and office planning.



2.13 EXISTING ROADWAYS

Secondary and tertiary roadways are highlighted to convey site access:

- » The site sits on Roberts Road, a tertiary roadway providing access to other neighbouring industrial buildings
- » Strategic transport connectivity via Old Wallgrove Road to M7 Motorway provides direct access to Sydney’s orbital motorway network



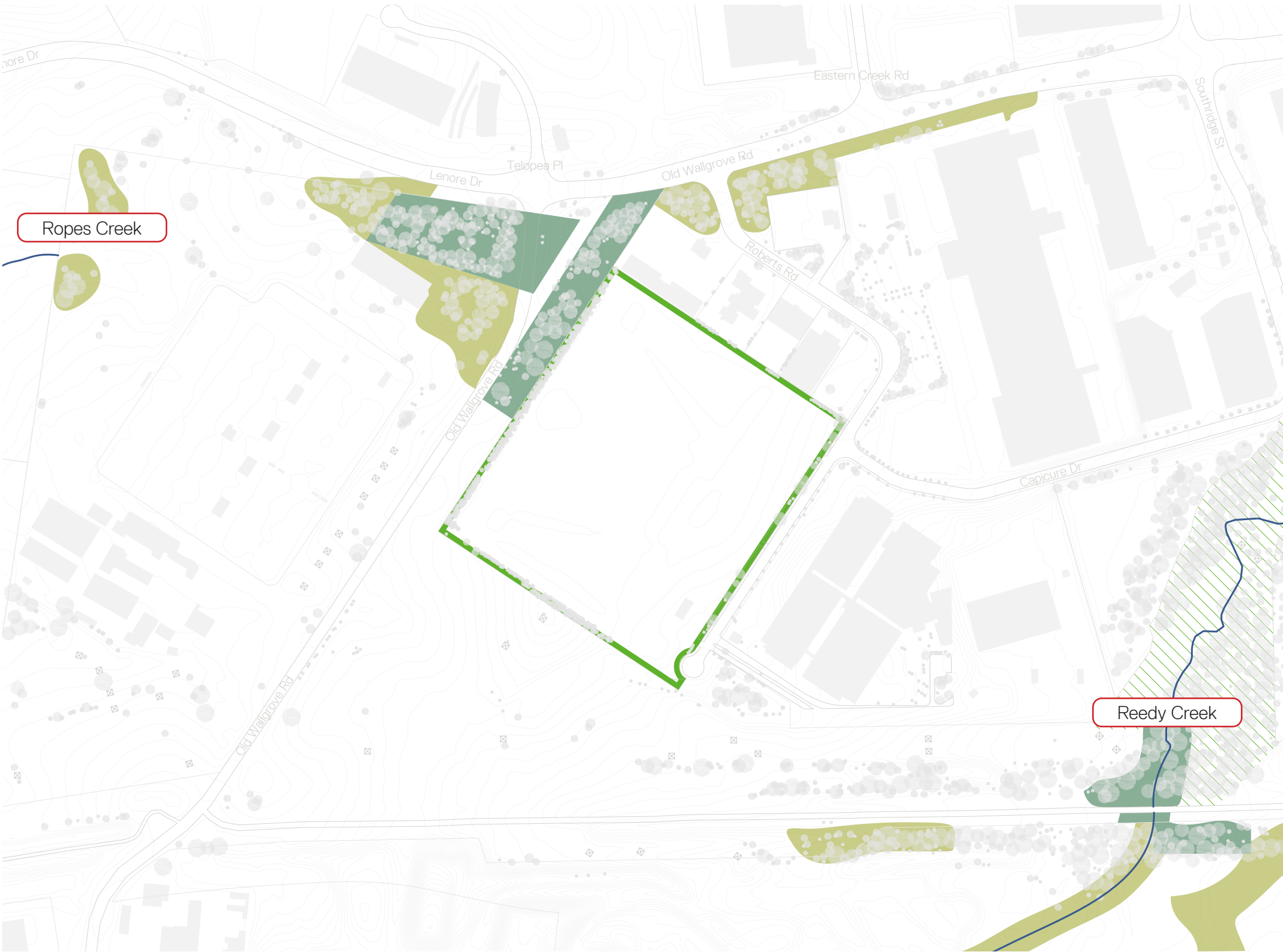
	SECONDARY ROADS
	TERTIARY ROADS
	BUS STOPS

2.14 SITE VEGETATION

The surrounding context is home to a number of protected biodiversity zones and significant tree canopies.

- » Biodiversity Values map (non-EPI) identify land sensitive to impacts of development - factored into Biodiversity Offset Scheme
- » Terrestrial Biodiversity EPI identifies high biodiversity areas to protect from impacts of development
- » Pre-existing trees along site boundary to be retained
- » Existing Green Grid (non-EPI) maps open space within Greater Sydney Region

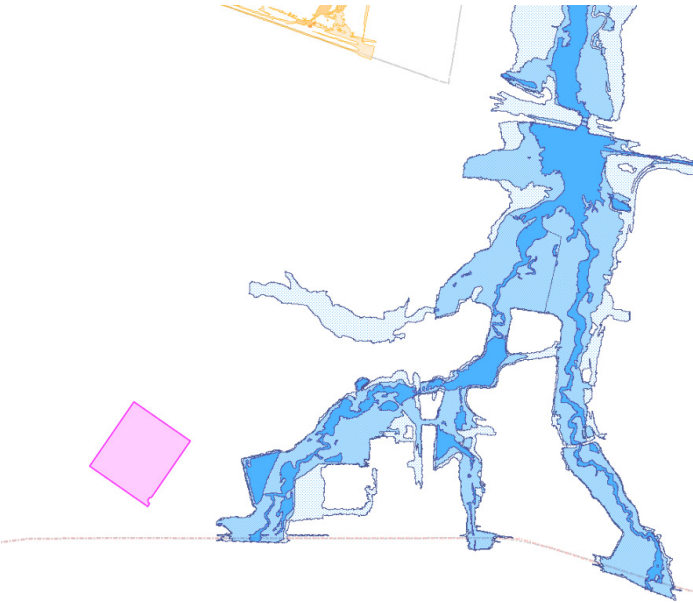
	BIODIVERSITY VALUES MAP
	TERRESTRIAL BIODIVERSITY
	RETAINED TREES
	WATERWAYS
	EXISTING GREEN ASSETS



2.15 SITE FLOOD RISK

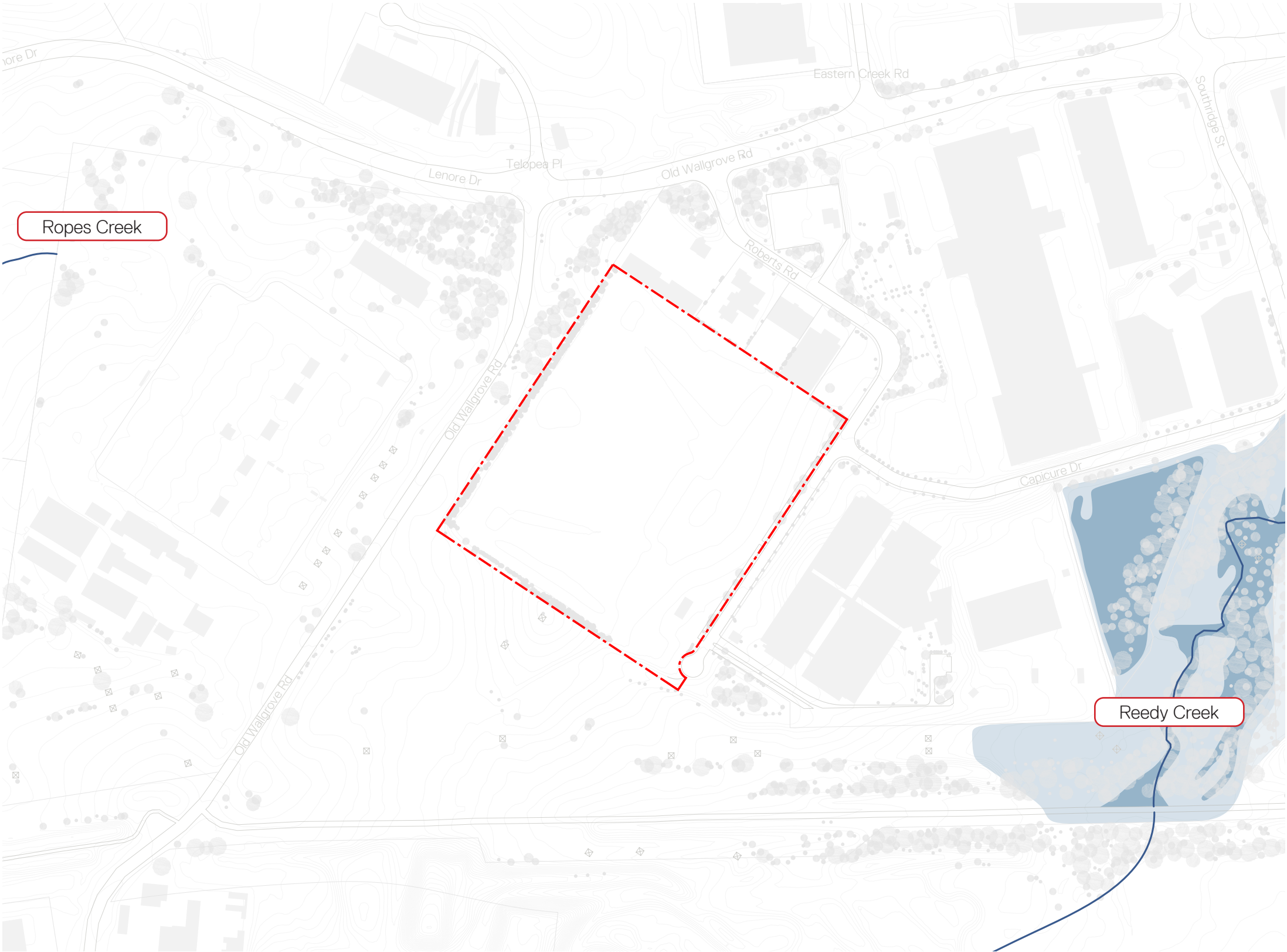
While flood risks may be of concern more generally in Eastern Creek, the Blacktown Council Flood Planning Area maps indicate there is low risk for flooding within subject site.

- » Reedy Creek & lower topographies subject to flood risk



Blacktown Council Flood Planning Area

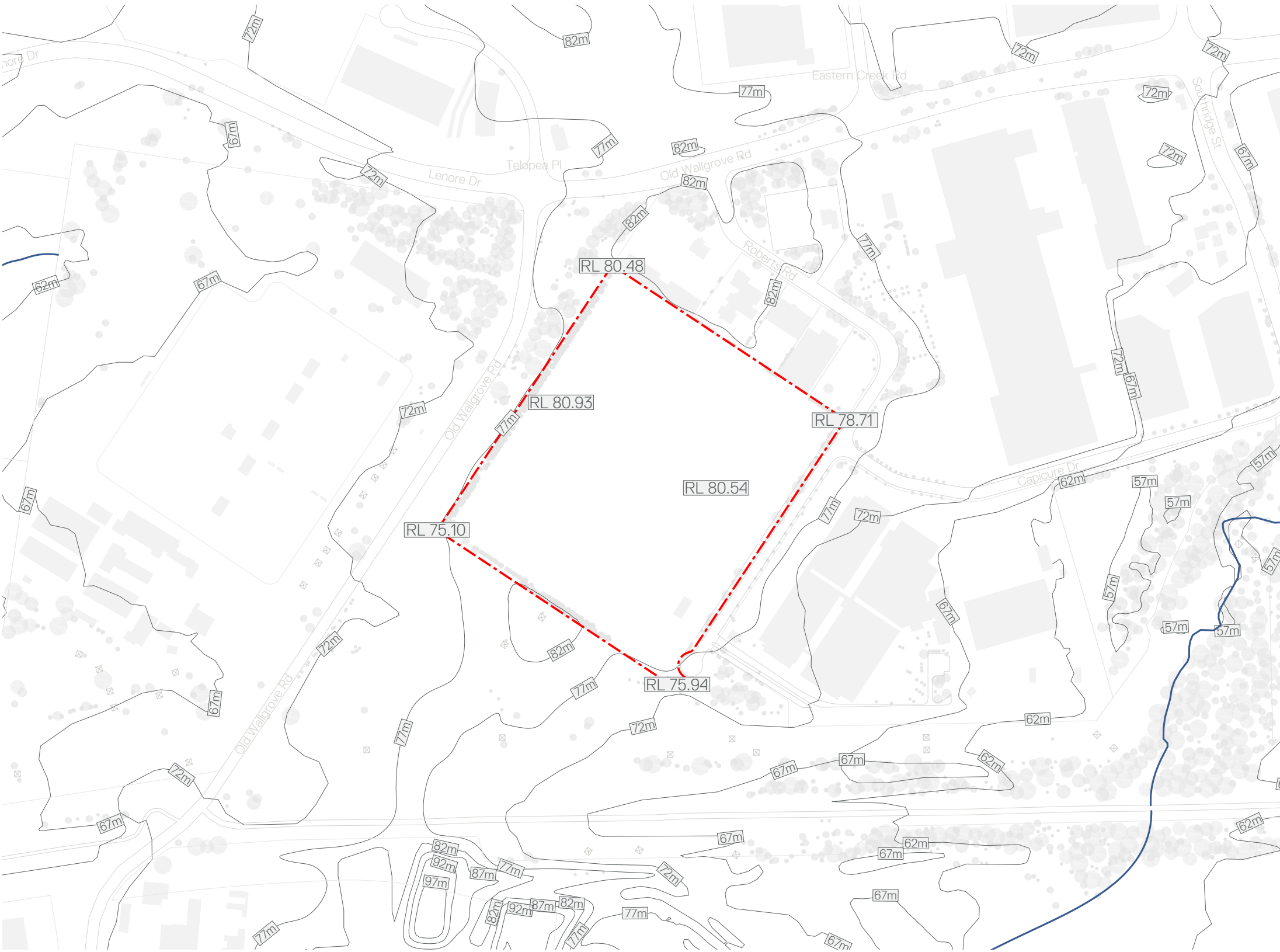
	HIGH FLOOD RISK PRECINCT
	MEDIUM FLOOD RISK PRECINCT
	LOW FLOOD RISK PRECINCT



2.16 SITE TOPOGRAPHY

The subject site is brownfield, topography within the site border is relatively flat with some degree of topographical variation along the borders of the site.

- » Steep embankment along east & south site border, may effect potential vehicle access



2.17 EXISTING DEVELOPMENT

Existing Infrastructure Analysis

The analysis of existing site conditions is underpinned by high-fidelity survey data provided by Goodman, prepared by LTS Surveyors (dated 26/06/2025). This review has identified key infrastructure assets that offer significant opportunities for adaptive reuse, driving both construction efficiency and sustainable resource management.

Hardstand Retention & Adaptation

The site benefits from the legacy infrastructure of the former distribution centre, most notably extensive areas of structural hardstand. Rather than a “clean slate” approach, the design strategy prioritizes the retention and adaptation of these concrete surfaces. Offering tangible benefits in waste reduction and program acceleration trhoguh civil works reduction.

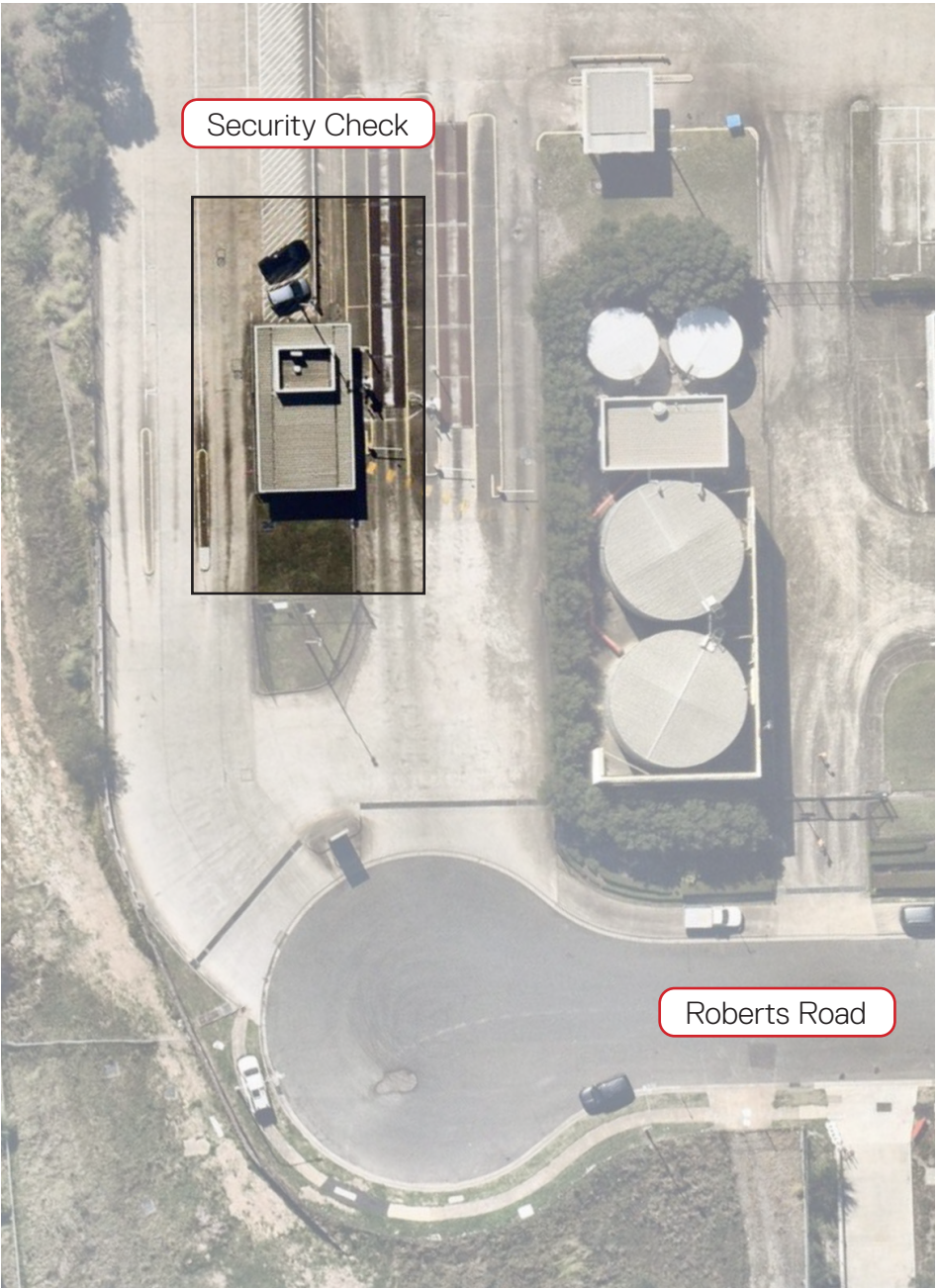
Strategic Access & Circulation

The primary ingress from Roberts Road has been identified not only as the optimal connection to the arterial road network but as the most topographically responsive entry point. The site inherits a sophisticated logistics framework that is directly transferable to the operational needs of a hyperscale data centre. The existing configuration offers:

- » Heavy Vehicle Geometry
Established turn paths and circulation zones engineered for Heavy Rigid (HRV) and Semi-trailer (SRV) vehicles, ensuring seamless logistics for equipment deployment.
- » Traffic Management Layering
A multi-lane entry arrangement capable of facilitating vehicle sorting, rejection, and queuing without impacting the public domain.
- » Security Infrastructure
Existing guardhouse facilities and perimeter controls that provide an immediate baseline for the high-security protocols required by critical digital infrastructure.

Security & Future Flexibility

The Roberts Road interface offers a defensible and legible security threshold, leveraging the site’s natural topography to control sightlines and approach speeds. While the current infrastructure provides a robust foundation for a secure campus entry, future planning allows for flexibility.

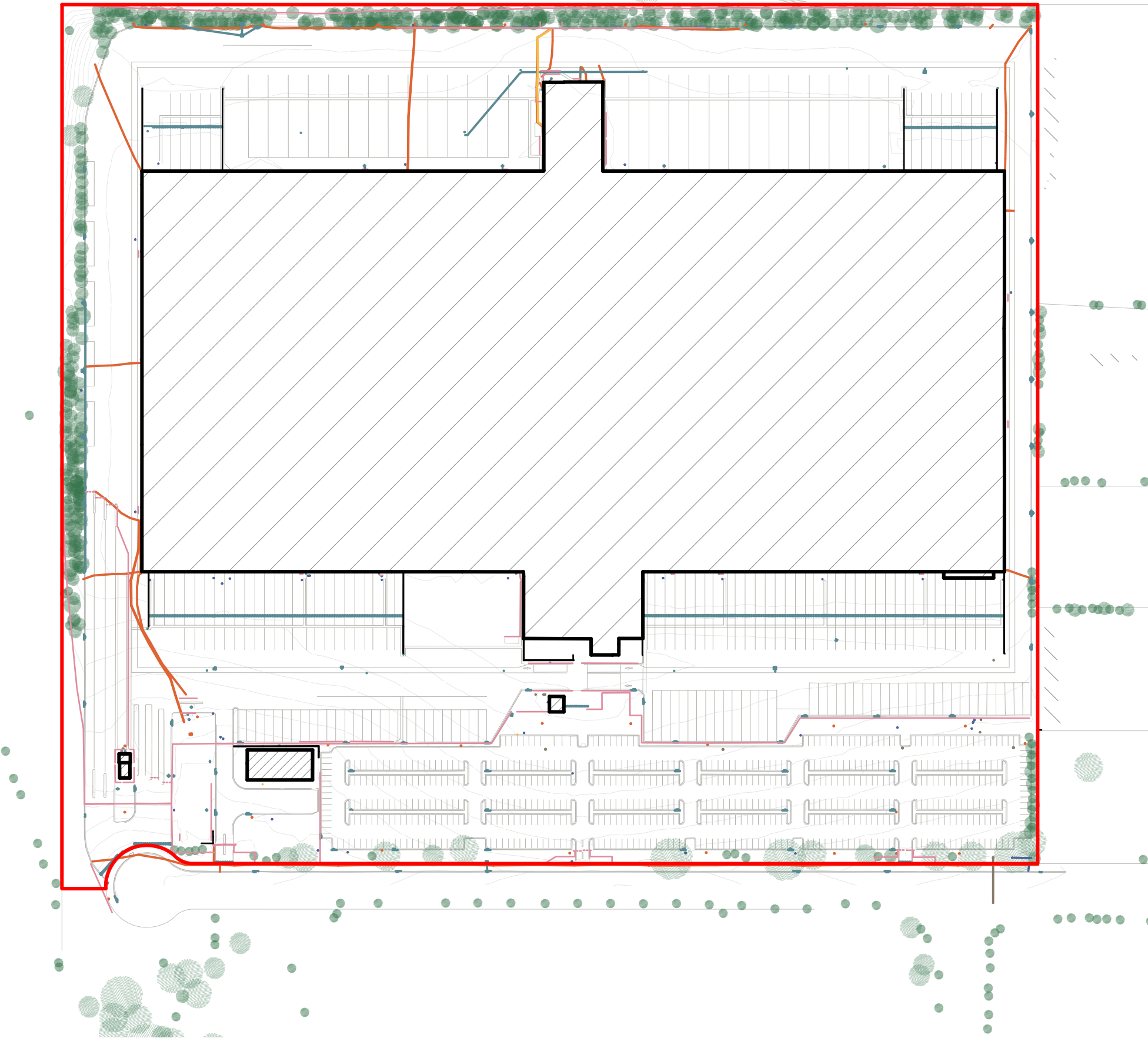


Existing access and security features.

