

Submissions and Amendment Report

*STACK SYDo1 Data Centre,
Erskine Park (SSD-82211208)*

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Report Number	Final

Acknowledgment of Country

Urbis acknowledges the Traditional Custodians of the lands we operate on. We recognise that First Nations sovereignty was never ceded and respect First Nations peoples continuing connection to these lands, waterways and ecosystems for over 60,000 years. We pay our respects to First Nations Elders, past and present.

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The river is the symbol of the Dreaming and the journey of life. The circles and lines represent people meeting and connections across time and space. When we are working in different places, we can still be connected and work towards the same goal.

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Glossary and Abbreviations

Reference	Description
ACHAR	Aboriginal Cultural Heritage Assessment Report
AEP	Annual Exceedance Probability
AHD	Australia Height Datum
AHIMS	Aboriginal Heritage Information Management System
APZ	Asset Protection Zone
AQIA	Air Quality Impact Assessment
ASS	Acid Sulphate Soils
BC Act	<i>Biodiversity Conservation Act 2016</i>
BC Reg	<i>Biodiversity Conservation Regulation 2017</i>
BC SEPP	<i>State Environmental Planning Policy (Biodiversity and Conservation) 2021</i>
BCA	Building Code of Australia
BDAR	Biodiversity Development Assessment Report
CEMP	Construction Environmental Management Plan
CTMP	Construction Traffic Management Plan
DCP	Development Control Plan
DP	Deposited Plan
DPHI	New South Wales Department of Planning, Housing and Infrastructure
DSI	Detailed Site Investigation
EDC	Estimated Development Cost
EIS	Environmental Impact Statement
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPA	New South Wales Environment Protection Authority
EPI	Environmental Planning Instrument
EPL	Environmental Protection Licence
ESD	Ecologically Sustainable Development
GFA	Gross Floor Area
HV	High voltage
I&E SEPP	<i>State Environmental Planning Policy (Industry and Employment) 2021</i>

Reference	Description
LAeq	A frequency-weighted Equivalent Continuous Sound Level
LEP	Local Environmental Plan
LGA	Local Government Area
LSPS	Local Strategic Planning Statement
MNES	Matters of National Environmental Significance
MUSIC	Model for Urban Stormwater Improvement Conceptualisation
NML	Noise Management Level
NSW	New South Wales
NVIA	Noise and Vibration Impact Assessment
OWMP	Operational Waste Management Plan
OLS	Obstacle Limitation Surface
R&H SEPP	<i>State Environmental Planning Policy (Resilience and Hazards) 2021</i>
Planning Systems SEPP	<i>State Environmental Planning Policy (Planning Systems) 2021</i>
PMF	Probable Maximum Flood
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Precincts SEPP	<i>State Environmental Planning Policy (Precincts—Western Parkland City) 2021</i>
PUE	Power Usage Effectiveness
RAPs	Registered Aboriginal Parties
Regulation	<i>Environmental Planning and Assessment Regulation 2021</i>
RFS	NSW Rural Fire Service
SEARs	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SIA	Social Impact Assessment
SIDRA	Signalised & Unsignalised Intersection Design and Research Aid
Site	78 Lockwood Road, Erskine Park NSW 2759 (Lot 101 in DP1268632) (Data Centre site) Lots 15, 16 and 17 in DP 1157491 located along Lenore Drive (HV Route site)
SSD	State Significant Development
SSDA	State Significant Development Application
T&I SEPP	<i>State Environmental Planning Policy (Transport and Infrastructure) 2021</i>
TfNSW	Transport for NSW
TIA	Traffic Impact Assessment

Reference	Description
VIA	Visual Impact Assessment
VPA	Voluntary Planning Agreement
WSEA	Western Sydney Employment Area
WSUD	Water Sensitive Urban Design

Executive Summary

This Submissions and Amendment Report (**report**) has been prepared by Urbis Ltd (**Urbis**) on behalf of STACK Infrastructure (**the Applicant**) in association with a State Significant Development Application (**SSDA**) for a proposed data centre development at 78 Lockwood Road, Erskine Park (**the site**).

This report responds to matters raised by the Department of Planning, Housing and Infrastructure (**DPHI**), other State government authorities/agencies, Penrith City Council, utility service providers, and the community during public exhibition of SSD-82211208 (**the SSDA**).

The report also assesses the proposed amendments to the original proposal, including minor refinements to the layout and design of the data centre facility and the inclusion of the high-voltage (**HV**) power connection as part of the proposal. The changes respond to feedback from key stakeholders, including detailed feedback from TransGrid/Lumea regarding the delivery of the required HV power connection to the site.

The proposed changes extend beyond minor refinements which can be accommodated via a Submissions Report. Accordingly, a joint Submissions and Amendment Report has been prepared and consent sought from DPHI to amend the SSDA as per Section 37 of the *Environmental Planning and Assessment Regulation 2021* (**the Regulation**).

Importantly, the amended scheme includes a revised cooling system for the data centre. The original proposal included provision for a water-cooled system, requiring 23 industrial water tanks within the site. Following further design development, the proposal now adopts a waterless (air cooled) cooling system. This change significantly reduces the project's demand for potable cold water and significantly improves acoustic outcomes at sensitive receivers.

It is understood the updated documentation package will be referred to authorities/agencies and other stakeholders for further review and comment. The amended application may also be publicly exhibited, enabling the community to make new or additional submission on the proposal. This report includes a detailed assessment of the economic, environmental and social impacts to provide a clear understanding of the amended project, including the merits of the proposed changes.

Original Proposal

The original SSDA was formally lodged with DPHI on 11 November 2025, in accordance with Section 24(2) of the Regulation. It sought consent for the following development under Clause 25, Schedule 1 of *State Environmental Planning Policy (Planning Systems) 2021* (**Planning Systems SEPP**):

- Site preparation and bulk earthworks.
- Temporary construction access from Lenore Drive.
- Construction of a three-storey data centre comprising two buildings, with a maximum height of 26.5 metres and a total gross floor area (**GFA**) of approximately 55,651m², including technical data halls, office and administrative areas, and ancillary circulation space.
- At-grade under-croft car parking (34 spaces) within the building footprint, plus an additional 44 on-site spaces, providing a total of 78 parking spaces.
- Separate generator gantry accommodating 170 backup generators.
- Landscaping and associated public domain works.
- Extension and augmentation of physical infrastructure and utilities as required, including an on-site substation and water storage tanks integrated within the building footprints.

The SSDA was placed on public exhibition between 5 December 2025 and 23 January 2026. It was also referred to other State government authorities/agencies, Penrith City Council, and utility service providers for review and comment.

Analysis of Submissions

Detailed submissions were received from the following State government authorities/agencies and utility service providers in response to their review of the SSDA:

- DPHI – Industry Assessments
- Penrith City Council (**Council**)
- Department of Climate Change, Energy, the Environment and Water (**DCCEEW**)
 - Conservation Programs, Heritage and Regulation Group (**CPHR**)
 - Heritage NSW (**HNSW**)
- NSW Environment Protection Authority (**EPA**)
- Sydney Water
- Fire and Rescue NSW (**FRNSW**)
- Nepean Blue Mountains Local Health District (**NBMLHD**)

The NSW Rural Fire Service (**RFS**) confirmed receipt of the SSDA referral, however advised that they did not have any further comments regarding the proposal, subject to compliance with the mitigation measures recommended in the Bushfire Hazard Assessment prepared by BlackAsh which accompanied the original SSDA.

Transport for NSW (**TfNSW**) also confirmed receipt of the SSDA referral and advised that they had no comments to make noting that the project will not have a detrimental impact to the surrounding transport and classified road network.

Five public submissions were also received from adjoining property owners and nearby residents. Out of these submissions:

- Two submissions expressed support for the project
- Three submissions objected to the project

DPHI issued letters on 27 January 2026 and 4 February 2026 requesting a response to the submissions received during the public exhibition and referral of the application. The key issues raised in the submissions can be broadly grouped as follows:

- **The Project**
 - Inclusion of the HV transmission line within the SSDA or clear justification for a separate approval pathway, including delineation between SSDA works and separately approved works.
 - Consistency with the approved Fitzpatrick Industrial Estate subdivision including existing approvals, planning agreements and relevant restrictions or covenants on title.
 - Building height, bulk and scale, including exceedance of Penrith Development Control Plan 2014 (**DCP**) controls, and whether setbacks, landscaping and architectural articulation achieve an acceptable built form outcome.
 - Architectural quality and site planning, including the ability to mitigate visual mass and provide landscaping given the extent of hardstand and infrastructure.
 - Adequacy of infrastructure servicing, including power, water and stormwater, and integration with existing estate infrastructure such as shared basins and wetlands.
 - Clarity of the water servicing and cooling strategy, including implications for water demand.
 - Traffic and access arrangements, including parking provision, vehicle circulation, on-site queuing and accessibility including public transport limitations.
- **Procedural Matters**

- Compliance with relevant legislation and policy frameworks including *State Environmental Planning Policy (Industry and Employment) 2021 (I&E SEPP)*, *State Environmental Planning Policy (Resilience and Hazards) 2021 (R&H SEPP)* and local flood planning provisions.
 - Confirmation of the appropriate assessment pathway, including the need for a formal SSDA amendment and any updates to Secretary's Environmental Assessment Requirements (**SEARs**).
 - Identification of additional approvals required under other legislation, including an Environment Protection Licence (**EPL**) and Sydney Water approvals.
 - Adequacy and consistency of documentation, including the need to update technical reports and ensure alignment across plans, modelling and project description.
 - Sufficiency of information to support assessment, including generator testing, battery storage and greenhouse gas emissions in accordance with the NSW Guide for Large Emitters.
 - Ensuring all components of the project, including HV infrastructure, are clearly defined and assessed within the EIS.
 - Adequacy of consultation processes, including Aboriginal cultural heritage consultation with Registered Aboriginal Parties (**RAPs**).
 - Confirmation of biodiversity requirements, including validity of the BDAR waiver following amendments to the project.
 - Provision of a compliant Estimated Development Cost (**EDC**) report to enable calculation of development contributions.
 - Ongoing consultation and agency concurrence, including with TfNSW and TransGrid, and confirmation of approval pathways.
 - – Consolidation and updating of mitigation measures to support conditions of consent.
- **Environmental Impacts**
 - Adequacy of the Noise and Vibration Impact Assessment (**NVIA**) including monitoring locations identification of most affected receivers' justification of amenity criteria inclusion of all relevant noise sources and operational scenarios and assessment of low-frequency noise and tonality.
 - Adequacy of the Air Quality Impact Assessment (**AQIA**) including generator testing regimes duration and load assumptions and confirmation of emission performance and compliance with relevant criteria.
 - Accounting for all greenhouse gas emissions including tenant IT loads Scope 2 and identification of mitigation measures across all operational sources including renewable energy procurement and alignment with the NSW Guide for Large Emitters.
 - Justification of energy efficiency performance including Power Usage Effectiveness (**PUE**) NABERS targets and the implications of the proposed cooling system.
 - Quantification of water demand and adequacy of the water servicing strategy including potable water demand wastewater servicing rainwater reuse and consistency with relevant targets such as Council's 80% reuse target.
 - Adequacy of the Flood Impact and Risk Assessment including assessment of 1% AEP and PMF events consideration of climate change scenarios and consistency with the Flood Risk Management Guideline LU01.
 - Completeness of stormwater design including drainage networks water quality treatment measures and long-term ownership and maintenance of infrastructure.
 - Adequacy of Visual Impact Assessment (**VIA**) including additional viewpoint analysis from nearby residential areas particularly to the north and cumulative impacts of building bulk and infrastructure.

- Confirmation of site suitability in relation to land contamination including whether further investigation or remediation is required.
- Traffic and transport impacts including heavy vehicle movements pedestrian safety construction traffic management and accessibility considerations.
- Ongoing validity of the BDAR waiver in light of amendments to the project.
- Fire safety and compliance with relevant standards including consistency with the National Construction Code and Fire and Rescue NSW requirements.
- Requirement to ensure environmental impacts are appropriately assessed mitigated and managed in accordance with relevant standards policies and guidelines.

Actions Taken Since Exhibition

The original proposal has been amended to respond to the submissions received during the public exhibition and referral of the SSDA, as well as ongoing detailed design development.

Since the SSDA was publicly exhibited, the Applicant has also undertaken further consultation with TransGrid/Lumea regarding the external HV works required to support the data centre. In response, the proposal has been amended to incorporate the HV connection within the scope of the SSDA, including additional land and works beyond the main site at 78 Lockwood Road to facilitate two 330kV transmission lines from the TransGrid Sydney West Substation along a 2.1km route within the Lenore Drive road reserve.

This amendment is required as TransGrid has advised it cannot deliver the works under Part 5 of the *Environmental Planning and Assessment Act 1979* (**EP&A Act**) due to competition law and ringfencing requirements.

The original architectural plans and various technical assessments and modelling (where relevant) have been updated to respond to issues raised within the submissions, as well as to the amended proposal. A full list of updated documents is provided at **Table 2** of this report.

Response to Submissions and Proposed Amendments

A detailed response to the matters raised in the submissions accompanies this report at **Appendix A**. Following public exhibition of the SSDA, the Applicant has updated the proposal to respond to issues raised in submissions, reflect ongoing consultation and incorporate a targeted amendment to the project.

Importantly, the only change that triggers the requirement for an amendment to the SSDA is the inclusion of the external HV connection and associated additional land. All other changes represent design development and refinements to the approved scheme in response to issues raised by Authorities.

The following change constitutes the amendment to the project:

- Inclusion of off-site HV infrastructure works, comprising two 330kV underground transmission lines (approximately 2.1 km in length) connecting the TransGrid Sydney West Substation to the site within the Lenore Drive road reserve.
- Expansion of the project area to include land within Lenore Drive to accommodate the HV connection, including Lots 15, 16 and 17 in DP 1157491 which comprise the Lenore Drive road reserve.
- Update to the staging strategy to include delivery of the external HV cabling route as part of Stage 1.
- Increase in EDC from approximately \$1.50 billion to \$3.70 billion, reflecting the expanded scope of works including the off-site HV infrastructure and updates following consultation with DPHI.

The following changes have been made in response to submissions or reflect ongoing design development and refinement, and do not alter the fundamental nature of the development.

- Minor adjustment to building siting, including a shift of the eastern data centre building approximately 3 metres to the west.

- Minor increase in total GFA from 55,651m² to 56,506m², with a corresponding increase in FSR from 0.72:1 to 0.73:1.
- Minor reduction in site coverage from 57.04% to 56.07% reflecting refinements to the building footprint and layout.
- Expansion of the generator gantry footprint by approximately 8 metres in a north south direction to accommodate an increase in diesel backup generators from 170 to 188.
- Gantry height remains consistent with the previous submission, with increased screening to accommodate the revised gantry floor to floor height.
- Adoption of a waterless (air cooled) mechanical cooling system, replacing the previously proposed water-based system and removing 23 industrial water tanks.
- Relocation and consolidation of ancillary infrastructure including fire tanks, pump room and security fencing.
- Refinement of the internal road network including conversion of the eastern and southern roads to two-way operation, realignment of the northern road, and adjustments to the northern ramp.
- Reduction in total earthworks (net fill) from approximately 39,780m³ to 38,460m³ reflecting updated grading and site levels.
- Introduction of retaining walls along sections of the eastern and southern internal roads in response to revised levels and alignments.
- Increase in deep soil area from 14,733.8m² (19.07%) to 15,806.37m² (20.5%) following removal of industrial water tanks.
- Minor reduction in tree canopy coverage from 8,856m² (11.46%) to 8,181m² (10.59%) associated with revised landscape design and infrastructure coordination.
- Minor internal refinements to the ancillary office floorplans, including the introduction of a corridor connecting both buildings at Upper Ground level.

The proposed amendments extend beyond minor refinements and, accordingly, this report is divided into two parts: **Part 1** being the Response to Submissions, and **Part 2** containing the Amendment Report. A detailed justification of the project is also provided, having regard for both the response to submissions and the amended proposal.

The report has been prepared to include all relevant matters in *State Significant Development Guidelines – Preparing a Submissions Report* and *State Significant Development Guidelines – Preparing an Amendment Report*.

Justification of the Amended Project

This report assesses the amended development in accordance with the relevant planning instruments and policies and outlines the mitigation measures to be implemented to avoid unreasonable or adverse environmental effects. The key environmental matters identified for the amended proposal include:

- Noise impacts.
- Air quality impacts.
- Infrastructure requirements.
- Urban design and built form.
- Visual impacts.
- Traffic and access.
- Landscaping.
- Sustainability and greenhouse gas emissions.

It has been demonstrated that for each of the likely impacts identified in the assessment of key issues, either the impacts will be positive, or mitigation measures can be adopted to ensure the amended proposal is appropriate.

The amended proposal represents a positive development outcome for the site and surrounding area, for the following reasons:

The proposal remains consistent with State and local strategic planning policies:

The amended proposal will remain consistent with the relevant objectives and goals contained in:

- *Greater Sydney Region Plan – A Metropolis of Three Cities*
- *Our Greater Sydney 2056: Western City District Plan*
- *Penrith Local Strategic Planning Statement 2020*
- *Penrith Employment Lands Strategy 2021*
- *Penrith Economic Development Strategy*
- *GANSW Better Placed*
- *Future Transport Strategy 2056*

The proposal continues to satisfy the applicable State and local development controls:

The amended proposal meets the relevant statutory requirements of the applicable environmental planning instruments, including:

- *State Environmental Planning Policy (Planning Systems) 2021*
- *State Environmental Planning Policy (Resilience and Hazards) 2021*
- *State Environmental Planning Policy (Industry and Employment) 2021*
- *State Environmental Planning Policy (Transport and Infrastructure) 2021*
- *State Environmental Planning Policy (Biodiversity and Conservation) 2021*
- *State Environmental Planning Policy (Sustainable Buildings) 2022*
- *Blacktown Local Environmental Plan 2015*
- *Penrith Development Control Plan 2014*

The design responds appropriately to the opportunities and constraints presented by the site:

- The site is suitable for the proposed development, being previously cleared and highly disturbed, with no contamination, biodiversity or cultural heritage constraints that would preclude development.
- The layout responds to identified flooding constraints, with no built form located within the 1% AEP flood extent and stormwater integrated with the existing detention infrastructure.
- Potential bushfire risk associated with the Ropes Creek corridor is appropriately addressed through the provision of an Asset Protection Zone (**APZ**) in accordance with NSW RFS requirements.
- The built form is compatible with the existing and emerging industrial character of the Erskine Park Employment Area, with building siting, articulation and landscaping reducing perceived bulk and scale.
- The proposal delivers a coordinated landscape strategy, including substantial deep soil planting and canopy coverage, contributing to visual amenity, biodiversity outcomes and urban heat mitigation.
- The development has been designed to avoid adverse impacts on surrounding receivers, with acceptable outcomes achieved in relation to visual amenity, noise, air quality and traffic.
- Safe and efficient access is provided via Lockwood Road, with internal circulation arrangements accommodating operational requirements while minimising potential conflicts.

The proposal is highly suitable for the site:

- The proposal is consistent with the IN1 zone objectives, is permitted with consent and satisfactorily addresses the relevant provisions in I&E SEPP, Blacktown LEP 2015 and the Penrith DCP 2014.
- The site is a large, consolidated land holding which is vacant and has been previously cleared of all structures and vegetation to accommodate future development.
- There are no significant environment constraints that would limit the project being developed on the site.
- The character and scale of the development is compatible and consistent with its existing and likely future context, being an emerging industrial employment area.
- The proposed development will optimise use of a vacant site and deliver strategic objectives located within a developing employment precinct with high amenity and employment outcomes and support business activity that occurs in other nearby established and emerging employment-generating precincts.
- The site is highly accessible to the regional road network and all necessary infrastructure can be accommodated, allowing operations to commence at no cost to Government.
- The proposed development is found to generate no adverse impacts on the established residential land to the north (approximately 300 metres away from the site), based on the environmental assessments undertaken.
- The HV route is predominantly located in a road reserve which is existing disturbed land, containing other services infrastructure. Excavation below Ropes Creek will be managed so not to impact the environmental quality of the waterway. The proposed HV connection works are permissible by way of section 4.38(3) of the EP&A Act as they are sufficiently related and ancillary to the data centre development.

The proposal is in the public interest:

- The proposal is consistent with relevant State and local strategic plans and complies with the relevant State and local planning controls including the relevant provisions in the EP&A Act, I&E SEPP, Blacktown LEP 2015 and Penrith DCP 2014.
- Subject to the implementation of the recommended mitigation measures, no adverse social or environmental impacts result from the proposal in terms of traffic, noise and vibration, air quality or views during construction and operation of the development.
- The potential impacts of this development to residential areas are significantly reduced compared to traditional industrial land uses, e.g. warehousing and distribution, which have greater potential noise and traffic impacts.
- The proposal directly contributes to the important role that the Western Sydney Employment Area (**WSEA**) plays as an employment generating precinct within the broader Western Parkland City, as identified in the Greater Sydney Region Plan (**Region Plan**).
- The proposal provides critical infrastructure which will support the growth for the digital economy within NSW and more broadly.
- The proposal will protect and enhance employment lands and increase job numbers.
- No major issues relating to the construction and operation of the development were raised during the pre-lodgement consultation with the local community, Council, Government and agency stakeholders.

In view of the above, it is considered that this SSDA has significant merit and should be approved subject to the implementation of the mitigation measures described in this report and supporting documents.

1 Introduction

1 Introduction

1.1 Background and Purpose

This Submissions and Amendment Report has been prepared on behalf of STACK Infrastructure (**the Applicant**) in association with a SSDA for a proposed data centre development at 78 Lockwood Road, Erskine Park. The report responds to matters raised in the authority referral responses and public submissions during its preliminary assessment. It also assesses the proposed amendments to the original proposal, including the inclusion additional land to facilitate the delivery of a HV connection electricity connection to the site.

The SSDA was lodged with DPHI on 11 November 2025 (**SSD-82211208**). The SSDA was placed on public exhibition between 5 December 2025 and 23 January 2026. It was also referred to other State government authorities/agencies, Penrith City Council, and utility service providers for review and comment. Each of the submissions received in response to the public exhibition and external referrals have been reviewed by the Applicant in detail.

The proposal has been refined in response to DPHI and stakeholder feedback, as well as ongoing detailed design development. The proposed changes include refinements to the data centre design and operational parameters. Importantly, the inclusion of the HV connection extends beyond what could be considered a minor refinement and therefore necessitates an Amendment Report to support an assessment of the revised proposal.

This report is structured into two parts: a Submissions Report within **Part 1** and an Amendment Report within **Part 2**. It provides a comprehensive justification of the project having regard to both the response to submissions and the amended proposal and addresses the relevant matters in *State Significant Development Guidelines – Preparing a Submissions Report* and *State Significant Development Guidelines – Preparing an Amendment Report*.

1.2 Applicant Details

The applicant details for the proposed development are listed below.

Table 1 Applicant Details

Descriptor	Applicant Details
Name	STACK Infrastructure Australia (78 Lockwood Road) Pty Ltd ATF the STACK Infrastructure (78 Lockwood Road) Unit Trust
Postal Address	L14, 627 Chapel Street, South Yarra, VIC 3141
ACN	683 088 495
Nominated Contact	Michael Dyer Vice President – Delivery (Australia)

1.3 Exhibited Proposal

The original SSDA applied to 78 Lockwood Road, Erskine Park, which is legally described as Lot 101 in DP 1268632. An aerial image of the site is provided at **Figure 1** below. The exhibited proposal sought consent for:

- Site preparation and bulk earthworks.
- Temporary construction access from Lenore Drive.
- Construction of a three-storey data centre comprising two buildings, with a maximum height of 26.5 metres and a total GFA of approximately 55,651m², including technical data halls, office and administrative areas, and ancillary circulation space.
- At-grade under-croft car parking (34 spaces) within the building footprint, plus an additional 44 on-site spaces, providing a total of 78 parking spaces.
- Separate generator gantry accommodating 170 backup generators.
- Landscaping and associated public domain works.
- Extension and augmentation of physical infrastructure and utilities as required, including an on-site substation and water storage tanks integrated within the building footprints.

Figure 1 Subject Site



Source: Urbis, 2025

1.4 Amended Proposal

The Amendment Report (**Part 2** of this report) outlines the proposed changes which are sought from the originally exhibited proposal. The project description as amended includes the following:

- Site preparation and bulk earthworks.
- Temporary construction access from Lenore Drive.
- Construction of a three-storey data centre comprising two buildings, with a maximum height of 26.5 metres and a total GFA of approximately 56,506m², including technical data halls, office and administrative areas, and ancillary circulation space.
- At-grade under-croft car parking (34 spaces) within the building footprint, plus an additional 44 on-site spaces, providing a total of 78 parking spaces.
- Separate generator gantry accommodating 188 backup generators.
- Landscaping and associated public domain works.
- Extension and augmentation of physical infrastructure and utilities as required, including an on-site substation and water storage tanks integrated within the building footprints.
- Off-site works comprising the delivery of two 330kV transmission lines from the TransGrid Sydney West Substation site to the subject site, utilising existing road reserve along Lenore Drive.

