

19 October 2022

NL182640

Newcastle Airport Pty Limited
Shane Murray
Private Bag 2001
Raymond Terrace NSW 2324

Dear Shane,

**Re: Traffic Assessment Statement
Proposed New Astra Aerolab Carpark**

Northrop Consulting Engineers have been engaged by the Newcastle Airport Pty Ltd (NAPL) to prepare a Traffic Assessment Statement to support a Development Application for a proposed new car parking facility on Stage 2B of the Astra Aerolab subdivision, adjacent to Newcastle Airport at Williamstown NSW.

There is no inherent traffic generation expected as part of this application (i.e., the proposed new parking spaces do not generate traffic), but rather all traffic generation is derived from other proposed development (e.g., development of lots within Astra Aerolab, etc) which does not form part of the current Development Application.

Therefore, a traditional quantitative Traffic Impact Assessment (TIA) has not been prepared and there are no significant offsite impacts expected by the proposed carpark. This traffic statement provides:

- A description of the purpose of the proposed carpark.
- An assessment of compliance of the proposed carpark with relevant standards.
- A description of the reasons why there are no notable offsite impacts as a result of this proposed carpark.

Given the unique characteristics of the proposed carpark and surrounding development, direct engagement has been undertaken with Transport for NSW (TfNSW) prior to preparing this correspondence.

Project Background

Newcastle Airport Pty Limited (NAPL) is an independent corporation, jointly owned by Port Stephens Council (PSC) and City of Newcastle (CN), which operates the aviation, aerospace and associated commercial facilities at Newcastle Airport in Williamstown, NSW.

There are essentially four main areas that form the overall Newcastle Airport precinct, those being:

- The Terminal and associated landside facilities (e.g. Terminal building, parking, drop-off, pick-up, rental car, etc.).

		Date
Prepared by	AB	19/10/2022
Checked by	BC	19/10/2022
Admin	HB	19/10/2022

NL182640 / 19 October 2022 / Revision C

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- The runway and other airside facilities (e.g. runway, taxiways, aircraft standing hardstand, etc.).
- The existing commercial precinct on the northern side of Williamstown Drive to the east of the existing Terminal facilities (e.g. hotel, commercial buildings, etc.).
- Astra Aerolab aerobusiness park (e.g. transport network, development lots, urban design initiatives, etc.).

Figure 1 below depicts the overall airport precinct and spatially locates the above main areas.

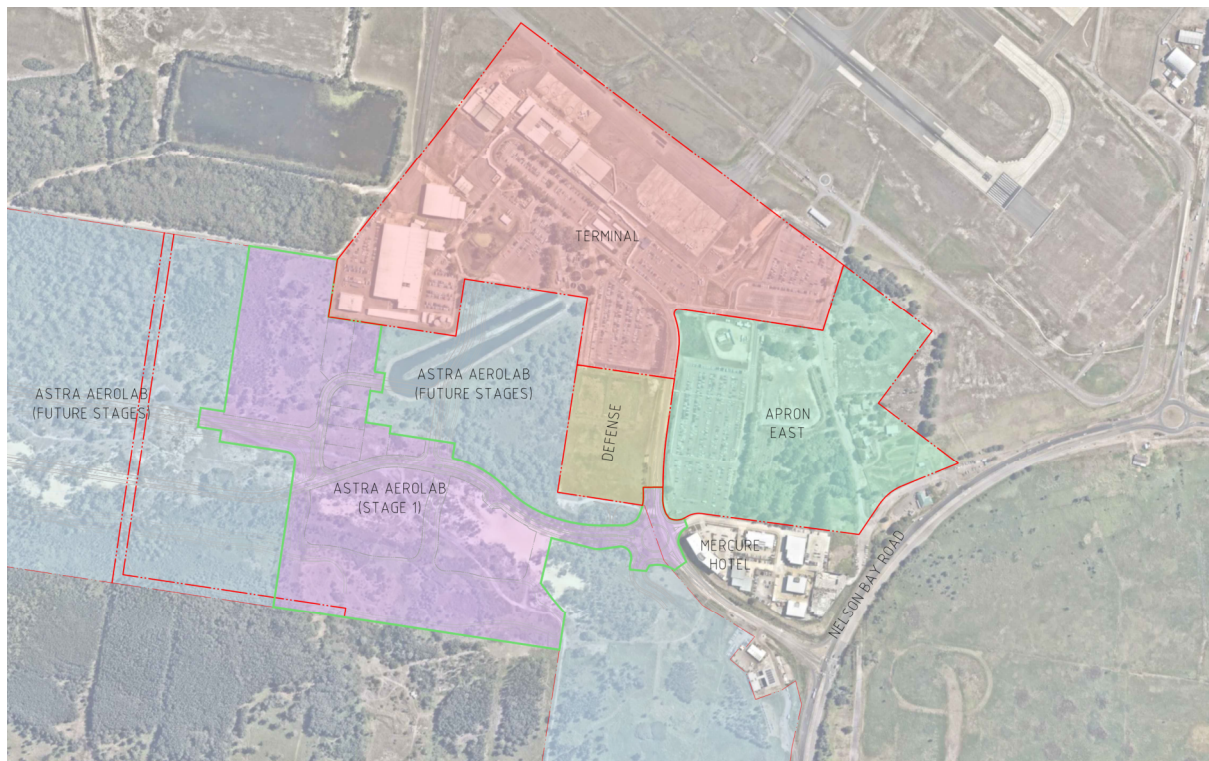


Figure 1 – Newcastle Airport Overall Precinct.