2.18 SITE FEATURES

EXISTING FEATURES

●	SITE BOUNDARY
●	FENCE
●	TREES
●	SEWER (SERVICE + DETECTED)
●	STORM WATER (SERVICE)
●	WATER (SERVICE + DETECTED)
●	ELECTRICAL (SERVICE + DETECTED)
●	GAS (DETECTED)

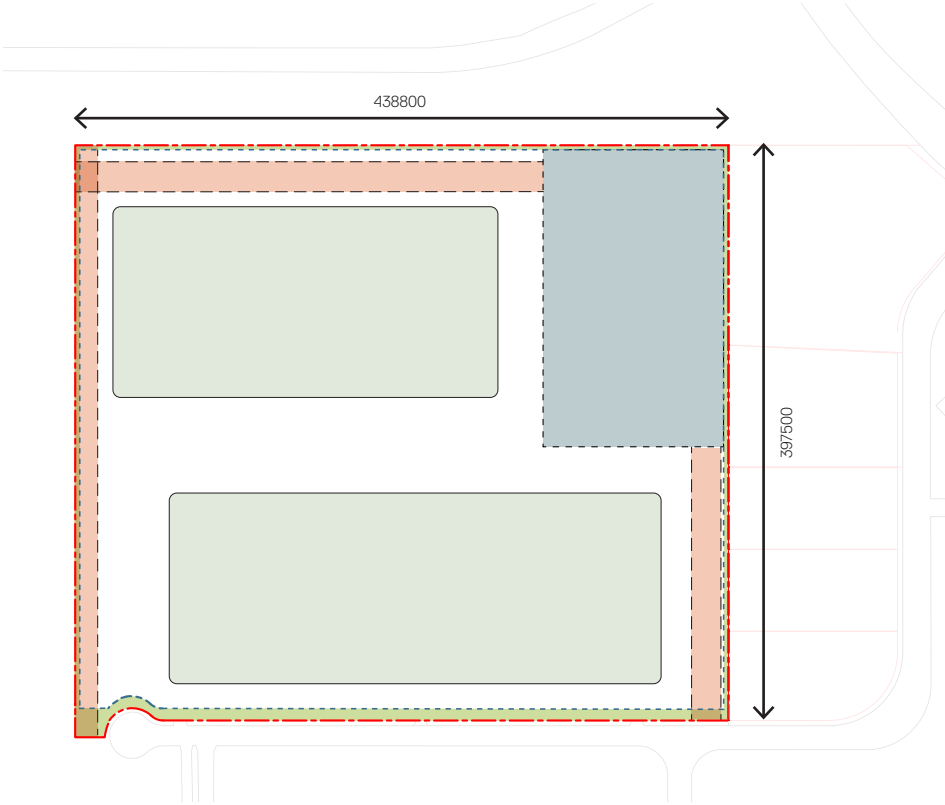


3.0 SITE & BRIEF RESPONSE

3.1 SITING

The siting of Project Atlas DC is a direct response to the land’s inherent characteristics, leveraging existing infrastructure and significant topography to optimize operational security and environmental performance. By integrating the facility into the natural levels of the site, the proposal minimizes the need for superficial screening, instead using the site’s physical profile to provide inherent privacy and buffering.

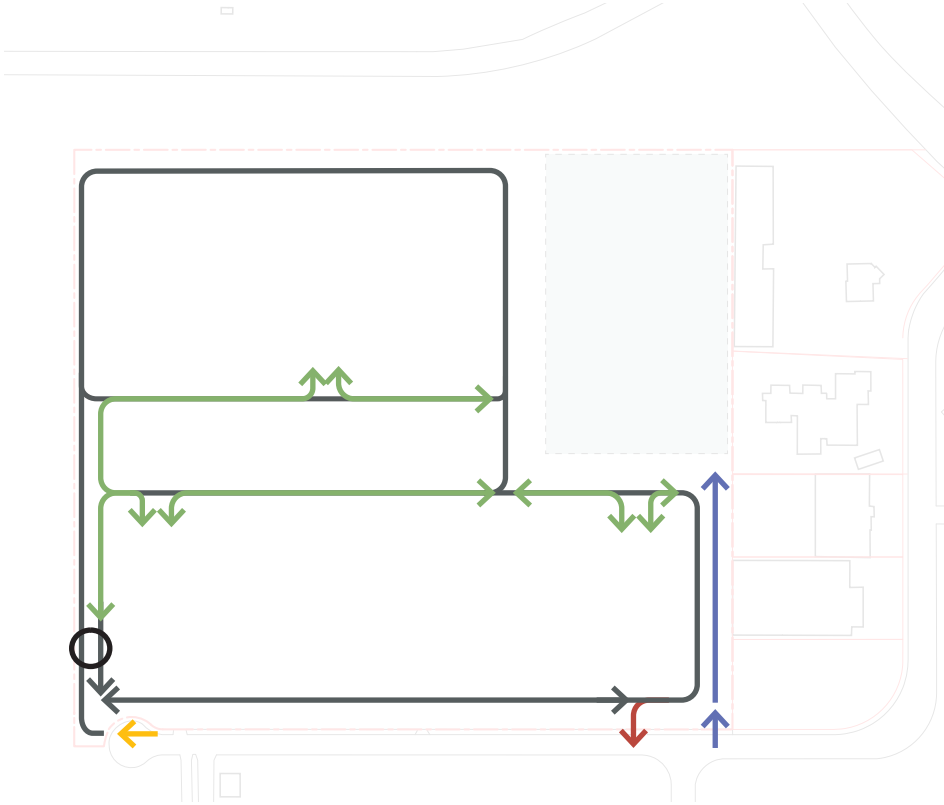
1. CONSTRAINTS



- » Approximately 24,600 sqm in the northwest quadrant is allocated to a 500MVA landing substation.
- » 15–20m electrical easements are integrated to facilitate robust reticulation from the substation, supporting both immediate demand and future scalability across the precinct.
- » While SEPP59 planning policy limits building footprint to 65%, the proposal achieves a highly efficient 59% coverage. This conservative footprint (inclusive of substation and ancillary tanks) allows for a more generous allocation of site area to be returned to high-quality landscape.

	SITE BOUNDARY		SUBSTATION
	BUILDING FOOTPRINT		EASEMENT
	SEPP 59 LANDSCAPE REQ		SETBACKS

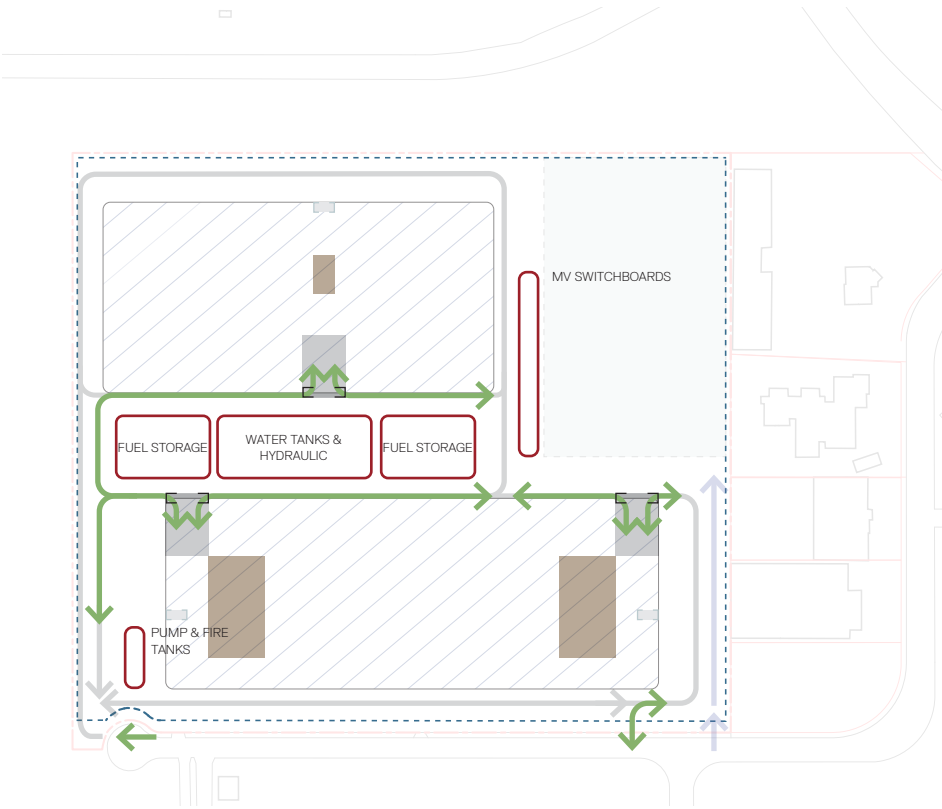
2. ACCESS



- » The main entry features integrated security screening facilities and a truck rejection loop to manage logistics without impacting the public road network.
- » The internal circulation ring provides simple, efficient servicing access to multiple loading docks while clearly defining the hard-stand equipment zones.
- » A secondary exit point and dedicated substation entry ensure that heavy vehicle movements are decoupled from the main campus entry, maintaining a calm and controlled environment.

	PRIMARY ACCESS		SUBSTATION ACCESS
	SERVICING ACCESS		SECONDARY EXIT
	SITE ENTRY		GUARD HOUSE

3. BOH

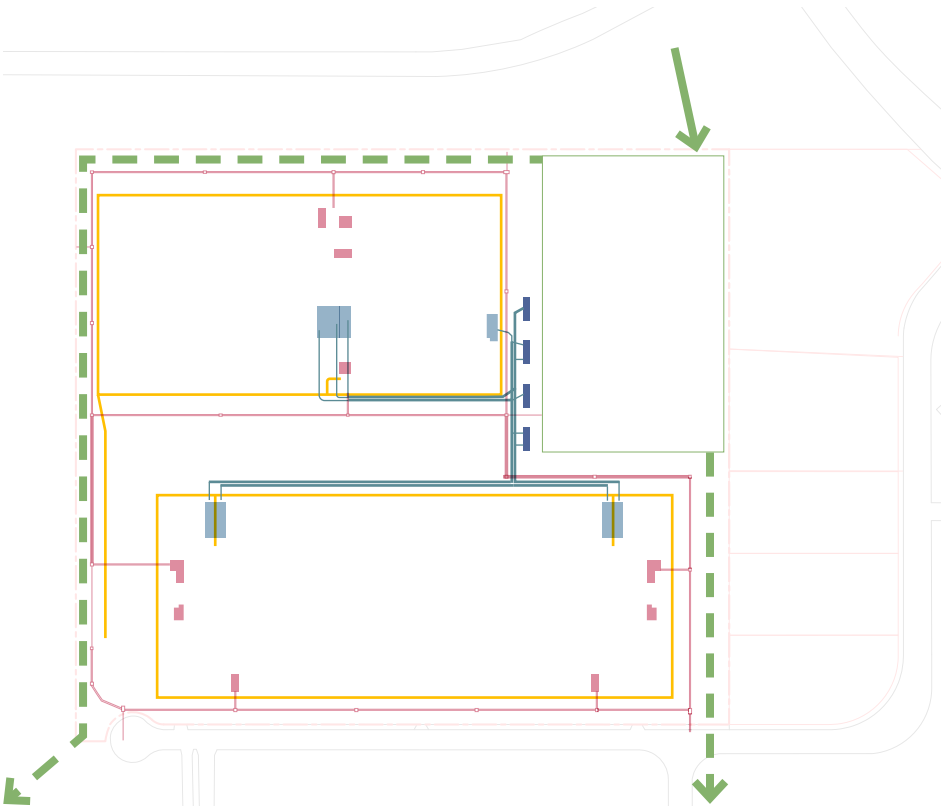


The central spine of the site acts as the industrial heart of the facility, shielding critical infrastructure from the public realm:

- » **Environmental Shielding:** Essential components—including pumps, industrial water tanks, retention systems, and diesel storage—are strategically located within the building forms to mitigate visual and acoustic impacts.
- » **Logistical Integration:** Loading bays are positioned for immediate accessibility from the primary circulation ring, ensuring seamless equipment replacement and servicing without disrupting site operations.

↑	BOH & EQUIPMENT ACCESS	⚙️	FOH OPENINGS
○	SITE INFRASTRUCTURE	🏠	STORAGE (GROUND FLOOR)
●	LOADING BAYS	⚙️	SETBACK

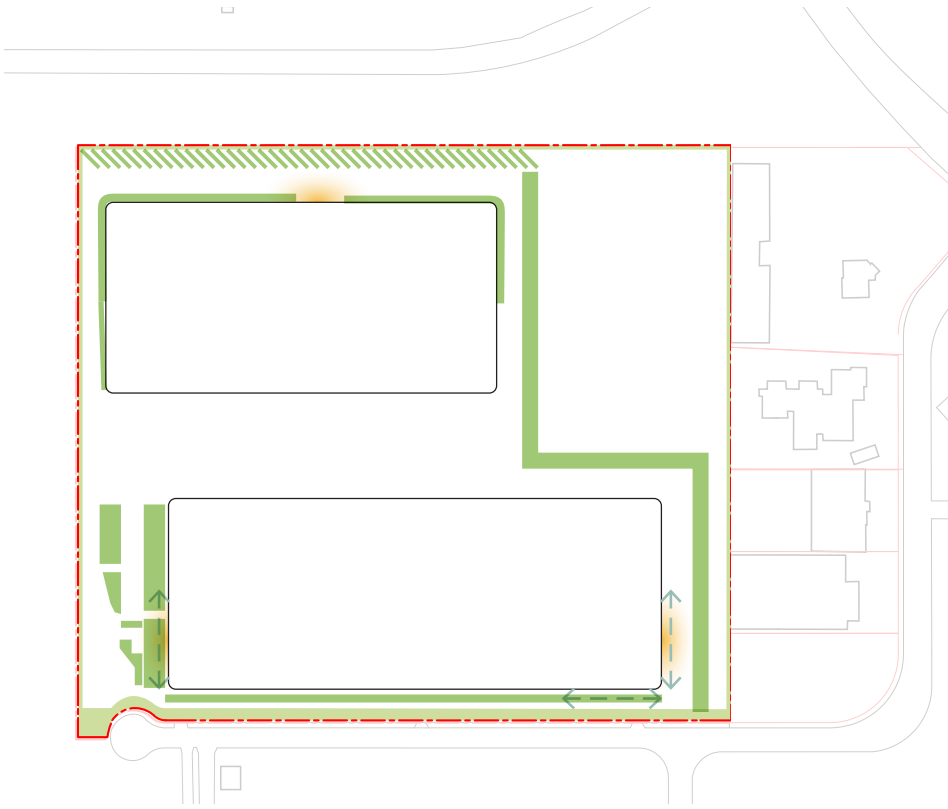
4. SITE SERVICES



- » MV, LV, and ICT trenching is determined through a first-principles approach to minimize site disturbance and maximize protection.
- » The HV cable feed is reticulated underground with the foresight to support a broader digital ecosystem as the region’s data needs evolve.

○	MV CABLE RETICULATION	○	TRANSGRID 330KV SUPPLY
○	LV CABLE RETICULATION	⚙️	POTENTIAL CABLE EXPANSION
●	MAIN MV SWITCHBOARDS	○	ICT
●	MV PLANT ROOMS		

5. LANDSCAPING



- » The landscape strategy is a fundamental act of Cumberland Plain Woodland reinstatement, aligning with the project’s “Designing with Country” objectives:
- » **Threatened Community Restoration:** The landscape prioritizes the restoration of the Cumberland Plain Woodland as a cornerstone of the site’s identity and ecological legacy.
- » **Habitat Layering:** In less disturbed zones, habitat creation is treated as a fundamental design layer, providing essential nesting and shelter opportunities to support local biodiversity.
- » **Natural Buffering:** Existing tree lines are maintained and reinforced along the NW and SW boundaries to bolster site privacy and contribute to the neighboring biodiversity corridor.

🌳	CONTINUATION OF COUNTRY	●	LANDSCAPE SETBACK
🌿	RETAINED VEGETATION	↑	PEDESTRIAN AMENITY
○	SITE BOUNDARY		

3.2 RESPONSE TO SITE CONDITIONS

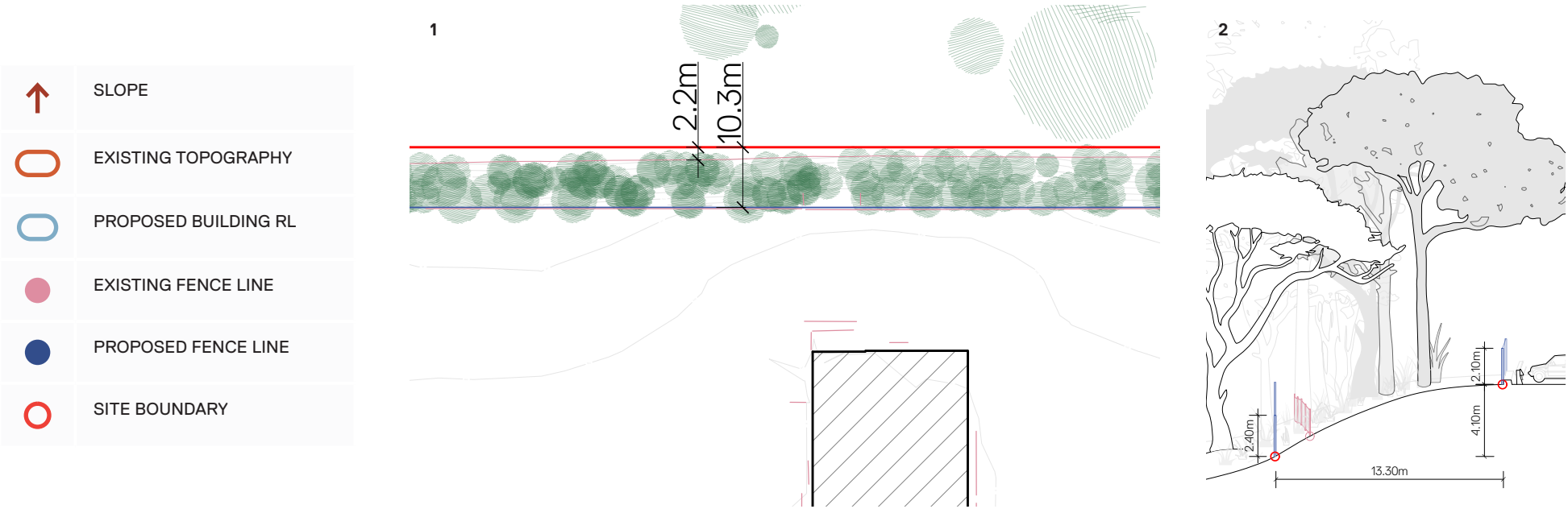
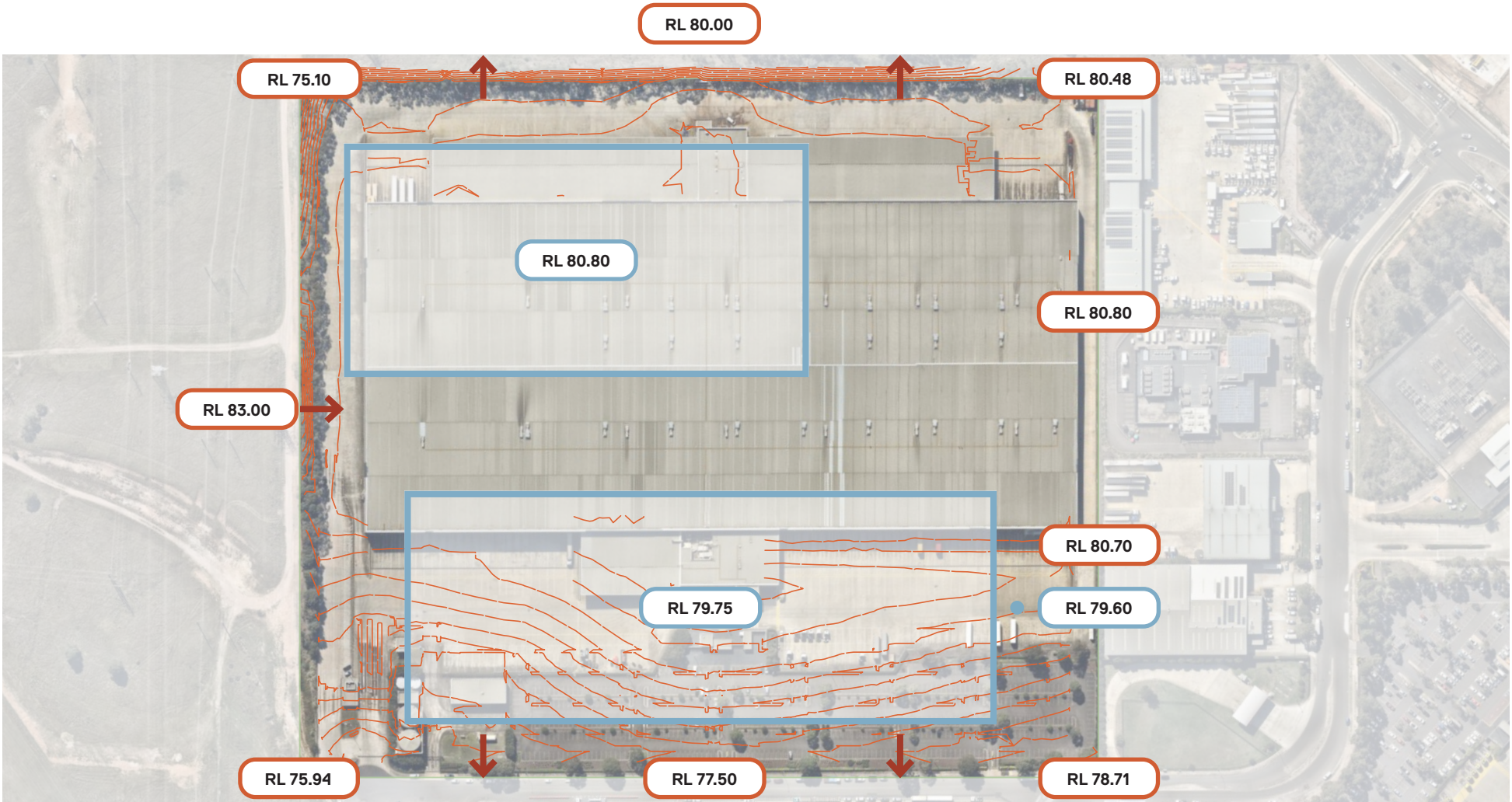
Synthesis & Design Framework

By synthesising the technical constraints with the physical opportunities of the land, the design framework establishes a logic that is both operationally robust and environmentally responsive.