The Minister for Planning and Public Spaces is the consent authority for the proposal in accordance with Section 4.36(2) of the EP&A Act.

1.5 Supporting Documentation

This Submissions and Amendment Report is supported by the following technical reports and documentation which have been updated to reflect the amended application and in response to the submissions received.

Table 2 Supporting Documentation

Document	Author	Appendix
Response to Submissions Table	Urbis	Appendix A
Revised Statutory Compliance Table	Urbis	Appendix B
Revised Mitigation Measures	Urbis	Appendix C
Revised Engagement Summary Table	Urbis	Appendix D
Revised Architectural Drawings	Genton	Appendix E
Revised Architectural Design Report	Genton	Appendix F
Revised Estimated Development Cost	Linesight	Appendix G
Survey Plan	Genton	Appendix H
Revised BCA Compliance Report	Bm+g	Appendix I
Revised Access Capability Report	STACC	Appendix J
Revised Landscape Design Report	Habit8	Appendix K
Revised Air Quality Impact Assessment	Northstar	Appendix L
Revised Noise and Vibration Impact Assessment	Acoustic Logic	Appendix M

Document	Author	Appendix
Revised Infrastructure Requirements and Utility Report	LCI Consultants	Appendix N
Revised Backup Power System Report	LCI Consultants	Appendix O
Revised Social Impact Assessment	Urbis	Appendix P
Revised Detailed Site Investigation	Douglas Partners	Appendix Q
Revised Groundwater Impact Assessment	Douglas Partners	Appendix R
Revised Salinity Management Plan	Douglas Partners	Appendix S
Revised Geotechnical Investigation	Douglas Partners	Appendix T
Revised Transport Impact Assessment	Positive Traffic	Appendix U
Revised Construction Traffic Management Plan	Positive Traffic	Appendix V
Revised Green Travel Plan	Positive Traffic	Appendix W
Revised Operational Waste Management Plan	Nuloop	Appendix X
Revised Construction Waste Management Plan	Nuloop	Appendix Y
Revised Bushfire Hazard Assessment	Blackash	Appendix Z
Revised Aboriginal Cultural Heritage Assessment Report	Urbis	Appendix ZA
Revised BDAR Waiver Request	écologique	Appendix ZB
Revised Community Engagement and Consultation Outcomes Report	Urbis	Appendix ZC
Revised Flood Impact Risk Assessment	ACOR Consultants	Appendix ZD
Revised ESD Report	LCI Consultants	Appendix ZE
Revised Hazards and Risk Screening Report	ACOR Consultants	Appendix ZF
Revised Dangerous Goods Report	ACOR Consultants	Appendix ZG
Revised Visual Impact Assessment	Urbis	Appendix ZH
Revised Greenhouse Gas Assessment	LCI Consultants	Appendix ZI
Revised Engineering Plans	ACOR Consultants	Appendix ZJ
Revised Integrated Water Management Plan	ACOR Consultants	Appendix ZK
Revised Embodied Emissions Materials Form	Linesight	Appendix ZL
External HV Works Plans	TransGrid and Linesight	Appendix ZM
Supplementary Construction Air Quality Assessment - External HV Works	Northstar	Appendix ZN
Supplementary Arboricultural Impact Assessment – External HV Works	CPS	Appendix ZO

Document	Author	Appendix
Supplementary Preliminary Construction Traffic Management Plan – External HV Works	Positive Traffic	Appendix ZP
Supplementary Infrastructure Requirements Report – External HV Works	LCI Consultants	Appendix ZQ
Supplementary Construction Noise and Vibration Assessment – External HV Works	Acoustic Logic	Appendix ZR
Supplementary Groundwater Impact Assessment – External HV Works	Douglas Partners	Appendix ZS
Supplementary ACHA Addendum – External HV Works	Urbis	Appendix ZT
Supplementary Preliminary Site Investigation and Unexpected Finds Protocol – External HV Works	Douglas Partners	Appendix ZU
BDAR Waiver for 78 Lockwood Road	DPHI	Appendix ZV

2

Part 1: Response to Submissions

2 Part 1: Response to Submissions

This part provides the information relevant to the Submissions Report, including responses to the agency advice/feedback and public submissions in response to the exhibition of the SSDA. It addresses all relevant matters in *State Significant Development Guidelines – Preparing a Submissions Report*.

2.1 Analysis of Submissions

The SSDA was placed on public exhibition between 5 December 2025 and 23 January 2026. It was also referred to other State government authorities/agencies, Penrith City Council, and utility service providers for review and comment.

Detailed submissions were received from the following State government authorities/agencies and utility service providers in response to their review of the SSDA:

- DPHI – Industry Assessments
- Penrith City Council
- Department of Climate Change, Energy, the Environment and Water (**DCCEEW**)
 - Conservation Programs, Heritage and Regulation Group (**CPHR**)
 - Heritage NSW (**HNSW**)
- NSW Environment Protection Authority (**EPA**)
- Sydney Water
- Fire and Rescue NSW (**FRNSW**)
- Nepean Blue Mountains Local Health District (**NBMLHD**)

The above submissions identified matters which required further assessment and/or recommended imposition of consent conditions should the application be approved.

The RFS confirmed receipt of the SSDA referral, however advised that they did not have any further comments regarding the proposal, subject to compliance with the conditions recommended in the Bushfire Hazard Assessment prepared by BlackAsh which accompanied the original SSDA.

TfNSW also confirmed receipt of the SSDA referral and advised that they had no comments to make noting that the project will not have a detrimental impact to the surrounding transport and classified road network.

Penrith City Council provided a detailed submission. Council's key concerns related to built form matters, development engineering/flooding, traffic and access, environmental management, and waterways/water management.

Five public submissions were also received from adjoining property owners and nearby residents. Out of these submissions:

- Two submissions expressed support for the project
- Three submissions objected to the project

The submissions in objection to the project primarily related to water use/management, noise (including construction and operational) impacts, visual impact, and other environmental health impacts (air quality, risk from hazardous goods).

In accordance with the DPHI *State Significant Development Guidelines*, the key issues raised in the submissions have been categorised below. A detailed Response to Submissions Summary Table is appended to this report at **Appendix A**.

Table 3 Categorising of Issues Raised

Category of Issue	Summary of Matters Raised
The Project	▪ Inclusion of the HV transmission line within the SSDA or clear justification for a separate approval pathway, including delineation between SSDA works and separately approved works. ▪ Consistency with the approved Fitzpatrick Industrial Estate subdivision including existing approvals, planning agreements and relevant restrictions or covenants on title. ▪ Building height, bulk and scale, including exceedance of DCP controls, and whether setbacks, landscaping and architectural articulation achieve an acceptable built form outcome. ▪ Architectural quality and site planning, including the ability to mitigate visual mass and provide landscaping given the extent of hardstand and infrastructure. ▪ Adequacy of infrastructure servicing, including power, water and stormwater, and integration with existing estate infrastructure such as shared basins and wetlands. ▪ Clarity of the water servicing and cooling strategy, including implications for water demand. ▪ Traffic and access arrangements, including parking provision, vehicle circulation, on-site queuing and accessibility including public transport limitations.
Procedural Matters	▪ Compliance with relevant legislation and policy frameworks including the I&E SEPP, R&H SEPP and flood planning provisions. ▪ Confirmation of the appropriate assessment pathway, including the need for a formal SSDA amendment and any updates to SEARs. ▪ Identification of additional approvals required under other legislation, including an EPL and Sydney Water approvals. ▪ Adequacy and consistency of documentation, including the need to update technical reports and ensure alignment across plans, modelling and project description. ▪ Sufficiency of information to support assessment, including generator testing, battery storage and greenhouse gas emissions in accordance with the NSW Guide for Large Emitters. ▪ Ensuring all components of the project, including HV infrastructure, are clearly defined and assessed within the EIS. ▪ Adequacy of consultation processes, including Aboriginal cultural heritage consultation with RAPs. ▪ Confirmation of biodiversity requirements, including validity of the BDAR waiver following amendments to the project. ▪ Provision of a compliant EDC report to enable calculation of development contributions. ▪ Ongoing consultation and agency concurrence, including with TfNSW and TransGrid, and confirmation of approval pathways. ▪ Consolidation and updating of mitigation measures to support conditions of consent.
Environmental Impacts	▪ Adequacy of the NVIA including monitoring locations identification of most affected receivers justification of amenity criteria inclusion of all relevant noise

Category of Issue	Summary of Matters Raised
	sources and operational scenarios and assessment of low-frequency noise and tonality. ▪ Adequacy of the AQIA including generator testing regimes duration and load assumptions and confirmation of emission performance and compliance with relevant criteria. ▪ Accounting for all greenhouse gas emissions including tenant IT loads Scope 2 and identification of mitigation measures across all operational sources including renewable energy procurement and alignment with the NSW Guide for Large Emitters. ▪ Justification of energy efficiency performance including PUE, NABERS targets and the implications of the proposed cooling system. ▪ Quantification of water demand and adequacy of the water servicing strategy including potable water demand wastewater servicing rainwater reuse and consistency with relevant targets such as Council's 80% reuse target. ▪ Adequacy of the Flood Impact and Risk Assessment including assessment of 1% AEP and PMF events consideration of climate change scenarios and consistency with the Flood Risk Management Guideline LU01. ▪ Completeness of stormwater design including drainage networks water quality treatment measures and long-term ownership and maintenance of infrastructure. ▪ Adequacy of VIA including additional viewpoint analysis from nearby residential areas particularly to the north and cumulative impacts of building bulk and infrastructure. ▪ Confirmation of site suitability in relation to land contamination including whether further investigation or remediation is required. ▪ Traffic and transport impacts including heavy vehicle movements pedestrian safety construction traffic management and accessibility considerations. ▪ Ongoing validity of the BDAR waiver in light of amendments to the project. ▪ Fire safety and compliance with relevant standards including consistency with the National Construction Code and Fire and Rescue NSW requirements. ▪ Requirement to ensure environmental impacts are appropriately assessed mitigated and managed in accordance with relevant standards policies and guidelines.

2.2 Actions Taken Since Exhibition

This section summarises the refinements that have been made to the project since its public exhibition. It also outlines the additional assessment undertaken to respond to the concerns raised by public agencies and bodies.

2.2.1 Further Engagement

Since public exhibition of the SSDA, the Applicant has undertaken targeted consultation with key stakeholders including DPHI, TransGrid and Lumea, Penrith City Council, Blacktown City Council and TfNSW.

This engagement has focused on resolving key issues raised in submissions, confirming the approvals pathway for the external HV connection and the associated impacts from these works, as well as addressing technical matters including flooding, infrastructure and servicing of the main data centre site

The table below provides a summary of this further consultation undertaken and the outcomes of this engagement.

Table 4 Further Engagement Summary

Stakeholder	How this Group was Consulted	Project Response
DPHI	Ongoing discussions have been held with DPHI, STACK, Urbis and TransGrid/Lumea to confirm the appropriate planning pathway for the external HV connection. A Section 37 amendment request was submitted on 19 March 2026 seeking agreement to amend the SSDA to include external HV works. Engagement also included discussions on updating the EDC to reflect the full extent of works and ensure compliance with relevant statutory requirements.	In response, the SSDA has been amended to include the full scope of the external HV connection. This includes two 330kV underground transmission lines between the Sydney West Substation and the data centre site. The EDC has been updated to reflect the amended project and ensure consistency with the revised scope. The Applicant will continue to engage with DPHI throughout the assessment process.
TransGrid/Lumea	The Applicant has undertaken ongoing engagement with TransGrid and Lumea over the past 12 months to secure a high voltage electricity connection. This has included coordination on route selection, design development and delivery requirements. TransGrid confirmed that the works cannot be delivered under Part 5 of the Act and must instead be included within the SSDA.	The SSDA has been updated to incorporate the required off-site HV transmission line extending from the Sydney West Substation to the data centre site. The design and delivery approach has been refined in consultation with TransGrid and Lumea. Ongoing coordination will continue to support detailed design, construction methodology and delivery of the connection.
Penrith City Council	Engagement has been undertaken regarding the proposed HV connection within Lenore Drive. A request for landowner's consent was submitted to Council on 25 March 2026 for works within the road reserve. Consultation has also occurred in relation to flooding matters raised in submissions.	The Flood Impact and Risk Assessment has been updated having regard to Council feedback. A response to the landowner's consent request is currently pending. The Applicant will continue to engage with Council to support detailed design and delivery of the works.
TfNSW	Consultation has been undertaken with TfNSW regarding the proposed HV connection along Lenore Drive. TfNSW confirmed that it is not the landowner despite the road classification and that its approval is not required. TfNSW also provided advice on the relevant approval pathway.	TfNSW has confirmed that landowner's consent is to be obtained from Penrith and Blacktown Councils as the relevant road authorities. Approval under Section 138 of the Roads Act will be required for trenching works following determination of the SSDA. The Applicant will continue to consult with TfNSW to ensure appropriate coordination of works.
Blacktown City Council	Engagement has been undertaken regarding the proposed HV connection within Lenore Drive. A request for landowner's consent was submitted to Council on 25 March 2026 for works within the road reserve.	A response to the landowner's consent request is currently pending. The Applicant will continue to engage with Council to support detailed design and delivery of the works.

2.2.2 Refinements to the Project

The proposed refinements respond to feedback received following the public exhibition and preliminary assessment of the SSDA, including further engagement with authorities/agencies, and also reflect ongoing detailed design development.

A range of refinements have been made to the design, layout and infrastructure of the development. These include adoption of a waterless mechanical cooling system, removal of industrial water tanks, adjustment to building siting, refinement of internal road layout and circulation, and updates to landscaping, earthworks and ancillary infrastructure. These changes improve operational efficiency, reduce water demand and enhance site planning outcomes.

Importantly, the only change that triggers the requirement for an amendment to the SSDA is the inclusion of the external HV connection and associated additional land. All other changes represent design development and refinements to the approved scheme in response to issues raised by Authorities.

The proposed amendments and refinements to the application are discussed in more detail in **Part 2** of this report.

2.2.3 Additional Impact Assessment

Additional assessments have been prepared to respond to issues raised in submissions and to support the proposed refinements to the project. These include updated technical reports and plans forming part of the EIS documentation.

In addition, to address the inclusion of the off-site HV transmission line from the data centre site to the TransGrid Sydney West Substation site, the following additional reports have been prepared:

- External HV Works Plans
- Supplementary Construction Air Quality Assessment – External HV Works
- Supplementary Arboricultural Impact Assessment – External HV Works
- Supplementary Preliminary Construction Traffic Management Plan – External HV Works
- Supplementary Infrastructure Requirements Report – External HV Works
- Supplementary Construction Noise and Vibration Assessment – External HV Works
- Supplementary Groundwater Impact Assessment – External HV Works
- Supplementary ACHA Addendum – External HV Works
- Supplementary Preliminary Site Investigation and Unexpected Finds Protocol – External HV Works

2.3 Response to Submissions

A total of 15 submissions were received in response to the public exhibition of the SSDA and its referral to key stakeholders, including other Stage government authorities / agencies, Penrith City Council, utility service providers, and the community.

A detailed response to each of the matters raised in the submissions accompanies this report at **Appendix A**. Further detailed discussion outlining the response to submissions is provided in the following part of the report which outlines the amended proposal, its compliance with strategic and statutory planning frameworks, and the key issues for assessment.

Section 0 of this report includes a comprehensive assessment of the amended proposal, informed by the updated impact assessment reports prepared by relevant specialist consultants to assess the proposed design changes, as well as responding to the detailed issues raised within the submissions.

3

Part 2: Amendment Report

3 Part 2: Amendment Report

This section of the report describes the proposed amendments and provides a comparative analysis of the original development and the amended proposal. It also includes an updated detailed description of the various components of the proposal, including of the proposed amendments.

3.1 Description of Proposed Amendments

The project description is to be updated to reflect the proposed amendments to the scheme as originally lodged with DPHI for assessment. The amended project description is provided below:

- Site preparation and bulk earthworks.
- Temporary construction access from Lenore Drive.
- Construction of a three-storey data centre comprising two buildings, with a maximum height of 26.5 metres and a total GFA of approximately 55,651m², including technical data halls, office and administrative areas, and ancillary circulation space.
- At-grade under-croft car parking (34 spaces) within the building footprint, plus an additional 44 on-site spaces, providing a total of 78 parking spaces.
- Separate generator gantry accommodating 188 backup generators.
- Landscaping and associated public domain works.
- Extension and augmentation of physical infrastructure and utilities as required, including an on-site substation and water storage tanks integrated within the building footprints.
- Off-site works comprising the delivery of two 330kV transmission lines from the TransGrid Sydney West Substation site to the subject site, utilising existing road reserve along Lenore Drive.

Following public exhibition of the SSDA, the Applicant has updated the proposal to respond to issues raised in submissions, reflect ongoing consultation and incorporate a targeted amendment to the project.

Importantly, the only change that triggers the requirement for an amendment to the SSDA is the inclusion of the external HV connection and associated additional land. All other changes represent design development and refinements to the approved scheme.

The following change constitutes the amendment to the project:

- Inclusion of off-site HV infrastructure works, comprising two 330kV underground transmission lines (approximately 2.1 km in length) connecting the TransGrid Sydney West Substation to the site within the Lenore Drive road reserve.
- Expansion of the project area to include land within Lenore Drive to accommodate the HV connection, including Lots 15, 16 and 17 in DP 1157491 which comprise the Lenore Drive road reserve.
- Update to the staging strategy to include delivery of the external HV cabling route as part of Stage 1.
- Increase in EDC from approximately \$1.50 billion to \$3.70 billion, reflecting the expanded scope of works including the off-site HV infrastructure and updates following consultation with DPHI.

The following changes have been made in response to submissions or reflect ongoing design development and refinement, and do not alter the fundamental nature of the development.

- Minor adjustment to building siting, including a shift of the eastern data centre building approximately 3 metres to the west.
- Minor increase in total GFA from 55,651m² to 56,506m², with a corresponding increase in FSR from 0.72:1 to 0.73:1.
- Minor reduction in site coverage from 57.04% to 56.07% reflecting refinements to the building footprint and layout.

- Expansion of the generator gantry footprint by approximately 8 metres in a north south direction to accommodate an increase in diesel backup generators from 170 to 188.
- Gantry height remains consistent with the previous submission, with increased screening to accommodate the revised gantry floor to floor height.
- Adoption of a waterless (air cooled) mechanical cooling system, replacing the previously proposed water-based system and removing 23 industrial water tanks.
- Relocation and consolidation of ancillary infrastructure including fire tanks, pump room and security fencing.
- Refinement of the internal road network including conversion of the eastern and southern roads to two-way operation, realignment of the northern road, and adjustments to the northern ramp.
- Reduction in total earthworks (net fill) from approximately 39,780m³ to 38,460m³ reflecting updated grading and site levels.
- Introduction of retaining walls along sections of the eastern and southern internal roads in response to revised levels and alignments.
- Increase in deep soil area from 14,733.8m² (19.07%) to 15,806.37m² (20.5%) following removal of industrial water tanks.
- Minor reduction in tree canopy coverage from 8,856m² (11.46%) to 8,181m² (10.59%) associated with revised landscape design and infrastructure coordination.
- Minor internal refinements to the ancillary office floorplans, including the introduction of a corridor connecting both buildings at Upper Ground level.

A comparative analysis has been undertaken of the proposed design changes to the original development in accordance with the DPHI *State Significant Development Guidelines* and is provided below:

Table 5 Comparative Analysis of Original and Amended Proposals

Element	Original Proposal	Amended Proposal	Change
Site Area	77,241.97m ²	77,241.97m ² plus land within the HV route (Approx. 80,000m ² for the HV route (allowing a 40m width along a 2.1km route))	+ 80,000m² approximate (to facilitate external HV works)
Site Address	78 Lockwood Road, Erskine Park NSW 2769 – Lot 101 / DP 1268632	The amended development footprint also includes additional land to accommodate the high-voltage connection, specifically land within Lenore Drive (public road, partly zoned C2 Environmental Conservation and partly zoned IN1 General Industrial) which comprises: ▪ Lot 15 / DP 1157491 ▪ Lot 16 / DP 1157491 ▪ Lot 17 / DP 1157491	No change to data centre site. Additional project area for the external HV works, comprising: ▪ Lot 15 / DP 1157491 ▪ Lot 16 / DP 1157491 ▪ Lot 17 / DP 1157491 being land within the Lenore Drive reserve.
Land Use Activity	Data centre with ancillary office space	Data centre with ancillary office space Ancillary HV connection	Addition of an ancillary HV connection.
Total GFA	55,651m ²	56,506m ²	+ 855m²

Element	Original Proposal	Amended Proposal	Change
Data Halls	32 data halls	32 data halls	No change.
Maximum Building Height	26.5m over 3 storeys	26.5m over 3 storeys	No change.
Floor Space Ratio	0.72:1	0.73:1	+ 0.01:1 additional FSR (on data centre site)
Site Coverage	44,062.38m ² (57.04% of data centre site)	43,313.09m ² (56.07% of data centre site)	- 749.29m² building footprint
Deep Soil Area	14,733.8m ² (19.07% of data centre site)	15,806.37m ² (20.5% of data centre site)	+ 1,072.57m² additional deep soil
Tree Canopy Coverage	8,856m ² (11.46% of data centre site)	8,181m ² (10.59% of data centre site)	- 675m²
Car Parking	78 car spaces, including 2 accessible spaces	78 car spaces, including 2 accessible spaces	No change.
Bicycle Parking	30 bicycle spaces	30 bicycle spaces	No change.
Motorbike Parking	3 motorbike spaces	3 motorbike spaces	No change.
Cut and Fill Volume	Net fill of approximately 39,780m ³	Net fill of approximately 38,460m ³	- 1,320m³ reduction in net fill.
Utilities	Provision of required utilities including: 170 x diesel generators accommodated with generator gantry structure 23 x water tanks for industrial water 2 x above-ground water tanks for fire water 330/132/11kV switching station	Provision of required utilities including: 188 x diesel generators accommodated with generator gantry structure 2 x above-ground water tanks for fire water 330/132/11kV switching station	+ 18 additional diesel generators. Deletion of water tanks for industrial water (- 23 water tanks) due to change to waterless mechanical cooling system. No change to above-ground water tanks for fire water. No change to switching station.
External HV Works	None proposed.	Off-site works comprising the delivery of two 330kV transmission lines from the TransGrid Sydney West Substation site to the subject site, utilising existing road reserve along Lenore Drive.	External HV works now included in SSDA.

Element	Original Proposal	Amended Proposal	Change
Power Consumption	450 MW	450 MW	No change.
Operations and Management	The facility will be constructed by STACK and operated by future tenants. The facility will operate on a 24/7 basis.	The facility will be constructed by STACK and operated by future tenants. The facility will operate on a 24/7 basis.	No change.
Staging and Construction	The project is to be constructed over two stages: - Stage 1 – Eastern data centre building, on-site substation, generator gantry, external plant and equipment, new Lockwood Road access, internal roads, car parking, and landscaping - Stage 2 – Western data centre building, gantry expansion, external plant and equipment, additional car parking and landscaping	The project is to be constructed over two stages: - Stage 1 – Eastern data centre building, on-site substation, generator gantry, external plant and equipment, new Lockwood Road access, internal roads, car parking, landscaping, and external HV cabling route - Stage 2 – Western data centre building, gantry expansion, external plant and equipment, additional car parking and landscaping	Works to facilitate HV cabling route now included as part of Stage 1.
Estimated Development Cost	\$1,502,051,858.30	\$3,699,726,631.89	+\$2,197,674,773.59
Jobs	Construction: 1,100 Operation: 200	Construction: 1,482 Operation: 200	Construction: +382 Operation: No change

3.2 Detailed Description

3.2.1 Project Area

The amended data centre proposal applies to the same primary site, comprising 77,241.97m² at 78 Lockwood Road, Erskine Park which is legally described as Lot 101 / DP 1268632.