NAPL has seen sustained growth in passenger numbers over recent years, notwithstanding Covid impacts, and has implemented a strategic masterplan for the airport precinct. This masterplan forecasts that passenger growth will continue and sets out the direction for the development of the airport infrastructure that will be required to support such growth.

There are currently three areas of proposed intensive development, and which all have current approvals for further development activity. These are:

- Terminal facilities upgrade - A Development Application (16-2008-940-4) has been attained from PSC for a major upgrade to the Terminal facilities, incorporating an expansion to the Terminal building, passenger processing facilities, additional carparking and ground access facilities, as well as upgrade and alteration to servicing utilities. As part of the Consent, 1,676 parking spaces are required for public use and 458 car parking spaces for other uses such as taxi, rental cars, staff, pick-up/ drop-off, etc. Refer to Attachment C for a copy of the plan that summarises the required parking (drawing number: DA04f, drawing name: 'Terminal & Site Plan – Scope of Works 6').

- Astra Aerolab – The release of the Astra Aerolab aero-business park has commenced with stage 1 construction complete. This aerobusiness park is intended to be a world-leading and nationally significant hub for defence, aerospace and related research, manufacturing and businesses, focused on supporting the adjacent RAAF Base Williamtown base. Astra Aerolab lies on a 76Ha parcel of land immediately to the south of the domestic airport facilities and has an active Development Consent (16-2009-324-1) from PSC. No parking is required for the subdivision release, but rather the intention is all parking required for development of allotments would be provided as part of the future Development Approvals for each allotment.
- Airside infrastructure and runway – a major upgrade to air-side facilities is proposed, including upgrades to the runway, taxiways and apron infrastructure which is currently budgeted and being undertaken by the Department of Defence.

Proposed Carpark

The proposed carpark is a physical extension of the currently approved Long-stay carpark which is a public parking facility operated by the Airport. This proposed new carpark is located on in Stage 2 of Astra Aerolab subdivision and has approximately 314 new parking spaces. The proposed carpark layout is depicted in Figure 2 below, as well as in plans presented as Attachment A.