The Roberts Road interface is the primary entrance, adapting and reusing and upgrading the existing access a the proposal minimizes civil intervention while securing functional access.

The design follows the existing topography to enhance the “defensible space” required for data centre operations.

- » The significant embankment of 3-4 metre fall across the 10.3m North-Western Interface setback from the hardstand is utilised to naturally suppress the visual scale of the facility and assist in stormwater management.
- » Similarly, the 3-4 metre fall along the southern perimeter is integrated into the site levels to create natural separation, reducing the reliance on engineered retaining structures where possible.
- » The retention of the existing vegetative fringe is a critical component of the environmental strategy. These established tree lines are preserved to perform a dual function: acting as an immediate visual buffer and contributing to the continuity of the adjacent biodiversity corridors. This approach ensures the secure perimeter is softened by existing landscape and ecological context.
- » To meet the stringent requirements of critical digital infrastructure, the boundary definition requires a complete upgrade. The existing fencing, no longer fit for purpose, will be removed in favour of a layered security strategy. This involves the installation of a secure zone defined by a 2.4m primary outer boundary, reinforced by a secondary 2.1m internal security line. This double-layer approach ensures the integrity of the asset while clearly demarcating the secure operational zone from the surrounding landscape buffer.

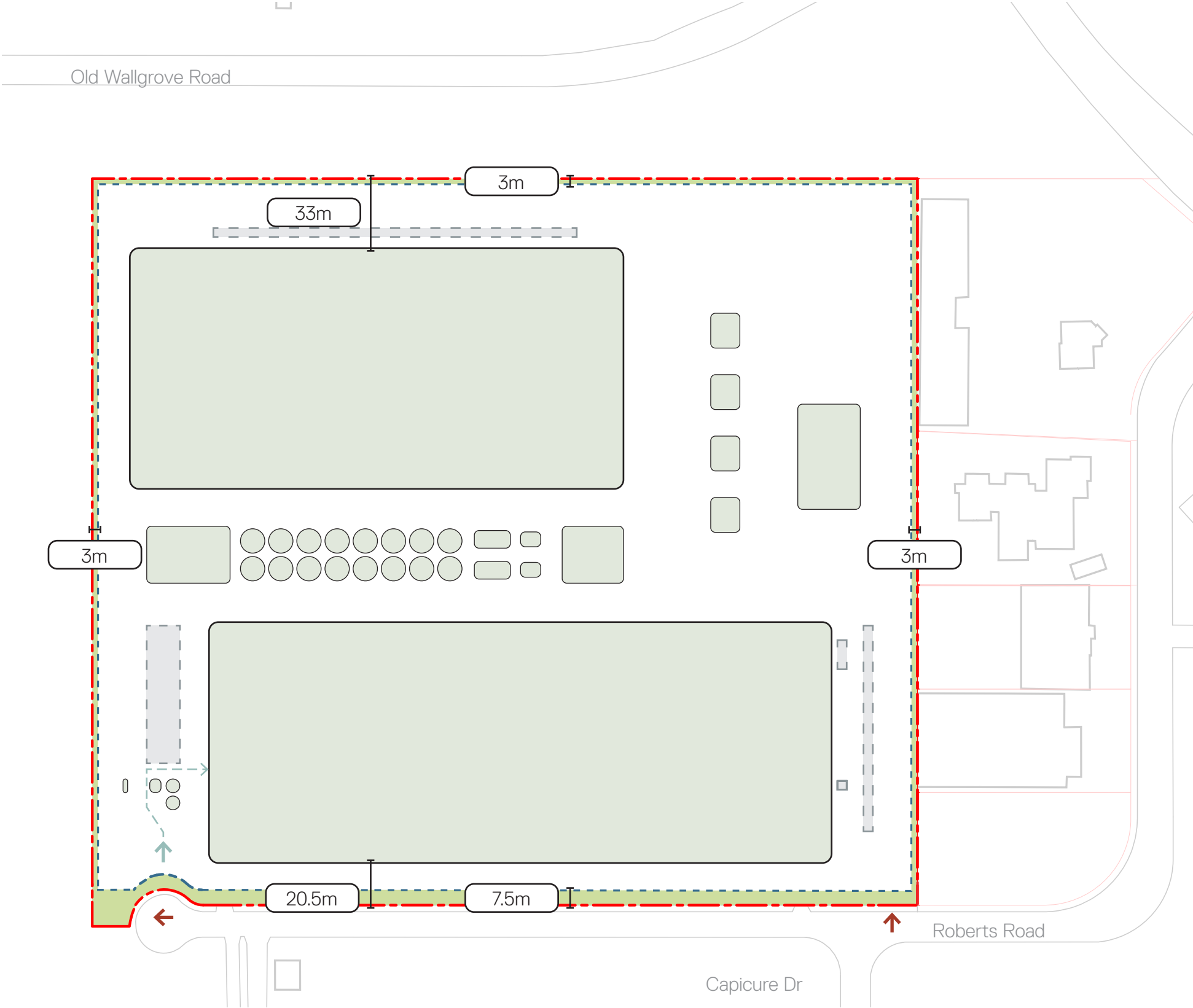


3.3 PLANNING CONTROLS OVERLAY

These conclusions are overlaid with SEPP 59 regulatory requirements, infrastructure zones, and utility easements to establish the develop-able area. Such requirements include:

- » **Setbacks:** 7.5m from front boundary, 3m from side and rear boundaries for buildings and hard-stand areas. Setback areas are to be used exclusively for landscaping and beautification works, with no additional planing requirements prescribing specific landscaping standards such as deep soil planting ratios or canopy targets
- » **Maximum Site Coverage:** Building footprint and canopy areas cannot exceed 65% of total site area. **Current Site coverage:** 58.9% (including substation buildings, site infrastructure)
Access: A single pedestrian entry point is located alongside the primary vehicle entry on the site’s southwest boundary on Roberts Road.
- » **Off Street Parking:** Private parking as mandated by SEPP59 is located on site as displayed in the diagram.

	SITE BOUNDARY
	SETBACK
	LANDSCAPE SETBACK
	VEHICLE ACCESS
	PEDESTRIAN ENTRY
	BUILDING FOOTPRINT
	OFF STREET PARKING



3.4 SITE INFRASTRUCTURE

The primary infrastructure consideration is the dedicated zone for the 500MVA 330kV landing substation and 330/33kV switching site, which provides the essential electrical supply infrastructure for the facility.

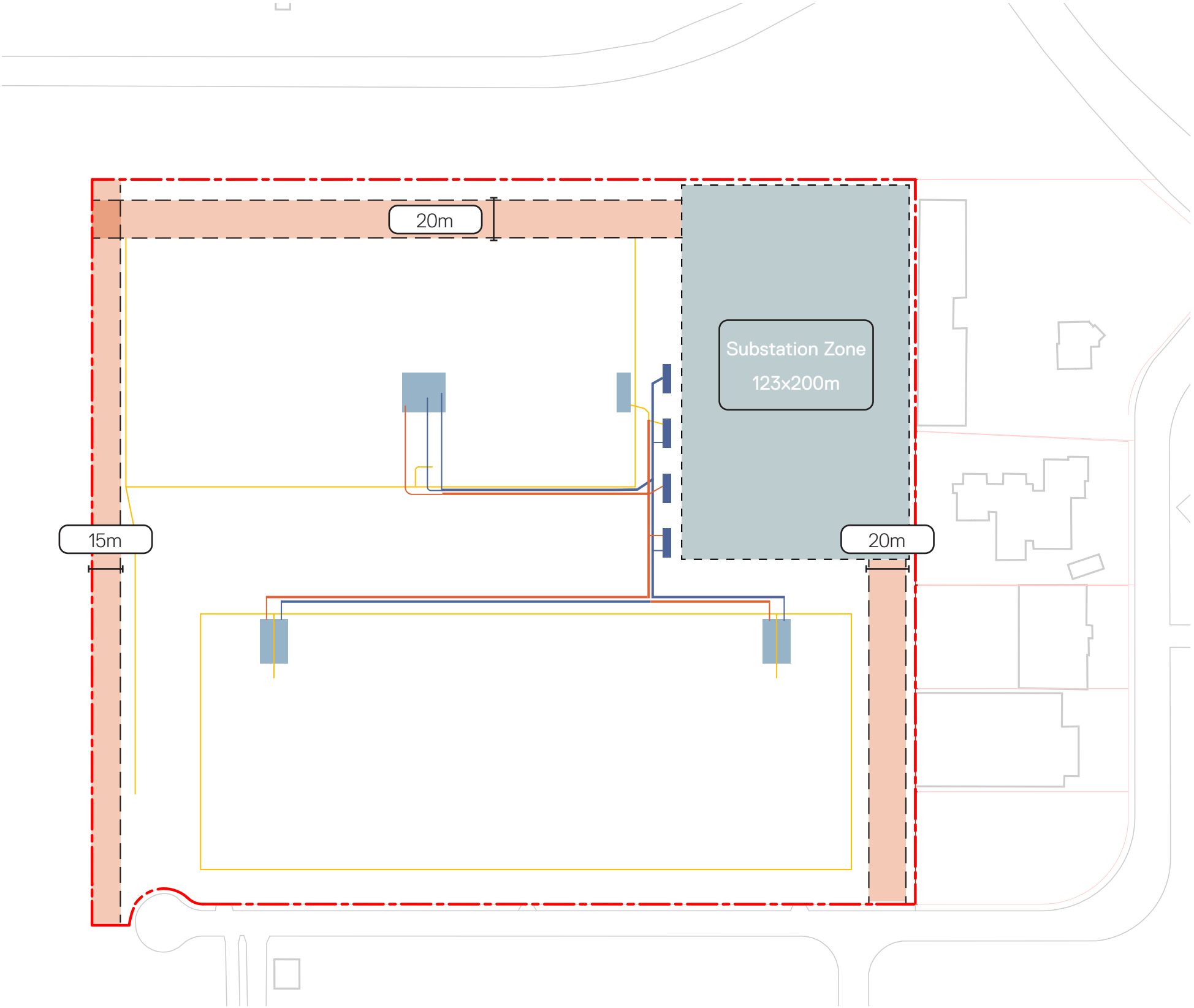
Substation Zone

The substation area has been provided by Goodman with input from Transgrid , refer to diagram for location and size of the substation zone that has been allocated.

Electrical Easements

Easements have been provisioned to safeguard existing site planting and integrate security fence requirements within the utility corridors. The northeast easement is specifically intended to provide dedicated access to the substation for the electrical utility operator/provider, ensuring appropriate operational access separate from the main site circulation.

	MV RETICULATION A
	MV RETICULATION B
	LV SITE RETICULATION
	MAIN MV SWITCHBOARDS
	MV PLANT ROOMS



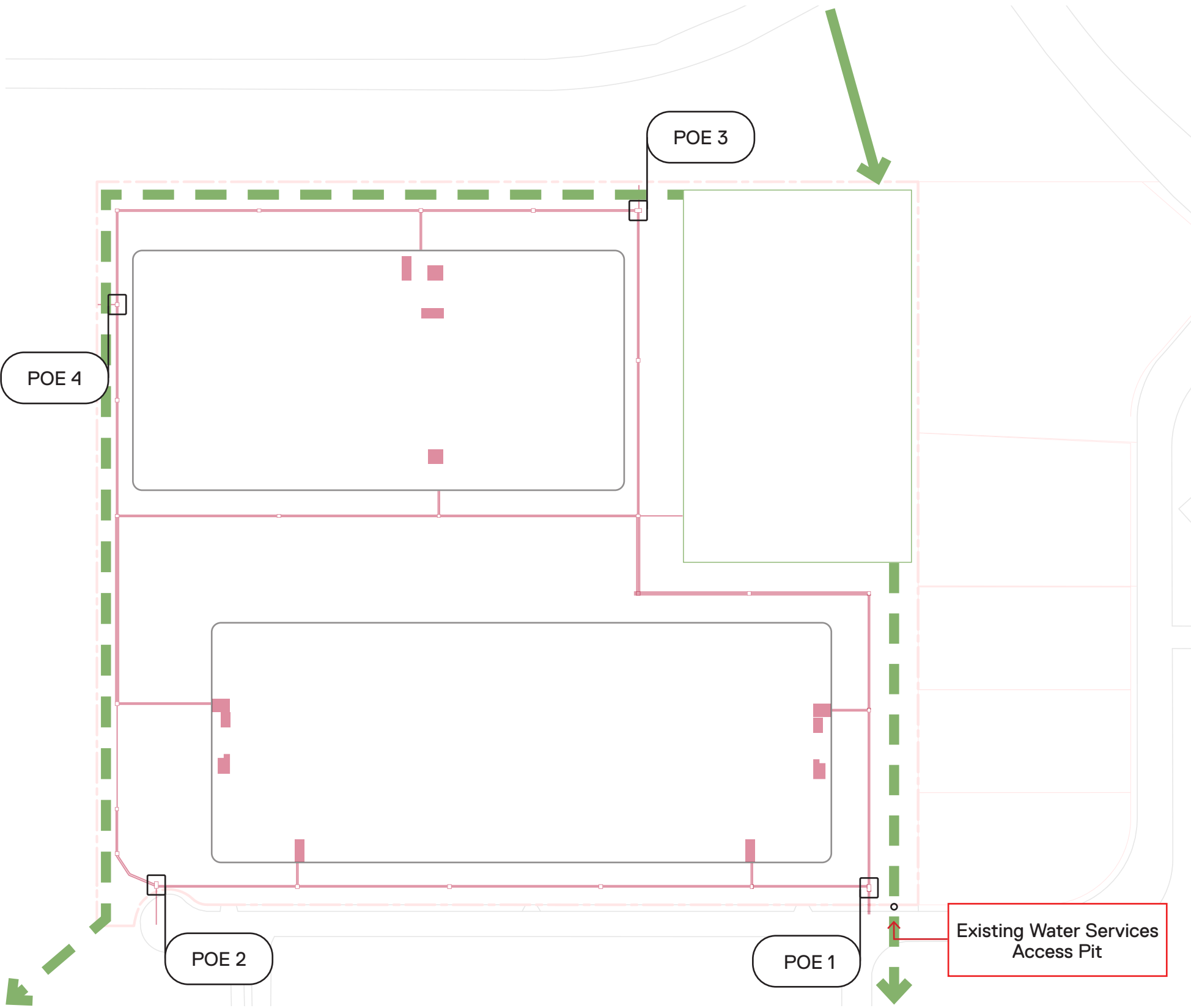
ICT, Information Communications Technology

The plan identifies Points of Entry to the site, establishing the primary connection points for utility services and infrastructure that interface with external networks and service providers.

Water

Water infrastructure man hole at intersection of Robert’s road and substation access to be reviewed in detail in the next phase.

	TRANSGRID 330KV SUPPLY
	POTENTIAL CABLE EXPANSION
	ICT

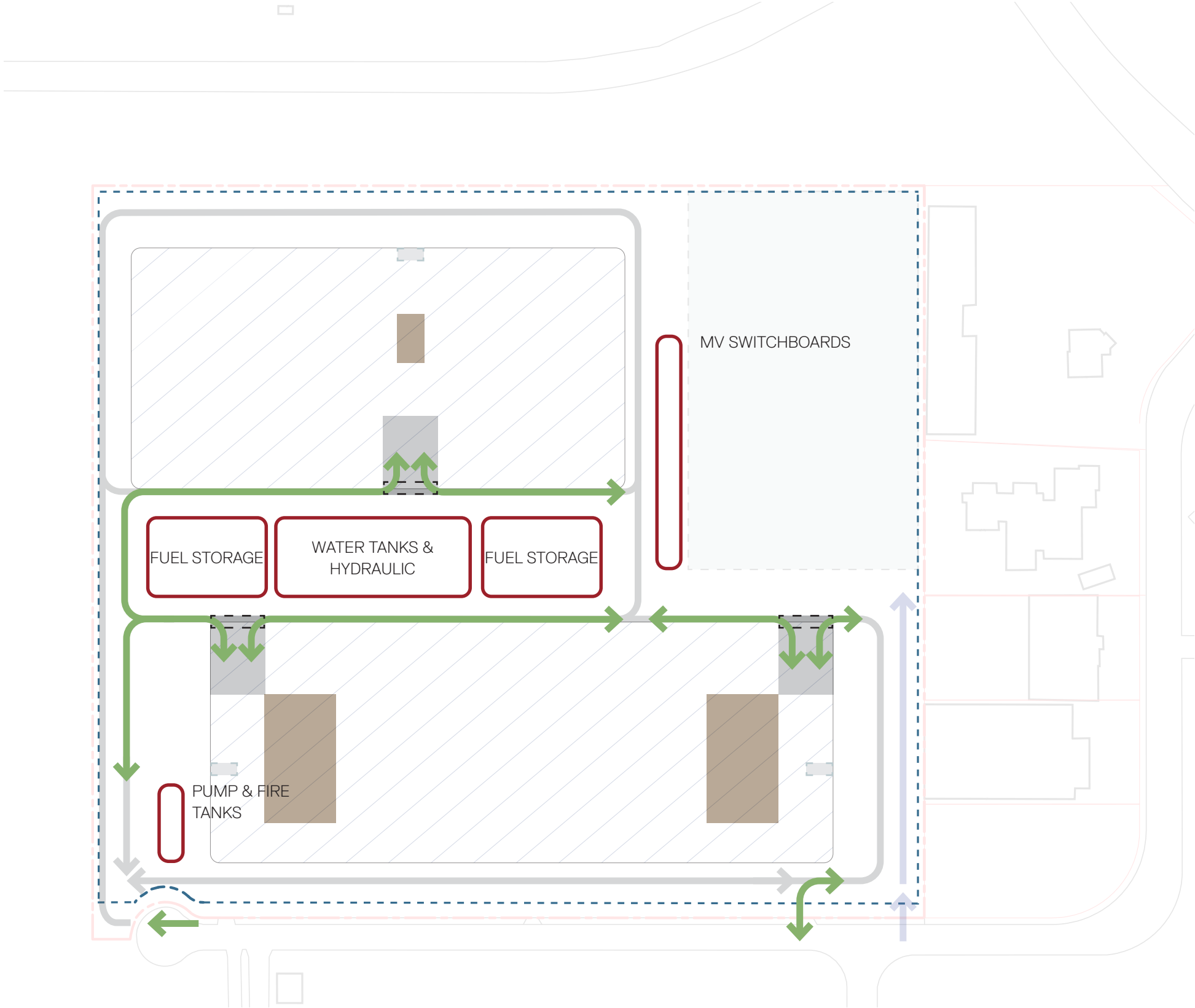


3.5 BOH + STORAGE

The central spine of the site acts as the industrial heart of the facility, shielding critical infrastructure from the public realm:

- » Environmental Shielding: Essential components—including pumps, industrial water tanks, retention systems, and diesel storage—are strategically located within the building forms to mitigate visual and acoustic impacts.
- » Logistical Integration: Loading bays are positioned for immediate accessibility from the primary circulation ring, ensuring seamless equipment replacement and servicing without disrupting site operations.