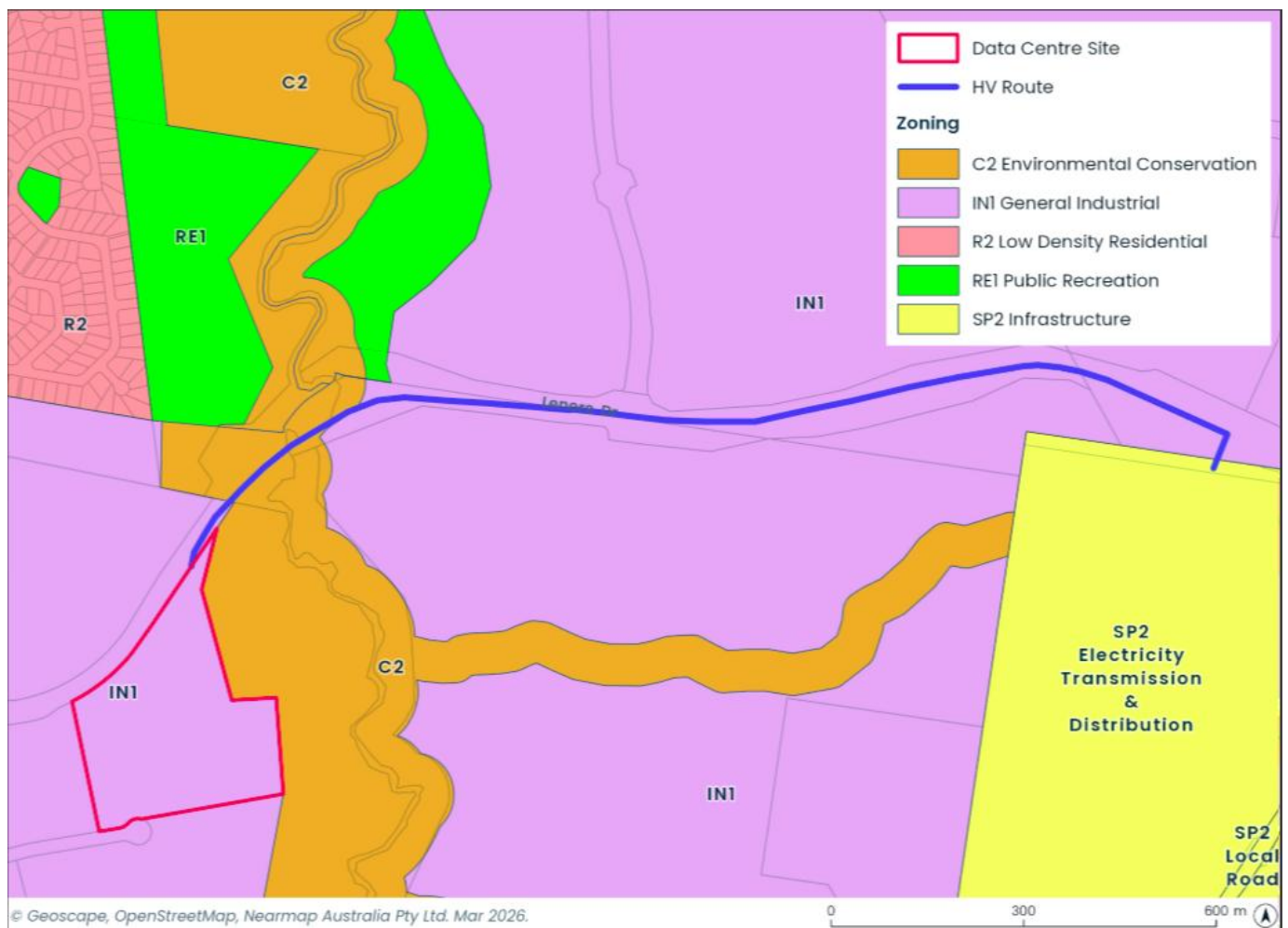
The amended development footprint also includes additional land to accommodate the high-voltage connection, specifically land within Lenore Drive (public road, partly zoned C2 Environmental Conservation and partly zoned IN1 General Industrial) which comprises:

- Lot 15 / DP 1157491
- Lot 16 / DP 1157491
- Lot 17 / DP 1157491

It is highlighted that the HV route, or any works associated with its construction, will not encroach on any private land.

A map showing the data centre site and the off-site HV cabling route is provided at **Figure 2**.

Figure 2 Zoning Map



Source: Urbis, 2026

3.2.2 Site Preparation Works

Bulk Earthworks

The site is level with no basement proposed however bulk earthworks will still be required to establish development platforms suitable for the proposed data centre and associated infrastructure.

The original proposal resulted a net fill of approximately 39,780m³. The amended earthworks strategy results in a net fill of approximately 38,460m³, reflecting minor updates to the layout. This represents a reduction in net fill of approximately 1,320m³.

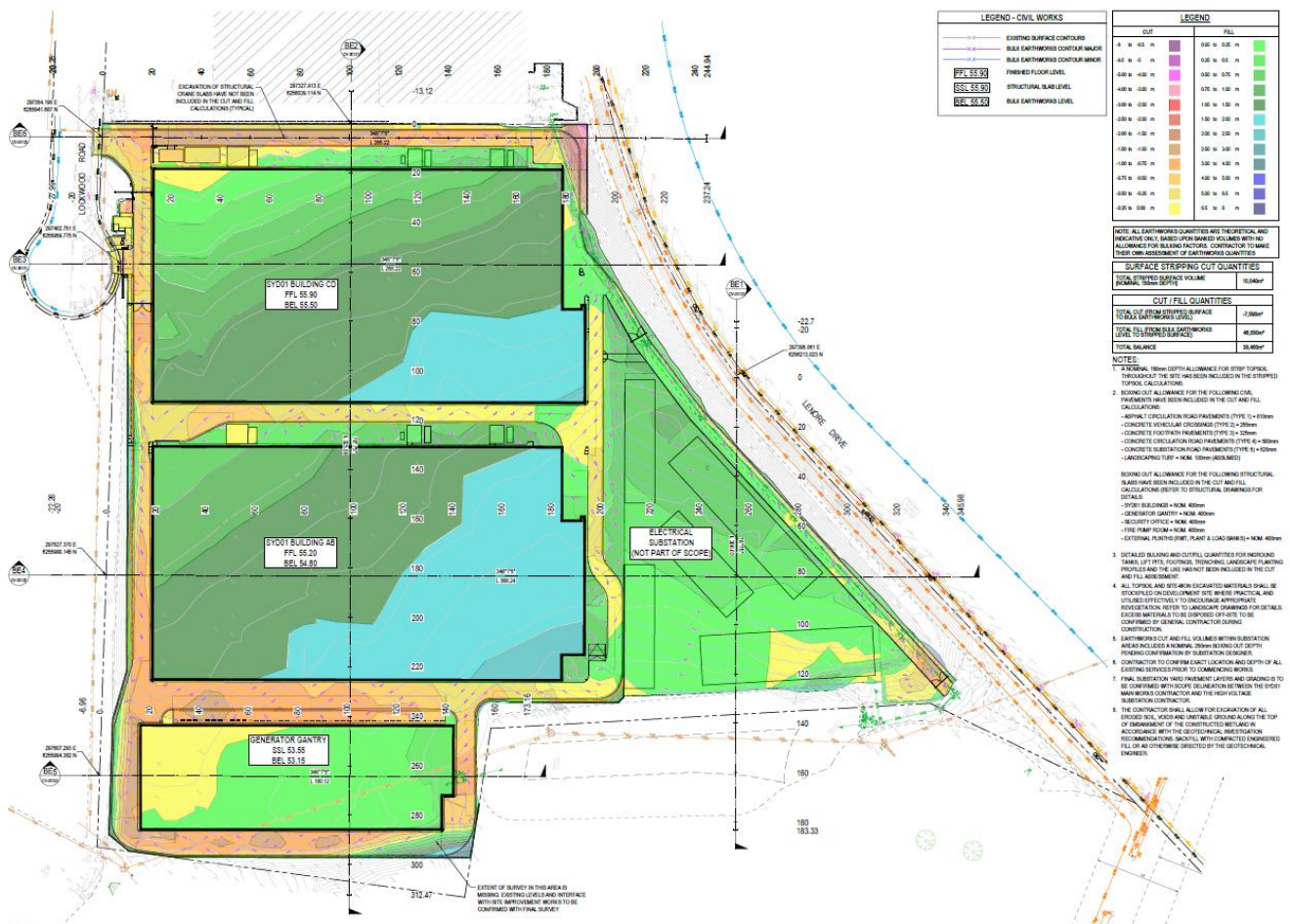
The revised proposal introduces retaining walls of up to 2 metres in height along sections of the eastern and southern internal roads associated with revised levels and road alignments.

The earthworks strategy has been informed by the need to minimise unnecessary ground disturbance, while ensuring efficient coordination with the broader precinct's road network, servicing strategy, and urban design objectives. An extract of the revised cut and fill plan is provided in **Figure 3**.

Tree Retention

The original proposal did not require any tree removal for the data centre site. The amended proposal which includes the HV works, similarly does not require any tree removal.

Figure 3 Proposed Cut and Fill Plan



Source: ACOR, 2026

3.2.3 Physical Layout and Design

Built Form and Scale

The amended proposal includes minor refinements to the layout and design of the data centre development to improve functionality, internal circulation and landscaped areas. These changes are modest and do not alter the fundamental built form, scale or overall design intent of the development.

The amended proposal includes a minor increase in GFA and FSR, and a slight reduction in site coverage. These changes represent a negligible variation from the original proposal. A minor adjustment to building siting is also proposed, including a shift of the eastern data centre building approximately 3 metres to the west.

The overall building footprints and massing of the two data centre buildings and generator gantry remain largely consistent with the original proposal. There is no change to building heights. A minor expansion of the generator gantry footprint in a north–south orientation has been incorporated to accommodate an increase in backup generators.

Cooling System and Plant Changes

The amended proposal adopts a waterless (air-cooled) mechanical cooling system, replacing the previously proposed water-based system and resulting in the removal of 23 industrial water tanks. This change has enabled consolidation of plant and contributed to increased deep soil areas and additional landscaping, particularly along the western boundary and within the central north–south spine.

Setbacks and Building Separation

Setbacks have generally been maintained across the site, with some areas increased and others subject to minor localised reductions. Along the western boundary, the setback has increased from a minimum of 8.5 metres to up to 18.49 metres across much of the boundary, facilitated by the removal of the water tanks and replacement with landscaping.

At the north–west corner, a minimum setback of 13.17 metres is maintained, increasing to more than 28.3 metres to the substation and over 50 metres to the eastern building along the frontage. Along the eastern boundary, the setback from the generator gantry has reduced from 10.2 metres to 8.81 metres. In contrast, the setback to the eastern data centre building has increased from 13.2 metres to 15.35 metres due to the westward shift. The substation setback of 10 metres remains unchanged.

Setbacks along the southern boundary remain largely consistent, ranging from 12.62 metres to 19.11 metres.

The removal of the water tanks has resulted in a revised separation between the two data centre buildings of approximately 18 metres. While this is reduced from 21.6 metres, the previous arrangement included tanks within this space, resulting in a more limited effective separation. The amended layout continues to present as two distinct buildings, consistent with the original design intent.

Internal Circulation and Access

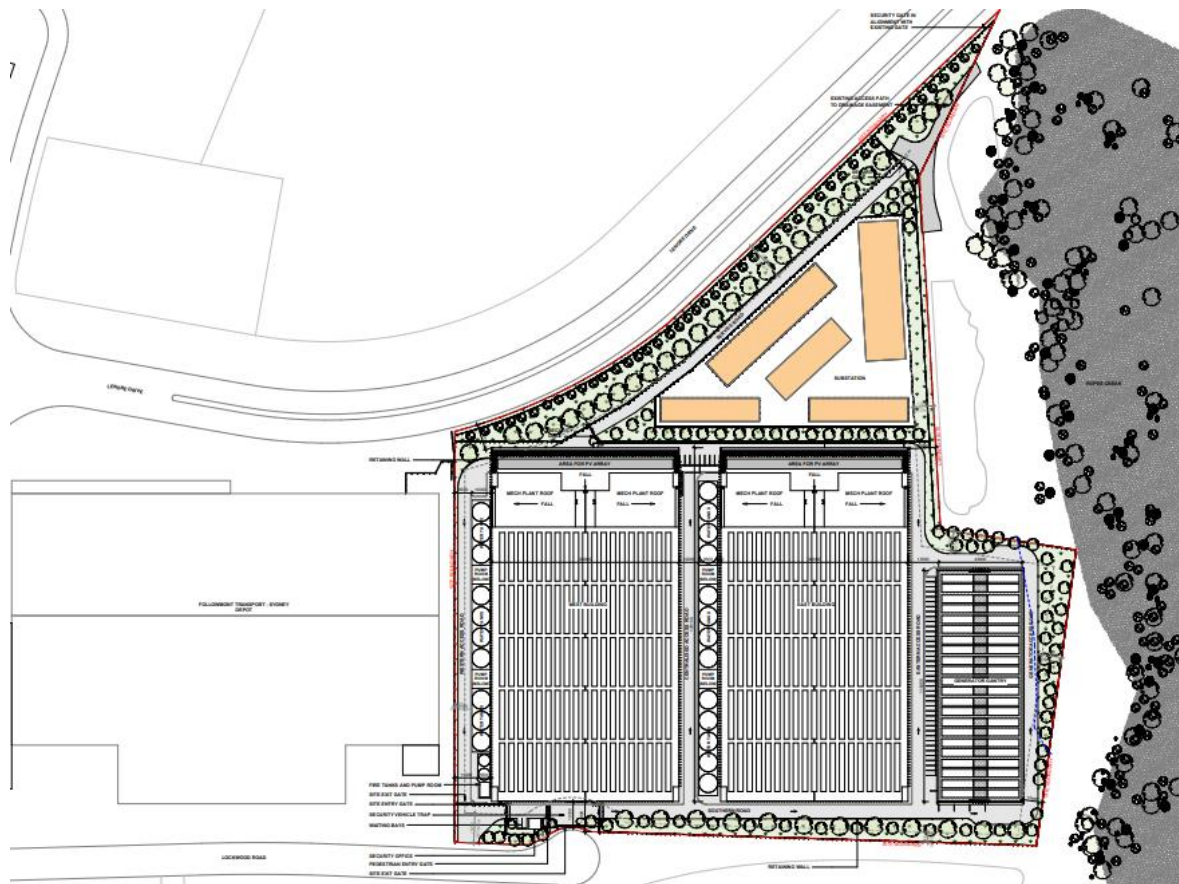
Refinements to the internal road layout, including conversion of the eastern and southern access roads to two-way operation, have resulted in changes to internal circulation. These changes have also led to a minor increase in separation between the eastern data centre building and the generator gantry stack, including an increase from 16.4 metres to 18.5 metres in this location.

Internal Layout

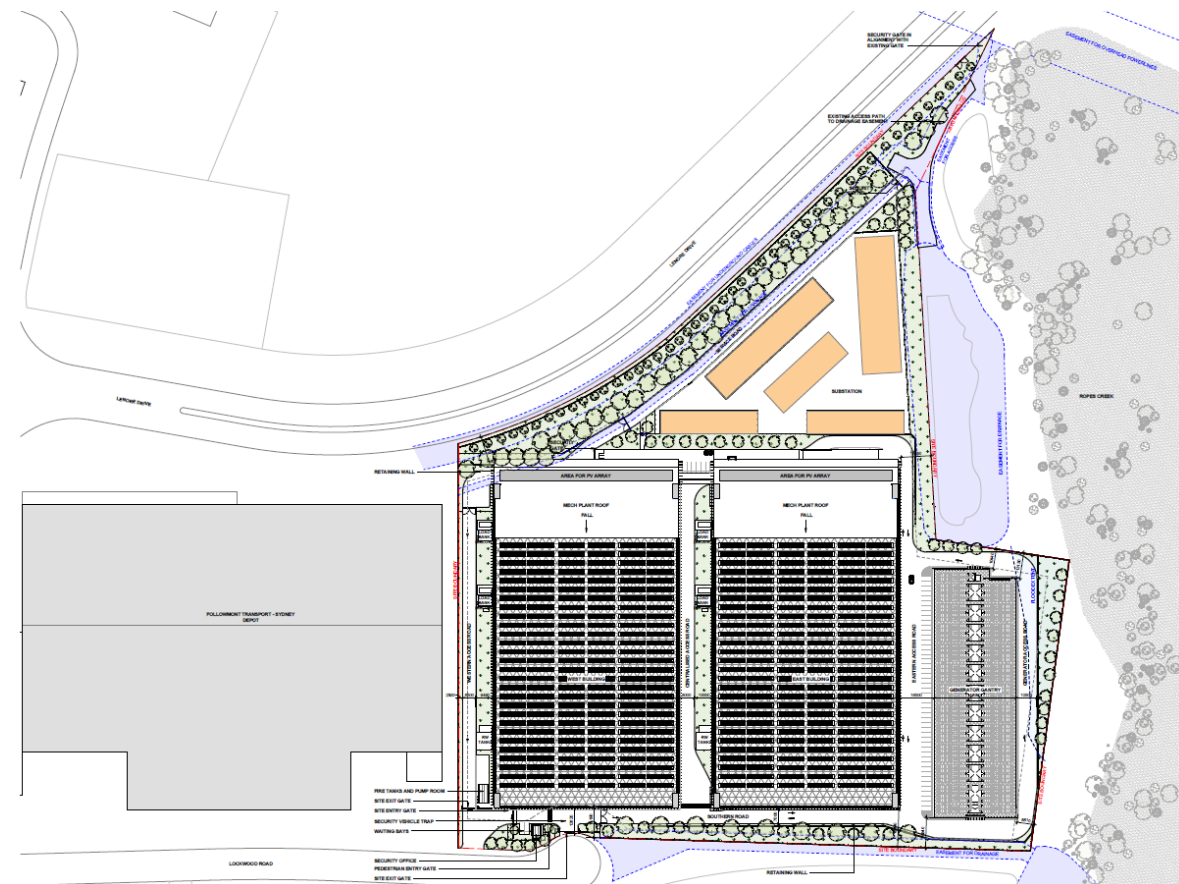
Minor refinements have been made to the ancillary office floorplans, including adjustments to room layouts, lobbies and plant areas, as well as the introduction of a circulation corridor connecting the two buildings at upper ground level. These changes do not affect the external appearance, bulk or scale of the development.

Comparisons of the original and amended site layouts are provided below.

Figure 4 Comparison of Original and Amended Site Layout

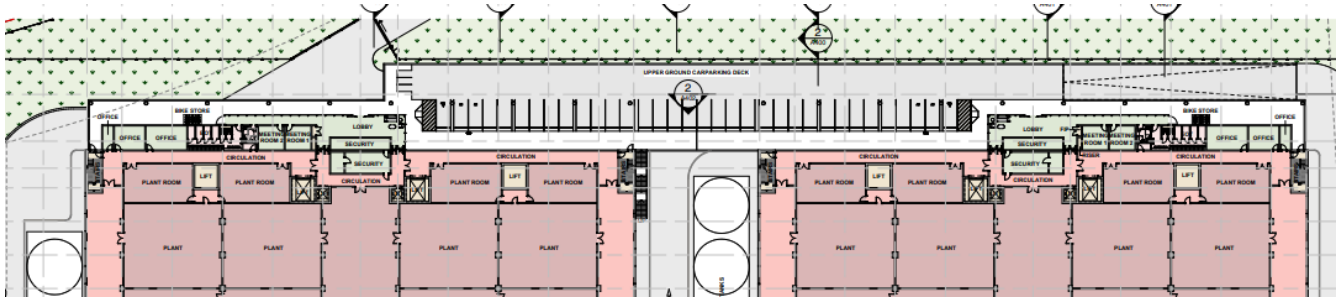


Picture 1 Original Site Layout

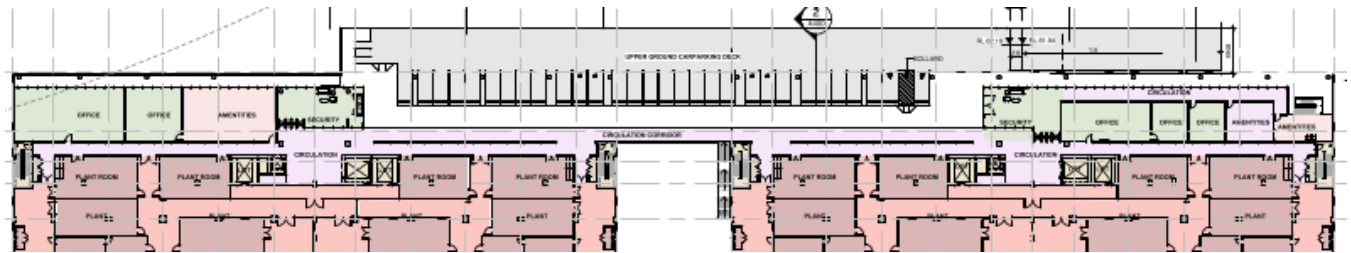


Picture 2 Amended Site Layout

Figure 5 Comparison of Original and Amended Internal Office Layout (Upper-Ground Level)



Picture 3 Original Upper-Ground Level Office Layout



Picture 4 Amended Upper-Ground Level Office Layout

Source: Genton, 2026

Materials and Finishes

No changes are proposed to the external materials and finishes from those originally proposed and exhibited. The development will continue to apply a refined yet robust materials palette that balances the operational demands of a mission-critical data centre with a cohesive, high-quality built form for the Erskine Business Park, consistent with the scheme as originally proposed by this SSDA.

Landscaping

The amended proposal includes an updated landscaping plan that responds to the revised site layout and improves integration of the development with its surrounding context, including adjacent industrial development and environmental conservation zones.

The removal of the 23 industrial water tanks has enabled additional landscaping across the site. The development will now provide 15,806.37m² of landscaping, equating to 20.5% of the site area. This represents an increase of 1,072.57m² (or an additional 1.24% of total site area) as compared to the original proposal. All landscaped areas are provided as deep soil.

As shown in the comparison of the original and amended landscape master plans below, the additional landscaping and deep soil areas are primarily located to the west of the western data centre building and along the central north-south spine between the two data centre buildings, within the location previously occupied by the industrial water tanks.

Figure 6 Comparison of Original and Amended Landscape Master Plan



Picture 5 Original Landscape Master Plan
Source: Habit8, 2026



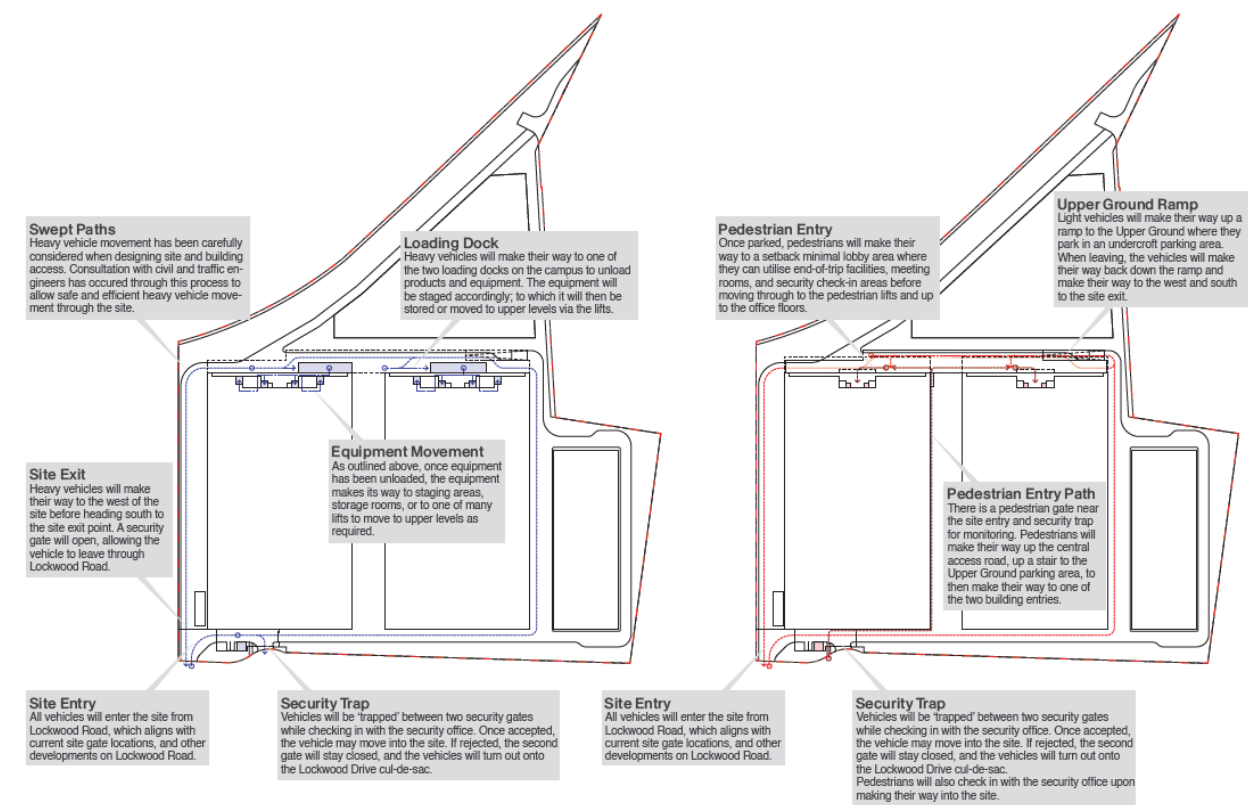
Picture 6 Amended Landscape Master Plan

3.2.4 Access, Parking, and Circulation

The amended proposal includes minor refinements to the internal access and circulation network to improve functionality and efficiency. Key changes include conversion of the eastern and southern internal roads to two-way operation, realignment of the northern road, and adjustments to the northern vehicle ramp. These refinements improve internal vehicle circulation and site operations. An updated access strategy diagram is provided at **Figure 7**.

The changes also result in minor adjustments to internal separation distances between built elements and circulation areas, including increased separation between the eastern data centre building and the generator gantry. There are no changes to site access points, the external road network, or the number and arrangement of car parking spaces.

Figure 7 Updated Circulation Strategy



Source: Genton, 2026

3.2.5 Uses and Activities

Hours of Operation

The amended proposal will operate on a 24 hour / 7-day basis, consistent with the originally lodged proposal. This allows for the critical operation of the data centre operations and includes loading and unloading, data centre, and office operations.

