Our Reference: **PT25026**

NineZero DC Sub TC I Pty Ltd
c/- LCI Consultants Pty Ltd
Level 5
73 Miller Street
North Sydney NSW 2060

10 October 2025

Via email: david.caleo@lciconsultants.com.au

Proposed Data Centre Expansion – 90 Peter Brock Drive, Eastern Creek
Addendum Traffic Impact Assessment Report

Please find below and attached the findings of an assessment of the proposed modified application for alterations / additions of the existing data centre site at 90 Peter Brock drive. Eastern Creek.

Existing Site

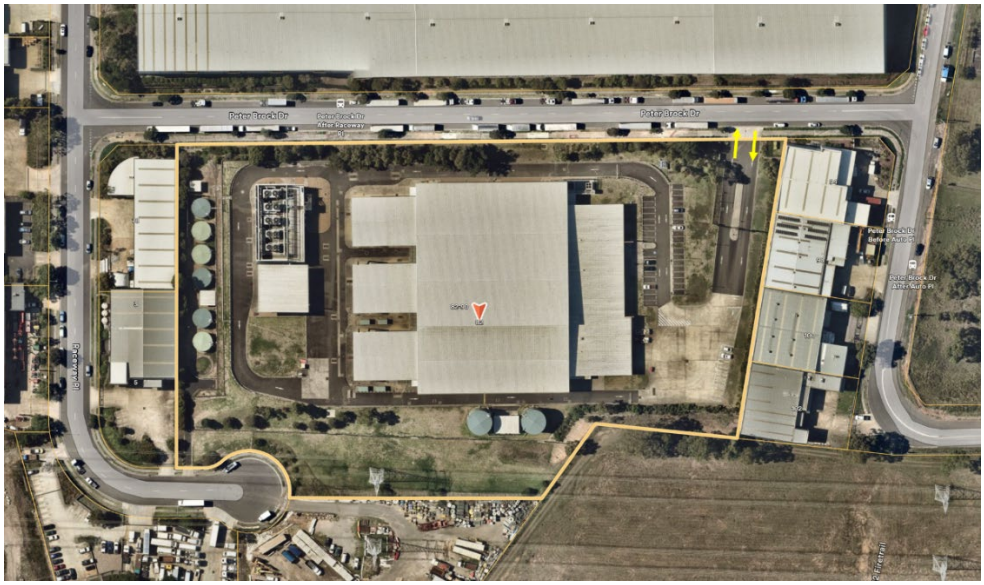
The existing arrangements of the site are shown below in **Figure 1**.

Figure 1 - Site Location

Positive Traffic Pty Ltd ATF Positive Traffic Trust
PO Box 3457, Rouse Hill NSW 2155
T: 0414 462247 / E: dean@positivetraffic.com.au

The existing site includes a large data centre facility with single secured entry / exit driveway access to Peter Brock Drive which provides the main frontage of the development. A portion of the rear frontage faces Raceway Place in the south – west corner of the site. However, no pedestrian or vehicle access is available via Raceway Place. All vehicles require security clearance to access the site. The current driveway location, internal circulation roadways and open air car parking arrangements are shown in **Figure 2**.

Figure 2 – Access, Car Park, Circulation Arrangements



However, the proposal includes ownership of a number of existing adjacent sites which will allow the expansion of the existing data facility. The overall site included in the approval and the available access driveways are shown below in **Figure 3**.

Figure 3 – Overall Site Boundaries

As noted in **Figure 3**, the overall site includes four (4) entry / exit driveways in Raceway Place and a further driveway on the bend of Peter Brock Drive in the south – east corner of the overall site.

Original Proposal / Traffic Impact Assessment Report

DCI Data Centres is proposing to expand its existing data centre located at 90 Peter Brock Drive, Eastern Creek. The existing data centre is known as SYD01. The proposed new data centre is known as SYD02.

On 1 September 2023, the Department of Planning, Housing and Infrastructure (the Department), as delegate of the then Minister for Planning and Public Spaces (the Minister), approved a State significant development application from NineZero DC Sub TC I Pty Limited (trading as DCI Data Centres, or DCI) for the expansion of DCI's Eastern Creek Data Centre located at 90 Peter Brock Drive, Eastern Creek in the Blacktown local government area (LGA).

The project was determined to be State Significant Development (SSD-21342738) and Development Consent was granted on 01/09/2023.

During detailed design for the project, DCI has identified the need for revision to the approved design. Modification 1 (SSD-21342738 Mod 1), relating to rainwater and process water storage tank arrangements on the site for enabling works and planning for future works, was approved 18/09/2025. Modification 1 included revised internal parking arrangement but kept total parking at 100 spaces.

DCI has continued design progression for the data centre, including a revised data centre design of 63MW IT capacity with a mixed cooling strategy. DCI is proposing a Modification 2 to the development consent to accommodate revised design. This traffic memo has been prepared to support Modification 2.

To support the original application for development consent, the site was assessed by Transport & Urban Planning Pty Ltd in their Traffic Impact Assessment Report dated 14 April 2022. This memo provides an update to the traffic considerations of the project.

The components of the proposal assessed in the TIA report at the time included:

- *The proposal is to demolish the existing industrial buildings adjoining the western boundary of the site (No. 90) and facing Raceway Place and construct a new data centre building and a new office building which will be integrated with the existing No. 90 site.*
- *A pedestrian bridge link will be provided between the new data centre and office buildings.*
- *A new zone substation will also be constructed on a separate adjoining block of land which will require the demolition of the existing warehouse building on that site.*
- *Table1 below shows the breakdown of the floor area for the proposal.*
- *As part of the proposal, an additional 57 car parking spaces including one (1) accessible space, will be provided in a separate area at No. 90 Peter Brock Drive. These spaces will be accessed via the existing*

driveway to No. 90 in Peter Brock Drive. a Total available parking on the site will be 100 car parking spaces.