	BOH & EQUIPMENT ACCESS
	SITE INFRASTRUCTURE
	LOADING BAYS
	ROLLER DOORS
	FOH OPENINGS
	STORAGE (GROUND FLOOR)
	SETBACK



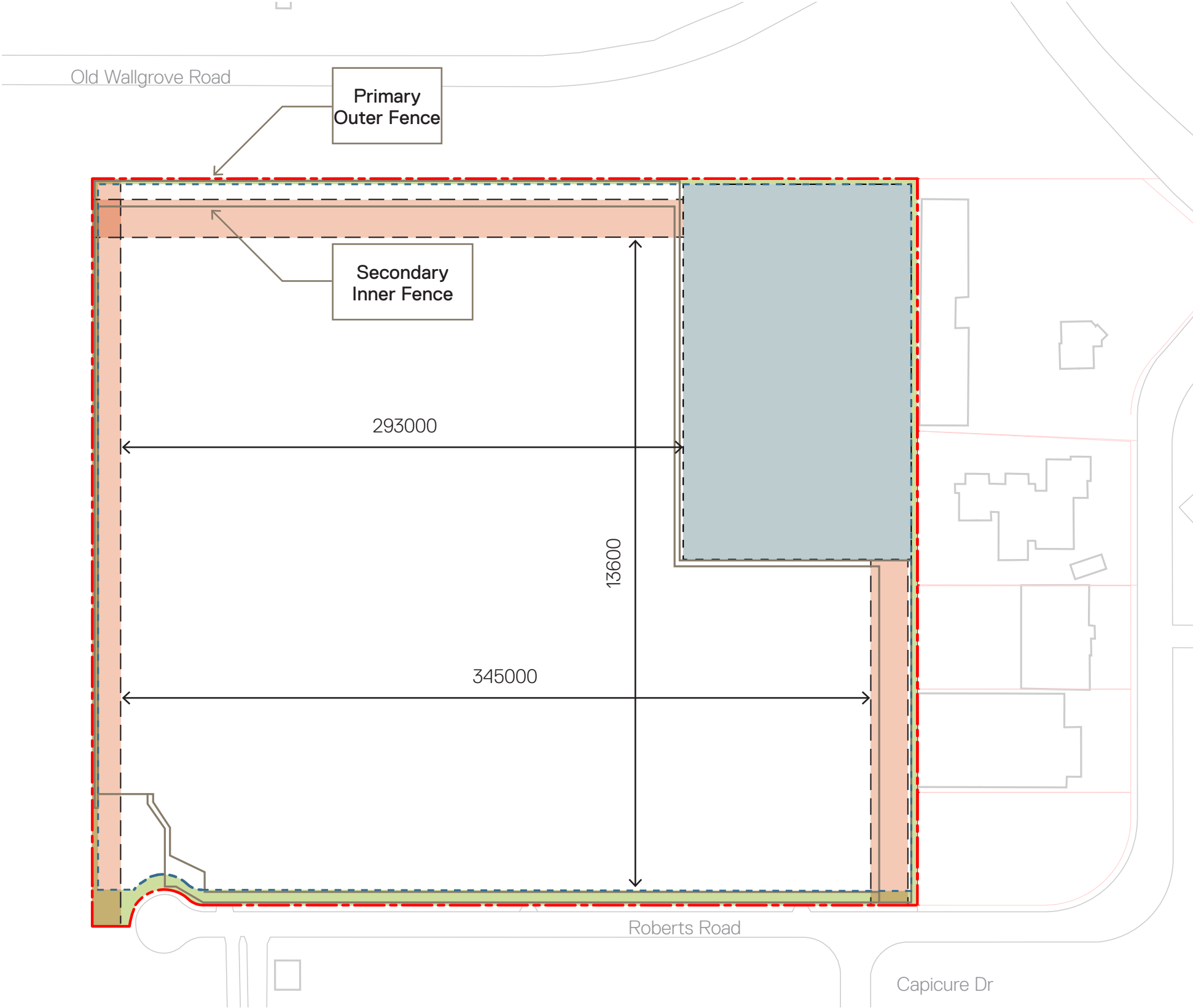
3.6 RESIDUAL AREA

Survey findings, combined with regulatory and infrastructure requirements, establish the net available area for DC placement after accounting for site constraints and conditions.

The develop-able area is defined through overlay of:

- » Optimal access, existing infrastructure retention, and topographic advantages
- » SEPP 59 regulatory requirements including mandatory setbacks and landscape provisions
- » Site infrastructure requirements including electrical easements and dedicated substation zone
- » Existing site conditions including fence lines, topographic constraints, and vegetation retention areas

	SETBACK
	PROPOSED SITE FENCING
	SITE BOUNDARY
	SUBSTATION
	LANDSCAPE SETBACK
	EASEMENT



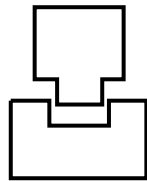
4.0 DESIGN RESPONSE

4.1 DESIGN QUALITY

HOW BETTER PLACED PRINCIPLES ARE CONSIDERED IN THE DESIGN



Integrated design policy for the built environment of NSW creates a clear approach to ensure we get the good design that will deliver the architecture, public places and environments we want to inhabit now and those we make for the future.



OBJECTIVE 1.
BETTER FIT
CONTEXTUAL, LOCAL AND OF ITS PLACE

The proposal is deeply rooted in the layered history of Eastern Creek, acknowledging the site’s ancient Indigenous heritage and its recent colonial and industrial past. Rather than imposing a generic structure, the design responds to the undulating topography, sitting slightly elevated to optimize view corridors while grounding the built form within the landscape.

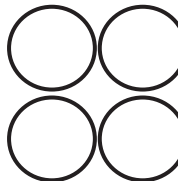
By replacing an existing industrial facility, the project significantly reduces hardstand areas in favor of expanded soft landscaping, re-establishing a connection to the natural environment. Architecturally, the building draws from the vernacular of Sydney’s industrial heritage—reinterpreting the robust, honest expression of utilitarian structures to create a contemporary facility that feels native to its setting, rather than alien to it.



OBJECTIVE 2.
BETTER PERFORMANCE
SUSTAINABLE, ADAPTABLE AND DURABLE

Project Atlas responds directly to the imperative for Better Performance by reconciling the high operational demands of digital infrastructure with a rigorous commitment to Country and climatic resilience. The proposal establishes a new benchmark for operational efficiency, targeting a Power Usage Effectiveness (PUE) of 1.3—significantly outperforming the national average—to support a target 5-Star NABERS Energy rating. This operational rigour is matched by a durable, low-carbon tectonic approach; construction methodologies prioritize embodied carbon reduction through high-recycled-content steel and concrete utilizing supplementary cementitious materials.

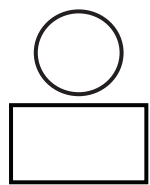
The asset is designed to be adaptable and future-proof. By engineering structural systems for disassembly and reuse, Project Atlas anticipates the rapid evolution of digital technologies and contributes to the circular economy. Combined with aggressive water conservation strategies and drought-tolerant endemic landscaping, the project delivers a facility that is not only efficient today but resilient for the long term.



OBJECTIVE 3.
BETTER FOR COMMUNITY
INCLUSIVE, CONNECTED AND DIVERSE

Recognizing that data centres function as secure microcosms, the proposal prioritizes high-amenity recreation spaces for the workforce within the secure perimeter. Moving beyond the secretive nature of the typology, the design creates “neutral ground”, communal areas where workers from different operators and sectors can connect, fostering a sense of community often absent in high-security environments.

The building’s modular design considers the site from a “whole-of-life” perspective. It acknowledges the rapid evolution of the digital economy and ensures the infrastructure can adapt to future economic, technological, and social shifts, demonstrating a long-term commitment to the Eastern Creek precinct rather than a transient occupation.

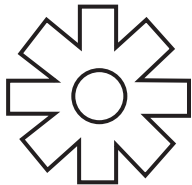


OBJECTIVE 4

BETTER FOR PEOPLE,
SAFE, COMFORTABLE AND LIVABLE

Project Atlas approaches security and safety through principles of clarity and landscape integration rather than fortification. Wherever possible, aggressive physical barriers are replaced or softened by expanded landscape buffers, retaining mature trees and extending the soft landscape beyond the previous hardscape footprint.

The design champions equity of amenity for all users; specific attention has been paid to the daily experience of support staff, including guardhouse officers and service vehicle operators. By mapping the “day in the life” of these essential users, the design ensures that operational efficiency does not come at the cost of human comfort, creating a workplace that is safe, dignified, and high-functioning.

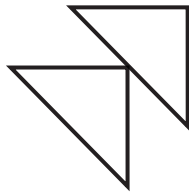


OBJECTIVE 5.

BETTER WORKING
FUNCTIONAL, EFFICIENT AND FIT FOR PURPOSE

Flexibility and adaptability are the cornerstones of the architectural strategy. The structural grid and spatial planning are engineered to accommodate the phasing inherent in large-scale infrastructure, allowing for seamless reconfiguration as server technologies evolve.

This future-proofing ensures the asset remains relevant and operational for decades. Crucially, the construction methodology has been selected to optimize speed to market, a functional requirement for data centre operators without compromising the integrity or adaptability of the final built form.

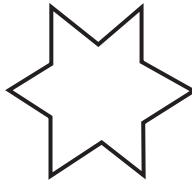


OBJECTIVE 6.

BETTER VALUE
CREATING AND ADDING BENEFIT

The project rejects “facadism” and superficial treatments in favor of an honest architectural expression where form follows function. This authenticity generates long-term value, ensuring the asset ages gracefully and maintains its integrity over time. By investing in robust materials, energy-efficient systems, and adaptable spaces, the proposal delivers economic and environmental resilience.

Project Atlas seeks to raise the benchmark for industrial architecture in Eastern Creek. By demonstrating that critical infrastructure can be visually compelling and highly functional, the development acts as a catalyst, encouraging further high-quality investment and elevating the standard of the entire precinct.



OBJECTIVE 7.

BETTER LOOK AND FEEL
ENGAGING, INVITING AND ATTRACTIVE

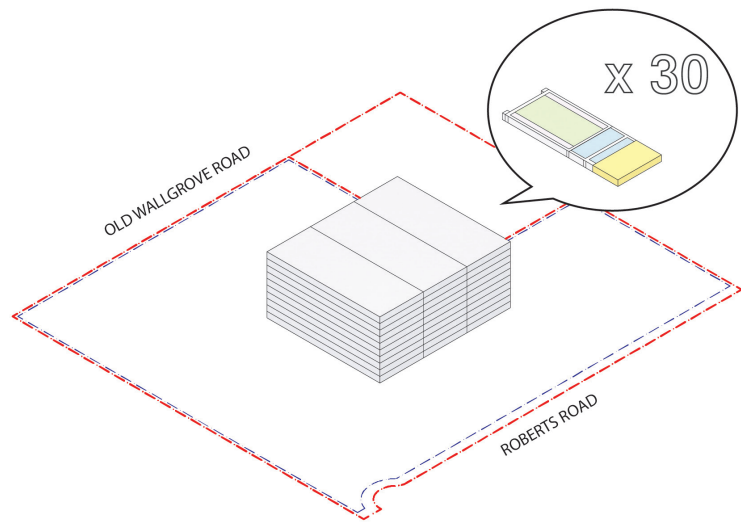
The design challenges the prevailing notion of data centres as anonymous, impenetrable boxes. Instead, it aspires to be a landmark that engages with both the digital age and the site’s industrial legacy.

The façade strategy employs a refined material palette and rhythmic composition to generate visual interest and scale, avoiding unnecessary ornamentation while articulating the building’s function. The integration of significant landscape elements softens the building’s massing and contributes to a more inviting streetscape, proving that even high-security facilities can make a positive, engaging contribution to the urban fabr

4.2 KEY MOVES

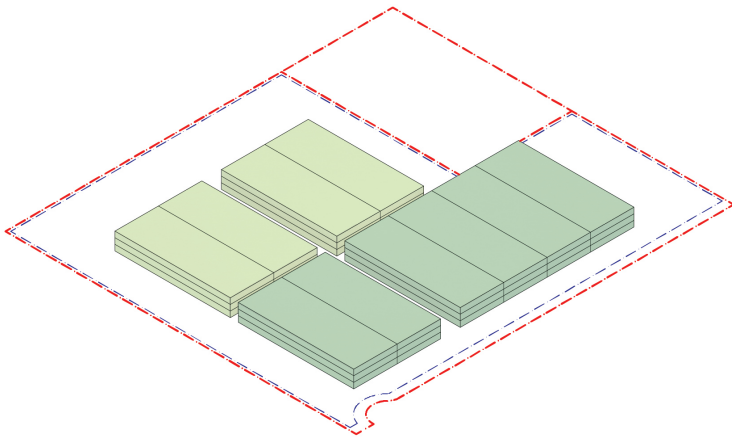
MASSING + DESIGN EXPRESSION

CORE MODULES



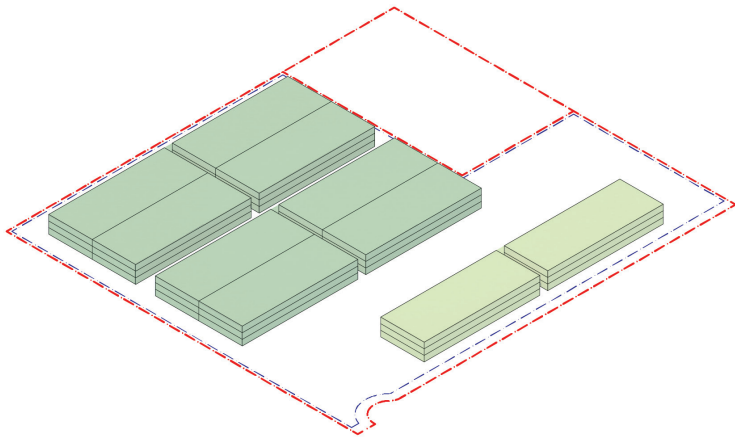
1. Critical to the project ambition is to achieve the site’s potential capacity without compromising the response.
For illustration purposes, the power availability allows for 30 modules, and the whole design team have evaluated different options to arrive at the proposed mass.

VARIATION 1



2. Looking to minimise the visual bulk of the development, this layout compacts the building with 3 levels of data halls and large building setbacks to the back and sides.
The compact nature of the proposal creates complexities around construction and maintenance. As well as construct-ability concerns.

VARIATION 2

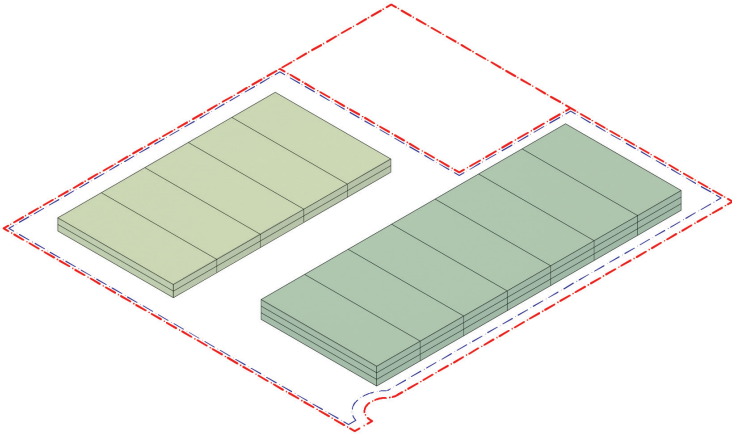


3. The third variation splits the large building into two, one large and one smaller. The larger building is placed to the back of the site reducing the existing landscape buffer in favour for a smaller building fronting Roberts road.
This variation has little to no tolerance when it comes to generator replacement strategies. Overall it compromises both siting and operations.

VARIATION 3

4.

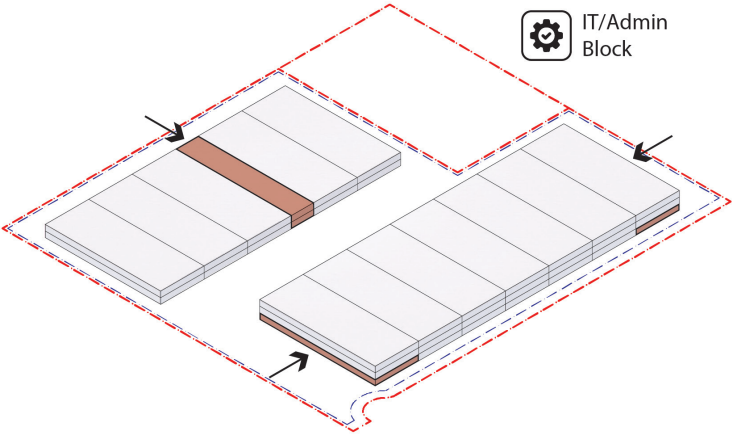
The variation that balanced bulk and mass best, reducing visual impact, arranged the buildings in two strips; one taller and one shorter building. This allows for generous setbacks to both front and back, and allows the infrastructure and back of house to be screened by the buildings.



IT/ADMIN BLOCKS

5.

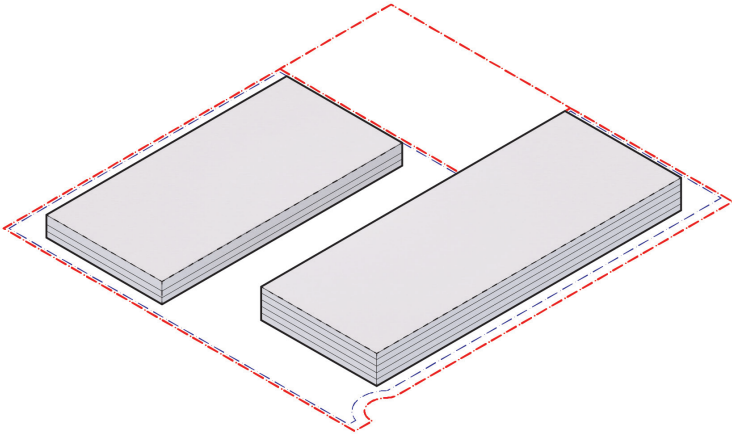
Office space and support is located centrally to building 1, and distributed at ground on either side of building 2 in order to maintain ease of access and coverage.



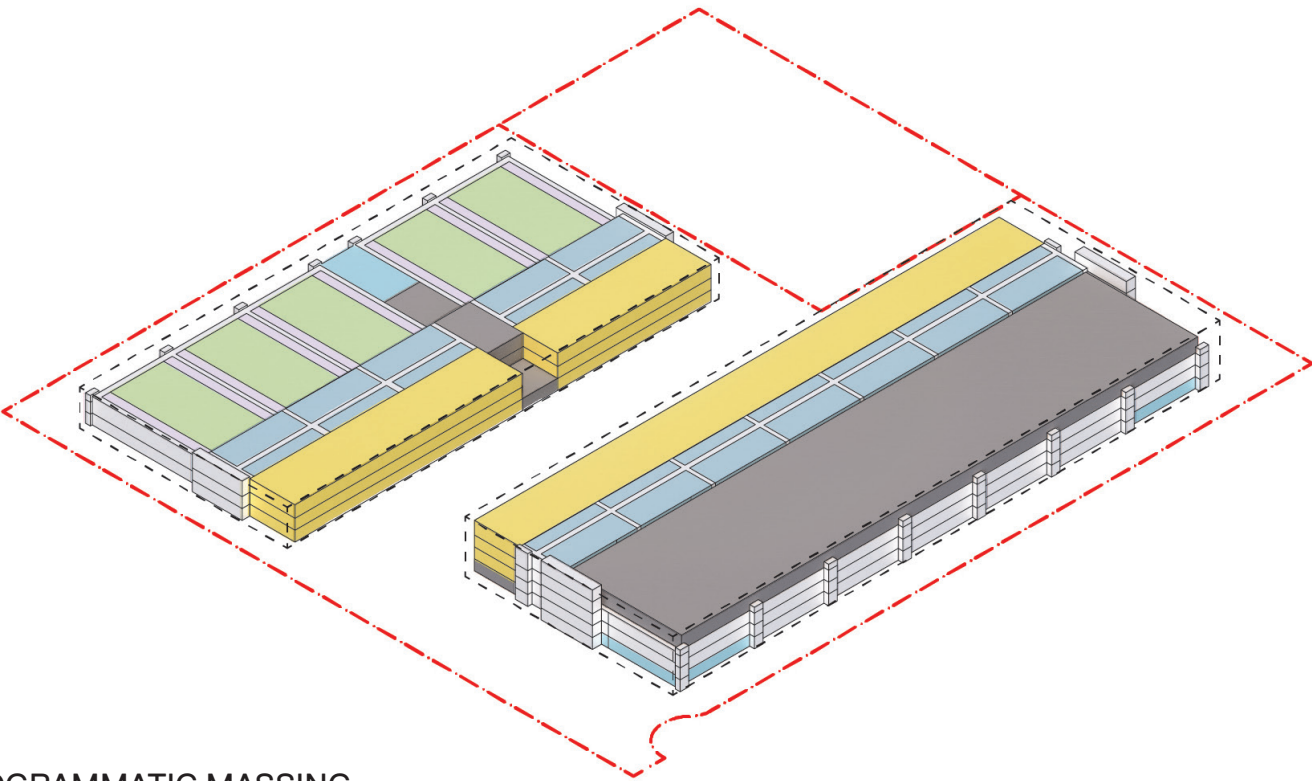
RESULTING MASS

6.

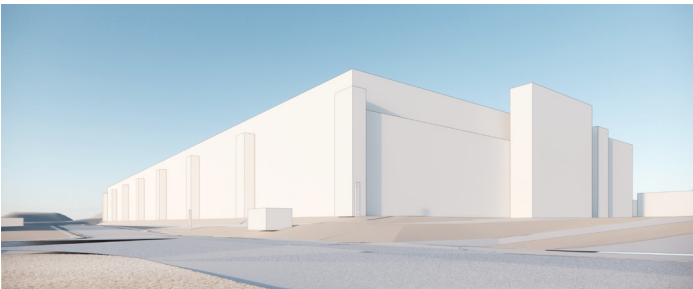
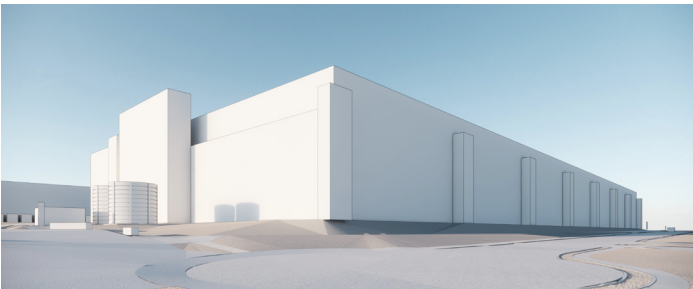
The resulting mass or envelope includes mechanical plants, screening, and support spaces on the roofs.