Employment

The construction phase of the project will generate 1,482 full-time equivalent jobs, which represents an increase of 382 construction jobs as result of the inclusion of the external HV works. The data centre will continue to generate 200 full-time equivalent jobs once operational, having regard to the 24-hour shifts and the typical 3x 8-hour shifts, consistent with the originally lodged and exhibited proposal.

Land Use

The proposed amendments do not result in any changes to the proposed land use activities on the data centre site. However, there have been minor refinements to the proposed floor space of individual components of the development, as outlined below.

Table 6 Changes to Floor Space

Land use	Changes to Floor Space
Data Centre	The original proposal included 41,221.16m ² of data centre floor space, across two levels. The amended proposal provides 41,845.54m ² of data centre floor space, across two levels. The amended proposal will increase the quantum of data centre floor space by 624.38m ² .
Ancillary Floor Space (Office, Circulation,	The original proposal included 14,429.41m ² of ancillary floor space, across two levels. The amended proposal provides 14,660.44m ² of ancillary floor

Land use	Changes to Floor Space
Amenities, BOH, Gatehouse, Storage)	space, across five levels. The amended proposal will increase the quantum of ancillary floor space by 231.03m ² .

Overall, the proposal as amended will result in a total net increase of 855.41m² of floor space on the data centre site. The physical relationship of the different components of the development on the data centre site (data halls and ancillary uses) will remain unchanged from the original scheme.

As part of this amended proposal, consent is also sought for the construction of the HV cabling route, which is external to the data centre site, as an ancillary land use to facilitate the data centre development.

3.2.6 Utilities

The amended data centre project will include provision for the following utilities:

- 330kV/132kV/11kV on-site substation
 - No change from original scheme
- 188 x 3.1 MW containerised diesel generators (94 x per data centre building) each with 990L day tanks.
 - The original scheme proposed 170 x diesel generators
- 2 x 167kL fire water tanks
 - The original scheme proposed 2 x 646kL tanks
- 2 x 250kL rainwater tanks for non-potable water use
 - The original scheme proposed 2 x 400kL rainwater tanks

Water

The amended scheme includes a revised mechanical cooling system. The original proposal incorporated a water-cooled system, comprising free cooling and air-cooled chillers with an adiabatic wetting system. This arrangement required potable water as part of system redundancy, resulting in the need for significant water supply and on-site storage, including 23 industrial water tanks.

Following further design development, the proposal now adopts a waterless (air-cooled) cooling system that rejects heat directly to the atmosphere without relying on evaporative processes. As a result, the system no longer requires cooling make-up water, water treatment cycles or associated storage infrastructure.

This change significantly reduces the development's potable water demand. The remaining water demand is limited to fire system top-up, irrigation and building amenities, with a total demand of approximately 8.75 L/s.

The following connections are proposed to existing Sydney Water assets (note that these proposed connections remain the same as the original proposal):

- 100mm potable water connection to the existing 300mm PVC trunk main on the northern side of Lenore Drive
- 200mm fire water connection to the existing 300mm PVC trunk main on the northern side of Lenore Drive
- 255mm sewer connection to the existing 525 GRP sewer trunk main on the eastern side of the site

On-site Substation

There are no changes to the configuration or operation of the on site substation as part of the amended proposal. All infrastructure downstream of the 330kV switchroom will continue to be privately owned and operated by STACK Infrastructure, consistent with the original proposal.

A detailed description of the proposed external HV cabling works is provided at **Section 3.2.8**.

Backup Power System

The amended proposal retains the backup power generation system within the generator gantry located in the south east corner of the site. The overall arrangement and function of the system remain consistent with the original proposal, with minor refinements to accommodate an increase in generator numbers.

The system is designed to provide standby power to support critical data centre operations in the event of a mains power failure. It comprises a total of 188 high voltage 3.1MW containerised diesel generators (94 per data centre building). Generators will operate only during utility outages or for routine testing purposes and support a total load of approximately 450MW.

The generators will be arranged in a stacked configuration across Levels 1 to 4 of the gantry, with ground level dedicated to diesel fuel storage. Each generator will include an integrated 1,000L day tank within the enclosure.

Fuel will be supplied from dedicated double skinned above ground diesel storage tanks with leak detection, each with a capacity of approximately 22,700L. These tanks will provide up to 24 hours of fuel storage for each generator and will be designed in accordance with AS 1940.

The generators will be arranged in two rows at each level, with a shared exhaust duct located between each row.

The following table provides the final fuel storage requirements based on the proposed design. These will be delivered in stages, aligned with the utilisation of the colocation space.

Table 7 Amended Fuel Storage Requirements

Storage area	Storage type	Chemical	Class/Division	Quantity	Unit Capacity (L)	Total Capacity
Eastern Building Fuel Storage	Diesel Storage Tank (Individual Double Bunded Tank)	Diesel	C1	94	22,700L	2,133,800L
Eastern Building Fuel Storage	Day tank	Diesel	C1	94	990	93,060L
Western Building Fuel Storage	Diesel Storage Tank (Individual Double Bunded Tank)	Diesel	C1	94	22,700L	2,133,800L
Western Building Fuel Storage	Day tank	Diesel	C1	94	990	93,060L
External Fire Pumphouse	Diesel Fire Pump Tank	Diesel	C1	2	514.8	1,030L
Total ground diesel quantity						4,454,750L

The amended backup power system will operate in accordance with the updated testing regime outlined below. The revised generator testing schedule is anticipated to have a cumulative total testing hours well below the 200-hour exemption limit outlined in Schedule 1 Clause 17 of the *NSW Protection of the Environment Operations Act 1997*

Table 8 Amended Standby Generator Maintenance Testing Regime

Test type	Period	Duration (mins)	Tests per data hall building per year			
			SYD01A	SYD01B	SYD01C	SYD01D
Run test	Monthly	5	12	12	12	12
Off-load run	Quarterly	10				
Load banking	Annual	60				
Cooldown period	Post-test	10				
Total runtime per generator (mins)					170	
Total cumulative runtime (mins)					8,160	
Total cumulative runtime (hours)					136	

3.2.7 Construction Staging

The amended project will consist of two construction stages (consistent with the original proposal) updated as follows:

- Stage 1 – Eastern data centre building, on-site substation, generator gantry, external plant and equipment, new Lockwood Road access, internal roads, car parking, landscaping, and external HV cabling route.
- Stage 2 – Western data centre building, gantry expansion, external plant and equipment, additional car parking and landscaping.

It is expected the standard construction work hours will apply for the main data centre site as follows:

- Monday to Friday: 7am - 5pm
- Saturday: 8am - 1pm
- Sunday and Public Holidays: No works

All construction works associated with the main data centre site are proposed to be in accordance with the original scheme and EIS. As the off-site HV transmission line along Lenore Drive involves road works, installation will require sequential lane closures and will primarily be undertaken at night (subject to approvals) to minimise traffic disruption.

3.2.8 External HV Works

Overview

The external HV works comprise two 330kV underground transmission cables extending from the proposed STACK SYD01 Switchyard, running along Lenore Drive, and terminating at the port of entry to the TransGrid Sydney West Substation. Any augmentation works within the Sydney West Substation will be undertaken by TransGrid and subject to separate approval.

Site Works

The amended project includes the installation of two HV cables, from STACK SYD01 Switchyard, via road reserve within Lenore Drive to the TransGrid Sydney West Substation. The total route length is approximately 2.1km. The transmission line extends across two LGAs, Penrith City Council and Blacktown City Council, as well as Crown land and a TfNSW State Road reserve.

Key components of this scope include:

- External HV Cable works extending from the STACK SYD01 Switchyard to the TransGrid Sydney West Substation, including:
 - Two x 330kV underground transmission cable circuits comprising six cables installed within six conduits
 - Two smaller conduits for optical fibre infrastructure
 - Approximately 2-4 joint bays per circuit, located at intervals of approximately 600-800 metres along the transmission route
 - Associated link boxes and sensor boxes at each joint bay to enable testing and maintenance
- STACK SYD01 Customer Switchyard
 - Two x GIS buildings approximately 75 x 50 metres
 - Three x 250 MVA transformers and eight x 90 MVA transformers
 - Auxiliary electrical equipment

Associated works required to facilitate the construction of the project, such as potential utility relocations have been considered. No major utility relocations are anticipated. Where minor services require adjustment to accommodate the transmission cable circuits, these works would be limited to within the project area.

A summary of the external HV installation works is provided below:

Table 9 Project Summary – External HV Works

Element	Summary of Proposal
Excavation Method	Open trenching will be undertaken along the HV route, comprising a double circuit trench up to approximately 2 metres wide and 4 metres deep. The trench configuration may vary (trefoil to flat) to accommodate utility crossings. Horizontal Directional Drilling (HDD) will be used for the Ropes Creek crossing and deep utility crossings, with an approximate depth of 15 metres.
Cable Life	Minimum design life of 45 years
Cable Length	Total approximate length is 2.1km
Key Components	▪ 330kV cable route: conduits, joint bays, 330kV cables and temporary laydown areas ▪ STACK Erskine Park onsite substation: civil works, primary electrical equipment, gas insulated switchgear (within buildings), power transformers, air insulated switchgear and temporary laydown areas
Timing and Duration	Energisation target is October 2027 (excluding contingency or risk allowance).
Workforce	Peak workforce is estimated around 50 personnel.
Estimated Spoil Volume	▪ Cable trenching: Two x 2.1km trenches (approximately 2 metres wide and 4 metres deep), generating approx. 33,600m³ of excavated material. ▪ Onsite substation: approximately 9,000m² site area with 300 mm topsoil stripping, generating approx. 2,700m³ of material. ▪ Total estimated spoil volume: Approx. 36,300m³
Hours of Construction	Standard construction hours will be adopted where reasonable and feasible: ▪ Monday to Friday 7:00 am to 6:00 pm

Element	Summary of Proposal
	- Saturday 8:00 am to 1:00 pm - No works on Sundays and public holidays Works outside standard construction hours, including night works and 24-hour operations, may be required for activities along Lenore Drive, at cable joining locations, and other areas as necessary or as requested by relevant authorities. TransGrid requires out of hours works for non-noise generation works during commissioning and when there are outage restrictions for the substation and lines.

The Project Area

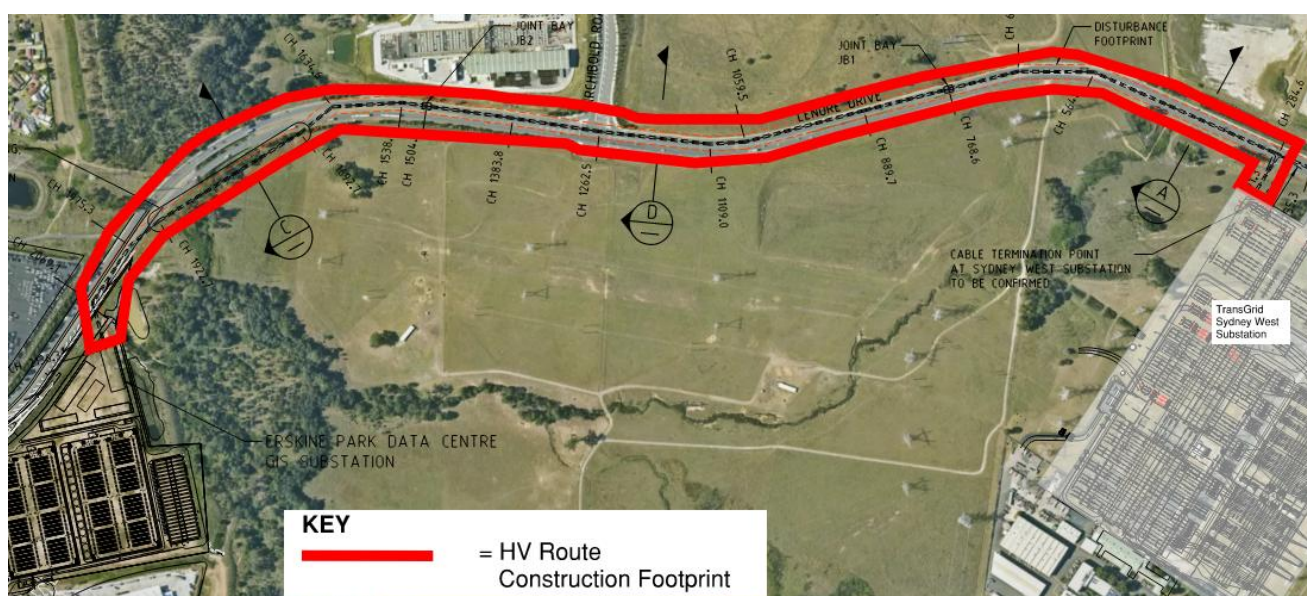
The project area for the external HV works comprises the overall potential area of direct disturbance by the project, which may be temporary (for construction) or permanent (for operational infrastructure) and extend below the ground surface.

The project area extends along the Lenore Drive road reserve and includes the crossing of Ropes Creek. Land affected by the works includes 78 Lockwood Road, Erskine Park (Lot 101 in DP 1268632) and Lots 15, 16 and 17 in DP 1157491 located along Lenore Drive.

While the project area defines the extent within which infrastructure may be located and works may occur, not all areas will be disturbed. Detailed design will refine the final alignment of the transmission cable within the road reserve and the location of joint bays and associated infrastructure within the assessed project area.

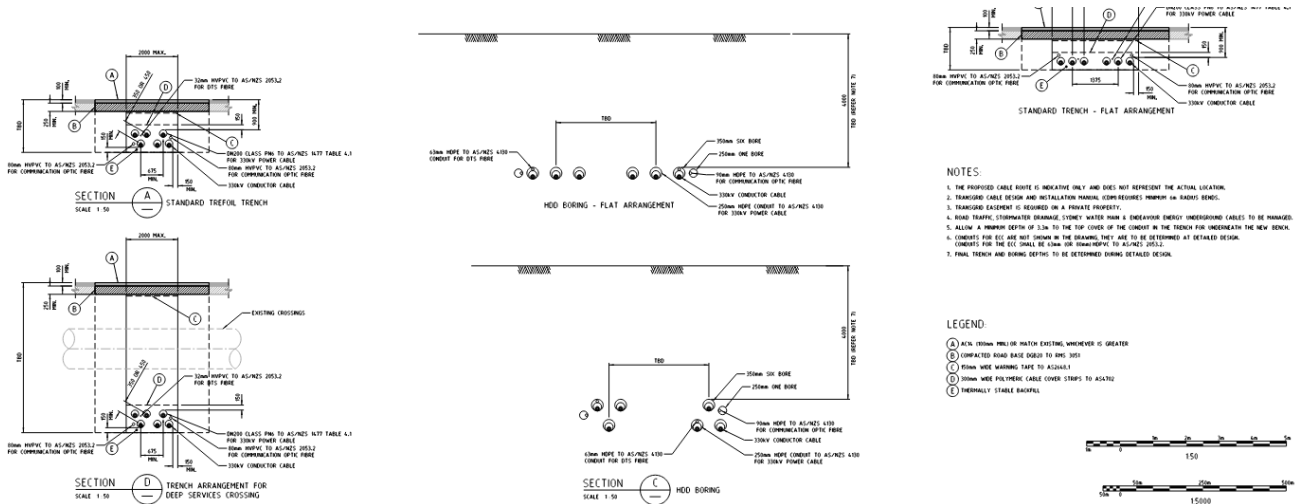
The proposed HV connection route crosses out of the Penrith City Local Government Area and extends into the Blacktown Local Government Area.

Figure 8 HV Cabling Route Map



Source: TransGrid and Urbis, 2026

Figure 9 Typical Trench Configurations



Source: TransGrid, 2026

Construction Activities

Construction activities will include:

- Site preparation including establishment and securing of work sites and construction laydown areas.
- Trenching and excavation of the transmission cable route.
- HDD for Ropes Creek crossing. Identification and confirmation of existing services/utilities and relocation where required.
- Installation of conduits.
- Excavation and construction of joint bays and associated concrete pits for ancillary infrastructure.
- Restoration of disturbed areas, including backfilling, surface reinstatement and rehabilitation.
- Cable pulling and jointing.

Traffic Management

Construction of the off-site HV transmission line will involve excavation of a single, double-circuit trench commencing at the STACK SYD01 Switchyard and extending along Lenore Drive.

Given the location of the works within the road reserve, construction will impact vehicle movements along Lenore Drive. The works are therefore expected to require staged traffic management measures, including sequential lane closures and re-openings, to facilitate safe construction while maintaining traffic flow.

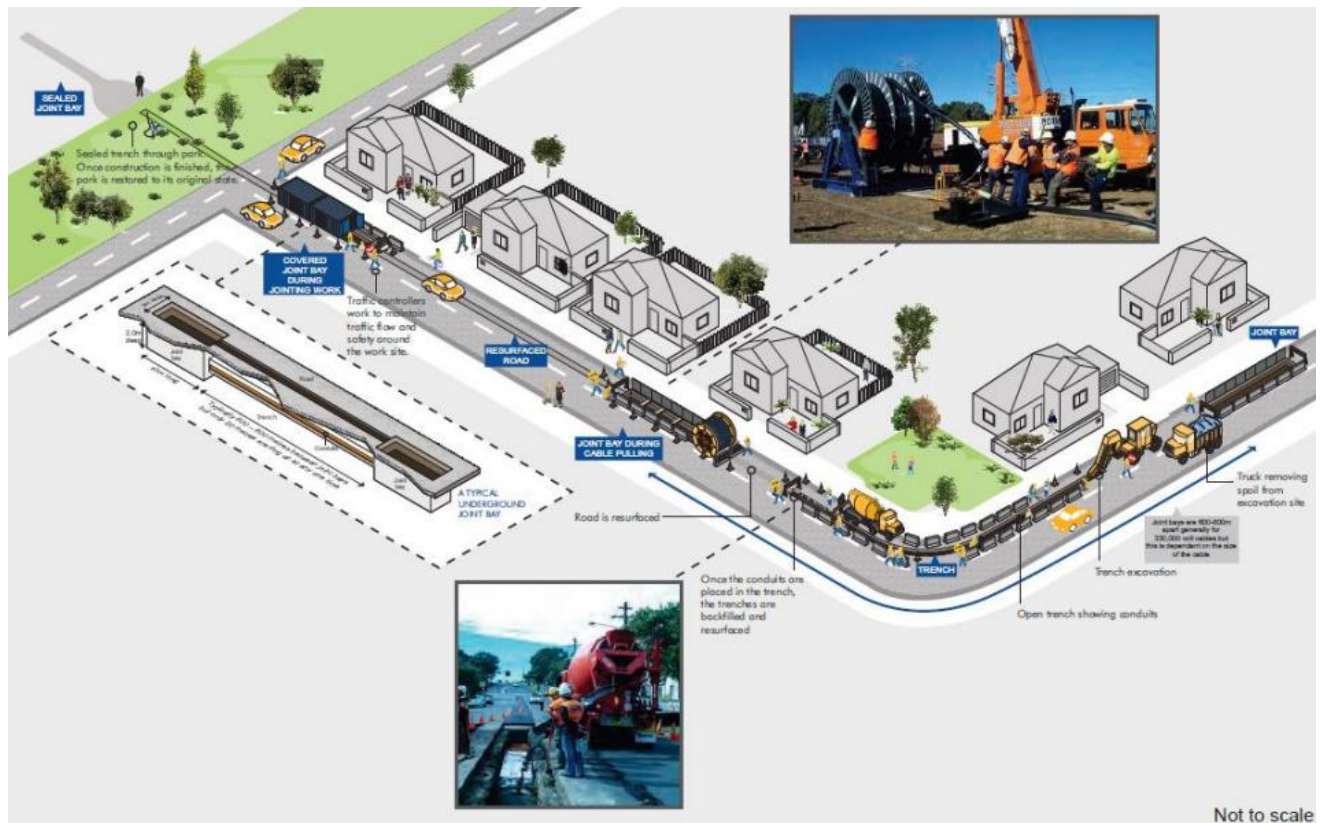
Traffic management is anticipated to include contraflow arrangements and associated traffic control measures. Where other lane closures are in place concurrently, alternative traffic control measures or detour routes will be implemented to ensure continuity of access.

Detailed construction staging and traffic management arrangements will be developed following contractor appointment. An indicative staging program for the off-site HV transmission line works is provided below.

Table 10 Indicative Construction Staging for HV Transmission Line

Stage	Description	Duration / Timing
1	Bulk excavation	October 2026 to March 2027
2	Installation of trenching / HDD underboring	January 2027 to September 2027

Figure 10 TransGrid Indicative Overview of Construction Activities



Source: TransGrid, 2026

Site Preparation

Prior to construction of the trench, site preparation activities would be undertaken. These works would include:

- Implementation of traffic management changes (such as safety barriers and road signage) to facilitate access and egress to/from the work sites.
 - Installation of environmental control measures (such as sediment barriers).
 - Minor clearing works (such as vegetation/tree removal).
 - Establishing construction laydown areas and ancillary facilities including temporary offices and worker amenities, site fencing and provision of power/services.
 - Delivery and storage of plant and equipment at construction laydown areas and work sites.

Before excavation commences at each work site within the Lenore Drive Road reserve, HDD Underbore area and STACK SYD01 Switchyard, the location of the trench or excavation would be marked (with chalk or spray paint) and if required, any surface vegetation would be cleared. Non-destructive identification of utilities and services along the route would be undertaken. The recorded location of known existing services crossing the trench would be marked for reference.

Trenching and Excavation

Along the cable route, a single trench will be excavated – approximately 2 metres wide and up to 2 metres deep in a trefoil configuration. At utility crossings, the trench may increase to approximately 3.6 metres wide and 4 metres deep to accommodate a flat configuration.

Trenching would be undertaken in short sections (typically around 20 metres at a time), with conduit installation and backfilling occurring progressively to minimise the extent of open excavation.

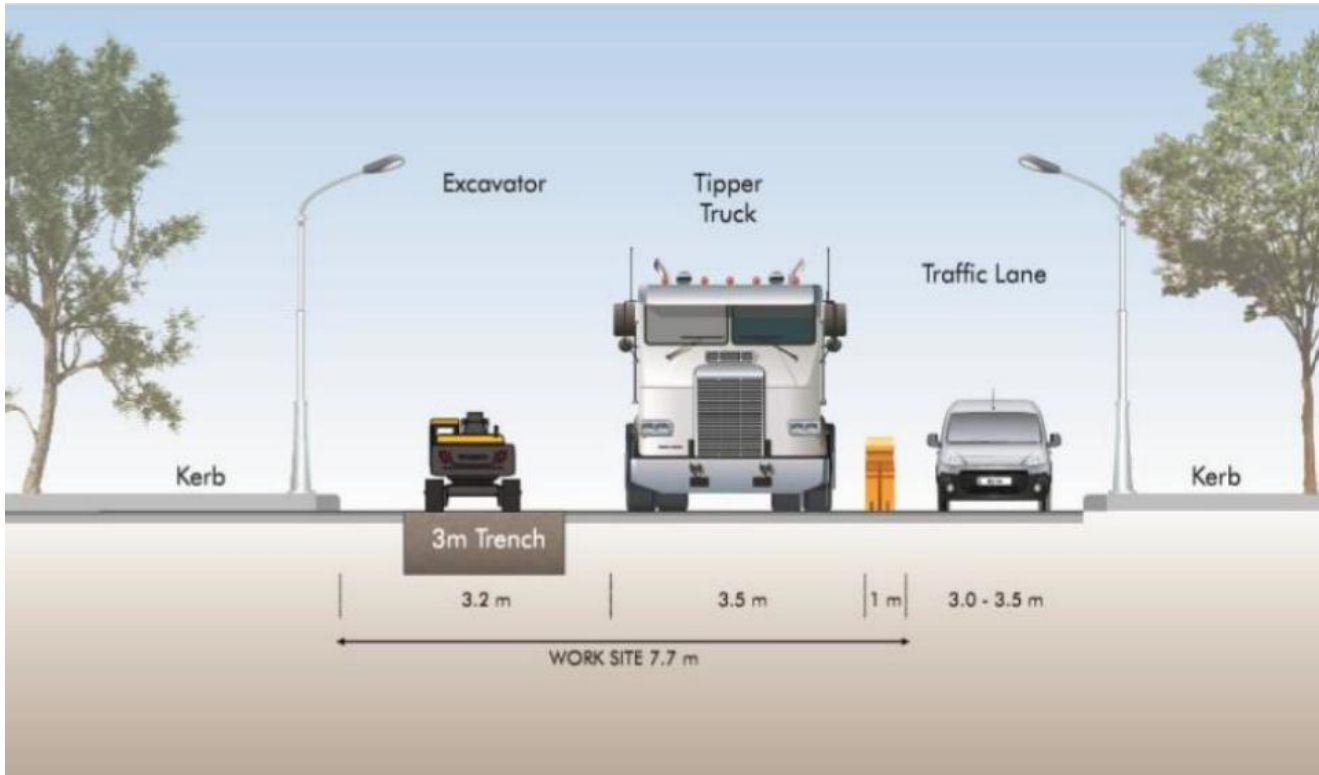
Prior to excavation, saw cutting of the road surface or pavement would be undertaken. Excavation would be carried out using standard plant such as excavators and loaders. Where hard material or rock is encountered, a rock breaker may be used.