- *Loading facilities for vans (i.e. Austroads Class 1 vehicle) will be provided off the internal road in No. 90.*
- *A new driveway in Raceway Place will be provided to the new Data Centre building. This driveway will be used occasionally to remove old/discontinued computer equipment.*
- *In addition, a new at grade pedestrian walkway will be constructed linking the new office and data centre to the existing data centre.*
- *The current hours of operation of 24 hours, 7 days per week will be maintained.*
- *Once operational, the new data centre will not require any additional shift staff which will remain as 8 people on the day shift and 3 people on the night shift. However, the data centre will accommodate up to 100 operational staff at any one time, which is a potential increase of up to 76 additional operational staff from the existing operation during the daytime shift (i.e. 6am – 7pm).*

Table 1 – Floor Area of New Data Centre Buildings

Building	GFA m² Office / Store / Lobby / Corridor	GFA m² Data Hall / MMR
New Data Centre	---	10,865m²
New Office Building	2,345m²	---
New Substation	---	---
Total	+13,210m²	

The TIA report[1] included intersection counts and modelling of existing / future traffic conditions at the following locations:

[1] TIA Report for Proposed Data Centre Expansion at 90 Peter Brock Drive, Eastern Creek – Transport & Urban Planning Pty Ltd 14 April 2022

Figure 4 – Weekday AM Peak Surveyed / Modelled Intersections

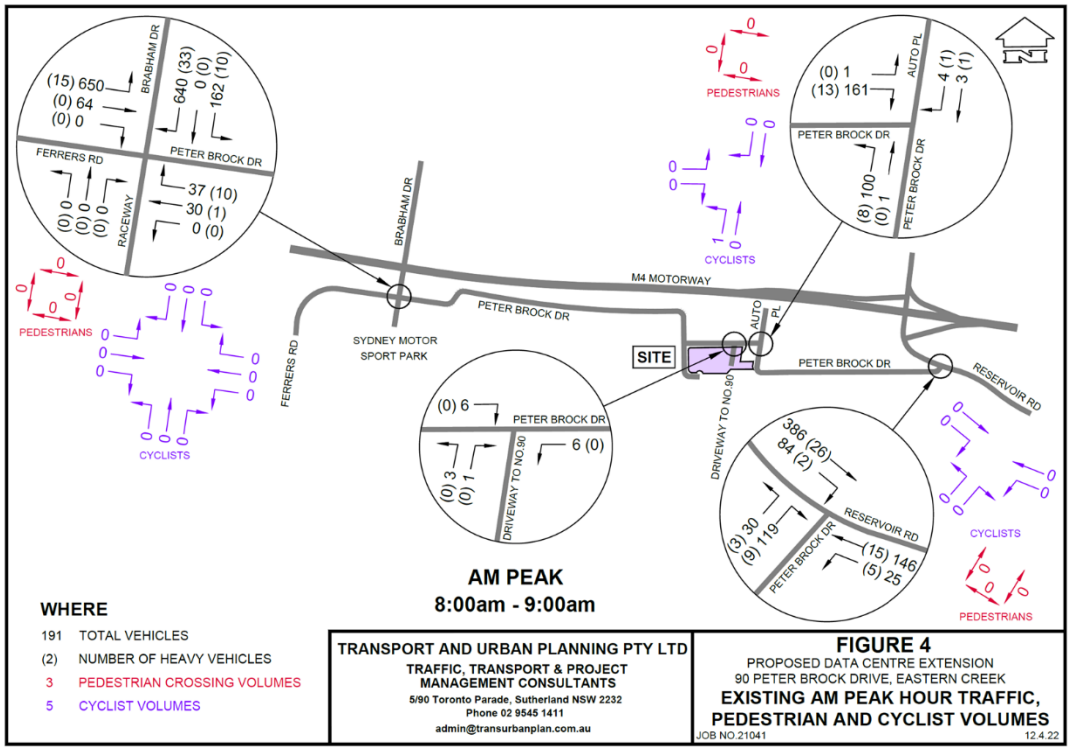
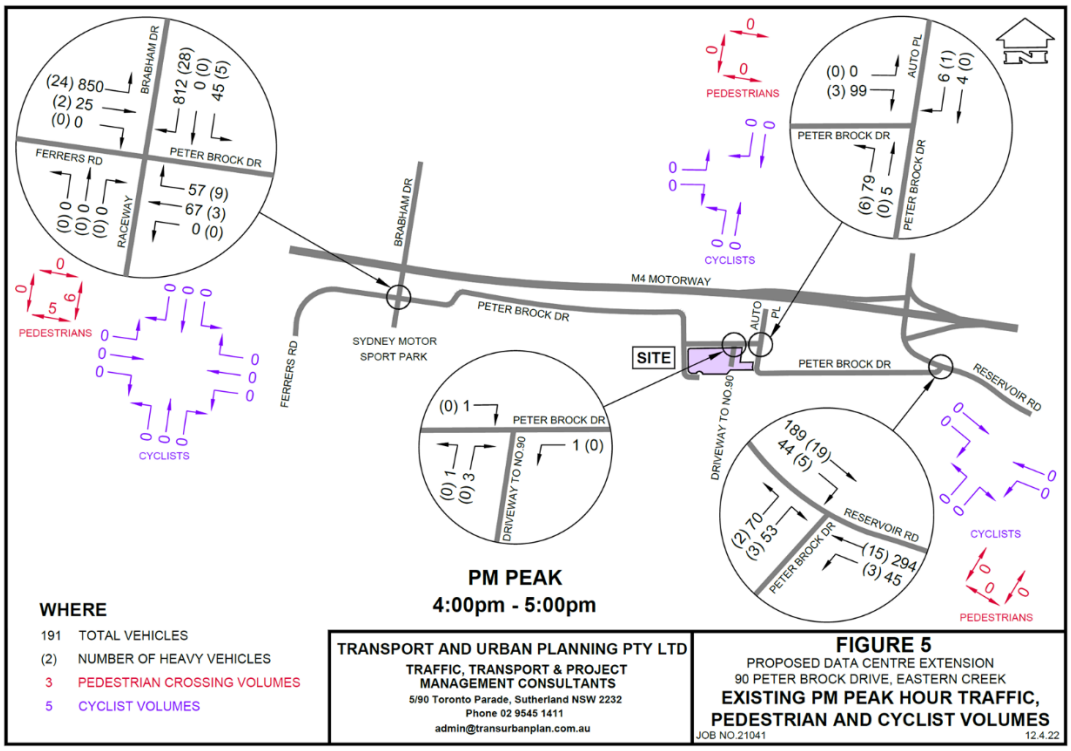


Figure 5 – Weekday PM Peak Surveyed / Modelled Intersections



The TIA report included a first principles assessment of both traffic generation and parking demands based on staff demands. This approach accounts for data centres more accurately which typically included large areas of floorspace managed by proportionally low overall staff numbers.

With a peak staff demand of 100 persons, the proposed 100 parking spaces would allow all staff to travel by individual vehicle (a conservative approach with mode share recorded at the site higher than 1 person per vehicle).