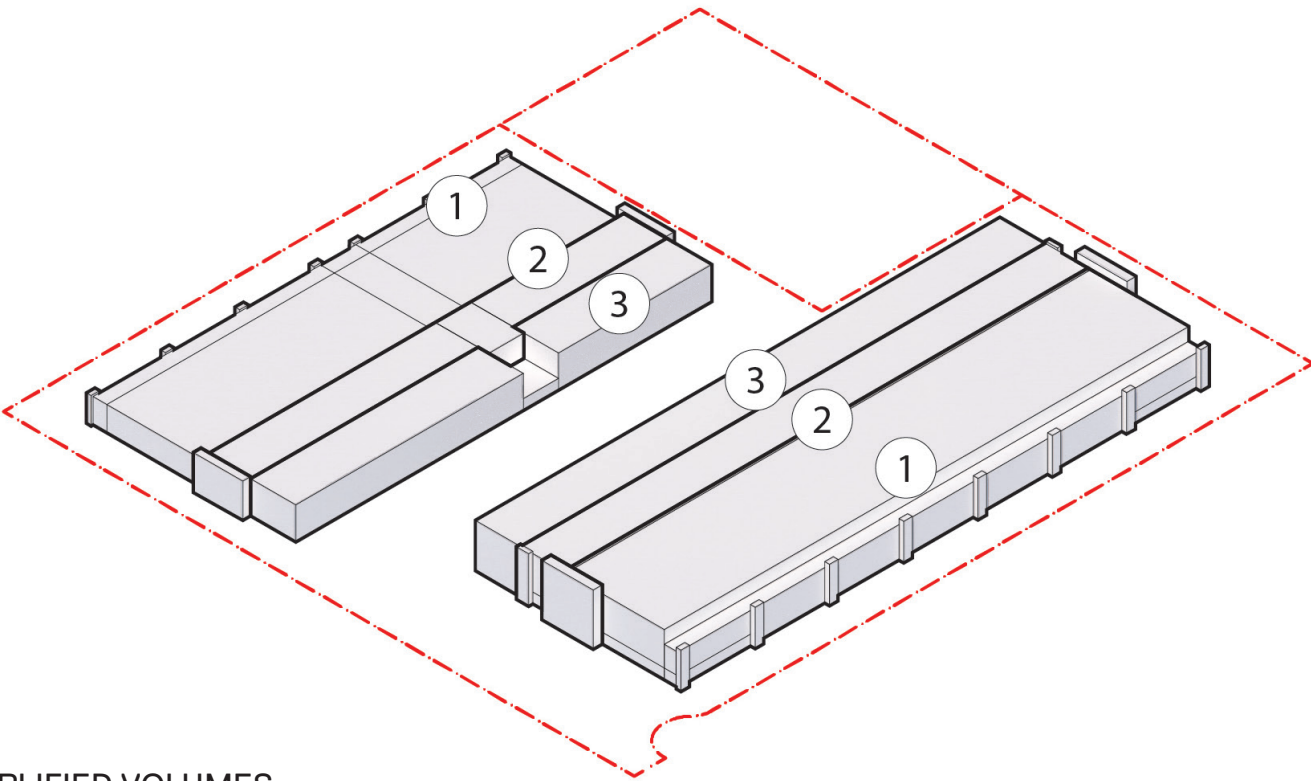
MASSING + DESIGN EXPRESSION



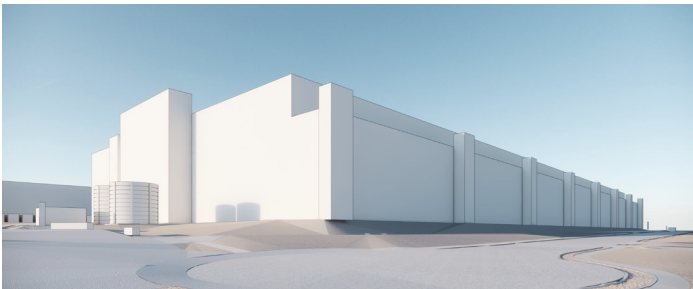
PROGRAMMATIC MASSING



A data centre is a complex machine with many constituent parts and strict technical requirements. The architects and the engineers have been working closely to arrive at a compact and efficient, programmatic massing that is holistically considered rather than a fragmented bricolage of parts. Where the elements are legible and cohesive.

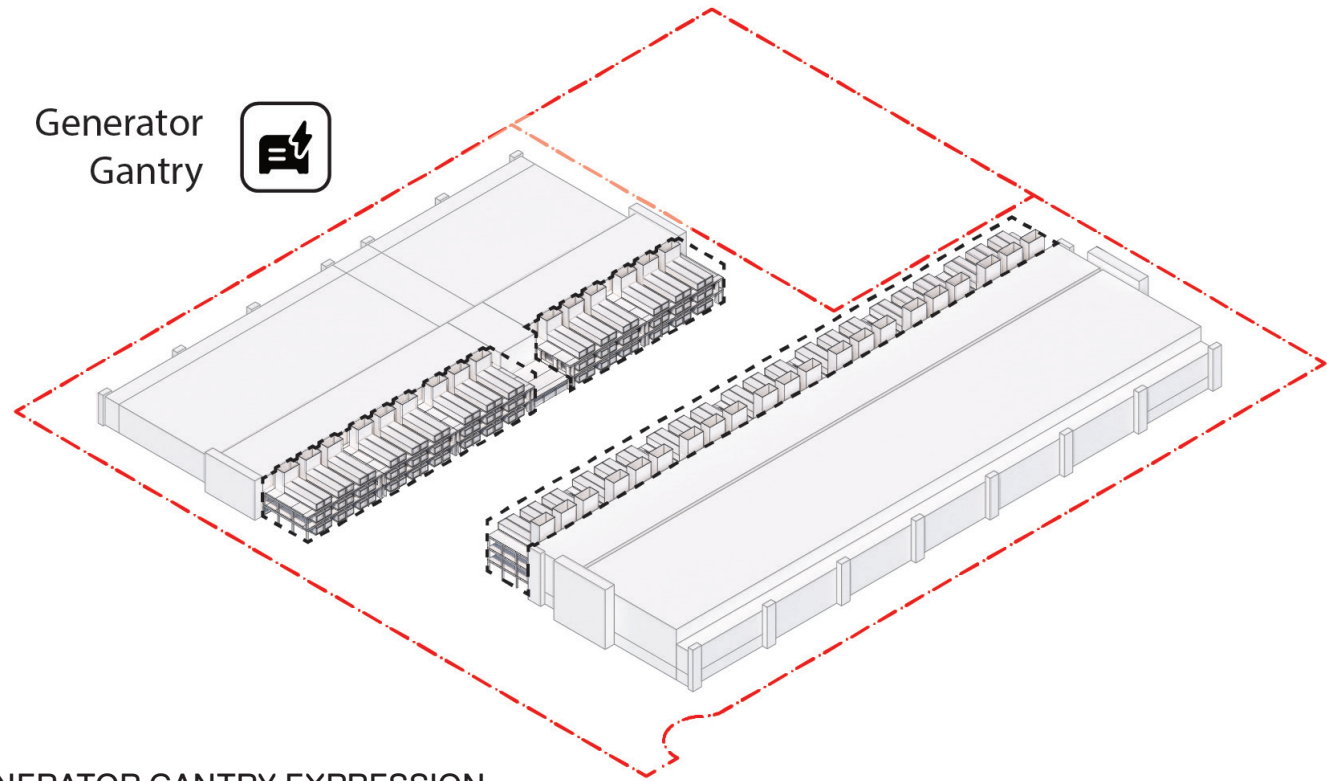


SIMPLIFIED VOLUMES

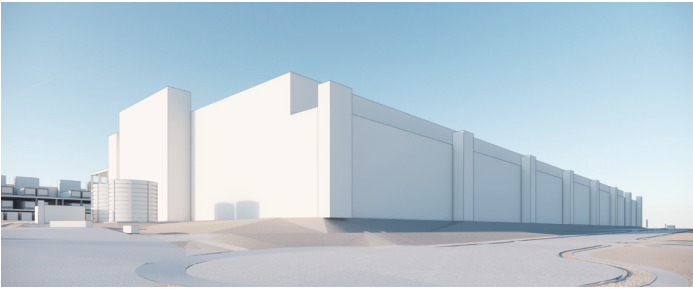


The resulting programmatic arrangement is articulated into three distinct volumes;

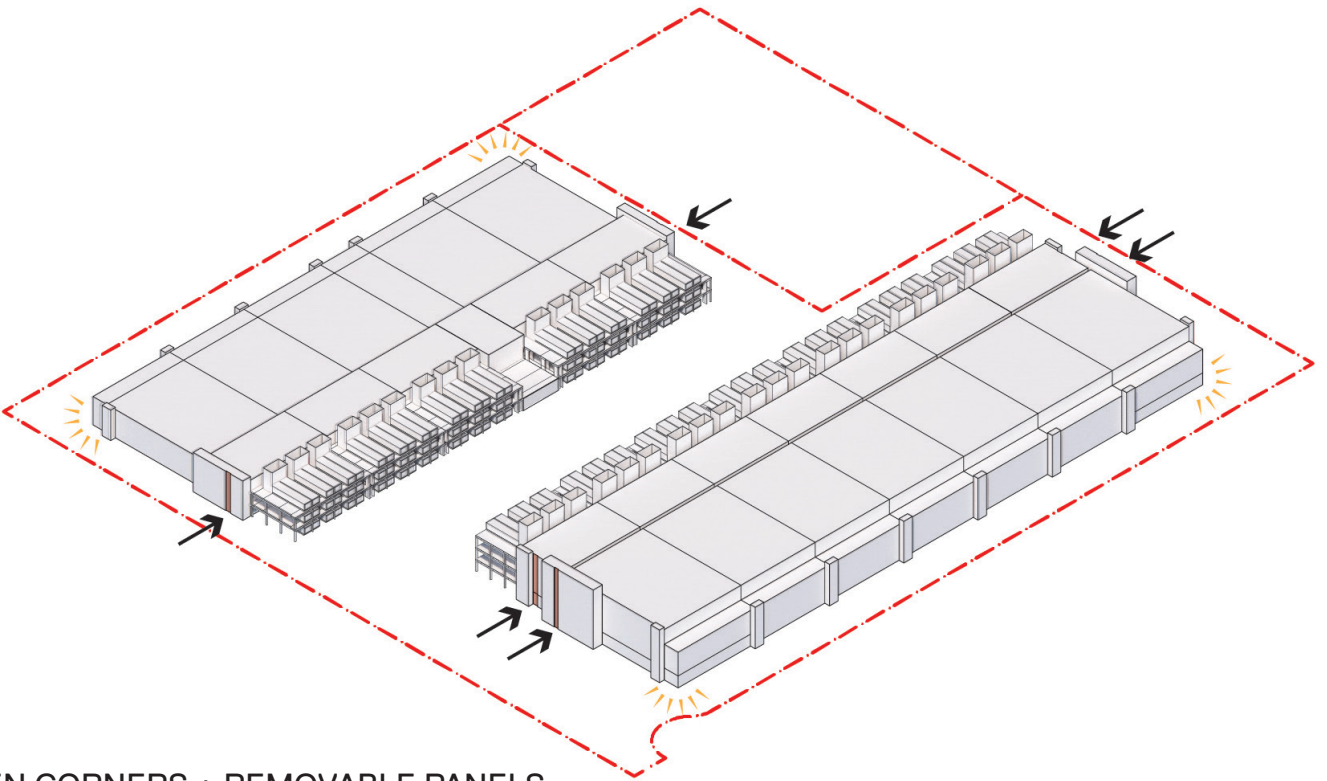
1. The data hall block
2. Electrical block
3. Generator gantry block—reducing perceived bulk and scale.



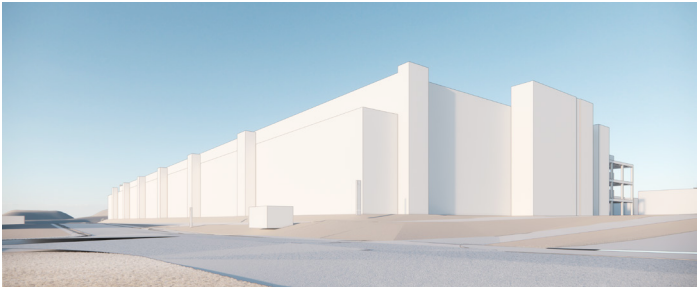
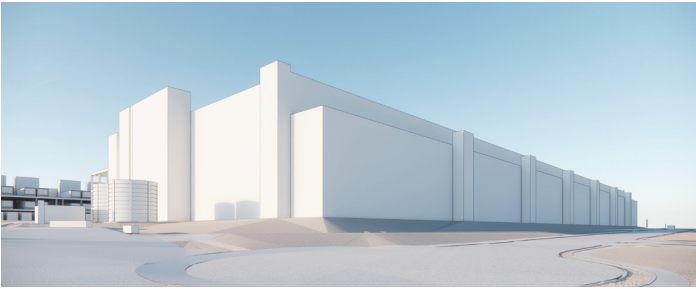
GENERATOR GANTRY EXPRESSION



Distinguishing the generator as a separate element, articulating it as an honest structural frame separate from the rest of the mass, providing visual relief from the large solid elements.

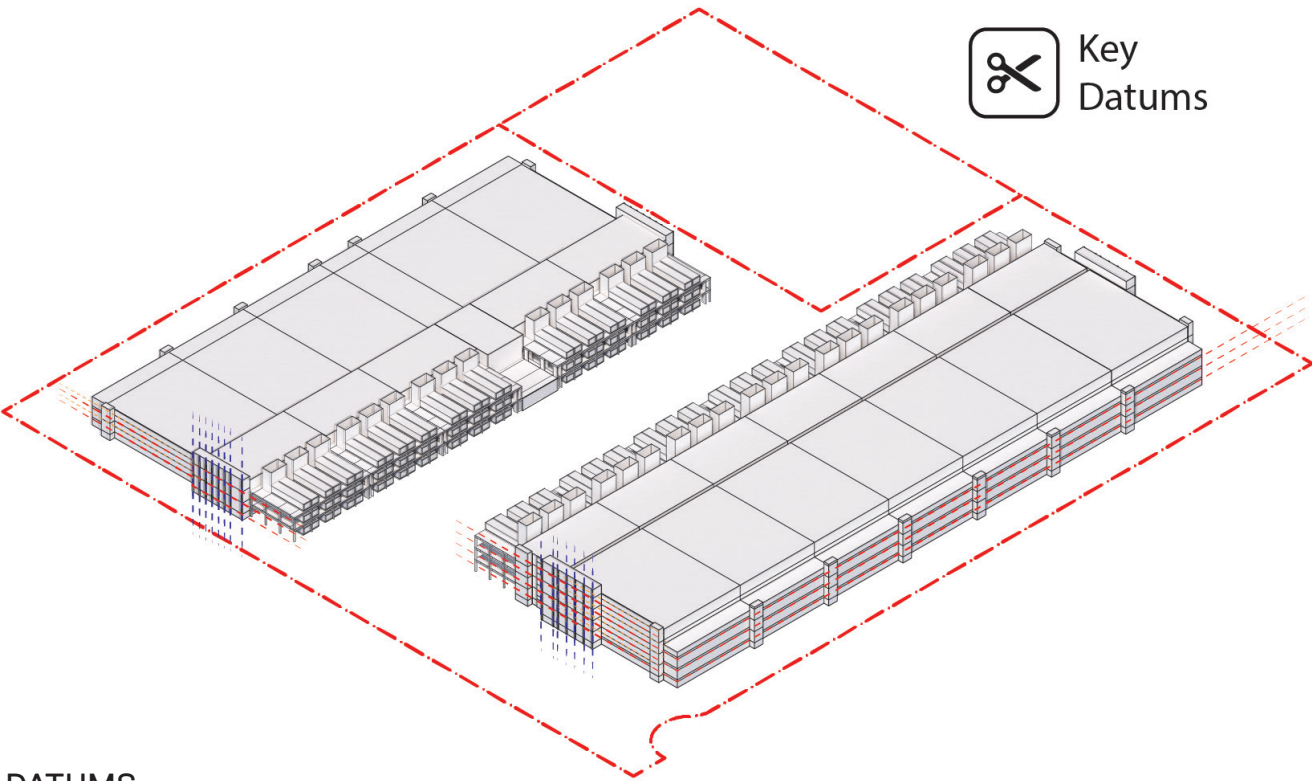


OPEN CORNERS + REMOVABLE PANELS



Corner egress stairs are relocated to open up the building corners. The removable façade panels are expressed and integrated for plant replacement.

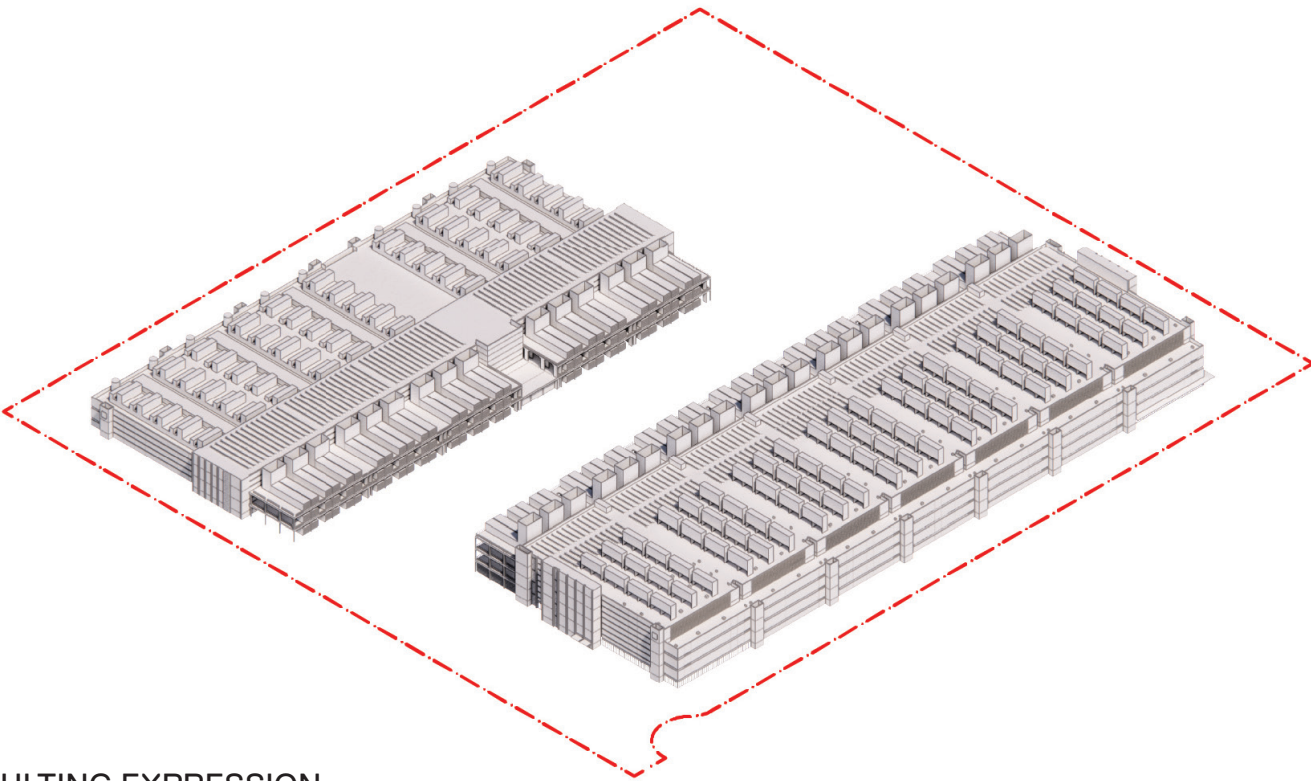
MASSING + DESIGN EXPRESSION



KEY DATUMS



Key site datums are expressed and carried through the building, tying elements together, with rebates introduced to accommodate intake and exhaust louvres.



RESULTING EXPRESSION



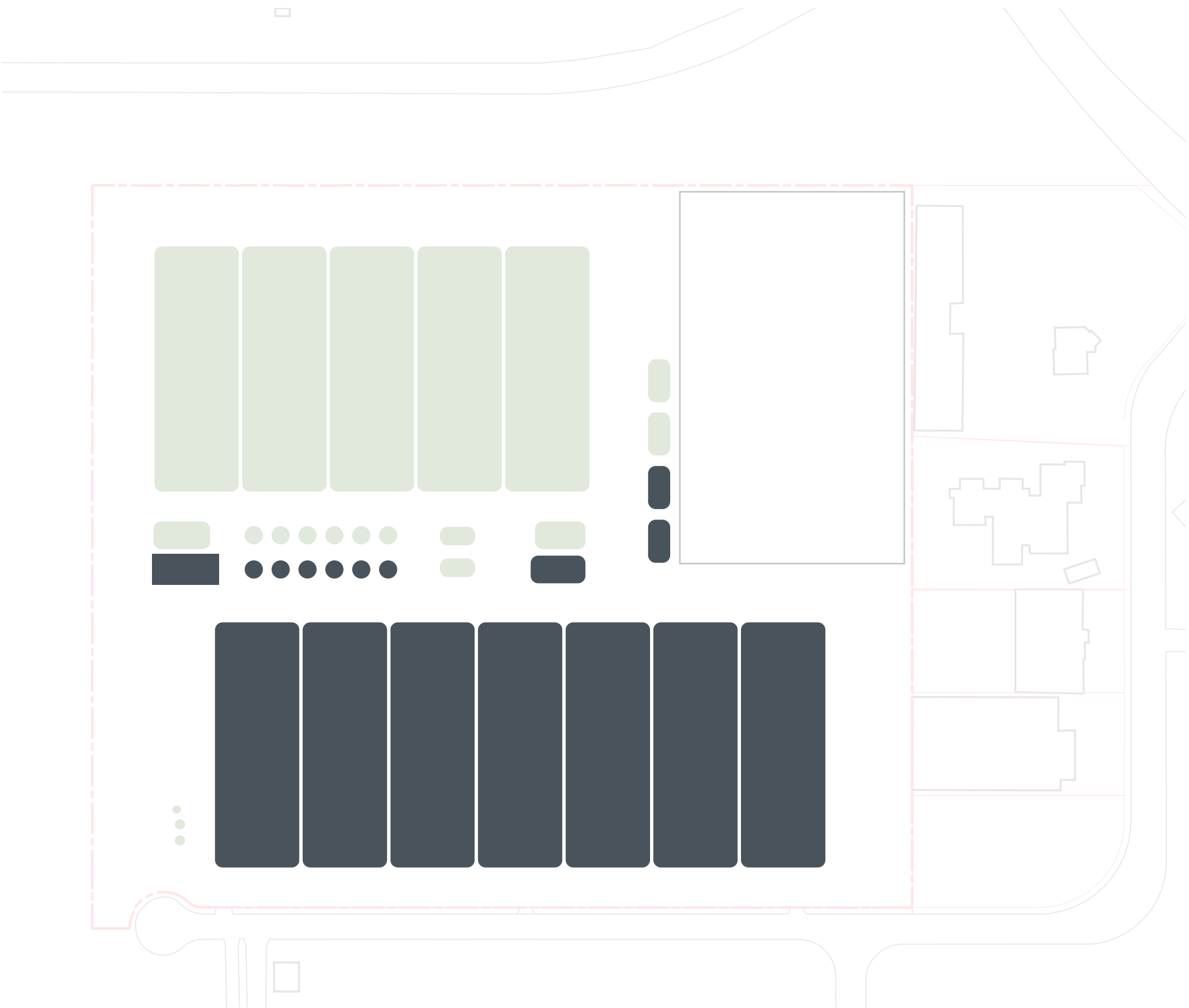
The outcome of the massing and finer articulation moves seeks to reduce the perceived bulk, choosing to balance the size and extent of plant screening with visual impact. Rather than screening to top of the mechanical equipment on the roof, the top of the hybrid cooling towers are allowed to be seen. The articulation provides a texture and interest to the façade whilst being honest to its purpose and modular precast construction that provide longevity and flexibility.