Following confirmation and relocation of services (where required), excavation would proceed to the base of the trench. Excavated material would be loaded directly into trucks for transport to designated laydown areas for temporary storage or to appropriately licensed off-site facilities for disposal.

Trench stability would be assessed during excavation, and shoring installed where required to prevent collapse, particularly in deeper sections. Open excavations would be secured with appropriate barricades and safety measures when unattended, with regular monitoring to ensure public safety.

Where feasible, works would be undertaken during periods of lower traffic volumes to minimise disruption. Traffic management measures would be detailed in a Traffic Management Plan prepared as part of the Construction Environmental Management Plan (**CEMP**).

Figure 11 Indicative Schematic Description of Kerbside Trenching and Excavation Construction Methodology



Source: TransGrid, 2026

Horizontal Direct Drilling (HDD) Beneath Ropes Creek

HDD and conduit installation would be undertaken to install underground electrical conduits beneath Ropes Creek where open trenching is not feasible.

Launch and receive pits would be excavated at either end of the proposed bore alignment. Pits would typically be approximately 3–6 metres in length, 2–6 metres in width and up to 3–6 metres in depth, depending on conduit size, drilling depth, geotechnical conditions and subject to final design. Prior to excavation, saw cutting of any existing road pavement or hardstand surface would be undertaken and removed. The approximate depth of the trench excavation below Ropes Creek will be 15m below ground surface.

The HDD drilling rig would be situated at the launch pit. A pilot bore would be drilled along the designed alignment using a guided drill head with electronic tracking to maintain the specified depth and line. Drilling fluids would be used to stabilise the bore, lubricate the drill string, and facilitate removal of spoil material. Drilling fluid would be managed at the launch and receive pits with control measure implemented.

Upon completion of the pilot bore, the bore hole would be progressively reamed to the required diameter to accommodate the conduits. Conduits would be pre-assembled and stringed out where space permits, then pulled back through the enlarged bore from the receival pit to the launch pit in a single continuous operation.

Excavated material from the pits would be loaded directly into trucks and transported to designated laydown areas for temporary storage or to appropriately licensed off-site facilities for disposal. Excess drilling fluids would be removed (for example via vacuum truck) and managed in accordance with environmental requirements.

Pit stability would be assessed during excavation, with shoring installed where required to prevent collapse. Open pits would be secured with appropriate barricades and safety measures when unattended, with ongoing monitoring to ensure public and worker safety.

Upon installation of conduits, pits would be backfilled and compacted in layers in accordance with project specifications and relevant authority standards.

Where feasible, works would be undertaken during low traffic periods, to minimise traffic impacts. Traffic management measures during construction would be outlined in a traffic management plan as part of the overarching CEMP for the project.

Service / Utility Relocation

Relevant service/utility providers within the project area will be engaged with regarding the possible interaction with and relocation of services and utilities during the construction of the project.

Conduit Installation

Installation of the conduits for the proposed and possible future transmission cable circuits would generally involve:

- Laying the conduits on plastic spacers to provide the required clearance from the side walls and bottom of the trench.
- Placing the optic fibre communication cable conduits into position.
- Covering the conduits and backfilling the trench with engineered backfill material. Backfilling would occur as soon as practicable following conduit installation to minimise the risk of erosion.
- Laying polymeric covers and warning tape (at various levels over the conduits) marked with appropriate warnings in case of accidental excavation.

Road Restoration Works

Restoration activities with the road reserve would be:

- Temporary, while trenching and cable pulling is still underway; and
- Permanent once cable pulling is complete.

The initial restoration of the road surface would include installing road base and a temporary road surface to allow vehicles and other road users to safely travel across the area. The temporary road surface can be used for a period of up to six months. Permanent restoration of the road surface would involve:

- Removing the temporary road surface.
- Backfilling with road base up to surface level, where required.
- Reinstating the road surface.
- Reinstating the remaining areas with spoil or other fill material to pre-construction levels and final finishing as appropriate (including footpath and/or kerb and gutter).

Cable Markers

Once restoration activities have been completed, cable markers would be installed along the transmission cable route to provide warning of the presence of the cables and the need to make enquiries with TransGrid before undertaking any excavation. The location of the cable circuit will also be registered on Dial-Before-You-Dig prior to construction commencing. Markers may include:

- Small signs attached to road kerbs.

- Concrete marker posts (between 800–900 millimetres tall) along the transmission cable route in vegetated areas where surface markers would be difficult to see.
- Flush markers constructed of concrete that are around 50–100 millimetres thick.

Cable Pulling and Jointing

Joint bays would be excavated via open trenching. Erosion and stormwater flow controls would be installed around the work site to prevent inundation, while hard barriers would be installed to protect the work site from traffic movements and unauthorised pedestrian access. During detailed design, the exact location of joint bays would be determined, with the aim of avoiding driveways and other access points wherever possible. However, where this is not possible and vehicle access to adjacent properties is required across open joint bays, they would be temporarily covered with trafficable steel plates.

Once the joint bays have been established, the cables can be pulled through the conduits. The cables are fed from large cable drums holding around 600–800 metres of cable (refer to images below). The sections of cable on either side of the joint bays are then connected at the joint bays.

Figure 12 Example of Cable Pulling and Cable Joint Works



Source: TransGrid, 2026

Expected Plant and Equipment List

The list of plant and equipment required to facilitate the HV cabling works will be confirmed by the appointed contractor prior to the construction of the HV route. The below list is indicative only.

Table 11 Expected Plant and Equipment List

Activity	Major Plant
Trenching	20–35t excavators, trucks, compactors
Cable Pulling	Winch, drum stands, crane
HDD	250–400t HDD rig, mud plant
Joint Bays	Excavator, shoring, crane
Traffic	VMS, barriers
Environmental	Sediment control, water carts

3.3 Strategic Context

This section describes the way in which the amended proposal addresses the strategic planning policies relevant to the site. It identifies the key strategic issues relevant to the assessment of the project.

The development, as proposed to be amended, remains aligned with relevant State, district, and local strategic plans and policies applying to the site, as summarised below.

Table 12 Strategic Planning Alignment

Strategic Plan	Project Alignment
State and District Plans	
Greater Sydney Region Plan: A Metropolis of Three Cities	The project will continue to align with the vision of the Western Parkland City. The development will facilitate the provision of jobs and economic activity within the WSEA, which is identified as a developing industrial and employment area well connected to transport links. By providing cloud-based data storage, the development enhances operational efficiency for businesses and supports the expanding digital economy. Located on industrial-zoned land, the proposal aligns with strategic planning objectives to attract investment, integrate employment precincts with infrastructure, and drive economic growth. It will generate approximately 1,482 construction jobs and 200 ongoing operational roles. The proposal reinforces WSEA's role as a hub for innovation and remote working through the co-location of advanced data infrastructure and technology-driven enterprises.
Our Greater Sydney 2056: Western City District Plan	The project maintains alignment with the vision of the Western Parkland City in that the development will facilitate the provision of jobs and economic activity within the WSEA, which is identified as a developing industrial and employment area well connected to transport links. Strategically located within the WSEA and less than 10km from the future Western Sydney International Airport, the Proposal enhances accessibility to digital storage and will attract local, national, and international investment. Co-location with key customers will further support business activity across the region. The project will generate up to 1,482 full-time equivalent construction jobs and 200 operational jobs, contributing to job creation and offering Western Sydney residents the opportunity to work locally.
Future Transport Strategy 2056	The proposal, as amended, will remain consistent with TfNSW's Future Transport Strategy as it will deliver high-tech infrastructure within a strategic employment area, leveraging existing and planned transport connections to support economic growth, create skilled jobs, and enable the integration of emerging technologies in line with the State's long-term vision.
Better Placed	The proposal, as amended, will remain consistent with the seven key objectives of the NSW Government Architect's <i>Better Placed</i> guide. A summary of the analysis against the Better Placed objectives, from the Genton Design Report, is provided below. Objective 1. Better Fit The proposal responds appropriately to its industrial context within the Erskine Business Park and the broader WSEA. The built form has been designed with consideration of the surrounding large-format industrial typologies, incorporating a scale and massing that is compatible with neighbouring development. Building orientation, material selection, and landscape integration have been informed by site-specific opportunities and

Strategic Plan	Project Alignment
	constraints, including interface with Lenore Drive and the retention of existing green corridors. Objective 2. Better Performance The development incorporates sustainability initiatives that support environmental performance and long-term resilience. Key features include energy-efficient systems, durable and low-maintenance materials, and construction methods that reduce operational and embodied carbon. The design enables adaptability through a large-span structural grid that allows for future reconfiguration of internal floorplates, ensuring the facility can respond to evolving operational requirements. The removal of the industrial water tanks and the use of waterless cooling technology will further minimise environmental impacts. Objective 3. Better for Community While the proposal is primarily a private data infrastructure facility, it contributes to broader community objectives by supporting digital connectivity and economic development. The design enhances the public realm along Lenore Drive through landscape treatments and articulation of built form. The project provides employment opportunities during construction and operation and contributes to the broader role of the WSEA as a key economic precinct. Objective 4. Better for People The development prioritises safety, clarity of movement and occupant amenity. The site layout provides clear delineation between public and service areas, with safe and legible circulation for staff and visitors. End-of-trip facilities and access to landscaped open space areas contribute to workplace wellbeing. The office components have been designed to maximise daylight access, outlook, and internal amenity. Objective 5. Better Working The facility has been purpose-designed to accommodate the operational needs of a high-security, high-performance data centre. Internal layouts support efficient equipment handling, clear circulation, and streamlined servicing. Back-of-house functions are separated from office and administrative areas to ensure operational efficiency and security. Site access and servicing arrangements have been carefully considered to facilitate 24/7 operation with minimal disruption. Objective 6. Better Value The project delivers economic, environmental, and social value. It enhances the local employment base, supports NSW's digital infrastructure capacity, and introduces a high standard of built form and landscape design into the precinct. The use of robust, low-maintenance materials ensures whole-of-life value and reduces the need for future interventions. Objective 7. Better Look and Feel While serving an industrial function, the building is designed with a strong architectural response that contributes positively to the streetscape. The articulation of the primary façade, thoughtful materiality, and integration of native landscaping create a visually appealing development that complements the broader setting. Plant and services have been screened or concealed to minimise visual clutter and enhance the overall presentation of the site.
Local Plans	
Penrith Local Strategic	The project will continue to align with the LSPS by supporting jobs, economic activity and sustainable growth through essential digital infrastructure.

Strategic Plan	Project Alignment
Planning Statement	The development will strengthen digital infrastructure in a key employment area and support smart city outcomes, consistent with Council's intended SMART City Strategy. The proposal will provide infrastructure that enables growth in nearby innovation and knowledge precincts linked to the Western Sydney Aerotropolis. The development, as amended, will continue to reinforce the eastern axis of Penrith's economic triangle, where digital infrastructure will be critical to future innovation-led centres.
Penrith Employment Lands Strategy	The proposal, as amended, will continue to demonstrate consistency with the Employment Lands Strategy by providing suitable digital infrastructure within a key employment area. The development of a data centre in this location will help drive innovation and deliver a diversity of business opportunities within the Erskine Business Park and more broadly within the Penrith economic triangle.
Penrith Economic Development Strategy	The data centre, as proposed to be amended, supports the Economic Development Strategy by helping attract investment through the provision of critical digital infrastructure in a key growth and employment area. Locating the facility within an established employment precinct would strengthen the appeal of the area to new and emerging businesses. The development would also support the growth of knowledge-intensive and future-focused jobs by providing the digital infrastructure needed by health, education, research and innovation sectors. More broadly, it would help reinforce innovation precincts and strengthen Penrith's economic triangle as economic activity continues to expand.

3.4 Statutory Context

The following section categorises and summarises the relevant requirements in accordance with the DPHI State Significant Development Guidelines.

3.4.1 Statutory Requirements

The table below provides a summary of the relevant statutory requirements applying to the project, in accordance with DPHI's *State Significant Development Guidelines*.

The assessment has considered the key statutory matters in respect to the amended scheme including the power to grant consent, permissibility, other approvals, pre-conditions, and mandatory considerations. A revised statutory compliance table reflecting the amended proposal is provided at **Appendix B**.

Table 13 Statutory Requirements

Statutory Relevance	Action
Power to grant approval	In accordance with Schedule 1, Clause 25 of the Planning Systems SEPP, development for the purpose of a data centre that has a total power consumption greater than 15 megawatts is classified as SSD. The proposed data centre, as amended, will continue to have a total capacity of 450 MW and, accordingly, the proposal is classified as SSD. The proposed HV connection works are considered ancillary to, and for the purposes of clause 2.6 of the Planning Systems SEPP, sufficiently related to, the primary purpose for which the SSD declaration was made. As such, these ancillary works can also be considered SSD and assessed and approved as part of the single SSD application.
Permissibility	Under the I&E SEPP, the data centre site and the majority of the Lenore Drive road reserve accommodating the HV connection are zoned IN1 General Industrial. A section of the Lenore Drive road reserve within the Ropes Creek corridor is zoned E2 Environmental Conservation. At the eastern end of the HV connection route, a small portion of the road reserve is zoned SP2 Electricity Transmission and Distribution under Blacktown LEP 2015. Refer to Figure 2 for a zoning map. <u>IN1 General Industrial Zoning</u> The land use table contained in Section 2.10 of the I&E SEPP identifies that "Industries (other than offensive or hazardous industries)" are permitted with consent on land zoned IN1. 'Data centre' is defined in the <i>Standard Instrument—Principal Local Environmental Plan (Standard Instrument)</i> as follows: <i>data centre</i> means a building or place the principal purpose of which is to collect, distribute, process or store electronic data using information technology. Data centres are a type of 'high technology industry' which, in turn, is a type of 'light industry' as defined in the Standard Instrument. The proposed use of the land for the purpose of a data centre, which is a type of light industry, is therefore permitted with consent on the site. The amended proposal includes 14,660.44m² of ancillary floor space, comprising office, storage, back-of-house areas and amenities. Planning Circular PS 21-008 confirms that ancillary uses are those that are subordinate to the dominant purpose of the development. These components are therefore permissible as ancillary to the primary data centre use.

Statutory Relevance	Action
	The HV connection is proposed as supporting infrastructure for the data centre and is similarly considered ancillary to the primary use. It is therefore permissible within the IN1 zoned land along the Lenore Drive road reserve. <u>E2 Environmental Conservation Zoning</u> ‘Industries’, ‘high-tech industries’ or ‘data centres’ are not permitted on that part of the land which is zoned E2 Environmental Conservation. Despite this, Section 4.38(3) of the EP&A Act provides that: <i>development consent may be granted despite the development being partly prohibited by an environmental planning instrument.</i> The proposed HV connection works can therefore be granted consent despite being prohibited in the E2 Environmental Conservation zone, given the environmental impacts are assessed to be acceptable / minimal in line with the zone objectives. <u>SP2 Infrastructure (Electricity Transmission & Distribution) zoning</u> ‘Industries’, ‘high-tech industries’ or ‘data centres’ are not permitted in the SP2 Infrastructure (Electricity Transmission & Distribution) zone under the Blacktown LEP 2015. Despite this, Section 4.38(3) of the EP&A Act provides that: <i>development consent may be granted despite the development being partly prohibited by an environmental planning instrument.</i> As the data centre project is classified as SSD, the HV works in the SP2 zone may be granted consent as ‘partly prohibited’ works as part of an SSD project, in accordance with Section 4.38 of the EP&A Act.
Other approvals	<u>Roads Act 1993</u> The project will continue to involve connecting a new driveway to the existing public road (Lockwood Road), which will require approval under Section 138 of the Roads Act. Approval will also be required under Section 138 of the Roads Act for the proposed external HV works, which will temporarily impact Lenore Drive. <u>Protection of the Environment Operations Act 1997</u> The revised project includes approximately 4,454,750L of diesel to be stored on-site. This is well above the 2,000-tonne limit and so the diesel storage will be classified as a scheduled activity for which a license is required. As such, an EPL will be required as per the requirements of Schedule 1, Clause 9 of the POEO Act. 10,752 kg of lithium-ion batteries will be stored onsite. This is below the 2,000-tonne limit as specified in the POEO Act. Accordingly, the development’s lithium-ion battery storage is not classified as a scheduled activity, and a licence is not required.
Environment Protection and Biodiversity Conservation Act 1999	Under the EPBC Act any action (which includes a development, project or activity) that is considered likely to have a significant impact on Matters of National Environmental Significance (MNES) (including nationally threatened ecological communities and species and listed migratory species), must be referred to the Commonwealth Minister for the Environment. The purpose of the referral is to allow a decision to be made about whether an action requires approval on a Commonwealth level. If an action is considered likely to have significant impact on Matters of National Significance, it is declared a “Controlled Action” for which formal Commonwealth approval is required. Based on investigations, the amended project does not warrant referral to the Commonwealth Minister for Environment. The data centre site has been cleared of all

Statutory Relevance	Action
	vegetation and no significant impacts on any MNES as a result of the project are expected to occur. The proposed HV route does not involve any tree removal, and the underboring beneath Ropes Creek avoids significant impacts to groundwater and associated environmental values.

3.4.2 Pre-Conditions

The table below outlines the pre-conditions to exercising the power to grant approval which are relevant to the amended project and the section where these matters are addressed.

Table 14 Pre-Conditions

Statutory Reference	Pre-Condition	Relevance to Proposal	Section in Amendment Report
State Environmental Planning Policy (Resilience & Hazards) 2021			
Section 4.6 Contamination and remediation to be considered in determining development application	Under the R&H SEPP, the consent authority must be satisfied that the land is suitable in its contaminated state – or will be suitable, after remediation – for the purpose for which the development is proposed to be carried out.	<u>Data Centre Site</u> The Detailed Site Investigation (DSI) provided at Appendix Q confirms that the site is suitable for the proposed development as amended from a contaminated land perspective, subject to implementations of the recommendations made in the DSI. <u>HV Cabling Route</u> The Supplementary Preliminary Site Investigation (PSI) prepared for the external HV provided at Appendix ZU finds that the risk of contamination on the land which will be affected by the construction of the external HV cabling route is considered to be low, based on an investigation of the previous land uses in this area. Accordingly, the PSI considers that the affected area is suitable from a contamination perspective for the proposed HV cabling works. Notwithstanding, an Unexpected Finds Protocol has been prepared to manage any potential contamination encountered during construction.	Statutory compliance table at Appendix B, Section 0
State Environmental Planning Policy (Industry & Employment) 2021			

Statutory Reference	Pre-Condition	Relevance to Proposal	Section in Amendment Report
Section 2.17 Requirement for development control plans	Under Section 2.17 of the I&E SEPP, the consent authority must not grant consent to development on any land to which Chapter 2 of the I&E SEPP applies unless a development control plan has been prepared for that land.	Chapter 2 of the I&E SEPP is the principal environmental planning instrument that sets out statutory provisions and controls for development on the data centre site. Chapter E6 of the Penrith DCP 2014 relates to the Erskine Business Park, which includes the data centre site. Other relevant provisions of the Penrith DCP 2014 also apply.	Statutory compliance table at Appendix B.
State Environmental Planning Policy (Transport & Infrastructure) 2021			
Section 2.119 Development with frontage to classified road	Under Section 2.119 of the T&I SEPP, the consent authority must not grant consent to development unless it is satisfied that where practicable and safe, vehicular access is provided by a road other than a classified road and that the safety, efficiency and ongoing operation of the classified road will not be adversely affected by the development.	Vehicle access to the site will continue to be from Lockwood Road, a local road. The northern boundary adjoins Lenore Drive, a classified State road. During construction, the project will also utilise the existing driveway from Lenore Drive for site access. The Transport Impact Assessment (TIA) (Appendix U) confirms that the revised proposal will not adversely affect the operation of intersections connected to Lenore Drive. It further notes that Lenore Drive is currently under capacity and can accommodate the modest increase in traffic generated by the data centre's operations.	Statutory compliance table at Appendix B. Section 0
Section 2.122 Traffic generating development	Section 2.122 relates to traffic generating development and requires that before granting consent the consent authority must refer certain development for with access to any road to TfNSW.	The data centre site has an area of 77,241.97m ² and provides access to a local road. It exceeds the 20,000m ² threshold for traffic-generating development, necessitating referral of the SSDA to TfNSW for concurrence.	Statutory compliance table at Appendix B. Section 0

3.4.3 Mandatory Considerations

The below table outlines the relevant mandatory considerations to exercising the power to grant approval and the section where these matters are addressed within the EIS.

Table 15 Mandatory Considerations

Statutory Reference	Mandatory Consideration	Section in Amendment Report
Consideration under the EP&A Regulation		
Section 193 Principles of ecologically sustainable development	Consideration of the principles of ecologically sustainable development	Statutory compliance table at Appendix B.
Consideration under the EP&A Act		
Section 1.3 Objects of Act	The relevant objects of the Act	Statutory compliance table at Appendix B.
Section 4.15 (1)(a)(i) Relevant environmental planning instruments	All relevant EPIs have been addressed in this Amendment Report, including: - Planning Systems SEPP - I&E SEPP - Blacktown LEP 2015 - R&H SEPP - Transport and Infrastructure SEPP - Biodiversity and Conservation SEPP - Sustainable Buildings SEPP	Statutory compliance table at Appendix B.
Section 4.15 (1)(a)(ii) Relevant draft environmental planning instrument	No draft EPIs apply to this site or to the proposed development.	N/A
Section 4.15 (1)(a)(iii) Relevant development control plan	Section 2.10(1) of the Planning Systems SEPP provides that the provisions of development control plans do not apply to SSDAs. There is therefore no requirement for assessment of the project against the Penrith DCP 2014. Notwithstanding, the project has considered the following provisions of the Penrith DCP 2014: - Chapter E6 Erskine Business Park - Chapter C2 Vegetation Management - Chapter C10 Transport, Access and Parking - Chapter C13 Infrastructure and Services - Chapter C14 Urban Heat Management	Statutory compliance table at Appendix B.
Section 4.15 (1)(a)(iiia) Any planning agreement	The site forms part of the former Fitzpatrick Industrial Estate, which was subject to a VPA (SVPA-2017-8407, dated 30	N/A

Statutory Reference	Mandatory Consideration	Section in Amendment Report
or draft planning agreement	August 2019) with the former DPE for the provision of State Infrastructure. The developer's obligations under the VPA have been met. The Estate is also covered by a Biodiversity Management Plan, which established the Erskine Park Biodiversity Corridor to offset biodiversity losses from the Estate's development as part of the Ropes Creek biodiversity corridor.	
Section 4.15 (1)(a)(iv) Relevant matters prescribed by the Regulations	This Amendment Report has been prepared in accordance with relevant matters prescribed in the EP&A Regulation.	Throughout this Amendment Report
Section 4.15(1)(b) The likely impacts of that development	The likely impacts of the development including environmental impacts on both the natural and built environments, and social and economic impacts in the locality.	Section 0
Section 4.15(1)(c) The suitability of the site for the development	The suitability of the site for the development	Section 3.6
Section 4.15(1)(d) Any submissions	Any submissions made in accordance with the Act or the regulations	This report
Section 4.15(1)(e) The public interest	The public interest	Section 3.6
Mandatory relevant considerations under EPIs		
State Environmental Planning Policy (Industry and Employment) 2021 Chapter 2 Western Sydney employment area	The I&E SEPP is the principal environmental planning instrument that that sets out land use zones and development controls for the data centre site. The I&E SEPP includes the following relevant considerations that will be fully addressed in the revised Statutory Compliance Assessment: - Part 2.2 Permitted or prohibited development - Part 2.3 Development control plans - Part 2.4 Principal development standards - Part 2.5 Miscellaneous provisions	Statutory compliance table at Appendix B.
Blacktown Local Environmental Plan 2015	A small portion of the HV cabling route extends into the Blacktown local government area. Accordingly, the Blacktown LEP 2015 is relevant to this part of the site and has been considered in the assessment. The Blacktown LEP 2015 sets out the applicable land use zones and development controls for land within this area. The following provisions are of particular relevance and are addressed in the revised Statutory Compliance Assessment: - Part 2 Permitted or prohibited development - Part 5 Miscellaneous provisions	Statutory compliance table at Appendix B.

Statutory Reference	Mandatory Consideration	Section in Amendment Report
State Environmental Planning Policy (Resilience and Hazards) 2021	Chapter 3 Hazardous and offensive development Section 3.7 Departmental guidelines	Statutory compliance table at Appendix B.
	Chapter 4 Remediation of land Section 4.6 Contamination and remediation to be considered in determining development application	Statutory compliance table at Appendix B.
State Environmental Planning Policy (Transport and Infrastructure) 2021	Section 2.122 Traffic-generating development Section 2.119 Development with frontage to a classified road	Statutory compliance table at Appendix B.
State Environmental Planning Policy (Biodiversity and Conservation) 2021	Chapter 2 Vegetation in non-rural areas	Statutory compliance table at Appendix B.
State Environmental Planning Policy (Sustainable Buildings) 2022	Chapter 3 Standards for non-residential development Section 3.3 Other considerations for large commercial development	Statutory compliance table at Appendix B.