Further, with an AM / PM peak hour count of the site, the TIA report provided an estimate of future site traffic generation based on existing travel behaviour and increase in floorspace despite the fact that the development would not require *any increase in current staff demands of 8 persons* to operationally manage the site.

The proposal will result in an increase in operational staff trips visiting the data centre on weekdays.

The existing data centre, which has a floor area of 7,070m^2 GFA, generates 16vph in the weekday AM peak hour and 9vph in the weekday PM peak hour.

The proposed new data centre and office building will have a floor area of 13,210m^2 GFA.

Adopting the same existing traffic generation rate for the AM and PM peak hours, the proposal is expected to generate an additional 36 vehicle trips in the AM peak hour and 21 vehicle trips in the PM peak hour.

After accounting for the potential increase in site traffic generation, the TIA report found that intersections surveyed would continue to operate at a satisfactory level of service in the future with no requirement for additional upgrade of surveyed intersections as shown below:

TABLE 5.2
SIDRA MODELLING RESULTS FOR WEEKDAY AM FOR EXISTING CONDITIONS AND WITH PROPOSAL

Intersection	Control	Existing AM Peak				AM Peak With Proposal			
		LS	DS	AVD (sec)	HMD (sec)	LS	DS	AVD (sec)	HMD (sec)
Peter Brock Drive/Alto Place	Priority	A	0.137	5.7	6.2	A	0.141	5.7	6.2
Peter Brock Drive/Reservoir Road	RAB	A	0.345	5.8	9.5	A	0.352	5.8	9.5
Peter Brock Drive/Brabham Drive/Ferrers Road	RAB	A	0.412	6.4	11.9	A	0.420	6.4	11.9
Peter Brock Drive/Site Access to No. 90	Priority	A	0.080	0.2	6.5	A	0.088	0.9	6.6

Where:
LS - Level of Service
DS - Degree of Saturation
AVD - Average Vehicle Delay
HMD - Highest Movement Delay in Seconds

TABLE 5.3
SIDRA MODELLING RESULTS FOR WEEKDAY PM PEAK HOUR FOR EXISTING CONDITIONS AND WITH PROPOSAL

Intersection	Control	Existing PM Peak				PM Peak With Proposal			
		LS	DS	AVD (sec)	HMD (sec)	LS	DS	AVD (sec)	HMD (sec)
Peter Brock Drive/Alto Place	Priority	A	0.082	5.4	6.1	A	0.089	5.4	6.1
Peter Brock Drive/Reservoir Road	RAB	A	0.228	5.0	9.9	A	0.229	5.1	9.9
Peter Brock Drive/Brabham Drive/Ferrers Road	RAB	A	0.486	6.7	13.5	A	0.487	6.7	13.6
Peter Brock Drive/Site Access to No. 90	Priority	A	0.047	0.4	6.2	A	0.050	0.9	6.2

Where:
LS - Level of Service
DS - Degree of Saturation
AVD - Average Vehicle Delay
HMD - Highest Movement Delay in Seconds

Current Proposal

The key changes to the design include:

- A shift to a mix air and liquid cooled data halls
- Removal of the proposed separate standalone office building (-2,345m^2 of GFA)
- Reduction in parking from 100 to 73
- *No* increase in **shift staff** demands currently 8 people on the day shift and 3 people on the night shift.
- *Reduction* in **peak staff** demands to 73 persons including existing staff to account for removal of office building.

All other elements of the original proposal would remain include a new driveway access. Plans of the revised proposal are provided in **Appendix A** of this report.

Potential Traffic Impacts

Applying the same approach of the original TIA report[2], the proposed reduction of 2,345m^2 of floorspace would in turn reduce the potential site traffic generation from 36 vehicle trips in the AM peak hour and 21 vehicle trips in the PM peak hour to **25** vehicle trips in the AM peak hour and **14** vehicle trips in the PM peak hour.

[2] TIA Report for Proposed Data Centre Expansion at 90 Peter Brock Drive, Eastern Creek – Transport & Urban Planning Pty Ltd 14 April 2022

As the TIA report confirmed with a higher site traffic generation that which would result from the revised proposal that all surveyed intersections would continue to operate at a satisfactory level of service in the future, the traffic impacts of this revised development proposal are considered acceptable.

Parking Provision

The revised parking provision allows for all existing / visitor staff to travel by individual vehicle which is unlikely. As the parking provision allows for 100% mode share to private vehicle, the provision is considered satisfactory to accommodate a conservative estimate of potential peak parking demands within the site.

Car Park / Access Design

The proposal includes use of the existing driveway access via Peter Brock Drive.

All elements of the proposed car parking areas design have been reviewed for compliance with AS2890.1 and were found to be satisfactory. All parking space widths, lengths, aisle widths and ramp grades comply with AS2890.1.

Overall, the design of the parking areas, access driveways and service vehicle arrangements comply with the relevant Australian Standards and is considered satisfactory.

Service Vehicle Access / Circulation

Once complete, access by vehicles would be limited to light vehicles driven by staff / visitors to the site. A turning path assessment of a 99th percentile vehicle entering, circulating and exiting the site is provided in **Appendix B** of this report and confirms all access arrangements for such a vehicle are satisfactory.

It is noted that there would be on occasion (considered an occasional service vehicle by the Australian Standard for Commercial Parking Facilities AS2890.2) access by a large rigid truck (1-2 times per annum) for spare parts / computer racking under a pre-planned arrangement and travel through the site would be under traffic control managed by staff.

A turning path assessment of a HRV circulating the site is provided in **Appendix B** along with turning path assessments of loading dock areas / intersections with various service vehicle types. These turn path assessments confirm access by service vehicles can be accommodated throughout the site and which the design ensures such a vehicle would enter and exit the site in a forward direction at all times.

Conclusion

This addendum traffic impact assessment report of the revised proposal for expansion of the existing data centre at the site known as No.90 Peter Brock Drive, Eastern Creek has found:

- The proposal includes a *reduction* in overall floorspace and therefore site traffic generation compared to that which has been approved.

- Future intersection operating conditions of surveyed intersections as detailed in the original TIA report would continue to operate at a satisfactory level of service.
- The design of all proposed car parking / access areas complies with the minimum requirements of AS2890.1 and considered satisfactory.
- The overall site parking provision allows for 100% mode share to provide vehicle use as single drivers for the capped peak staff demand of 73 persons and thus is considered satisfactory.
- The design of the site can safely accommodate the occasional service vehicle (HRV) and ensure such a vehicle would enter, circulate and exit in a forward direction at all times.