4.3 SITE CONSTRUCTION STAGING DIAGRAM

The site infrastructure and built forms are inherently modular, facilitating a phased construction strategy that allows for the progressive activation of the campus. This staged approach is meticulously coordinated with site logistics to eliminate spatial conflicts between ongoing construction activities and live operational requirements.

Supported by a flexible structural grid, the staging sequence can be calibrated to fluctuate with market demand. The accompanying diagram illustrates a viable delivery sequence in two stages, Building 1 and Building 2, integrating critical infrastructure, including MV switch rooms, Power over Ethernet (PoE) hubs, and essential fluid storage.



●	STAGE 1
●	STAGE 2

4.4 SITE SECURITY DIAGRAM

The security framework for Project Atlas is established in accordance with the Goodman security protocols, utilizing a tiered approach that balances site permeability with rigorous asset protection. While the specific requirements for the adjacent substation remain indicative at this stage, the proposal allows for seamless integration of specialized secondary security measures as required.

The campus is organized into four primary security gradients:

Public Access: Managed via the primary vehicle turnaround and entry thresholds.

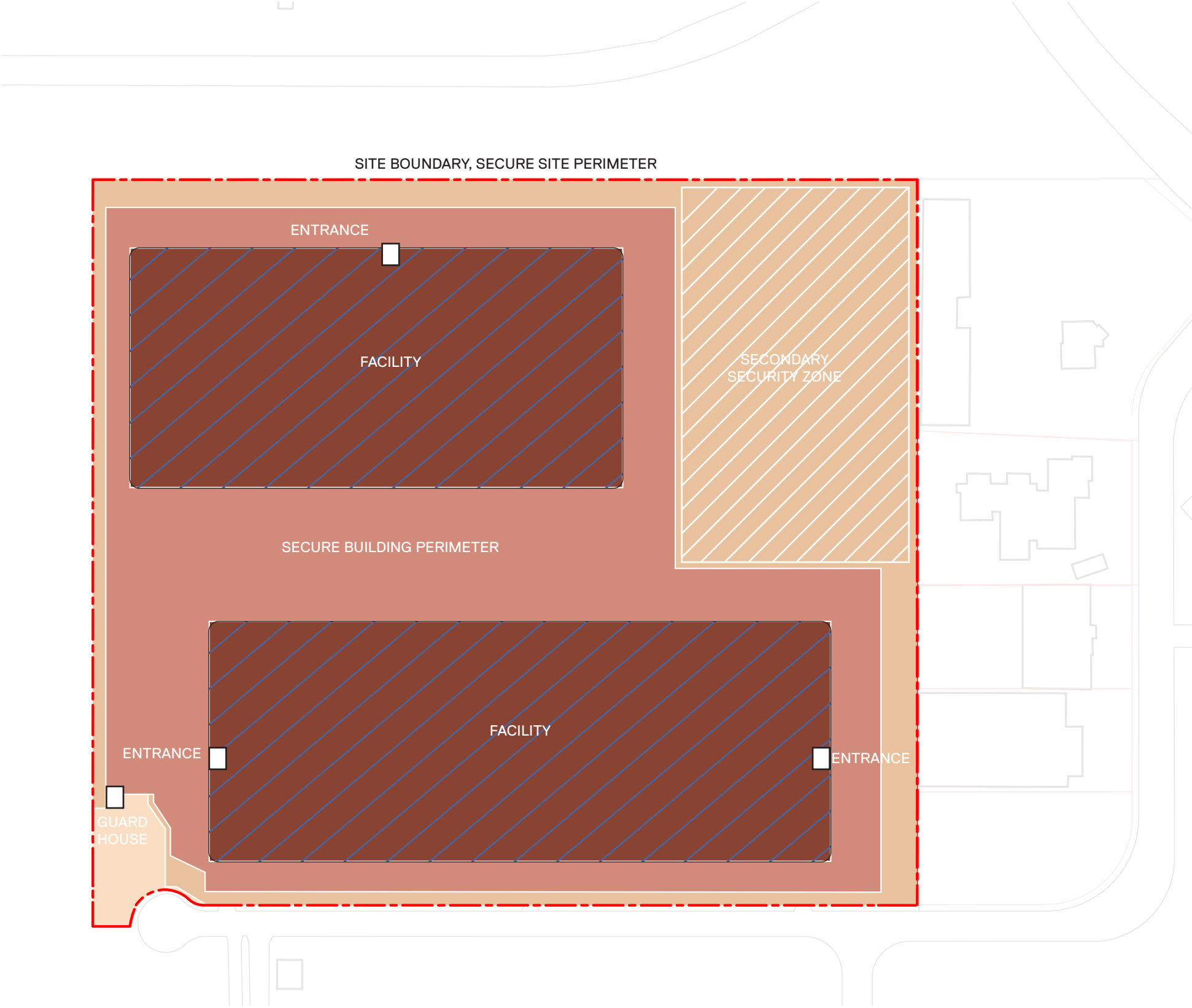
Substation Access: A secondary security layer providing controlled entry for specialized maintenance and utility providers.

Site Access: A hardened perimeter ensuring a secure transition from the site boundary to the inner campus.

Building Access: The final external tier, defined by the building's physical envelope and facility outline.

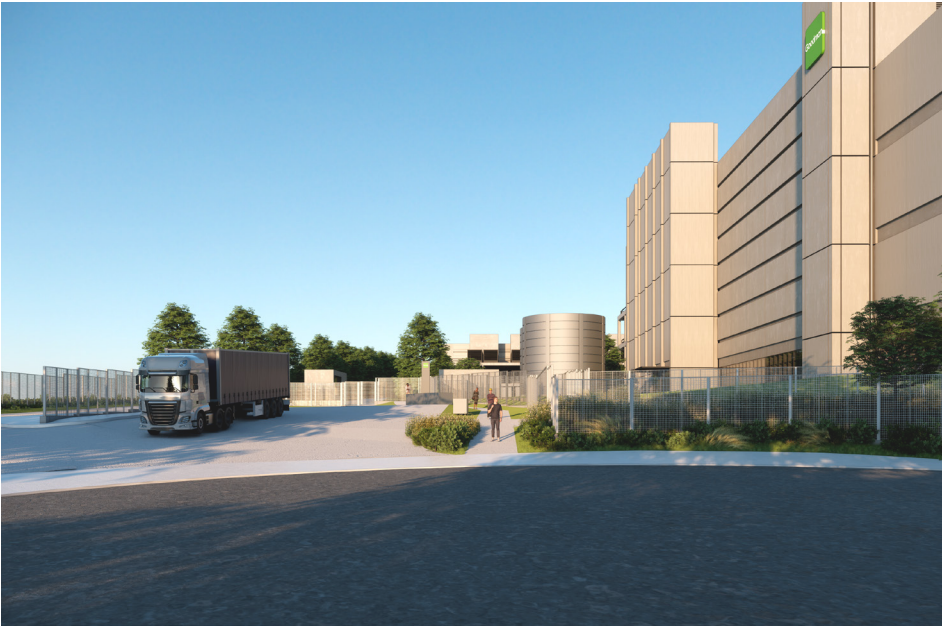
Beyond these external demarcations, the internal architecture provides additional layers of security, ensuring that the critical digital infrastructure remains resilient and protected from unauthorised access.

	PUBLIC ACCESS - VEHICLE TURNAROUND
	SUBSTATION ACCESS - SECONDARY SECURITY
	SITE ACCESS - SECURE BUILDING PERIMETER
	BUILDING ACCESS - FACILITY



4.5 SECURITY & ENTRY SEQUENCE

PEDESTRIAN ACCESS FROM ROBERTS ROAD



- » The pedestrian footpath entry is located directly beside the main vehicle entry on Roberts road
- » Entries are separated by a low brush vegetation, both to signify and improve the pedestrian footpath whilst maintaining security vantage points

PEDESTRIAN ACCESS, SECURITY GATE



- » Pedestrians may enter the site through a gate surveyed by the guard house

PEDESTRIAN ACCESS, BUILDING ENTRY



- » The footpath continues toward the building facade alongside parking and an office amenities area before it meets reception
- » All visitors will enter through one of three reception areas located throughout the site to be admitted into the secure building perimeter

MAIN VEHICLE ACCESS, ROBERTS ROAD



» The primary vehicle access control area allows for routine entry and exit of employees in addition to large vehicle access and rejection movements

SECONDARY EXIT



» Secondary access is located towards the Northeast boundary of the site primarily for large vehicle use during construction phasing

SUBSTATION ACCESS



» Access reserved only for use of on-site substation and is treated as a secondary security zone

4.6 LANDSCAPE VISION - ARCADIA

The landscape strategy seeks to reinstate the character of the Cumberland Plain Woodland, prioritizing the restoration of this threatened ecological community as a cornerstone of the site's identity. In the less disturbed zones of the campus, habitat creation is treated as a fundamental design layer, providing essential nesting and shelter opportunities to support local biodiversity.

Rooted in the site's geological heritage, the design draws its materiality and form from the Wianamatta Group and Plumpton Ridge silcrete deposits. This cultural narrative honoring the land's history as an Indigenous toolmaking site and a traditional corridor of movement, is expressed through organic 'bush room' breakout spaces. Geological patterns inform the geometry and textures of the landscape, where pavement tones reference local stone and informal rock placements transition into integrated seating elements within the inner campus.

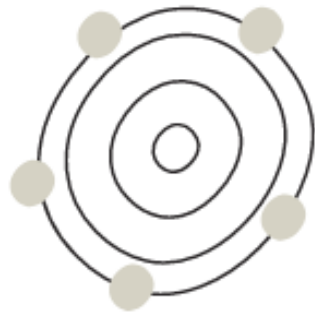
For a detailed schedule of species, soil management, and habitat specifications, refer to the Landscape Architect's documentation

1	ART INTEGRATION
2	BREAK OUT SPACES
3	BIKE RACKS
4	TREE PLANTING
5	EXISTING TREES
6	SCREENING PLANTING

n)



GROUNDING IN COUNTRY



Embed geology, ecology and cultural memory to create a landscape that is authentic, legible and respectful of place. Create a design that is responsive to the geology of Eastern Creek, reinstates threatened ecological communities that supports habitat creation and cultural and industrial narratives into the site.

ELEVATE EVERYDAY USE

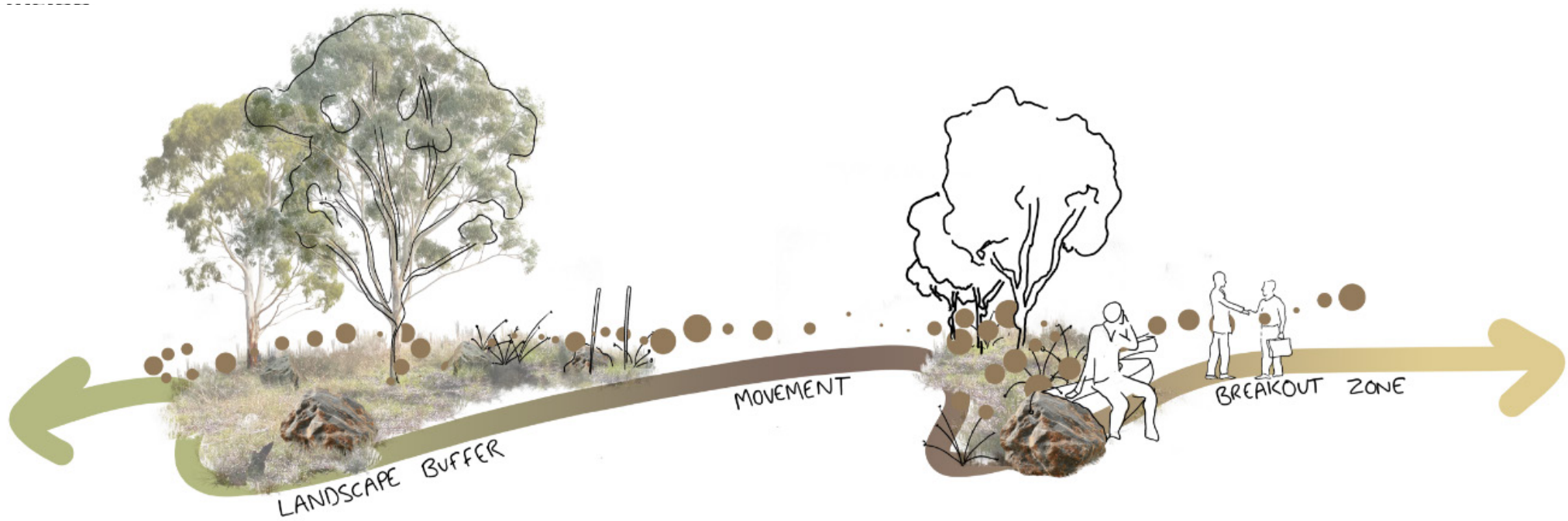


Create outdoor spaces that support informal meetings, breaks, movement, and social connection for workers while strengthening the site's public-realm amenity.

INTEGRATE SECURITY THROUGH LANDSCAPE

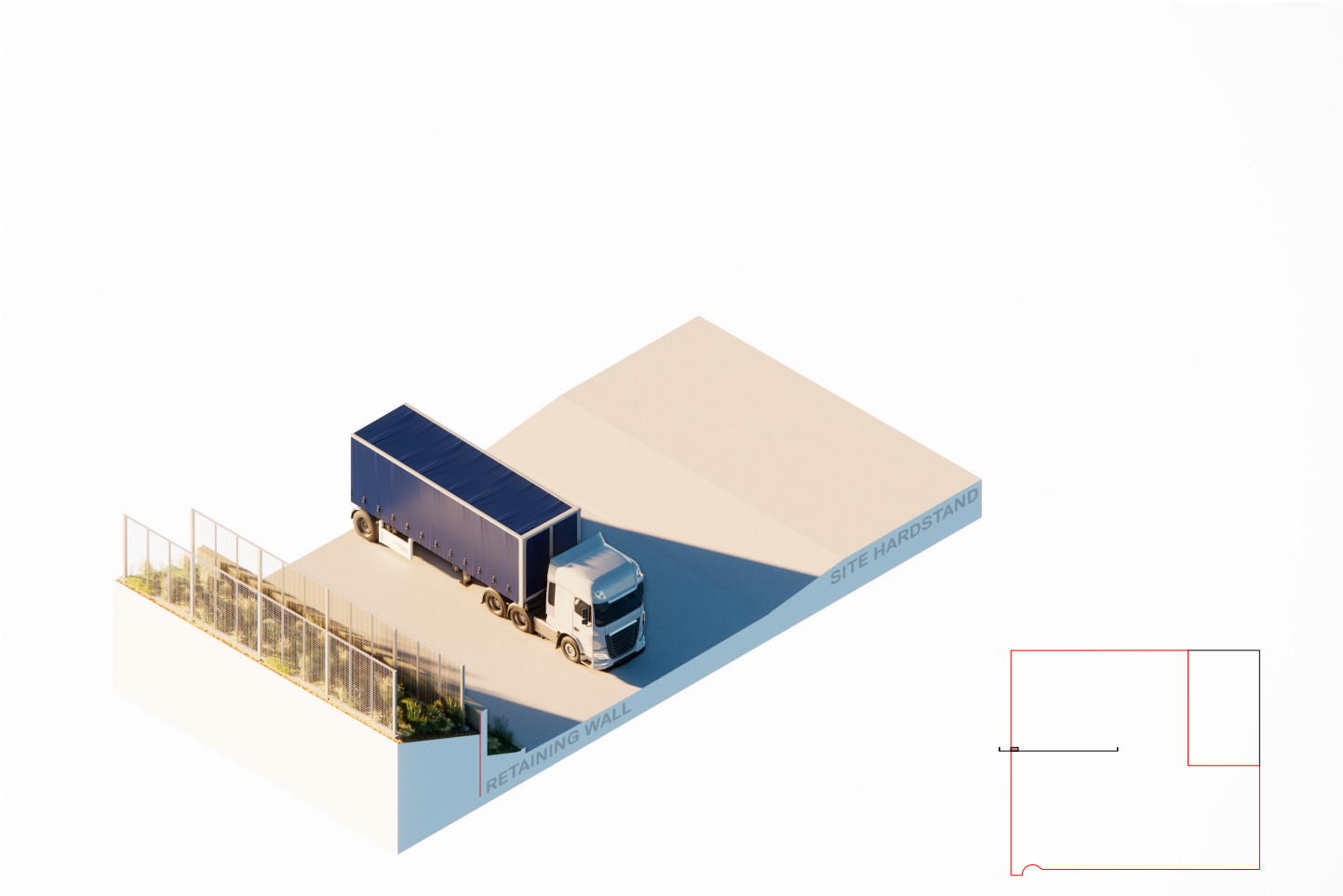


Structure the landscape as a layered system that supports intuitive movement, passive surveillance and clear programming of spaces. Use planting, layout, and material choices to absorb required security measures into the environment.