Considerations under other legislation

Biodiversity Conservation Act 2016 Part 7 and Part 8 (2)	The BC Act protects native vegetation, species of threatened flora and fauna, endangered populations and endangered ecological communities and their habitats in NSW. Section 7.9 requires a development application for SSD to be accompanied by a BDAR, unless the Planning Agency Head and the Environment Agency Head determines that the proposed development is not likely to have any significant impact on biodiversity values. A request to waive the requirement for a BDAR was prepared by écologique and submitted to DPHI on 15 August 2025 to accompany the SSD. The waiver request was prepared on the basis that: - The site is located within the 'Fitzpatrick Industrial Estate', which has been the subject of a Biodiversity Management Plan (prepared by Kevin Mills and Associates) and a VPA resulting in the establishment of the Erskine Park Biodiversity Corridor. - This is in place to offset the losses in biodiversity from the overall development of the Estate lands and forms part of the Ropes Creek biodiversity corridor. - Previous approvals for site preparation works, including the creation of development pads, granted consent for the removal of most vegetation from the site.	Appendix ZB and Appendix ZV
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Statutory Reference	Mandatory Consideration	Section in Amendment Report
	▪ The site is now largely cleared of vegetation and does not contain habitat for threatened species. Limited vegetative regrowth (predominantly weeds) is present along the northern boundary on a landscaped berm created under DA19/0818. ▪ The site is fully serviced, with potential hydrological impacts previously assessed under DA19/0817 (which approved an artificial waterbody/detention basin providing storage and tertiary water quality treatment for three developments, including this site) and DA19/0818 (which approved bulk earthworks and stormwater infrastructure). Based on these factors, DPHI granted a BDAR waiver for the data centre site on 12 September 2025 for the project (Appendix ZV). An updated BDAR Waiver Request (Appendix ZB) has been prepared by écologique as part of this amended application, to assess the potential biodiversity impacts of the external HV cabling route. The amended BDAR Waiver Request has been prepared on the basis that: ▪ The HV route is predominantly located within existing road reserve and hardstand areas. ▪ The road corridor and Ropes Creek crossing have been subject to substantial disturbance, with managed riparian vegetation associated with the TransGrid easement. ▪ The works area does not provide habitat for threatened species or support habitat connectivity. ▪ The proposal will not impact the Ropes Creek riparian corridor or the Erskine Park Biodiversity Corridor. ▪ The proposal will not affect the flight paths of protected fauna. ▪ Potential impacts to hydrological processes supporting threatened ecological communities are low, with the Cumberland Red Gum River-flat Forest avoided through underboring beneath Ropes Creek. The amended BDAR Waiver has been submitted with this Amendment Report.	

3.5 Assessment of Impacts

The following subsections provide a comprehensive description of the updated specialist technical studies undertaken to assess the potential impacts of the amended proposal, as described at **Section 3.1** of this report. Where relevant, this includes the updated mitigation, minimisation and management measures recommended to avoid unacceptable impacts.

The detailed technical reports and plans appended to this report are individually referenced within the following sections. A summary of the updated mitigation measures is provided at **Appendix C**.

3.5.1 Detailed Assessments

3.5.1.1 Built Form and Urban Design

As demonstrated in the revised Architectural Drawings provided at **Appendix E**, minor refinements have been made to the layout and built form of the proposed development in response to submissions and ongoing design development. These changes include a minor shift of the eastern data centre building, refinement of internal road layouts, consolidation of plant and infrastructure, and removal of the previously proposed industrial water tanks.

The amended proposal retains the overall building footprints, massing and height of the two data centre buildings and generator gantry, with only minor changes to the generator gantry footprint to accommodate additional generators. The scale and bulk of development therefore remain consistent with the original proposal.

Setbacks to site boundaries are generally maintained or increased, with localised reductions associated with infrastructure adjustments. Increased setbacks and landscaping along the western boundary, resulting from the removal of water tanks, provide an improved interface with adjoining land uses. Variations to setbacks along other boundaries are minor and do not materially change the spatial relationship of the development to surrounding areas.

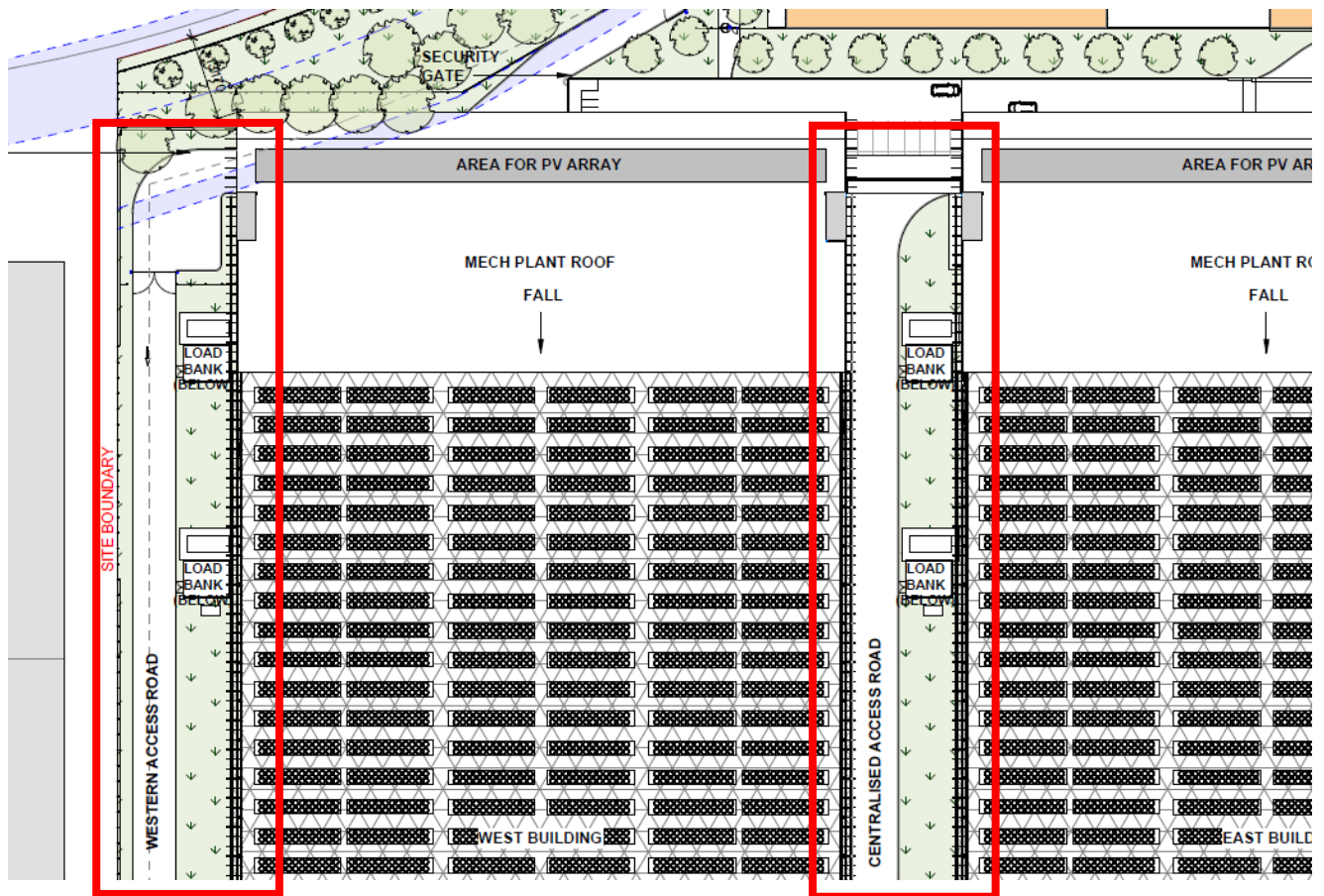
The removal of the industrial water tanks has enabled increased deep soil and landscaped areas, particularly along the western boundary and within the central north south spine between the two data centre buildings. This includes a substantial increase in setback along the western boundary, allowing for a more generous landscaped buffer, as well as the introduction of landscaping between the two buildings where infrastructure was previously proposed. While there is a minor reduction in overall tree canopy coverage, the amended proposal provides an enhanced landscape outcome and improved visual amenity compared to the original scheme.

Refinements to internal circulation, including conversion of internal roads to two-way operation and realignment of the northern road and ramp, improve functionality without altering the external presentation of the site.

The amended proposal does not introduce any changes to building height or bulk that would alter overshadowing impacts relative to the original proposal. Minor adjustments to building siting and layout are limited in extent and do not result in any material change to shadow patterns. As such, overshadowing impacts remain consistent with those previously assessed and are considered acceptable.

Overall, the amended layout represents a refinement of the original design that maintains the key built form parameters while improving site planning and landscape outcomes. In particular, the removal of the industrial water tanks and consolidation of plant has enabled increased setbacks, additional deep soil areas and enhanced landscaping, improving the interface with surrounding land and the overall visual presentation of the site. Accordingly, the amended proposal represents an improved urban design outcome compared to the original scheme, without giving rise to any additional impacts.

Figure 13 Extract of Site Plan highlighting increased western setback and landscaping between buildings



Source: Genton, 2026

3.5.1.2 Visual Impact

The VIA (**Appendix ZH**) has been updated to reflect the amended project description and to address matters raised by DPHI during the assessment process, including a targeted assessment of potential views from residential receivers at Weaver Street and Cetus Place.

The amended proposal includes only minor refinements to built form, including adjustments to siting, plant and internal layout, which do not materially change the visual characteristics of the development as previously assessed. Accordingly, the VIA confirms that the amended proposal does not result in any additional visual impacts relative to the exhibited scheme.

In response to DPHI's request for further analysis of potential views from nearby residential areas, additional assessment has been undertaken focusing on Weaver Street and Cetus Place. A detailed response to these matters is provided as an appendix to the revised VIA.

This assessment confirms that opportunities for views toward the development from these locations are limited due to the established low rise built form, consistent boundary fencing, and constrained sightlines between dwellings. While some visibility may occur from upper levels of select dwellings, such views would occur within a visual context already influenced by existing large format industrial development along Grady Crescent, which is located in closer proximity to these receivers than the subject site.

In relation to 86 Weaver Street, while potential views from upper levels are acknowledged, these are limited and primarily associated with non-primary living spaces. Review of available imagery indicates that the eastern elevation contains limited openings, including a window likely serving a bathroom (refer **Figure 14**), with a secondary window on the western elevation likely associated with a bedroom. In accordance with the Tenacity planning principle for view sharing, views from non-primary living spaces (such as bedrooms) are afforded less weight than views from primary living areas such as living rooms and kitchens.

Based on this additional analysis, the VIA concludes that the amended proposal does not introduce any new or materially different visual impacts. As no mitigation measures were required under the original VIA, and the level of visual impact remains unchanged, no additional mitigation measures are proposed for the amended scheme.

Figure 14 86 Weaver Street rear elevation



Source: Urbis, 2026

3.5.1.3 Traffic, Transport and Accessibility

Data Centre Site

Construction Phase Traffic

Positive Traffic has prepared a revised Preliminary Construction Traffic Management Plan (**CTMP**), provided at **Appendix V**. The CTMP assesses the anticipated traffic impacts associated with construction of the data centre site and outlines management measures to minimise disruption to the surrounding road network.

Construction traffic associated with the data centre site remains broadly consistent with that assessed in the original proposal. Any minor changes arising from refinements to the site layout and staging will be managed through the implementation of the CTMP, including traffic control measures, vehicle routing and staging of works to maintain safe and efficient operation of the surrounding road network.

The revised TIA and CTMP for the data centre proposal did not identify any additional mitigation measures beyond those previously outlined in the EIS.

Operational Phase Traffic

An amended TIA has been prepared by Positive Traffic and is provided at **Appendix U**. The TIA assesses the amended proposal and the anticipated transport implications of the project during operation.

The amended proposal provides 78 car parking spaces, consistent with the original proposal.

Refinements to the internal road network have been made to improve site circulation and operational efficiency. This includes conversion of the eastern and southern internal roads to two-way operation, realignment of the northern road, and adjustments to the northern vehicle ramp. These changes improve internal vehicle movements without altering the external access arrangements.

Updated swept path analysis demonstrates that the amended internal road layout continues to accommodate all required vehicle movements, including service and emergency vehicles, in accordance with relevant design standards.

Access to the site, including ingress and egress via the surrounding road network, remains unchanged from the original proposal.

Mitigation Measures

Based on the assessment undertaken, the amended proposal does not result in any material change to traffic generation, distribution or operational traffic impacts compared to the original scheme. The findings and conclusions of the original TIA therefore remain applicable.

HV Cabling Route

In addition to the above, a supplementary Preliminary CTMP has been prepared by Positive Traffic (refer **Appendix ZP**) to assesses the anticipated traffic impacts associated with construction of the external HV cabling route and outlines management measures to minimise disruption to the surrounding road network.

The HV cabling works will be undertaken within the Lenore Drive road reserve, generally within the westbound lanes and adjacent verge areas, and will be delivered progressively along the route. Construction activities will include trenching, cable installation, and horizontal directional drilling at key crossings.

Construction access will be via the existing arterial and sub-arterial road network, including Lenore Drive, Mamre Road, Wallgrove Road and the M7 Motorway, all of which are approved B-Double routes and suitable for construction traffic.

Peak construction workforce for the HV works is expected to be approximately 50 personnel. Worker vehicles and construction machinery will be accommodated within the data centre site at 78 Lockwood Road or within designated laydown areas, avoiding the need for on-street parking.

Construction traffic generation associated with the HV works is expected to be low. Heavy vehicle movements are estimated at approximately 8 movements per day during peak periods (or approximately one per hour), with the majority of movements occurring outside peak traffic periods where practicable.

The works will require temporary and progressive lane closures along sections of Lenore Drive. However, given the existing dual carriageway configuration and available road capacity, these closures are not expected to result in significant impacts on traffic conditions, including during peak periods.

Impacts on pedestrians and cyclists are expected to be minimal, with limited existing pedestrian infrastructure along the southern side of Lenore Drive. Where works interface with pedestrian or cycle paths, appropriate Traffic Control Plans will be implemented to maintain safe access.

Emergency vehicle access will be maintained at all times, with traffic management measures ensuring continued access to surrounding properties and the broader road network.

Mitigation Measures

The supplementary CTMP prepared for the HV works identifies the following additional mitigation measures:

- Preparation and implementation of stage-specific Traffic Control Plans by suitably qualified personnel for all works within the road reserve.
- Staging of works and progressive lane closures to maintain traffic flow and minimise disruption.
- Use of accredited traffic controllers and appropriate signage to manage vehicle, pedestrian and cyclist movements.

- Scheduling of construction vehicle movements, including deliveries, to avoid peak traffic periods where practicable.
- Provision of on-site worker parking and laydown areas to avoid on-street parking and minimise localised congestion.
- Coordination of deliveries and construction activities to avoid queuing and ensure vehicles can be accommodated within work zones.
- Implementation of a driver code of conduct, including requirements relating to speed, fatigue management, noise minimisation and load covering.
- Maintenance of access to all properties and emergency services at all times during construction.

Overall, the CTMP concludes that construction of the HV cabling route will result in manageable and temporary traffic impacts, which can be effectively mitigated through the implementation of the above measures.

3.5.1.4 Trees and Landscaping

Data Centre Site

The amended proposal results in improved landscaping outcomes for the data centre site. The removal of the 23 industrial water tanks has enabled additional deep soil planting areas, particularly along the western boundary and within the central north south spine between the two data centre buildings. This includes the introduction of landscaping in areas previously occupied by infrastructure, as well as a substantial increase in setback along the western boundary, allowing for a more generous landscaped buffer to adjoining land.

As outlined in the amended Landscape Design Report provided at **Appendix K**, the development now provides 15,806.37m² of landscaping, equating to 20.5% of the site area. This represents an increase of 1,072.57m² (1.24% of the site area) compared to the original proposal. All landscaped areas are provided as deep soil, supporting improved planting opportunities and long-term landscape establishment.

Consistent with the original proposal, the amended proposal does not require any tree removal within the data centre site, which remains cleared of vegetation.

HV Cabling Route

The proposed HV cabling route comprises a double circuit trench extending from the on-site switchyard and continuing along Lenore Drive. The works are located within the existing road reserve and do not require vegetation clearing. Accordingly, no impacts to existing trees or landscaped areas are anticipated, and no additional landscaping works are proposed as part of this component of the development.

A supplementary Arboricultural Impact Assessment (**AIA**) prepared by CPS (**Appendix ZO**) has assessed 100 trees along the HV route and confirms that no tree removal is required and all trees can be retained.

Mitigation Measures

The supplementary AIA identifies the following mitigation measures to ensure protection of retained trees during construction:

- Retain and protect Trees 1–100 in accordance with the Tree Location Plan and Tree Protection Specification, and AS4970 Protection of Trees on Development Sites.
- Engage a suitably qualified Project Arborist prior to commencement of works to oversee implementation of tree protection measures and monitor tree condition throughout construction.
- Undertake all excavation, trenching and fill placement within Tree Protection Zones under the supervision of the Project Arborist.
- Prepare and implement a detailed Tree Protection Plan and Specification prior to construction to ensure all retained trees are protected and not adversely impacted.

Overall, the amended proposal does not result in any additional impacts to trees or landscaping and provides an improved landscaping outcome for the data centre site, with any potential impacts associated with the HV works appropriately managed through the identified mitigation measures.

3.5.1.5 Air Quality

Data Centre Site

An updated AQIA has been prepared (**Appendix L**) by Northstar that assesses the impact of the amended data centre site design and operations. Changes considered within the updated AQIA for the data centre operation include

- Updated project description and site layout, including minor architectural and landscaping refinements and an increase in standby generators (170 to 188) with a corresponding expansion of the generator gantry.
- Revised operational parameters, including a reduction in annual testing hours from 198 to 136, changes to the testing regime, and an increase in diesel storage capacity.
- Updated air quality assessment, including refined dispersion modelling, additional sensitive receptors, and expanded cumulative impact assessment.
- Additional technical analysis, including assessment of power interruption risk and air quality exceedance likelihood, and completion of a Best Available Technology review in response to NSW EPA requirements.

Construction Phase Air Quality

Northstar has adapted the methodology from the IAQM construction dust guidance (IAQM, 2024) to assess construction phase risk. The anticipated activities during the data centre construction phase are:

- Site preparation and bulk earthworks, including excavation and material handling.
- Building construction and fit out works.
- Movement of construction vehicles and plant on unsealed or partially sealed surfaces.
- Vehicle track-out of dirt and mud onto public roads.

This approach employed a six-step process to evaluate the risks associated with dust impact from construction activities (refer Appendix B of their AQIA). It considers receptor sensitivity and potential impact magnitude to identify key control measures.

Given the distance of the site from sensitive receivers (250–300m), the sensitivity of the identified receptors is classified as ‘medium’ for dust soiling, and ‘low’ for health impacts. The dust emission magnitudes for the various construction phase activities as presented in Appendix B of the AQIA, which when assessed in light of the sensitive receiver locations, demonstrates that the resulting risk of air quality impacts (without mitigation) are ‘medium’ for dust soiling and ‘low’ for human health.

With the implementation of the identified mitigation measures in Appendix B of the AQIA (including standard best-practice mitigation measures implemented including dust suppression through water sprays, covering of stockpiles, wheel-wash facilities, and regular street sweeping), construction phase risks are anticipated to be reduced to an acceptable level which corresponds to low to negligible residual risk. Considering the proposal site size, distance to sensitive receptors and the nature of the proposed activities, residual impacts from fugitive dust emissions are therefore anticipated to be negligible, provided the mitigation measures are appropriately implemented.

Construction Phase mitigation measures detailed in Appendix B to the AQIA prepared by Northstar, report ref: 25.1138.FR2V2 and dated 18 March 2026 are to be adopted into the CEMP for the data centre construction.

Operational Phase Air Quality

Operational emissions from the data centre on a day-to-day basis would be anticipated to be negligible, with the exception of potential emissions from diesel-fuelled standby generators during periodic

maintenance testing or during a power outage event. Additionally, there is the potential for minor fugitive emissions from the storage of diesel at the proposal site.

The only significant source of emissions during site operations will be the diesel-fuelled standby generators, which operate during mains power outages or for scheduled maintenance testing. Under normal conditions, the data centre facility will draw electricity from the grid, and no adverse air quality impacts are expected.

Two operational scenarios were assessed:

- Scenario 1 – Justified Worst-Case: All 188 generators operating simultaneously at full load during a complete power failure.
- Scenario 2 – Routine Maintenance Testing: Four standby generators operating simultaneously for approximately one hour during daylight testing window of 7am to 6pm, at 100% load.

Air dispersion modelling was undertaken using CALPUFF, accounting for building wake effects, local topography, and 2021 meteorological data processed via CALMET. Background pollutant concentrations were sourced from the St Marys and Prospect Air Quality Monitoring Stations.

Under Scenario 1, modelling predicted short-term exceedances of some criteria (including NO₂, PM₁₀, and PM_{2.5}) at certain sensitive receptors. However, this scenario represents a highly unlikely event given the low probability of a full-site outage, the redundancy of the on-site power system, and the high reliability of the external electricity grid. Probability analysis in the AQIA confirmed that the combined likelihood of both a full outage and concurrent exceedances is low.

Under Scenario 2, annual average particulate matter concentrations (as TSP, PM₁₀ and PM_{2.5}) are predicted to comply with the relevant impact assessment criteria, with no exceedances predicted. Further, no additional exceedances of the cumulative impact assessment criteria for 24-hour PM₁₀ and 24-hour PM_{2.5} are predicted as a result of the proposal. While an exceedance of the 24-hour PM₁₀ and PM_{2.5} criteria are identified, these are attributable to elevated background concentrations that already exceed the respective criteria and are not related to emissions from the proposal. Therefore, it is anticipated that under operation of the testing schedule no significant air quality impacts are predicted to be experienced at sensitive receptors during routine operations.

Operational phase activities will not result in any odour emissions, except for the periodic operation of the diesel-fuelled generators for testing and standby power generation purposes. Toluene (C₇H₈) and xylene (C₈H₁₀) emissions have been assessed and compared against the relevant odour impact assessment criteria. No exceedances of the relevant odour criteria are predicted during either emergency or realistic operations.

Generator testing is to be undertaken in accordance with or at no greater intensity than the testing regime that informed the AQIA, to ensure air quality impacts are appropriately managed.

Cumulative Impact Assessment

The potential for cumulative air quality impacts has been evaluated in accordance with relevant CIA guidance (NSW DPIE, 2022). There is the potential for cumulative air quality impacts to arise from nearby data centres during concurrent operations particularly in the event of a regional grid outage where all facilities including the proposal simultaneously activate standby diesel generators. Such emergency operation scenarios which may occur during widespread grid failures are recognised by NSW EPA and subject to regulatory allowances. The probability of concurrent power feeder failures is considered to be low, particularly as it is common for data centres to be served by multiple power supply feeders to reduce this risk.

Routine maintenance testing may also contribute to cumulative impacts since most facilities conduct tests during daytime hours. Due to the distances between the proposal, other facilities and sensitive receptors as well as the low likelihood of concurrent testing with emissions transported downwind, these impacts are anticipated to be limited. Furthermore, generator operating hours are typically limited under development consent or EPL conditions (e.g. 200 hours per year) to minimise routine emissions with testing and maintenance regulated to control pollutant impacts.

Limited cumulative impacts may also arise during overlapping construction phases, primarily related to dust soiling and human health risks. Nonetheless, each development is required to have a CEMP, including waste and traffic management measures. Dust emissions from construction are well understood and can be effectively mitigated to minimise significant cumulative impacts.

Mitigation Measures

Based on the findings of the revised AQIA, there are no revised or additional mitigation measures which are required to support development on the data centre site from an air quality perspective, beyond those previously outlined in the EIS.

HV Cabling Route

A supplementary AQIA has been prepared by Northstar (refer **Appendix ZN**) that assesses the impact of the construction works to facilitate the 2.1km HV connection route between the TransGrid Sydney West Substation and the proposed data centre site at 78 Lockwood Road, Erskine Park.

Construction Phase Air Quality

Construction activities along the HV connection route are expected to be progressive. Vegetation will be cleared and topsoil removed prior to installation in each section of the route. It is anticipated that the cable trench would be excavated to a maximum depth of 4 metres below ground level for HV cable installation with excavated material temporarily stockpiled adjacent to the trench. Sections of cable will be lowered into the trench using side-booms, after which the stockpiled material would be returned and compacted. The substation bench extension would be sized to accommodate the new feeder bays, with exact dimensions confirmed during detailed design.

While the proposal would most likely be constructed in sections, a conservative assumption has been made for this assessment that all works occur simultaneously. For the purposes of this AQIA, the scope has been limited to a 250-metre buffer around the HV connection route.

Construction phase activities carried out as part of the proposal are anticipated to have the potential to generate short-term emissions of particulates (construction dust). Generally, these are associated with uncontrolled (or 'fugitive') emissions and may typically be experienced at surrounding land uses at short distances from the construction activities as amenity impacts, such as dust deposition and/or visible dust plumes, rather than associated with health-related impacts.