Overall, the traffic impacts of the proposal are considered acceptable.

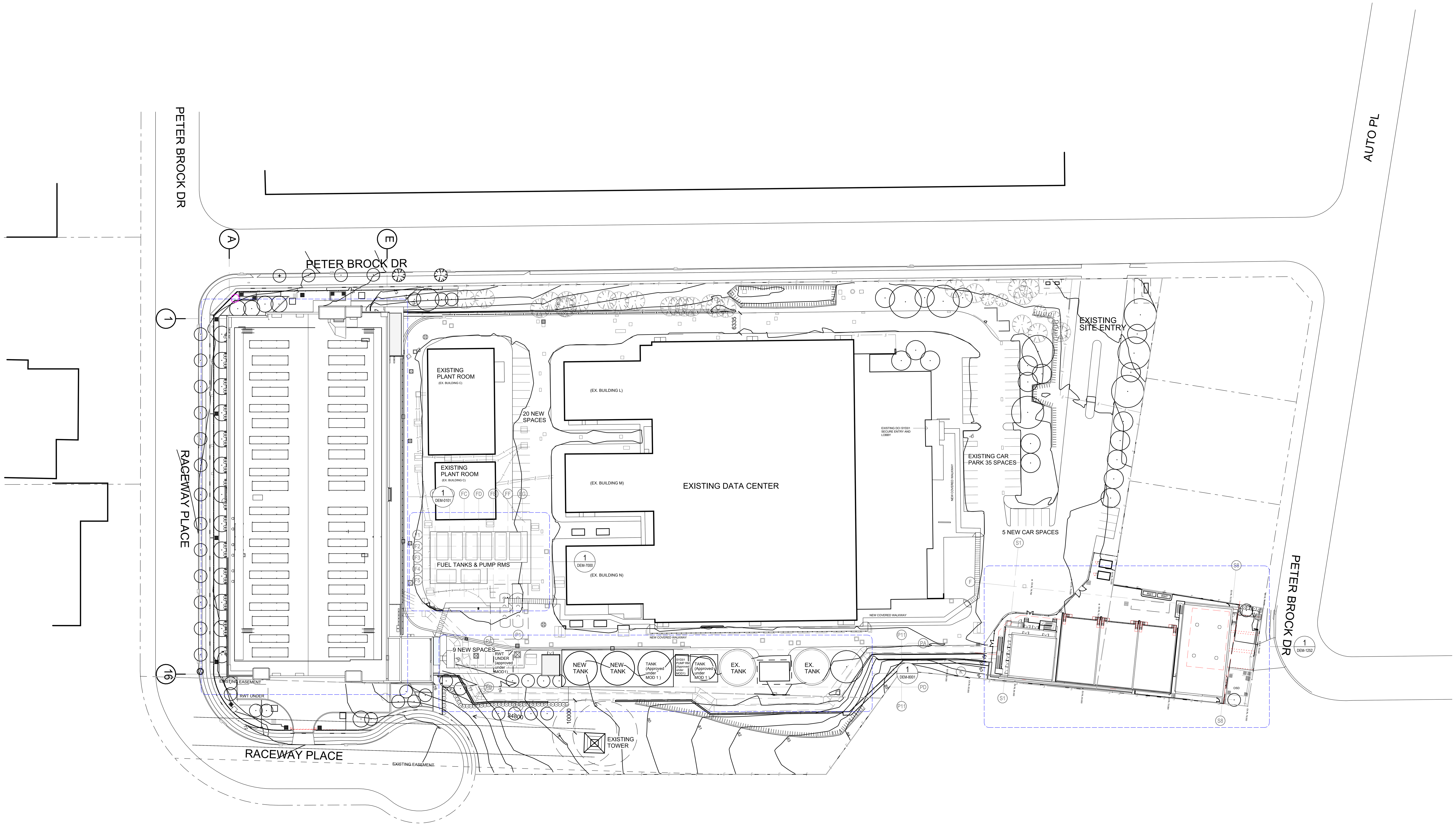
Please do not hesitate to contact myself on 0414 462247 should you require any additional information.

Yours sincerely

DEAN BRODIE
Managing Director
B.Eng (Civil) MIEAust NER
RMS Accredited Level 3 (Lead) Road Safety Auditor
RPEQ 27423
Expert Traffic Engineering & Road Safety Witness at NSW Land & Environment & NSW Supreme Court

APPENDIX A – REVISED DESIGN PLANS

nominated architects: Rudi Valla BArch (Hons) nsw reg no 6582 Jon Pizey BArch nsw reg no 6567



general notes legend

THE WHOLE 50% SCHEMATIC DESIGN DOCUMENTATION PACKAGE IS ISSUED FOR COSTING/PRICING PURPOSES ONLY & IS NOT SUITABLE FOR CONSTRUCTION. THE SELECTED CONTRACRTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED FINAL DESIGN & DOCUMENTATION COORDINATION PRIOR TO COMMENCING ANY WORKS ON SITE. THE DESIGN INTENT DEPICTED ON THESE DRAWINGS MUST BE CARRIED THROUGH IN ALL FINAL DESIGN & CONSTRUCTION DOCUMENTATION PRODUCED BY THE SELECTED CONTRACTOR & SHALL BE CONSISTENT WITH THE PRINCIPAL'S PROJECT REQUIREMENTS & D&C CONTRACT REQUIREMENTS. ALL ARCHITECTUAL DRAWINGS MUST BE READ IN CONJUNCTION WITH ARCHITECTUAL SPECIFICATION / SCHEDULES & CROSS REFERENCED AGAINST ALL ENGINEER'S DRAWINGS, SINGLE LINE DIAGRAMS, DETAILS, EQUIPMENT SCHEDULES & SPECIFICATIONS, THE ARCHITECTUAL AND ENGINEERING DOCUMENTS ARE TO BE READ IN THEIR ENTIRETY & THE CONTRACTOR MUST ALLOW FOR ALL WORKS DEPICTED OR IMPLIED WITHIN THE ENTIRE SET OF DESIGN DOCUMENTS REGARDLESS OF WHETHER ELEMENTS ARE NOT SHOWN ON ALL DOCUMENTS. WHERE THERE IS A DISCREPANCY BETWEEN DOCUMENTS, THE CONTRACTOR SHOULD ALLOW FOR THE MOST EXPENSIVE SOLUTION UNLESS INSTRUCTED OTHERWISE BY THE PRINCIPAL AUTHORISED PERSON OR AUTHORISED REPRESENTATIVE.