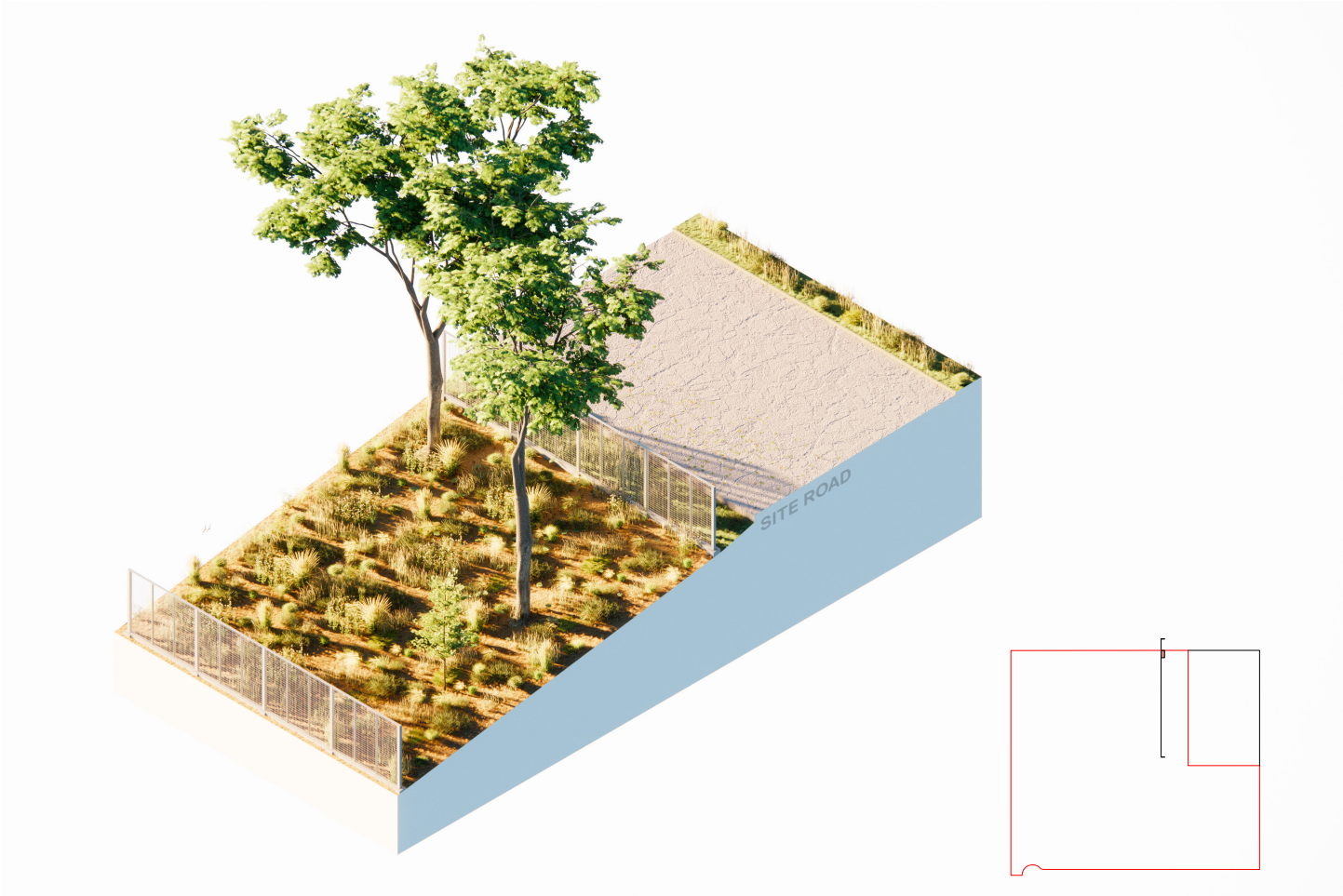
4.7 BOUNDARY CONDITIONS

SOUTHWEST RETAINING WALL BOUNDARY



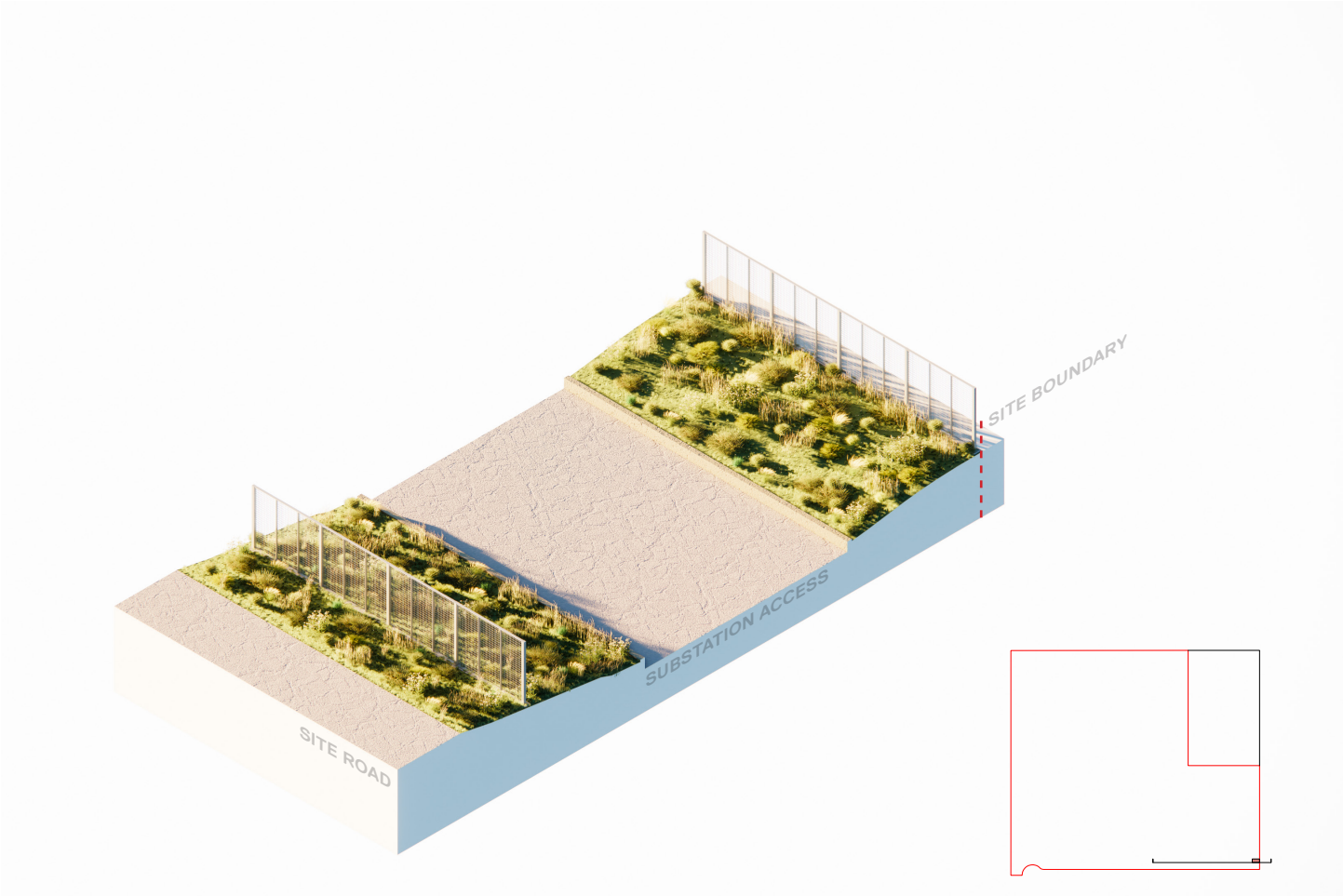
- » 2.4m high outer and inner fencing (consistent across site)
- » 3m gap between outer and inner fencing (minimum distance to be maintained across site)
- » Retaining wall required to mediate steep topography
- » Only low planting permitted along this boundary condition for security purposes

NORTHWEST BOUNDARY



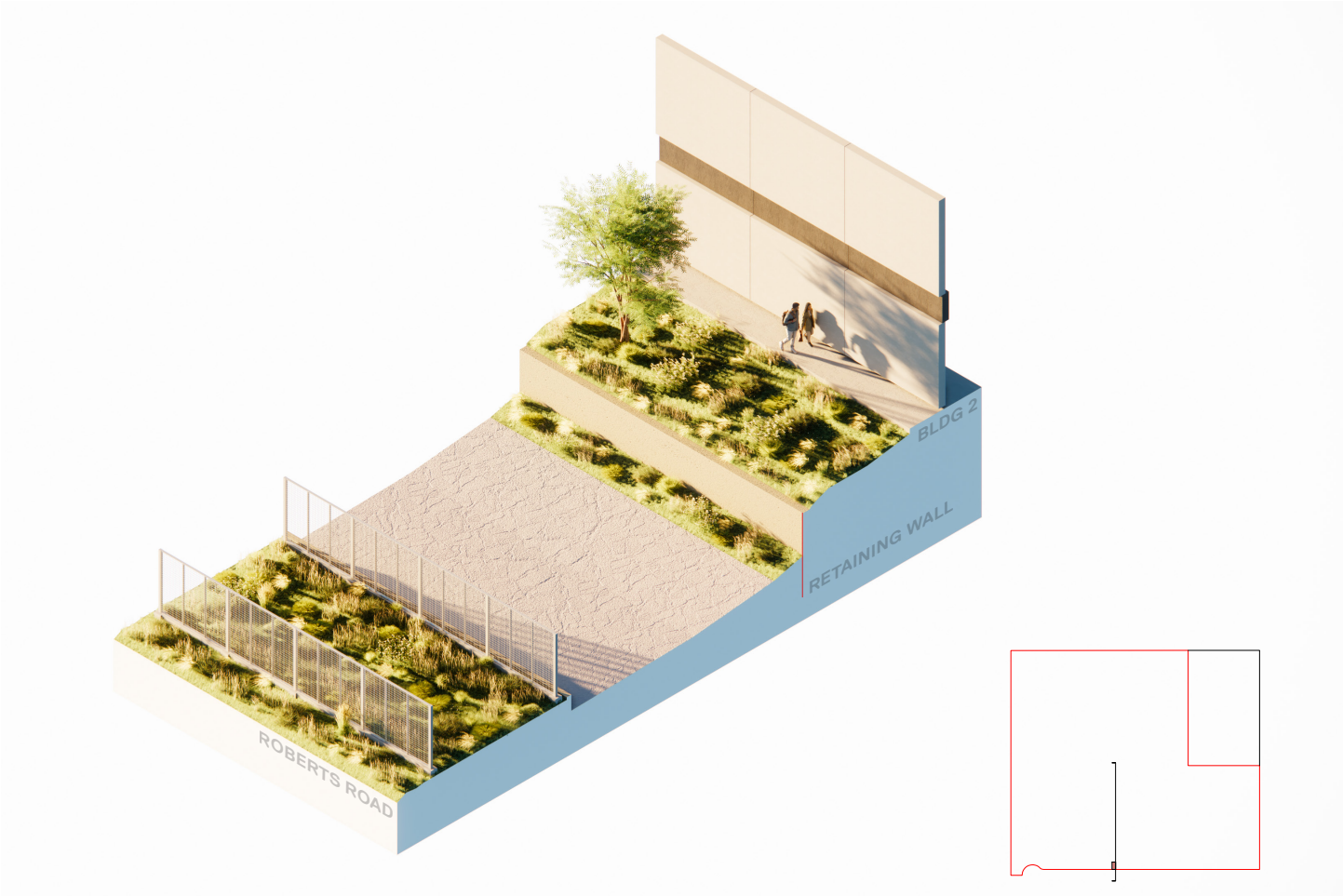
- » 14m gap between outer and inner layer
- » Taller trees may be retained, provided they do not provide any climbing aids that risk security

SUBSTATION ACCESS BOUNDARY



- » 17m gap between outer and inner layer
- » Substation access permitted between the primary and secondary security fences
- » Only low planting permitted along this boundary condition for security purposes

ROBERTS ROAD BOUNDARY



- » 6m gap between outer and inner fencing
- » Retaining wall required to mediate steep topography
- » Only low planting permitted near fencing, taller planting may be included along the building facade

Note: Exact fencing type to be determined, though likely to implement 2400mm high / 3mm thick / 85mm wide, black palisade to comply with SEPP59 requirements and Goodman brief

4.8 MATERIALITY AND ARCHITECTURAL EXPRESSION

A Balanced Response to the Street Frontage
The formal response to the Project Atlas DC brief necessitates a rigorous synthesis of technical infrastructure, operational excellence, and contextual integration. This balanced approach ensures a high-quality outcome where optimal function is expressed through a considered architectural presence.

These drivers guide a material selection that prioritizes security and construction efficiency while maintaining an honest expression of the building’s internal logic. By modulating form and applying a disciplined palette of finishes, the design achieves a distinctive and legible architectural character.

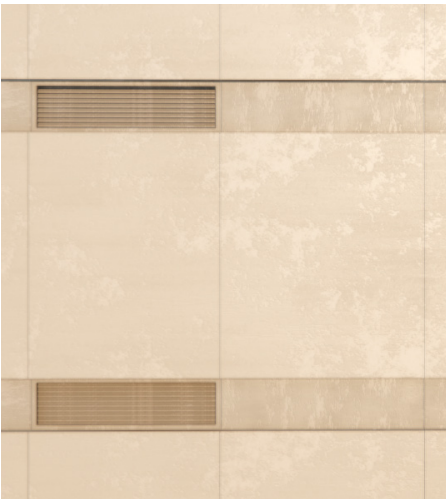
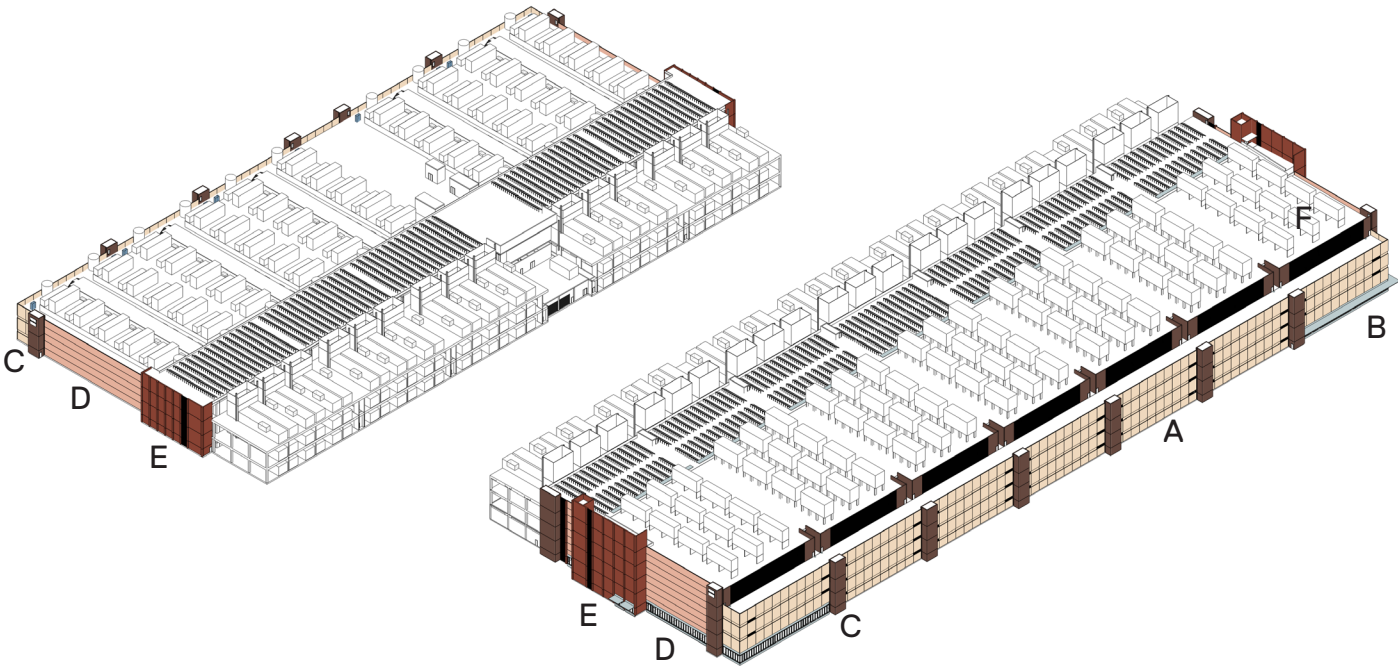
The proposal embraces Sydney’s industrial heritage, where functionality is elevated through robust, purposeful aesthetic appeal.

Structural Rhythm and Industrial Character
The facade composition breaks down the building’s mass into its operational parts, creating a visual cadence that references the

precinct’s industrial grain. Exposed structural elements establish a clear rhythm and a legible architectural language, providing a tangible link to the site’s manufacturing past.

Human-Scale Articulation
The building base is articulated at a datum relative to the human scale, fostering a more intimate and navigable street-level experience. By utilising the tectonics of the fire stairs and expressed structural modules, the design creates visual depth and interest.

The street wall is further refined through functional panels that integrate air intake and exhaust requirements, effectively mitigating the perceived bulk of the structure. An expanded setback of over 23 meters from the street facilitates strategic deep-soil planting zone. This green buffer softens the transition between the public realm and the industrial form, enhancing biodiversity and air quality within the precinct.



A PRECAST PANEL



B GLASS CURTAIN WALL



C PRECAST PANEL



D PRECAST PANEL



E PRECAST PANEL



F LOUVRES

Legibility and Logic of Façade Typologies

The building is conceptualized as a series of discernible linear volumes that express their underlying programmatic functions. The facade serves as the interface between internal organizational structures and the wider campus. Each volume is expressed through a nuanced facade type, utilizing differentiated panel systems that balance economies of scale with the imperative to mitigate structural mass. This facilitates a sophisticated volumetric articulation and a meaningful dialogue between the building forms and their urban context.

Standardized production to ensure precision and quality.

- » Cost-effectiveness, Optimized material usage and fabrication.
- » Construction Efficiency, Facilitating rapid on-site assembly to meet critical “speed-to-market” requirements.

The Roberts Road Interface

- » A primary design challenge was addressing the 330-meter-long street wall. The strategy avoids superficial “facade-ism”, the application of decorative treatments to mask a building’s form, and instead opts for an honest, legible expression that celebrates its construction.
- » The expansive surface is broken down into comprehensible modules that preserve a cohesive identity. This structural rhythm segments the facade into manageable portions, creating a visual cadence that engages the eye without overwhelming the observer. This strategy of calm neutrality prioritizes longevity and contextual harmony

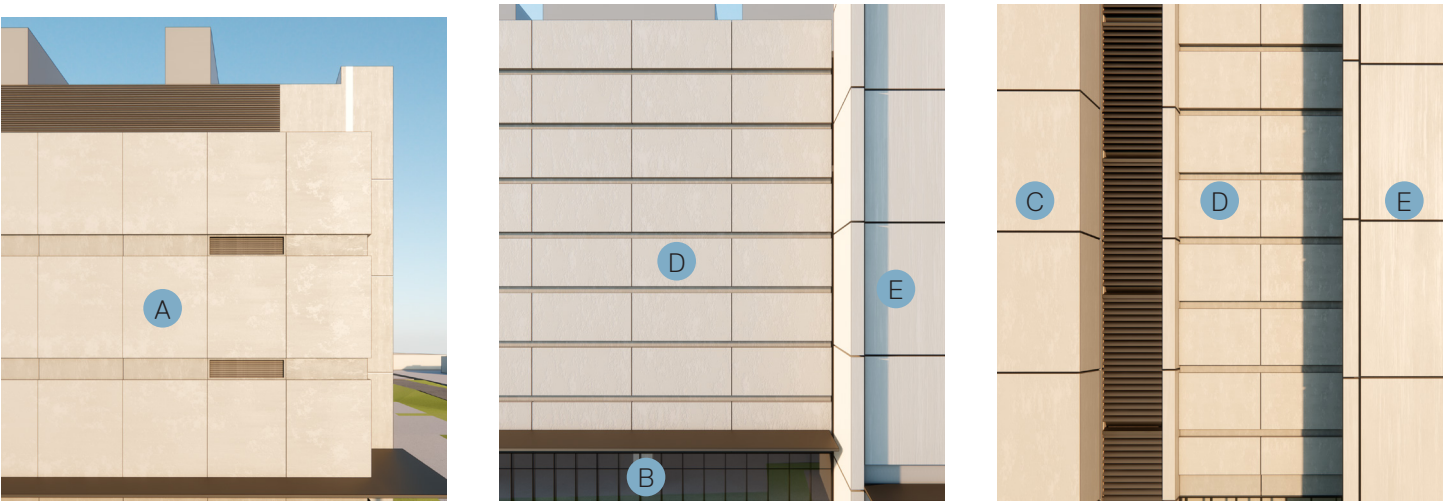
over ephemeral architectural trends

The Short Facades

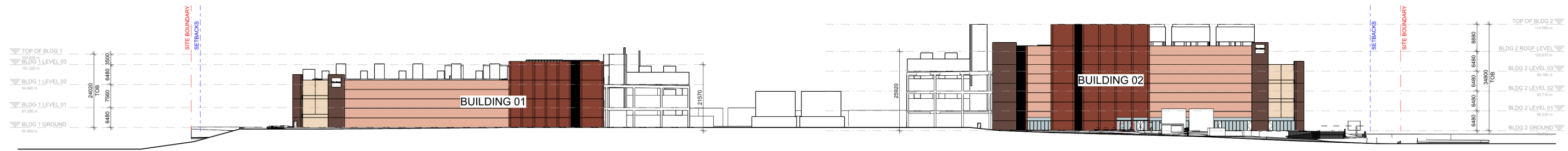
The short end facades continue the rhythmic strategy, blending programmatic needs with contextual sensitivity. Subtle variations in tectonic forms reflect the internal workings of the facility, achieving a harmonious composition. The building’s setbacks balance stringent security requirements with “rewilding” zones, integrating the facility into a restored ecological framework.

Internal Infrastructure Spine

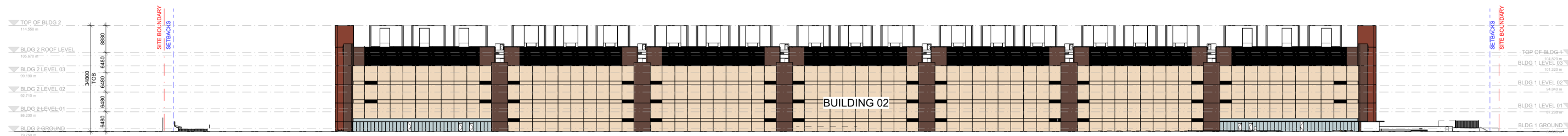
The internal facade is defined by the generator gantry—a critical component for uninterrupted operation. Conceived as an ordered, modular assembly of structural concrete framing, it deliberately expresses its modularity. This framing provides a purposeful contrast to the larger data hall volumes, revealing the elemental components of the data centre infrastructure with integrity.