The preliminary risk assessment indicates that with no mitigation measures there is a low to medium risk of human health and dust soiling (amenity) impacts associated with construction activities within a 250-metre buffer of the proposal. For ease and consistency in the adoption of mitigation measures into a CEMP, it is recommended that mitigation measures associated with medium risk sites be applied along the entire alignment to ensure construction dust will be adequately managed.

Given the size of the proposal, land use values surrounding the proposed alignments, and the activities to be performed, residual impacts associated with fugitive dust emissions from the proposal would be anticipated to be negligible, should the implementation of the recommended mitigation measures be performed appropriately.

Operational Phase Air Quality

As the HV connection will be below ground, it will not have any operational phase air quality impacts.

Mitigation Measures

Construction phase mitigation measures detailed in Appendix B to the AQIA prepared by Northstar, report ref: 25.1138.FR3V2 and dated 18 March 2026 are to be adopted into the CEMP for the HV route construction.

3.5.1.6 Noise and Vibration

A revised NVIA has been prepared by Acoustic Logic (refer **Appendix M**) to respond to the submissions received and to assess the amended proposal.

Data Centre Site

Construction Noise and Vibration

The amended proposal does not introduce any material changes to the construction methodology, plant or staging that would alter the construction noise and vibration impacts previously assessed. The findings of the original NVIA in relation to construction noise and vibration therefore remain applicable.

The updated NVIA confirms that construction noise and vibration will be managed through the preparation and implementation of a Construction Noise and Vibration Management Plan, incorporating standard mitigation measures and procedures consistent with the Interim Construction Noise Guideline.

Operational Noise

The operational noise assessment has been comprehensively updated to respond to submissions and to reflect the amended project, including revised plant selections, updated modelling inputs and refinement of operational scenarios. The NVIA adopts the NSW Noise Policy for Industry and relevant local planning controls to establish project noise trigger levels for surrounding sensitive receivers.

The updated assessment includes detailed noise modelling of the full range of operational scenarios, accounting for variations in plant operation, environmental conditions, staging of the development and anticipated load conditions. A range of operational scenarios has been modelled to represent both typical and worst-case operating conditions for Stage 1 and Stage 2 of the development.

The operational noise sources considered in the assessment include mechanical plant (including chillers), transformers and ancillary equipment associated with the data centre. The modelling incorporates conservative assumptions, including the adoption of noise-enhancing meteorological conditions and full load operational scenarios where relevant.

Importantly, the amended proposal incorporates updated plant selection, including the adoption of air-cooled chillers and refinement of equipment layout and shielding. The NVIA confirms that these changes have resulted in a measurable improvement in predicted noise emissions at surrounding receivers. In particular, previously identified exceedances under earlier modelling scenarios have been resolved.

The updated modelling demonstrates that the amended proposal complies with the applicable project noise trigger levels at all identified sensitive receivers for both Stage 1 and Stage 2 operation. In some instances, predicted noise levels for Stage 2 operation are lower than Stage 1 due to increased shielding provided by the additional building mass, which reduces propagation of rooftop plant noise toward sensitive receivers.

The NVIA also considers potential acoustic characteristics including low frequency noise and tonality. The assessment confirms that low frequency noise does not trigger additional modifying factors and that any tonal characteristics associated with individual plant items would be adequately masked by dominant noise sources, such that no adverse tonal impacts are expected at receivers.

Emergency power generation and maintenance testing have been assessed separately. These activities are infrequent and limited in duration and are designed to meet relevant noise criteria. Predicted noise levels associated with testing scenarios remain within acceptable limits and are not expected to result in adverse impacts.

Overall, the amended proposal results in an improved operational noise outcome compared to the original proposal, with all predicted noise levels complying with applicable criteria and no residual exceedances identified. Operational noise impacts are therefore considered acceptable and can be effectively managed through the recommended mitigation measures.

Mitigation Measures

The revised NVIA for the data centre proposal identifies a range of updated mitigation measures to control operational noise emissions and ensure compliance with the applicable noise criteria, including:

- Acoustic attenuation of chiller fans through lined ductwork, with requirements linked to the number of chillers in operation.
- Provision of acoustic enclosures for all generators.
- Installation of acoustic barriers around the 330/66 kV and 66/11 kV transformer clusters.
- Location of substation plant within acoustically designed plantrooms to ensure cumulative noise compliance.
- Detailed acoustic design of all mechanical plant during detailed design to achieve the project noise objectives.
- Restriction of generator testing and servicing to daytime periods to minimise impacts on surrounding receivers.

The updated assessment also recognises the contribution of the building form and layout in providing inherent acoustic shielding, particularly to receivers to the north.

Overall, the mitigation strategy remains consistent with the original proposal, with refinements improving the efficiency and effectiveness of the acoustic design.

HV Cabling Route

A Supplementary Noise and Vibration Assessment has been prepared by Acoustic Logic (refer **Appendix ZR**) to address construction noise and vibration impacts associated with the inclusion of the external HV works.

The supplementary NVIA confirms that operational noise impacts are not associated with the HV cabling works, as no operational noise generating plant is proposed as part of the cable infrastructure. Accordingly, operational noise impacts for this component of the development have not been assessed.

Construction of the HV cabling route will involve activities such as trenching, HDD, cable pulling, joint bay installation and road restoration. These activities have the potential to generate temporary noise and vibration impacts at nearby receivers, particularly residential receivers located to the north of Lenore Drive.

The assessment has been undertaken in accordance with the Interim Construction Noise Guideline and relevant vibration criteria, with project-specific noise management levels derived based on measured background noise levels.

The modelling indicates that:

- No receivers are predicted to experience noise levels exceeding the highly noise affected management level.
- Some residential receivers will experience exceedances of the noise management levels during certain activities, particularly trenching, HDD and road restoration works.
- Exceedances are generally temporary and associated with specific construction activities and locations along the alignment.
- Construction vibration levels are expected to comply with relevant criteria for both amenity and structural damage, with standard construction plant and methods adopted.

Where exceedances of the noise management levels are predicted, these are consistent with typical linear infrastructure works and will be managed through the implementation of feasible and reasonable mitigation measures in accordance with the ICNG.

Mitigation Measures

The supplementary NVIA prepared for the external HV works identifies the following additional mitigation measures:

- Preparation and implementation of a Construction Noise and Vibration Management Plan prior to commencement of works.
- Implementation of feasible and reasonable noise control measures, including selection of appropriate plant and equipment, use of quieter work methods where practicable and optimisation of construction staging.
- Application of project-specific noise management levels to guide construction activities and minimise impacts at nearby receivers.
- Community notification and consultation where works are predicted to exceed noise management levels.
- Management of out of hours works in accordance with relevant guideline requirements and justification processes.
- Application of minimum safe working distances and vibration management measures to protect nearby structures.

Overall, the construction noise and vibration impacts associated with the HV cabling route are temporary and localised in nature and can be effectively managed through the implementation of the recommended mitigation measures. The impacts are consistent with those typically associated with linear infrastructure works and are considered acceptable.

3.5.1.7 Water Management

Data Centre Site

The Integrated Water Management Plan (refer **Appendix ZK**) has been updated by ACOR to account for minor design amendments resulting from the changed data centre building design. These changes include a new retaining wall along the southern and eastern boundaries of the site.

Updates include revised rainwater storage and reuse, updated MUSIC modelling, stormwater drainage plan refinements, reduced potable water demand due to the air-cooled system, and inclusion of the Penrith City Council Stormwater Concept Plan Checklist.

Overall, the proposed approach to on-site water management does not change from that originally proposed and continues to adopt and sit within the design parameters informing the water quality treatment train installed under subdivision consent DA19/0818.

The proposed built form will remain within the 85% impervious limit (with total impervious area of 79.5 %) such that site runoff will be accommodated by the subdivision's regional basin. No on-site detention is therefore required.

The existing precinct-wide stormwater management system, designed and validated at the subdivision stage using DRAINS and MUSIC, has capacity to manage flows and achieve pollutant load reduction targets for this site. Stormwater from the development will be conveyed via a new pit and pipe network designed for the minor drainage event with climate change allowance, with safe overland flow paths for the major event.

The MUSIC modelling undertaken shows that no additional on-lot treatment train is required; however, the existing GPT provided at the subdivision stage will be replaced by two OceanProtect GPTs at the downstream end of the internal pit and pipe network, maintaining estate-level water quality performance.

Two 250kL rainwater tanks will capture 50% of roof runoff for non-potable uses such as toilet flushing and irrigation, meeting approximately 73% of annual non-potable demand, in line with industry practice.

During construction, earthworks, materials handling and vehicle movements could mobilise sediment and pollutants. If uncontrolled, these could enter the stormwater network and impact the adjacent Ropes Creek biodiversity corridor to the east. Subject to comprehensive erosion and sediment controls in accordance with the Blue Book, these risks will be effectively managed to avoid degradation of water quality, habitat condition, or ecological function.

Mitigation Measures

The updated mitigation measures to be adopted into the design and operation must reflect the following:

- Limit total site impervious area to $\leq 85\%$ (target $\leq 80\%$) to comply with subdivision stormwater management parameters and avoid the need for additional detention or treatment infrastructure.
- Remove the existing GPT and replace it with 2 x GPTS (OceanProtect OceanSave-3300-870 and Ocean save 1500-60) to treat outflows at the downstream stormwater discharge location, installed in accordance with manufacturer specifications and positioned for safe maintenance access.
- Construct the internal pit-and-pipe drainage network to accommodate the 5-year ARI (minor) event with climate change allowance and provide overland flow paths to safely convey the 100-year ARI (major) event without causing property damage or safety risks.
- Install and commission two 250kL rainwater tanks to harvest roof runoff from 50% of the data centre roof for toilet flushing and irrigation, with backflow prevention, inlet/overflow screening, and connections to building plumbing to meet at least 72% of projected annual non-potable demand.
- Prepare and implement a Construction Erosion and Sediment Control Plan in accordance with the Blue Book, including sediment fences, stabilised site access points, inlet protection, and progressive stabilisation of disturbed areas.
- Prevent construction runoff or pollutants from entering the adjacent Ropes Creek biodiversity corridor by maintaining containment measures and undertaking daily inspections during all ground-disturbing works.
- Establish a maintenance program for all stormwater quality devices, drainage infrastructure, and rainwater tanks, with inspections in accordance with manufacturer guidelines and after significant rainfall events.
- Connect wastewater to the Sydney Water sewer network under an approved trade waste agreement, ensuring no untreated discharge enters the stormwater system.

3.5.1.8 Hazards and Risks

A revised Hazards and Risks Screening Report and Dangerous Goods Compliance Report has been prepared by ACOR Consultants and are provided at **Appendix ZF** and **ZG** respectively. These reports have been updated to reflect the amended proposal. A comparison of dangerous goods storage between the original and amended proposals is provided below.

Table 16 Comparison of Dangerous Goods Storage

Item	Original Proposal	Amended Proposal
Diesel (C1 Combustible Liquid)	4,027,300L	4,454,750L
Electrolytes in Lithium-ion Batteries	86,176L	1,300 kg

The revised Hazards and Risks Screening Report confirms that diesel will be stored above ground and separated from flammable materials. Consistent with the definitions in DPHI's *Hazardous and Offensive Development Application Guidelines – Applying SEPP 33 (2011)*, the development is not considered potentially hazardous under the R&H SEPP.

The revised report also confirms that the amended development will require an EPL under the POEO Act, as the total volume of petroleum products exceeds the relevant threshold (2,000 tonnes).

The revised Dangerous Goods Compliance Report confirms that Class 9 goods (stored lithium-ion batteries not in use) are excluded from risk screening and are not considered potentially hazardous under the R&H SEPP. The batteries will operate as secondary power backup and remain connected to a circuit. Associated risks can be appropriately managed in accordance with AS 4681:2000, including provisions for storage and

handling of modules and spent batteries. The report also notes that lithium-ion batteries are exempt from the hazardous chemicals requirements of the *Work Health and Safety Regulation 2017*.

The revised compliance assessment concludes that dangerous goods storage, as amended, can be managed safely on site and will comply with relevant standards, including AS 1940:2017 in relation to separation distances for C1 combustible liquids.

Mitigation Measures

No additional or amended mitigation measures are required beyond those identified in the original Dangerous Goods Compliance Report.

3.5.1.9 Greenhouse Gas Emissions

A revised Greenhouse Gas (GHG) Assessment Report has been prepared by LCI and is included at **Appendix ZI**. The revised report has been prepared in response to comments from DPHI and the NSW EPA and includes an assessment of the amended proposal. The assessment was updated to be prepared in accordance with the EPA's *Guide for Large Emitters* and evaluates emissions associated with the amended proposal, including construction and 50 years of operation.

Key findings of the revised GHG Assessment Report include:

- The project is confirmed as a large emitter, exceeding the 25,000 tCO₂-e/year (Scope 1 and 2) reporting threshold under the *National Greenhouse and Energy Reporting Act 2007 (Cwth)*. However, the project does not trigger the Safeguard Mechanism, as Scope 1 emissions remain well below 100,000 tCO₂-e/year.
- Under earlier (benchmark) scenarios, annual emissions were estimated to be tens of thousands of tonnes (e.g., approx. 45,000–90,000 tCO₂-e/year) depending on throughput.
- With the updated “All Measures” scenario, Scope 1 and 2 emissions are almost entirely eliminated, with average annual emissions reduced to ~185 tCO₂-e/year over the project life.
- Residual emissions remain but are minor and localised, primarily arising from diesel use for backup generator testing and refrigerant leakage.

The proponent will commit to a net zero (Scope 1 and 2) target by 2050, with emissions effectively negligible from commencement under full mitigation and zero from 2050 onwards.

Residual emissions (estimated at <200 tCO₂-e/year) will be managed through carbon offsetting, primarily via Australian Carbon Credit Units. Offsets are intended to address emissions that cannot be avoided or substituted, namely backup generator diesel use and refrigerant emissions from cooling systems.

Mitigation Measures

The updated GHG Assessment report includes the following revised mitigation measures:

- Commitment to 100% renewable electricity for both IT (tenant) and non-IT (proponent) loads from commencement.
- High-efficiency design (target PUE ~1.3) to minimise energy demand.
- Use of low global warming potential refrigerants in cooling systems.
- Investigation of biofuels for backup generators to reduce Scope 1 emissions.
- Implementation of a net zero (Scope 1 and 2) target by 2050.
- Offsetting of residual emissions using ACCUs.
- Ongoing monitoring, reporting, and optimisation of energy and emissions performance.

3.5.1.10 Ground and Water Conditions

Data Centre Site

A revised Groundwater Impact Assessment has been prepared by Douglas Partners and is provided at **Appendix R**. This report has been updated to include the updated project description. However, the proposed amendments made do not alter the previous assessment or mitigation measures outlined in the EIS.

HV Cabling Route

A supplementary Groundwater Impact Assessment has been prepared by Douglas Partners to address potential groundwater impacts associated with the construction of the HV cabling, including horizontal directional drilling (**HDD**) beneath Ropes Creek and excavation of launch and receive pits.

The assessment identifies that groundwater within the alignment is associated with a shallow unconfined alluvial aquifer, underlain by low permeability Bringelly Shale. Groundwater levels are anticipated to be relatively shallow, typically encountered at depths of approximately 3.6 metre to 4 metres below ground level, and are hydraulically connected to Ropes Creek.

Groundwater inflows during construction are expected to be limited and temporary. Modelling indicates that inflows to the launch and receive pits and HDD works would be modest, with total inflows estimated at approximately 660 m³ over the assumed three month construction period. Localised drawdown would occur immediately adjacent to excavations, with a predicted drawdown of approximately 0.4 metres at a distance of 10 metres from the pits.

The use of bentonite-based drilling fluids during HDD would assist in stabilising the borehole and limiting groundwater ingress, such that seepage and associated drawdown along the HDD alignment is expected to be negligible.

A risk assessment undertaken as part of the assessment concludes that potential impacts to groundwater dependent ecosystems associated with Ropes Creek, third-party groundwater users and groundwater quality are low. This is due to the short duration of works, absence of registered groundwater bores within 1km of the site, and the controlled management of groundwater and drilling fluids during construction.

Mitigation Measures

To further minimise potential impacts, the following mitigation measures will be implemented:

- Design of the HDD alignment to maintain adequate separation beneath Ropes Creek and avoid highly permeable zones where practicable.
- Continuous circulation of bentonite-based drilling fluid to stabilise the borehole and limit groundwater ingress.
- Monitoring of drilling fluid pressures and returns in real time to detect potential losses or inadvertent returns.
- Collection, storage and disposal of drilling fluids, groundwater and cuttings to a licensed off-site facility.

Overall, the supplementary assessment confirms that the HV cabling works are unlikely to result in significant groundwater impacts, with effects expected to be localised, temporary and manageable through standard construction controls.

3.5.1.11 Contamination and Remediation

Data Centre Site

A revised DSI prepared by Douglas Partners, relating to the data centre site, is provided at **Appendix Q**. The DSI does not identify any additional impacts resulting from the amended proposal from a contamination perspective and confirms that the site remains suitable for the proposed development.

Based on the findings of the revised DSI, there are no revised or additional mitigation measures which are required to support development on the data centre site from a contamination perspective, beyond those previously outlined in the EIS.

HV Cabling Route

A PSI prepared by Douglas Partners related to the HV cabling route is provided at **Appendix ZT**.

The PSI was undertaken in accordance with the *National Environment Protection (Assessment of Site Contamination) Measure 1999* (as amended 2013) and relevant NSW EPA guidelines. The assessment comprised a review of historical land use information, relevant environmental databases, previous investigations, and a site walkover, supported by the development of a conceptual site model to identify potential contamination sources, pathways, and receptors.

The PSI identified that the alignment of the proposed HV cabling route was historically vacant or grazing land prior to its development as Lenore Drive circa 2013, with surrounding industrial development occurring progressively from the mid-2000s. No records of contamination were identified on NSW EPA registers for the site or for adjoining land.

Potential contamination sources are limited to imported fill associated with road construction, general road use, and isolated fly tipping, which may include asbestos-containing materials. Based on this history and site observations, the risk of widespread or significant contamination is considered low, with any contamination likely to be localised and manageable.

Potential impacts of the HV cabling works are associated with disturbance of soils during construction, including trenching and horizontal directional drilling. These activities may expose construction workers and, to a lesser extent, the surrounding environment to contaminants through direct contact, inhalation of dust, or mobilisation via surface water runoff or groundwater pathways.

Given the linear and temporary nature of the works and having regard for the proposed construction methodology involving progressive excavation, removal, and backfilling, the PSI considered that the potential for significant or long-term contamination impacts is low. Any contamination encountered is expected to be localised and not indicative of broader site-wide contamination.

Notwithstanding the above, an Unexpected Finds Protocol has been prepared to manage any potential contamination encountered during construction for works associated with the HV transmission line.

Mitigation Measures

The PSI proposes standard environmental management measures to minimise contamination risks during construction, including:

- Segregation, classification, and appropriate disposal of excavated materials in accordance with NSW EPA requirements;
- Validation and verification of imported materials to ensure suitability for reuse.
- Pre-construction inspection and removal of fly-tipped materials, where present.
- Implementation of an Unexpected Finds Protocol, including procedures for managing potential contamination and asbestos.
- Engagement of a suitably qualified environmental consultant where contamination is suspected.

3.5.2 Standard Assessments

3.5.2.1 Biodiversity

A revised BDAR Waiver Request has been prepared by écologique as part of this amended application to assess the potential biodiversity impacts of the external HV cabling route and is provided at **Appendix ZB**. The revised BDAR Waiver Request has been prepared on the basis that:

- The HV route is predominantly located within existing road reserve and hardstand areas.

- The road corridor and Ropes Creek crossing have been subject to substantial disturbance, with managed riparian vegetation associated with the TransGrid easement.
- The works area does not provide habitat for threatened species or support habitat connectivity.
- The proposal will not impact the Ropes Creek riparian corridor or the Erskine Park Biodiversity Corridor.
- The proposal will not affect the flight paths of protected fauna.
- Potential impacts to hydrological processes supporting threatened ecological communities are low, with the Cumberland Red Gum River-flat Forest avoided through underboring beneath Ropes Creek.

The amended BDAR Waiver has been submitted with this Amendment Report.

3.5.2.2 Flood Risk

A revised Flood Risk Impact Assessment (**FIRA**) has been prepared by ACOR Consultants and is included at **Appendix ZD**.

Data Centre Site

The revised FIRA addresses potential flood impacts associated with the data centre site. In response to DPHI comments, ACOR obtained updated flood level information from Penrith City Council, which has informed revised 1% AEP and probable maximum flood (**PMF**) levels for the site. Given the scale of the site and the hydraulic gradient of Ropes Creek, separate flood planning levels have been adopted for the northern and southern portions of the site. A comparison of original and revised flood levels is provided in **Table 17**.

Table 17 Original and Amended Flood Planning Levels for the Data Centre Site

Location	1% AEP Flood Elevation (mAHD)	Flood Planning Level (incl. 0.5m freeboard) (mAHD)	Probable Maximum Flood (mAHD)
South (Generator Gantry Area)	▪ Original FIRA – 51.7 ▪ Revised FIRA – 51.70	▪ Original FIRA – 52.20 ▪ Revised FIRA – 52.10	▪ Original FIRA – Not identified ▪ Revised FIRA – 52.40
North (Substation Area)	▪ Original FIRA – 51.0 ▪ Revised FIRA – 50.80	▪ Original FIRA – 51.50 ▪ Revised FIRA – 51.30	▪ Original FIRA – Not identified ▪ Revised FIRA – 51.90

Comparison of the existing survey levels with the updated PMF levels confirms that the majority of the development footprint remains above the relevant flood planning levels. The PMF extent does not encroach into the northern extent of the development, and in the south, existing embankment levels exceed the PMF level, limiting flood extent to areas outside the developable platform.

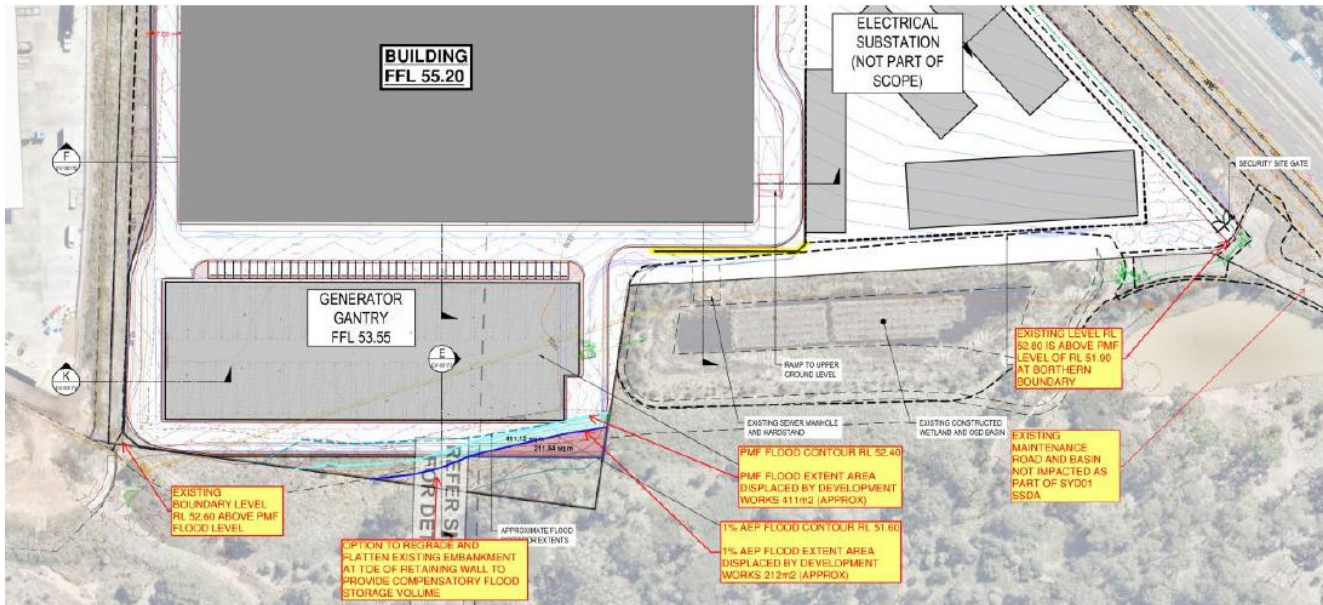
As outlined in **Figure 15**, the revised FIRA includes an overlay of the proposed development against the 1% AEP and PMF flood extents. This confirms that only minor encroachment occurs, limited to works within the existing embankment along the eastern boundary. These works are associated with the eastern circulation roadway and do not extend into the broader development footprint.

Given the limited extent and location of these works, the revised FIRA concludes that impacts on flood storage and flood behaviour would be negligible, with minimal displacement of floodwaters. On this basis, detailed post-development flood modelling is not required.

Mitigation Measures

Overall, the revised FIRA confirms that the amended proposal is suitable with respect to flooding and associated risks, with no additional mitigation measures required.