THE CONTRACTOR IS RESPONSIBLE FOR REVIEWING & CONFIRMING THE EXTENT OF LOCATION OF ALL EXISTING SITE SERVICES & FOR COORDINATING THE INSTALLATION OF ALL PROPOSED NEW SERVICES DEPICTED ON THE RELEVANT ENGINEERING DOCUMENTS PRIOR TO COMMENCING ANY WORKS. SHOULD ANY DISCREPANCIES BE DISCOVERED, CLARIFICATION MUST BE SOUGHT THROUGH SUPERINTENDENT OR CONTRACT ADMINISTRATOR PRIOR TO THE COMMENCEMENT OF ANY WORKS.

ALL SHOP DRAWINGS MUST BE PROVIDED IN CONJUNCTION WITH THE DESIGN INTENT DEPICTED IN THE ARCHITECTUAL & ENGINEERING PRELIMINARY DESIGN DRAWINGS & SPECIFICATIONS TO ENSURE THE PRINCIPALS PROJECT REQUIRMENTS & ORIGINAL DESIGN INTENT HAS BEEN MET & ACHIEVED. THE CONTRACTOR IS TO ENSURE THAT THE WORKS ARE CARRIED OUT IN ACCORDANCE WITH THE CONTRACT DOCUMENTATION, THE REQUIREMENTS OF THE CURRENT NATIONAL CONSTRUCTION CODE, ALL RELEVANT AUSTRALIAN STANDARDS, AND THE CONDITIONS OF CONSENT ISSUED UNDER DEVELOPMENT APPLICATION BY BLACKTOWN CITY COUNCIL, INCLUDING ANY APPROVED SUBSEQUENT MODIFCATION CONSENT(S).

any reports, drawings, advice or information included or referenced that is prepared and/or provided by any other party, including the client/principal, is the sole representation of the party who prepared the report drawings, advice or information and does not constitute a representation by **dem** (aust) pty limited. **dem** (aust) pty limited expressly takes no responsibility for any documents, advice or other material prepared by any other party.

All miscellaneous items such as stairs, ramps, bollards, benches, seats, handrails, balustrades, water features, playground equipment, fences and the like that are indicated on the drawings, are indicated as design intent only. Refer Structural Engineer's documents for detailed engineering requirements related to all supports /structural aspects of these elements. Where specific support / structural information is not shown in the design documents the Contractor shall allow to provide all necessary structural supports / footings as required to ensure installations are structurally sound and adequate to suit the installation. The Contractor shall be responsible for providing all necessary structural engineering inputs & certifications necessary to satisfy this requirement.

figured dimensions to be taken in preference to scaled dimensions. verify all dimensions on the job before preparing shop drawings or commencing work. dimensions shown are computer generated and the contractor is to apply standard building tolerances.

verified suitable for the use stipulated by the relevant revision/issue only if initialled and checked by an authorised **dem** (aust) pty limited representative.

amendments

no.	date	amendment	by	verified
01	30.10.24	SCHEMATIC DESIGN ISSUE	VI	ET
02	20.03.26	50% DESIGN ISSUE	RN	ET