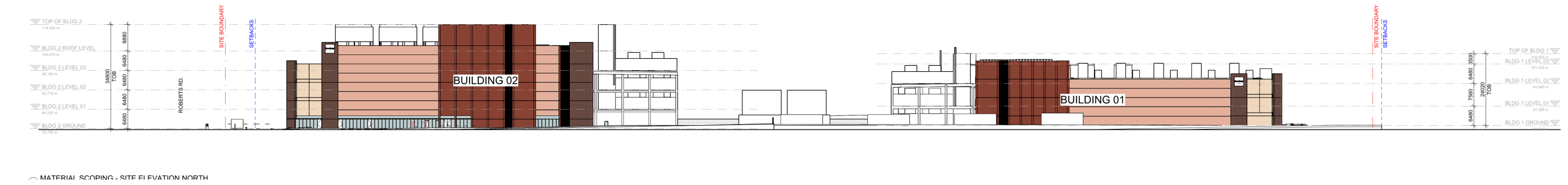
FACADE TYPES



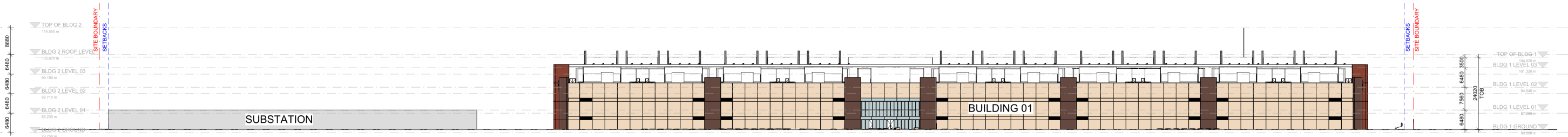
SOUTHERN ELEVATION



ROBERTS ROAD EASTERN ELEVATION



ROBERTS ROAD NORTHERN ELEVATION



OLD WALLGROVE ROAD WESTERN ELEVATION

4.9 OFFICE TENANCIES - BUILDING 1

Our design approach aligns with the following key principles:

- 1. Customer Experience: Usable and attractive spaces
 - » Functional workspaces that are enjoyable to use, to attract and retain customers.
 - » Contemporary commercial office spaces with a high level of amenity, including natural light, end of trip facilities, landscaped areas, lunch and break out spaces.
 - » Overall look and feel to present a premium facility.
- 2. Strategic Flexibility: Diverse uses and possible tenancy sizes
 - » Open office floor plans can be divided by Inter-tenancy walls into multiple configurations to suit individual tenant demand.
 - » The ability to separately operate services and provide fire egress



BUILDING 1 OFFICE TENANCIES

OFFICE TENANCIES - BUILDING 2



BUILDING 2 OFFICE TENANCIES

OFFICE TENANCIES - BUILDING 1



01 INTERIOR VIEW OF BUILDING 1 OFFICE BREAK OUT SPACE



02 INTERIOR VIEW OF BUILDING 1 OFFICE LOOKING TO NORTH WEST

OFFICE TENANCIES - BUILDING 2



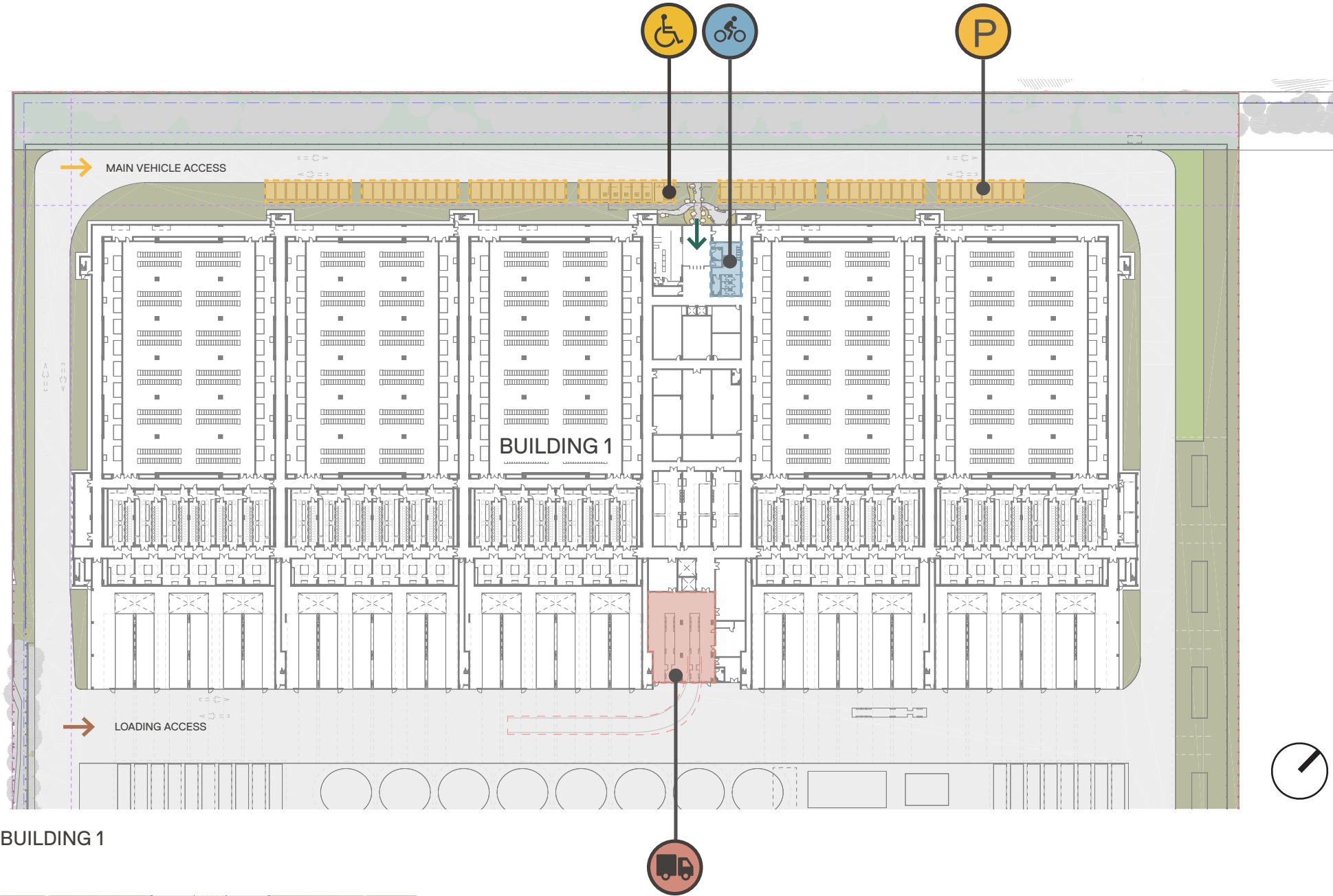
01 VIEW OF BUILDING 2 OFFICE LOOKING SOUTH WEST



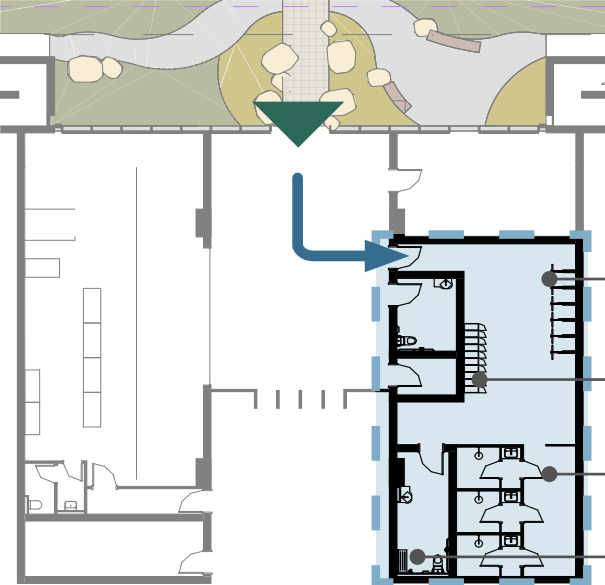
02 INTERIOR VIEW OF BUILDING 2 OFFICE

4.10 PARKING + EOT

- Our approach aligns with the following design principles:
- » Sufficient Car parking (including accessible spaces), Bicycle parking and Loading access with appropriate passive and active security measures.
 - » Well planned and functional.
 - » Considered traffic movements providing direct, legible, and separated pedestrian, car + truck movements routes emphasizing security and safety.
 - » End of trip facilities appropriate to user numbers including secure bike parking, bathrooms and showers/change rooms.



BUILDING 1



END OF TRIP & SECURE BIKE STORAGE

BASEMENT SUMMARY		PROPOSED
EV spaces		15
Accessible Car Spaces		3
Total Car spaces		150
Locked Bike Storage		13
Showers		12
Accessible Bathrooms		3

ENTRANCE LOBBY

EOT FACILITIES

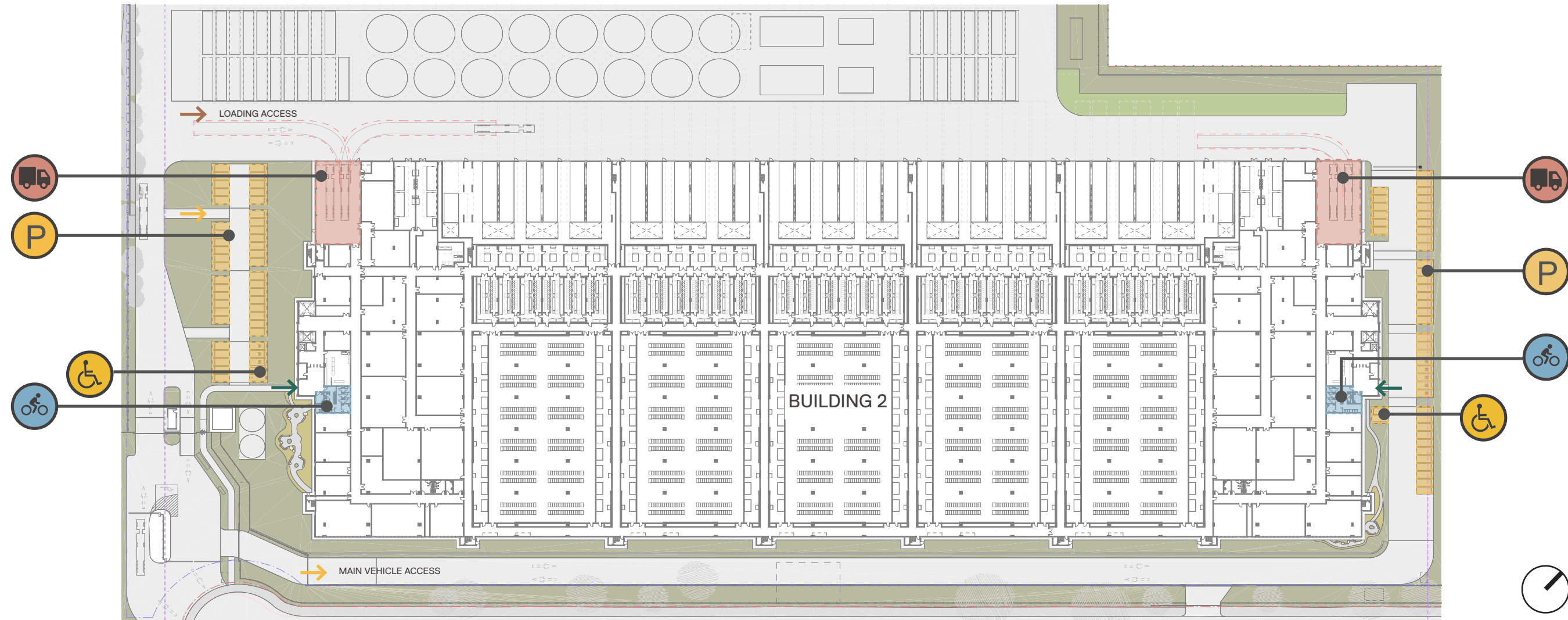
CAR PARKING SPACES

BICYCLE MOVEMENTS

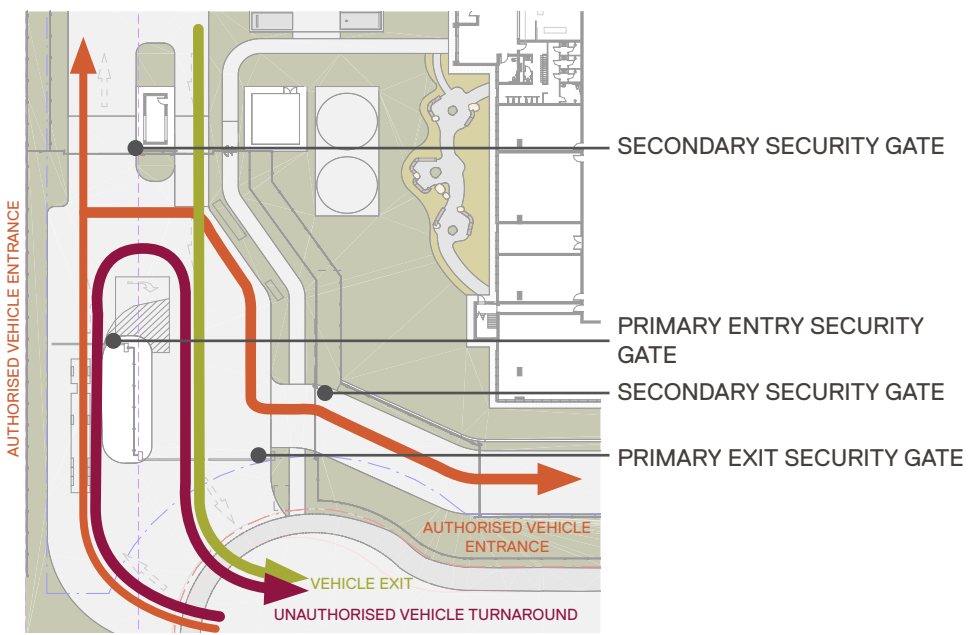
ARV LOADING

CAR PARKS

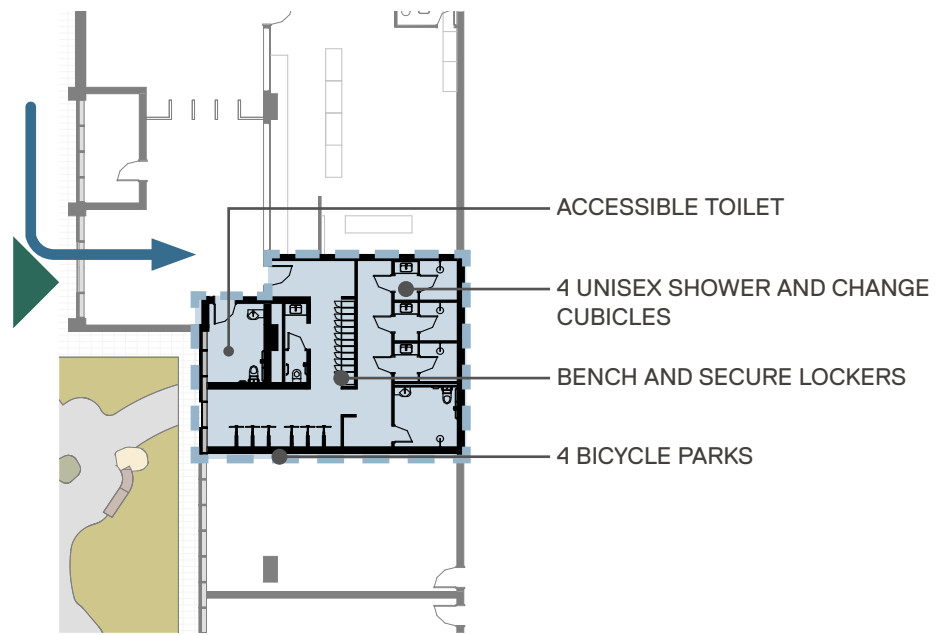
BICYCLE PARKING



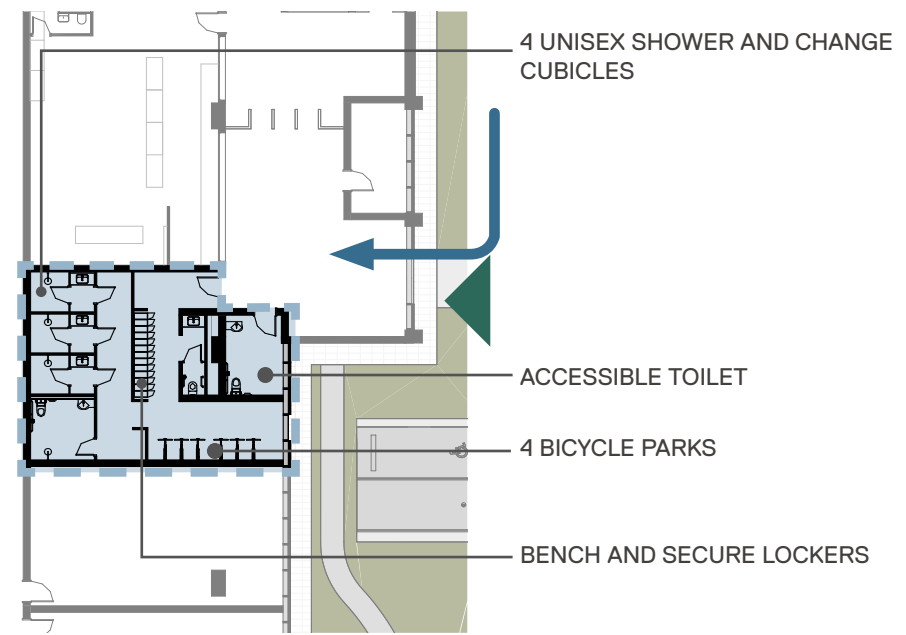
BUILDING 2



VEHICLE ENTRANCE AND SECURITY



END OF TRIP & SECURE BIKE STORAGE



END OF TRIP & SECURE BIKE STORAGE

4.11 ESD + COMFORT

The inherent tension between a data centre’s substantial environmental footprint and the imperative to care for Country requires an innovative and holistic approach.

Starting from first principles the proposal aims to push the boundaries of efficiency, adaptability, and maximise area for ecological rewilding. Additionally the proposal aims to consider the whole of life of the building, future use change and the circular economy.

NABERS Benchmarking and PUE

- » ATLAS targets a maximum PUE of 1.3 representing a significant improvement on the national PUE average of about 1.55
- » A PUE of 1.3 supports a NABERS Energy for Data Centres Infrastructure rating of 5 stars
- » The pursued energy performance initiatives will lead to reductions in operational energy consumption and associated greenhouse gas emissions from grid sourced electricity

Net Zero Pursuits

- » Commitments to procure 100% renewable electricity for all non-IT operational energy use within the facility and data halls
- » Low Global Warming Potential (GWP) chiller plant, and refrigerant selections to minimise emissions
- » Procurement of non-fossil based renewable diesel fuel is being considered, leading to a reduction in emissions for generator fuel in the order of 75%
- » Combined commitments look to reduce estimated annual emissions by over 40% compared to national average performance
- » A minimum rated output capacity of 1200kWe across both buildings can be expected when maximising available roof space for PV panels

Water Use

- » Building 1 air-cooled heat rejection chiller plant avoids use of water
- » Building 2 hybrid coolers are able to operate in air-cooling only mode when ambient conditions allow
- » Low or zero irrigation demand through drought tolerant endemic native vegetation

Materials

- » Structural pre cast concrete facade panels incorporate supplementary cementitious materials from recycled by-product sources, such as fly ash and granulated blast furnace slag to reduce Portland cement content
- » Structural steel and reinforcement products with high recycled material content reduces need to source new materials

Whole of Life & Future Use

- » Structural systems maximise opportunities for use of pre cast concrete ensuring rapid construction, disassembly and reuse
- » Structural systems incorporate recycled products where allowable, reducing greenhouse gas emissions created by virgin materials



5 STAR NABERS

ATLAS targets an annual average PUE of 1.3, supporting a NABERS Energy for Data Centres Infrastructure rating of 5 Stars

The relevant campus components are also committed to achieving a NABERS Energy for Office 5.5 Star Base Building rating, and NABERS Water for Office 3 star rating



NET ZERO PURSUITS

A commitment to procure 100% renewable electricity for all non-IT operation energy use within the facility and data halls

Use of low GWP refrigerants in chiller plant further reduce emissions



ON-SITE SOLAR POWER

A minimum rated output capacity of 1200kWe across both buildings can be expected when maximising available roof space for PV panels



REDUCED ANNUAL WATER USE

Building 1 air-cooled heat rejection chiller plant avoids use of water

Building 2 hybrid coolers able to operate without water when ambient conditions allow

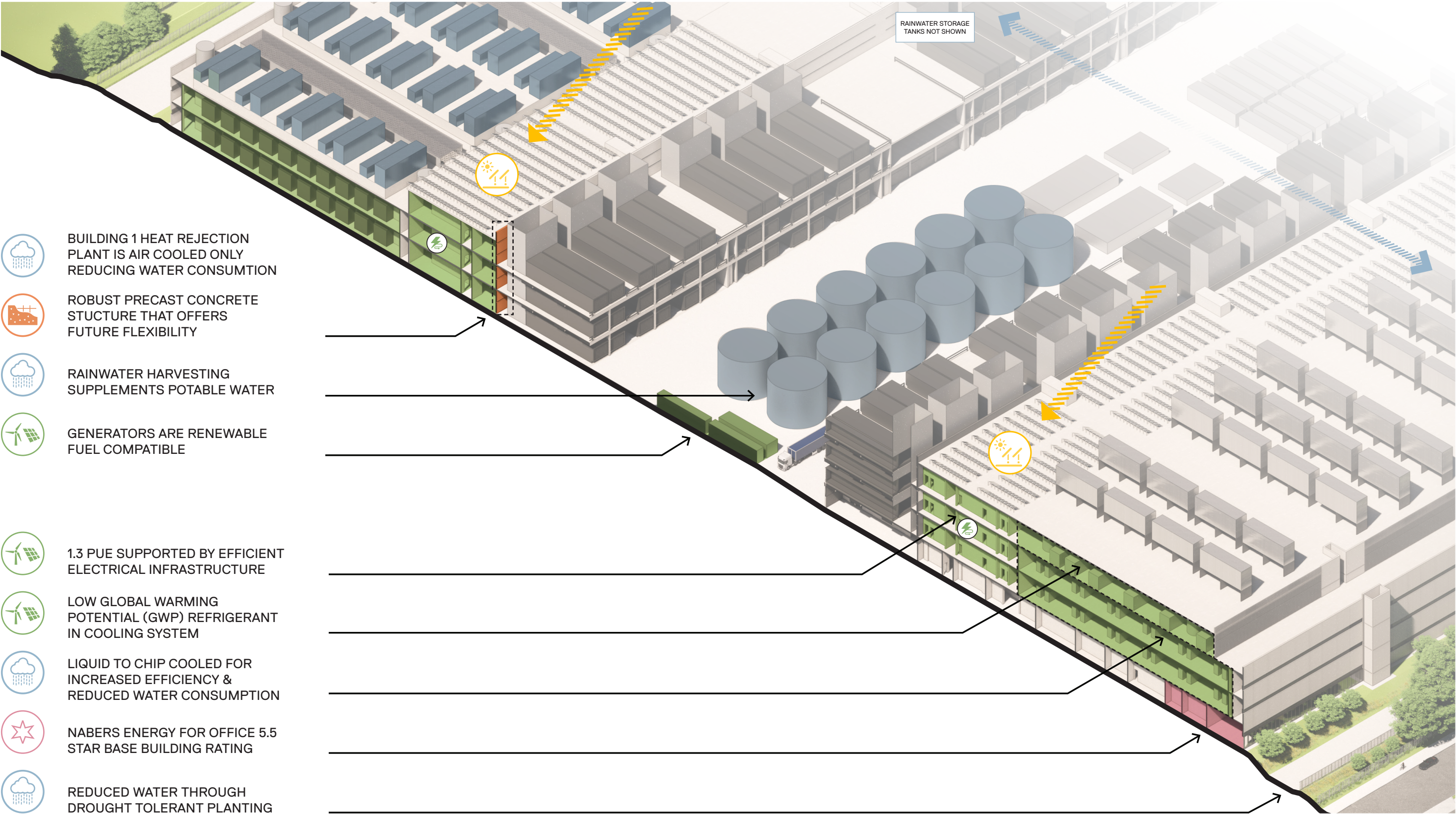
Low or zero irrigation demand through drought tolerant planting



RECYCLED MATERIAL CONTENT

Recycled by-products such as fly ash incorporated into concrete mix to reduce Portland cement content & associated emissions

Structural steel & reinforcement products with high recycled material content



5.0 DRAWINGS