Figure 15 Overlay of Development Works within the 1% AEP and PMF extents



Source: ACOR Consultants, 2026

HV Cabling Route

The route for the proposed HV cabling line is not identified as flood prone or flood affected land. Accordingly, this component of the project is not expected to result in any flooding impacts, and no mitigation measures are required.

3.5.2.3 Ecologically Sustainable Development

A revised ESD Report addressing the amended development has been prepared by LCI Consultants and is included at **Appendix ZE**. The revised report outlines proposed changes to ESD targets and initiatives for the amended proposal.

The most significant change to the project's ESD strategy relates to industrial water use. Since exhibition of the EIS, the heat rejection system has been revised from an evaporative system to a fully air-cooled system, resulting in the removal of the previously proposed 23 industrial water tanks.

The adoption of an air-cooled system eliminates the need for water in heat rejection, substantially reducing reliance on potable water infrastructure, improving operational resilience and reducing maintenance requirements. As a result, the development will achieve an annual average Water Usage Efficiency (**WUE**) approaching zero, representing a significant improvement on the industry benchmark of 1.73.

Notwithstanding the above, the amended design also achieves an improved PUE of 1.3, reduced from 1.35 under the exhibited scheme.

While further reductions in PUE could be achieved through water-based systems, this would come at the cost of significantly increased water demand. The adopted approach therefore represents a more sustainable and balanced outcome.

A comparison of the original and revised ESD targets / initiatives is provided below. Changes in the table below are indicated in **bold** text.

Table 18 Comparison of Original and Revised ESD Targets and Initiatives

Original Scheme	Amended Scheme
Energy Efficiency and Performance	
- Target annual average PUE of approximately 1.35, representing a marked improvement compared with the national average of around 1.6. - Operational energy performance designed to support a NABERS Energy for Data Centres rating of 4.5 stars (exceeding the current national average of 4 stars). - Commitment to achieving a 5.5 Star NABERS Energy (Base Building) rating and a 3 Star NABERS Water rating for the office component, secured through a NABERS Agreement to Rate. - Consistent with the Sustainable Buildings SEPP, an Embodied Emissions Materials Form was prepared for the original scheme. - Integration of high efficiency building services and technologies, including: - Elevated data hall cooling setpoint temperatures and relaxed humidity set-points, supported by direct-to-chip liquid cooling, to optimise mechanical plant efficiency. - Waterside economy cycle and free-cooling capability from hybrid coolers, reducing reliance on mechanical chillers. - High-efficiency chiller plant with modern compressor technology and elevated operational chilled water temperatures enabled by liquid cooling. - Maximised on-site photovoltaic (PV) generation, with a minimum targeted output of 115 kWe per data centre building, subject to available roof space (noting constraints from cooling plant requirements). - High-efficiency LED lighting with occupant-responsive controls to minimise demand and operational hours. - Low-absorptivity, high Solar Reflective Index (SRI) external finishes to reduce radiant heat gain. - High-performance building fabric and glazing to office areas, with shading devices to reduce thermal loads.	PUE target of circa 1.3 annual average, a marked improvement compared to the national average of approximately 1.6. - Operational energy performance that would support a NABERS Energy for Data Centres performance of 5 stars if realised in operation (exceeding the current national average of 4 stars). - Commitment to a NABERS Energy for Office 5.5 Star Base Building rating and NABERS Water for Office 3 Star rating for the development office component through an Agreement to Rate. - Consistent with the Sustainable Buildings SEPP, a revised Embodied Emissions Materials Form has been prepared to address the amended proposal and is provided at Appendix ZL. - Incorporation of energy features to support target outcomes as follows: - Elevated data hall cooling setpoint temperature and relaxed humidity setpoints combined with direct to chip liquid cooling capability to maximise efficiency of mechanical plant. High efficiency chiller plant through modern compressor technology coupled with elevated operational chilled water temperatures due to relaxed hall conditions and direct to chip liquid cooling. - On-site PV maximised to the available roof space with a targeted rated output capacity in the order of a minimum 115kWe per data centre building, 230kWe minimum across the site. Roof top area available for installation is limited as majority is allocated to cooling chiller plant that cannot be installed over. - High efficiency LED lighting selections throughout to minimise demand coupled with occupant responsive controls to minimise operational time and associated energy consumption. - Low absorptivity / high SRI building external finishes to reduce radiant heat gains.

Original Scheme	Amended Scheme
	– High performance fabric / glazing to the office spaces and glazing shading to reduce thermal loads.
Water Efficiency and Conservation	
▪ Hybrid coolers with capability to operate in air-cooling mode (in lieu of evaporative mode) when ambient conditions allow. ▪ Reduced cooling loads through elevated data hall set-points and direct-to-chip liquid cooling, lowering heat rejection and associated water use. ▪ Landscaping designed with drought-tolerant, predominantly native species, minimising or eliminating irrigation demand.	▪ Air-cooled chillers used for heat rejection that do not consume water in operation leading to effectively zero water use in regular operation for the data centres. ▪ Low or zero irrigation demand through selection of drought tolerant planting for landscaping such as endemic native vegetation. ▪ Rainwater capture and reuse system for supply to flush fixtures and irrigation.
Pathway to Net Zero Emissions	
▪ Commitment to procuring 100% renewable electricity for all non-IT operational energy use within the facility, noting alignment with leading hyperscale AI and cloud providers' net-zero carbon commitments. ▪ Use of very low Global Warming Potential (GWP) refrigerants in chiller plant to minimise Scope 1 emissions. ▪ Consideration of future adoption of renewable diesel alternatives to replace fossil-fuel products.	▪ Commitment to procuring 100% renewable electricity for all non-IT operational energy use within the facility and data halls. ▪ Hyperscale customers are committed to procurement of 100% renewable electricity for IT load, eliminating the associated scope 2 emissions. ▪ Use of very low GWP refrigerants in chiller plant minimising as far as practical the associated Scope 1 emissions. ▪ Future procurement of renewable diesel alternatives to fossil fuel-based products subject to viability & availability, and procurement of offsets for residual Scope 1 emissions.
Materials and Waste	
The following initiatives are proposed to minimise material use and waste generation: ▪ Construction and demolition waste management plan to maximise diversion from landfill. ▪ Use of concrete mixes with supplementary cementitious materials to reduce embodied carbon. ▪ Structural steel and reinforcement with high recycled content. ▪ Durable, low-maintenance materials to extend service life and reduce replacement needs.	The following initiatives are proposed to minimise material use and waste generation: ▪ Construction and demolition waste management plan to maximise diversion from landfill. ▪ Use of concrete mixes with supplementary cementitious materials to reduce embodied carbon. ▪ Structural steel and reinforcement with high recycled content. ▪ Durable, low-maintenance materials to extend service life and reduce replacement needs.
Urban Heat Mitigation	

Original Scheme	Amended Scheme
▪ High-reflectivity external finishes to minimise heat absorption and contribute to cooler surrounding temperatures. ▪ Over 19% of the site landscaped with deep soil planting to provide shading and evapotranspiration cooling. ▪ Evaporative heat rejection with vertical discharge to minimise localised temperature increases. ▪ Significant separation from sensitive receivers, with nearest residences located more than 300 metres away.	▪ High-reflectivity external finishes to minimise heat absorption and contribute to cooler surrounding temperatures. ▪ 20.5% of the site landscaped with deep soil planting to provide shading and evapotranspiration cooling.

3.5.2.4 Waste Management

Construction Phase

A revised Construction & Demolition Waste Management Plan (**CDWMP**) has been prepared by Nuloop and is provided at **Appendix Y**. The revised CDWMP confirms that the updated data centre proposal will not result in any additional waste generation as a result of construction activities to facilitate the development. No additional or amended mitigation measures are proposed above those previously outlined in the original CDWMP.

Operational Phase

A revised Operational Waste Management Plan (**OWMP**) has been prepared by Nuloop and is included at **Appendix X**. No changes are proposed to the waste storage measures as originally proposed. The amended proposal will not result in any changes to the generation rates or waste streams as originally anticipated in the original OWMP. Accordingly, no additional or amended mitigation measures are proposed above those previously outlined in the original OWMP.

3.5.2.5 Aboriginal Cultural Heritage

Data Centre Site

A revised Aboriginal Cultural Heritage Assessment Report (**ACHAR**) addressing the amended proposal on the data centre site has been prepared by Urbis and is included at **Appendix ZA**.

The revised ACHAR confirms the same findings as the original report submitted with the SSDA, with no additional or amended mitigation measures required, reflecting the site's low Aboriginal archaeological potential and high level of previous disturbance.

In response to submissions from Heritage NSW, further clarification has been provided regarding consultation with RAPs. A total of 21 RAPs were registered for the project, with earlier discrepancies attributable to administrative errors. Further detail is provided in the Response to Submissions at **Appendix A**.

HV Cabling Route

An ACHAR Addendum Statement has been prepared by Urbis and is included as **Appendix ZS** and is provided to address the external HV cabling route.

An updated search of the Aboriginal Heritage Information Management System (**AHIMS**) was undertaken in March 2026 for an area of approximately 3.5km by 3km, encompassing both the data centre site and the HV cabling route. This search identified three Aboriginal sites within the vicinity of the proposed HV route, all of which have previously been assessed as having low scientific significance due to the limited number of artefacts and the disturbed nature of the surrounding areas.

The potential for previously unidentified Aboriginal objects has been assessed using the predictive model adopted in the ACHAR. While portions of the eastern and western sections of the route are located within 200 m of natural waterways, indicative of past Aboriginal land use, the broader alignment is not associated with other sensitive landscape features. Given the high level of historical disturbance across the entire corridor, Aboriginal archaeological potential is assessed as very low.

Mitigation Measures

Accordingly, the ACHAR Addendum concludes that the proposed HV cabling works are unlikely to result in harm to Aboriginal objects. The recommendations of the original ACHAR are maintained, with no additional or amended mitigation measures required.

3.5.2.6 Infrastructure Requirements and Utilities

A revised Infrastructure Requirements & Utilities Report has been prepared by LCI and is included at **Appendix N**. The report assesses the existing and required infrastructure needed to service the site and future data centre. The potential impacts associated with the amended data centre are consistent with the existing proposal. A summary of the potential impacts associated with the demand for utilities is provided below.

Hydraulic and Fire Infrastructure

- The project will rely on connections to nearby Sydney Water assets for potable water and sewerage. No upgrades to the Sydney Water assets are required to service the project.
- 2 x fire water tanks will be installed on the site.
- 1 x rainwater tank will be installed for irrigation and other non-potable uses. Plants with low irrigation demand have been selected to reduce water consumption for irrigation.
- Building-level and sub-metering will be provided to monitor and record the water consumption of the overall development, as well as irrigation systems, water fixtures, and water use for the mechanical systems.
- The amended project includes a revised cooling system which will significantly decrease the flow demands from the Sydney Water network. The cooling system will now be air-cooled, where the original proposal included a water-cooled system.

Electrical

- The development will be supplied via an underground 450MVA feeder connected to the nearby 330kV TransGrid Sydney West Substation.
- The site will accommodate 3 x 330/132kVA transformers to step the voltage down to 132kV, which in turn will supply 8 x 132/11kV transformers in the on-site substation via a 132kV switchroom. These services will be owned and operated by STACK.
- Each data hall will receive 4 x 11kV supplies from the 132/11kV transformers, which will supply 4 x 80/100MVA 132/11kV oil type transformers for each data hall.
- Backup power supply will be provided by 188 x 3,100kW 11kV diesel generators (94 x generators per data hall), with each generator housed within a prefabricated generator enclosure with noise attenuation and an internal day tank designed to comply with AS1940.
- Lithium-Ion batteries will be used as an alternative backup power supply.

Information and Communication Technology

- A total of 4 x carrier point-of-entry into the data centre site are proposed to be provided at the northern and southern boundaries of the site. Multiple POEs are required for capacity and resiliency.
- Telecommunications carriers will meet and connect into the POEs for regional connectivity between the data centre site and other major telecommunications facilities including exchanges, gateways, other data centres, etc.

- Each pathway will be provided via underground telecommunications pit and pipe. The lead-in pipe is owned by the carrier up until the POE at the property boundary.
- It is noted that some telecommunications pathways are adjacent to easements. The revised report confirms that the proponent's telecommunications team will coordinate these pathways in conjunction with utilities providers outside of the property boundary.
- All internal reticulation between the POEs and the buildings is via private infrastructure comprising telecommunications vaults and communications conduits spanning between these vaults. The pathways will be sized to minimise subsequent on-site excavation activities during the life of the facility.

3.5.2.7 Bushfire Risk

A revised Bushfire Hazard Assessment has been prepared by Blackash and is provided at **Appendix Z**. This report has been updated to include the updated project description. However, the proposed amendments made do not alter the previous assessment or mitigation measures outlined in the EIS.

3.5.2.8 Building Code of Australia

A revised BCA Assessment Report has been prepared by bm+g and is provided at **Appendix I**. The report assesses the amended proposal against the relevant Deemed-to-Satisfy provisions of the Building Code of Australia 2022.

The assessment identifies a number of matters requiring further detail at Construction Certificate stage, as well as items that will be addressed through fire safety engineering and other performance-based solutions.

Notwithstanding this, the assessment does not identify any issues that would necessitate redesign of the proposal. Subject to the resolution of the identified matters through detailed design and appropriate performance solutions, the amended development is capable of achieving compliance with the BCA.

3.5.2.9 Accessibility

A revised Accessibility Report has been prepared by STACC Consulting and is included at **Appendix J**. The review of the amended proposal confirms that the proposed development can comply with the relevant accessibility requirements of the BCA 2022 Amendment 2 and the Disability (Access to Premises – Buildings) Standards 2010 at the detailed construction stage.

3.5.2.10 Social Impacts

A revised Social Impact Assessment has been prepared by Urbis and is provided at **Appendix P**. The assessment confirms that the amended proposal does not result in any additional social impacts. Accordingly, no additional or revised mitigation measures are required beyond those previously identified in the EIS.

3.6 Justification of Amended Project

This section of the report provides a comprehensive evaluation of the amended proposal having regard to its economic, environmental and social impacts, including the principles of ecologically sustainable development. It assesses the potential benefits and impacts of the proposed amendments, considering the interaction between the findings in the detailed assessments and the compliance of the proposal within the relevant controls and policies.

3.6.1 Project Design

The amended proposal reflects targeted design refinements arising from the Response to Submissions process, together with a discrete amendment to facilitate the delivery of the required external HV connection.

Importantly, the overall design intent, scale and function of the approved data centre development remain unchanged. The only substantive change to the project is the inclusion of the off-site HV infrastructure and associated expansion of the project area within the Lenore Drive road reserve. All other updates represent design development and coordination refinements in response to Authority feedback and ongoing technical resolution.

The site layout has been refined to improve functionality, access and infrastructure coordination, including minor adjustments to building siting, consolidation of ancillary infrastructure and optimisation of the internal road network. These changes maintain the approved development footprint while improving operational efficiency and site legibility.

The amended design also improves landscape outcomes. Removal of the previously proposed industrial water infrastructure has enabled an increase in deep soil areas and more cohesive planting zones, strengthening the site interface and enhancing visual outcomes.

The adoption of a waterless (air-cooled) mechanical system represents a key design refinement, reducing operational water demand and enabling the removal of previously proposed industrial water tanks. This has facilitated an increase in deep soil areas and a more efficient landscape outcome across the site.

The external HV underground cable connection is essential to support the operation of the development. The alignment follows the Lenore Drive road reserve, a highly disturbed corridor, which avoids sensitive ecological areas and minimises impacts on vegetation and biodiversity. The route has been developed in consultation with TransGrid and relevant authorities to ensure it is practical to construct and minimises disruption to existing infrastructure and surrounding land uses.

Overall, the amended proposal retains the key characteristics of the exhibited development while delivering targeted improvements, including enhanced landscaping, reduced water demand and integration of essential infrastructure

3.6.2 Strategic Context

This amendment report has demonstrated that the project is consistent with the strategic framework and has been considered against key Government and Council documents including the following:

- *Greater Sydney Region Plan – A Metropolis of Three Cities*
- *Our Greater Sydney 2056: Western City District Plan*
- *Penrith Local Strategic Planning Statement 2020*
- *Penrith Employment Lands Strategy 2021*
- *Penrith Economic Development Strategy*
- *GANSW Better Placed*
- *Future Transport Strategy 2056*

3.6.3 Statutory Context

The relevant State and local environmental planning instruments are listed in **Section 3.4** and assessed in **Appendix B**. The assessment findings remain unchanged from those assessed under the EIS. The assessment concludes that the updated proposal complies with the relevant provisions within the relevant instruments as summarised below:

- The proposed development has been assessed and designed in respect to the relevant Objects of the EP&A Act as defined in section 1.3 the Act and has been evaluated in accordance the relevant matters for consideration under s4.15(1) of the EP&A Act as outlined in **Appendix B**.
- This EIS has been prepared in accordance with the SEARs as required by sections 190–192 of the EPA Regulation.
- Consideration is given to the relevant matters for consideration as required under the BC Act and the revised proposal is supported by a BDAR Waiver request.
- This SSDA pathway has been undertaken in accordance with the Planning Systems SEPP as the proposed development is classified as SSD.
- An EPL will be required as per the requirements of Schedule 1 clause 9 of the POEO Act.
- Concurrence from TfNSW will be required as per the T&I SEPP for ‘traffic generating development’.
- The proposal addresses the principles of ESD in accordance with the requirements at section 194 of the EPA Regulation

3.6.4 Consultation

As set out in **Part 1** of this report, feedback received during the public exhibition period has informed the design refinements made to the proposal. Consultation feedback received during the refinement of the amended proposal has also been considered. A detailed breakdown of submissions and response can be found at **Appendix A**.

3.6.5 Likely Impacts of the Proposal

The proposed development has been assessed considering the potential environmental, economic and social impacts as outlined below:

Table 19 Environmental Impact Summary

Matter	Summary
Impacts on the natural environment	The proposal as amended has been assessed in relation to the following key natural environment impacts: ▪ Contamination: A revised DSI confirms the data centre site is suitable for the proposed use, with no additional contamination impacts identified. For the HV route, a PSI identifies a low risk of contamination, with any impacts expected to be localised and manageable through standard measures and an Unexpected Finds Protocol. ▪ Flooding: Updated flood modelling confirms the majority of the development footprint remains above relevant flood planning levels, with only minor encroachment limited to the eastern embankment works. Impacts on flood behaviour and storage are negligible. The HV route is not located within flood prone land and will not result in flooding impacts. ▪ Bushfire: While the site is not mapped as bushfire prone land, existing vegetation to the east associated with the Ropes Creek corridor presents a potential bushfire hazard. To address this, the proposal incorporates an APZ consistent with the

Matter	Summary
	recommendations of the Bushfire Hazard Assessment. The APZ ensures adequate separation between the development and the hazard, thereby mitigating bushfire risk and ensuring compliance with relevant NSW RFS guidelines. ▪ Biodiversity: The data centre site is cleared and highly disturbed, with no impacts to native vegetation or threatened species. The HV route is predominantly within an existing road corridor and will not impact biodiversity values, including the Ropes Creek corridor. A BDAR waiver has been prepared confirming negligible biodiversity impacts. ▪ Groundwater: A supplementary assessment for the HV works confirms impacts will be localised, temporary and low risk, including HDD beneath Ropes Creek, with appropriate mitigation measures in place. ▪ Aboriginal cultural heritage: Updated assessment confirms low archaeological potential and no impact to Aboriginal objects for both the data centre site and HV route. Any unexpected finds can be managed through standard procedures.
Impacts on the built environment	The proposal has been assessed in relation to the following key built environment impacts: ▪ Bulk and Scale: The amended proposal retains the overall scale, height and massing of the exhibited scheme, with only minor refinements. The development remains consistent with the industrial character of the Erskine Park Employment Area. ▪ Trees and Landscaping: No tree removal is required. Landscaping has increased to approximately 15,800m² (20.5% of the site), driven by the removal of industrial water tanks. This results in improved deep soil planting, enhanced buffers, and better visual amenity outcomes. The HV route does not require vegetation removal, with all assessed trees retained. ▪ Visual Impacts: The amended proposal does not introduce any additional or materially different visual impacts. Visibility from surrounding receivers remains limited and within an established industrial context. ▪ Traffic: Traffic generation and access arrangements remain consistent with the original proposal. Construction and operation of both the data centre and HV route will result in manageable impacts, with temporary construction impacts mitigated through CTMP measures. ▪ Noise and Vibration: Operational noise outcomes have improved, with compliance achieved at all receivers. Construction impacts for both the site and HV works are temporary and can be managed through standard mitigation measures. ▪ Air Quality: Construction impacts are temporary and manageable. Operational impacts remain negligible, with generator testing compliant with criteria. HV works will not generate operational emissions and construction impacts are low and manageable.
Social impacts	▪ The proposal will create employment opportunities during both the construction and operational phases. During construction, jobs will be generated in various trades and services, benefiting local contractors and suppliers. In operation, the data centre will provide ongoing roles in areas such as facility management, IT infrastructure, research and development, and administration. These roles contribute to regional economic growth and local workforce development.

Matter	Summary
	▪ The development of a contemporary data centre addresses the increasing demand for digital infrastructure and data storage in the Sydney region. By enabling businesses to securely store and process data, the proposal aligns with the strategic goals of WSEA to position itself as a hub for employment, technology and innovation. ▪ The inclusion of generous landscaped setbacks and green spaces will enhance the visual and functional quality of the streetscape and mitigate against the urban heat island effect. These enhancements will create a more pleasant and accessible environment for local workers and visitors, contributing to community well-being and urban amenity. ▪ The proposal incorporates a range of sustainability measures to reduce energy consumption while minimising environmental and amenity impacts
Economic impacts	▪ The proposal will facilitate the orderly and economic development of a highly strategic site. ▪ The proposal will provide employment opportunities during both the construction and operational phases of the development. ▪ The proposal will meet the growing demand for data storage space in a highly suitable location.
Cumulative impacts	The proposed development will contribute to the ongoing transition of the Erskine Park Employment Area into a high-tech industrial precinct. Given the site's location within an established industrial context and the scale of the project, cumulative impacts are expected to be limited and manageable. Utility augmentation, stormwater discharge to the adjacent detention basin, and localised traffic generation have been assessed as having negligible to low cumulative effects on surrounding infrastructure networks. Landscaping, deep soil provision, and canopy planting will assist in mitigating urban heat contributions at a precinct scale. Operational air quality and noise impacts are confined to periodic generator testing and comply with relevant criteria, ensuring no unacceptable cumulative effects on nearby sensitive receivers. Through adoption of sustainable design measures, including high-efficiency cooling systems, renewable energy commitments, and low-carbon construction materials, the project will further reduce its contribution to cumulative environmental loads.

The potential impacts can be mitigated, minimised or managed through the measures summarised in **Appendix C** to this Amendment Report.

3.6.6 Suitability of the Site

- The proposal is consistent with the IN1 zone objectives, is permitted with consent and satisfactorily addresses the relevant provisions in I&E SEPP, Blacktown LEP 2015 and the Penrith DCP 2014.
- The site is a large, consolidated land holding which is vacant and has been previously cleared of all structures and vegetation to accommodate future development.
- There are no significant environment constraints that would limit the project being developed on the site.
- The character and scale of the development is compatible and consistent with its existing and likely future context, being an emerging industrial employment area.

- The proposed development will optimise use of a vacant site and deliver strategic objectives located within a developing employment precinct with high amenity and employment outcomes and support business activity that occurs in other nearby established and emerging employment-generating precincts.
- The site is highly accessible to the regional road network and all necessary infrastructure can be accommodated, allowing operations to commence at no cost to Government.
- The proposed development is found to generate no adverse impacts on the established residential land to the north (approximately 300 metres away from the site), based on the environmental assessments undertaken.
- The HV route is predominantly located in a road reserve which is existing disturbed land, containing other services infrastructure. Excavation below Ropes Creek will be managed so not to impact the environmental quality of the waterway. The proposed HV connection works are permissible by way of section 4.38(3) of the EP&A Act as they are sufficiently related and ancillary to the data centre development.

3.6.7 Public Interest

The proposed development is considered in the public interest for the following reasons:

- The proposal is consistent with relevant State and local strategic plans and complies with the relevant State and local planning controls including the relevant provisions in the EP&A Act, I&E SEPP, Blacktown LEP 2015 Penrith DCP 2014.
- Subject to the implementation of the recommended mitigation measures, no adverse social or environmental impacts result from the proposal in terms of traffic, noise and vibration, air quality or views during construction and operation of the development.
- The potential impacts of this development are significantly reduced compared to traditional industrial land uses, e.g. warehousing and distribution, which have greater potential noise and traffic impacts.
- The proposal directly contributes to the important role that the WSEA plays as an employment generating precinct within the broader Western Parkland City, as identified in the Greater Sydney Region Plan.
- The proposal provides critical infrastructure which will support the growth for the digital economy within NSW and more broadly.
- The proposal will protect and enhance employment lands and increase job numbers.
- No major issues relating to the construction and operation of the development were raised during the pre-lodgement consultation with the local community, Council, Government and agency stakeholders.

In view of the above, it is considered that this SSDA has significant merit and should be approved subject to the implementation of the mitigation measures described in this report and supporting documents

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