civil

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services

LCI CONSULTANTS (AUSTRALIA) PTY LTD
LEVEL 5, 73 MILLER STREET, NORTH SYDNEY, NSW, 2060
ABN: 92 124 107 973

client

project

DCI SYD02
90 Peter Brock Drive, Eastern Creek, NSW

drawing title

ARCHITECTURAL -
SITE PLAN - SUBSTATION

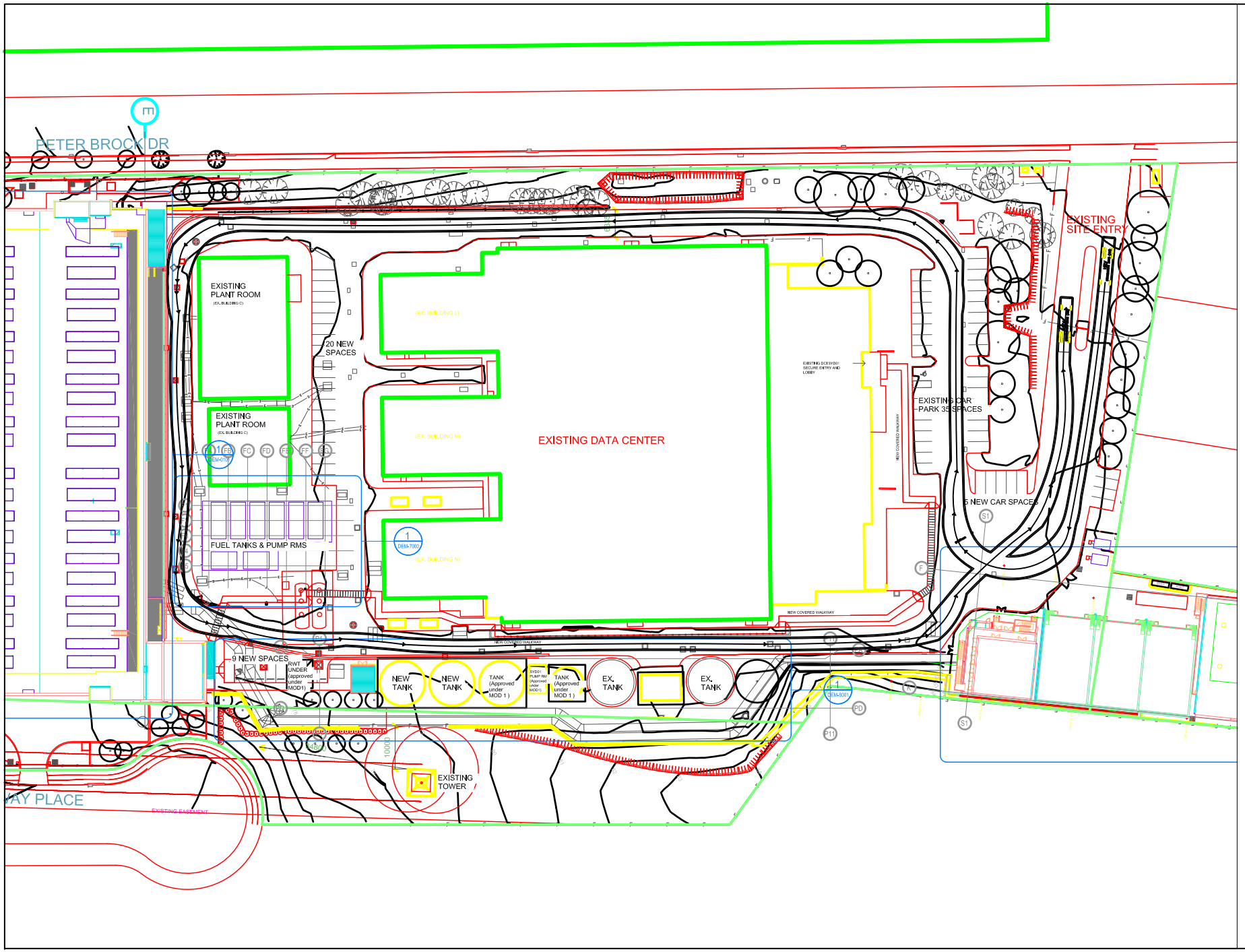
50% DESIGN ISSUE

original	scale	drawn	project no.
a0	1 : 500	ab	4666

drawing no.	rev no.
S02-AR-00-DRG-DEM-0108	02

plotted: 20/03/26 4:24:27 PM   file: Autodesk Docs://DCI DATA CENTRE (SYD02)/S02-AR-01-RVT-DEM-0001-R24.rvt

APPENDIX B – SERVICE VEHICLE TURNING PATH ASSESSMENT



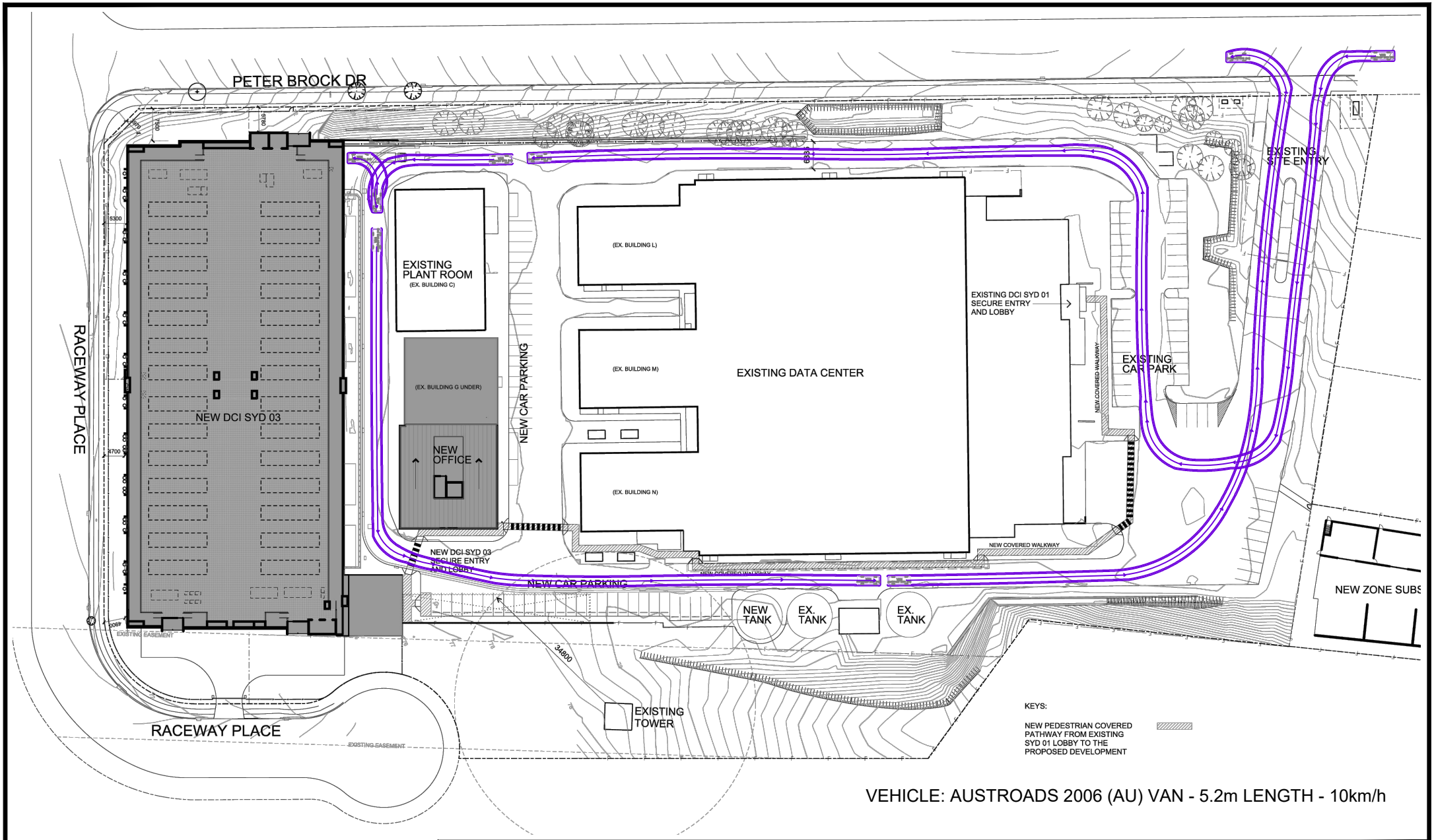
General Notes

No.	Revision/Issue	Date

Pacific Traffic Pty Ltd
PO Box 3457
Nowra Hill NSW 2155

Proposed Data Centre Expansion
90 Peter Brock Drive, Eastern Creek

Drawing No: PT23028DA02	Sheet
Date: 16 Apr 2025	
Scale 1:1000@A4	



VEHICLE: AUSTROADS 2006 (AU) VAN - 5.2m LENGTH - 10km/h

TRANSPORT AND URBAN PLANNING PTY LTD

TRAFFIC, TRANSPORT & PROJECT MANAGEMENT CONSULTANTS

5/90 Toronto Parade, Sutherland NSW 2232

Phone 02 9545 1411

admin@transurbanplan.com.au

FIGURE 7A

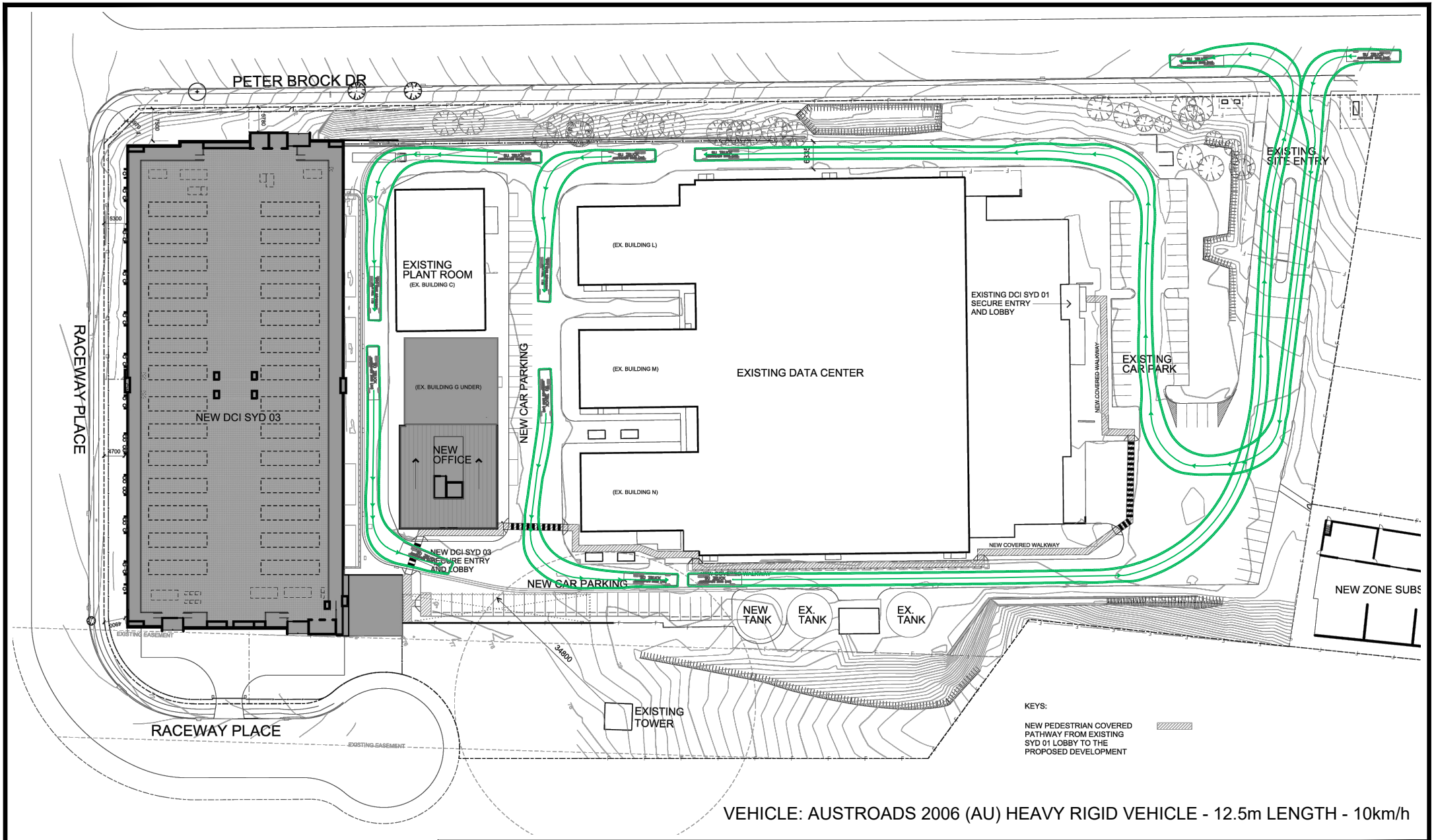
PROPOSED DATA CENTRE EXTENSION

90 PETER BROCK DRIVE, EASTERN CREEK

SWEPT PATH OF VAN USING LOADING AREAS

JOB NO.21041

1.8.22



VEHICLE: AUSTROADS 2006 (AU) HEAVY RIGID VEHICLE - 12.5m LENGTH - 10km/h

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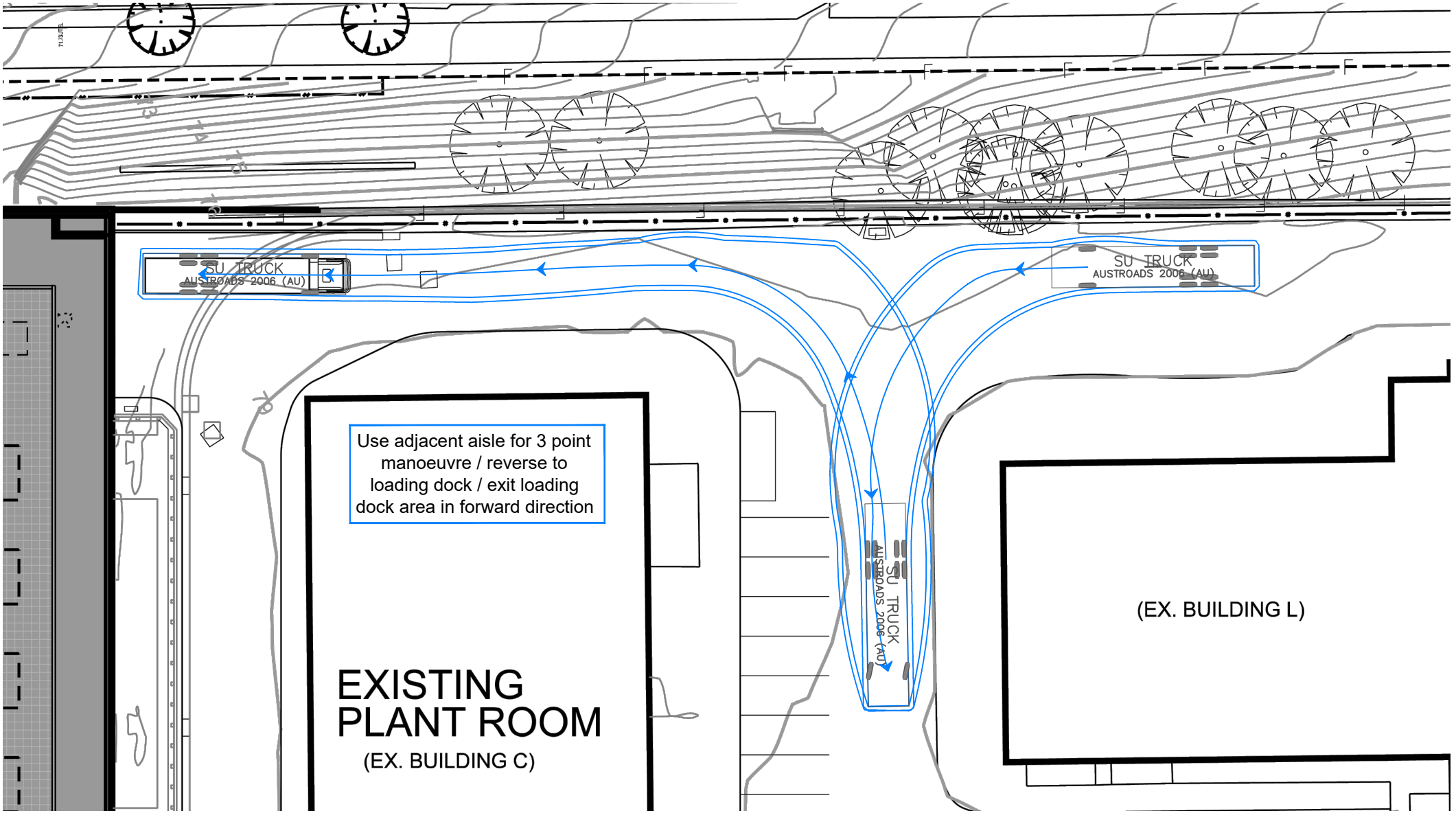
FIGURE 7B

PROPOSED DATA CENTRE EXTENSION
90 PETER BROCK DRIVE, EASTERN CREEK

SWEPT PATH OF 12.5m HRV CIRCULATION

JOB NO.21041

1.8.22



VEHICLE: AUSTROADS 2006 (AU) HEAVY RIGID VEHICLE - 12.5m LENGTH - 5km/h

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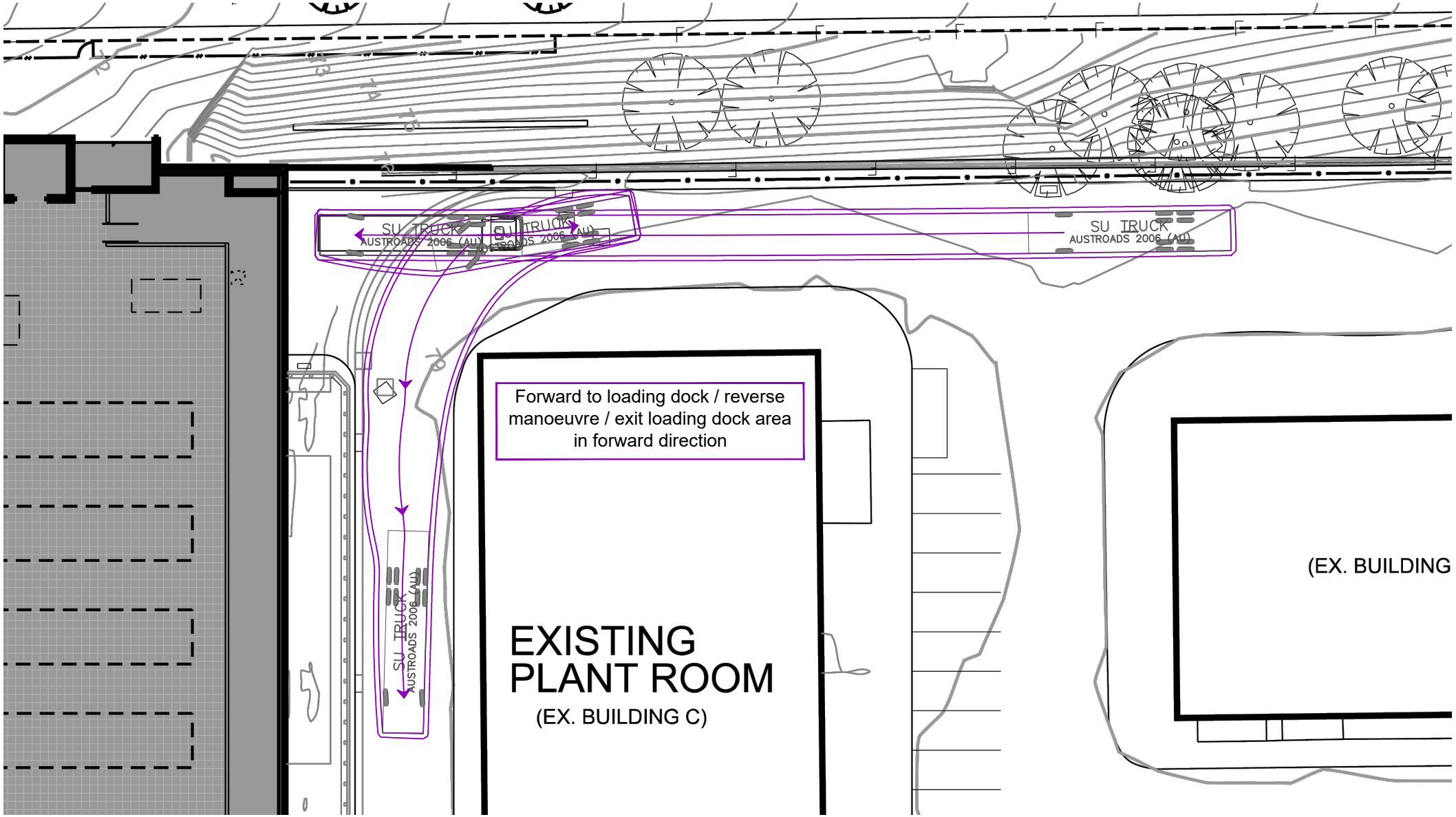
FIGURE 7C

PROPOSED DATA CENTRE EXTENSION
90 PETER BROCK DRIVE, EASTERN CREEK

SWEPT PATH OF 12.5m HRV
LOADING DOCK ACCESS - REAR LOADING

JOB NO.21041 1.8.22



VEHICLE: AUSTROADS 2006 (AU) HEAVY RIGID VEHICLE - 12.5m LENGTH - 5km/h

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FIGURE 7D

PROPOSED DATA CENTRE EXTENSION
90 PETER BROCK DRIVE, EASTERN CREEK

SWEPT PATH OF 12.5m HRV
LOADING DOCK ACCESS - FRONT LOADING

JOB NO.21041 1.8.22