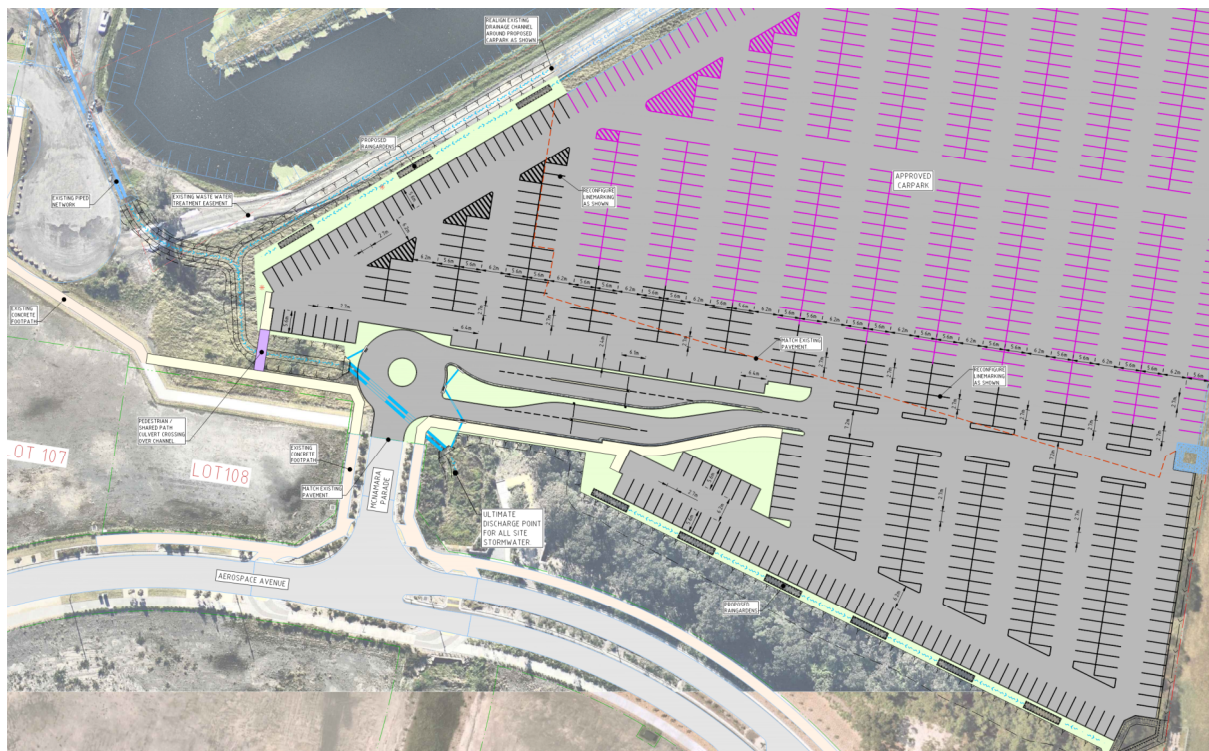


Figure 2 – Proposed carpark layout

Carpark Purpose

The purpose of the proposed carpark is to provide parking for the future development on eight lots of Astra Aerolab Stage 1, being Lots 103 to 110 inclusive, to reduce the number of spaces that are required to be provided on each of the actual development lots.

The exact form of the proposed developments on lots 103 to 110 is not yet known, however two of the Lots, being Lot 106 and Lot 109, have already undergone concept design and have been lodged for Development Application with PSC, hence their parking requirements well known. Additionally, the Stage 1 precinct has also undergone a masterplanning process and the proposed bulk, scale, and use for the other lots is somewhat known. Therefore, using the two DAs and the masterplan, an

assessment has been undertaken to estimate the likely number of parking spaces that will be required for the ultimate development of lots 103 to 110.

The number of parking spaces expected to be required for the future development on lots 103 to 110 is 924. This assessment was undertaken by SECA, and is presented in Attachment B. Obviously, this is an estimate only and will be required to be confirmed as the development of each allotment is approved. The summary of parking expected to be required by each allotment is summarised below in Table 1.

Table 1 – Estimated parking numbers for the development of Lots 103 to 110.

Lot	Estimated parking spaces required	Spaces assumed provided on Lot	Parking deficiency to be provided externally	Basis for parking assessment
103	172	0	172	Masterplan
104	151	0	151	Masterplan
105	207	0	207	Masterplan
106	133	17	116	DA Lodged
107	43	0	43	Masterplan
108	38	0	38	Masterplan
109	120	63	57	DA Lodged
110	60	0	60	Masterplan
TOTAL	924	80	844	

The assessment is an estimate based on the current masterplan / concept information available, however we expect that the parking requirements will change in time as the development proposals are further developed for each allotment. The assessment also assumes that no parking spaces are provided on each allotment, with the exception of lots 106 and 109 (which reflect that proposed as part of the Development Application package which has already been submitted to PSC for assessment). This is expected to be unlikely, and we would anticipate that visitor and accessible parking would as a minimum likely be provided on lot. We note that Astra Aerolab road network does not provide any on-street parking.

The proposed carpark only has approximately 314 spaces, and therefore an additional 530 spaces is required to achieve the current theoretical parking allocation. Therefore, additional spaces from the adjacent Long-stay carpark are intended to be allocated for the future development on lots 103 to 110.

To ensure that those spaces being allocated from the Long-stay carpark do not adversely impact the Terminal operations, a full site-wide precinct parking assessment has been undertaken to ensure there is adequate parking spaces available for all airport related uses (e.g., Astra allotment development as well as the terminal operations).

Parking Assessment

The Terminal Development Application (ref: 16-2008-940-4) included an assessment for the number of spaces required for the future Terminal operations. The parking requirements are depicted on the approved plan 'Terminal & Site Plan – Scope of Works 6' (drawing number: DA04f), and which is depicted in Attachment C. The total number of parking spaces is 2,134 spaces, being 1,676 for public

use and 458 for airport operations. These parking requirements are further summarised in Table 2 below.

Table 2 – Parking requirements for Terminal operations.

Public Parking	Spaces Required
Carpark 1	136
Carpark 2	222
Carpark 3	443
Carpark 4	875
Total	1,676

Other Parking	Spaces Required
Staff	175
Rental	198
Pick-up / Drop-off	25
Taxi pick-up / holding	58
Emergency	2
Total	458

An assessment of the total number of spaces within the entire Airport precinct was undertaken and has been determined to be 3,772 spaces, inclusive of the proposed new 314 space carpark. Refer to plan CD-03-C01.01 in Attachment A ('Newcastle Airport and Astra Aerolab Carparking Plan'), which depicts the number of spaces and where they are located within the overall precinct. We note that some parking spaces have been discounted because they are proposed to be removed as part of the Terminal development (e.g., within Short-stay 1, etc).

Table 3 below compares the number of available spaces to those required for Terminal operations and those desired for future development on Astra lots 103 to 110.

Table 3 – Parking requirements for entire precinct.

Use	Required Spaces	Available Spaces
Terminal – public	1,676	
Terminal – operational	458	
Astra Lots 103 – 110	844	
Total	2,978	3,772

Therefore, there are adequate spaces available to allocate toward the future development on lots 103 to 110, and hence the extra spaces will be allocated to the Astra Carpark to service future development on lots 103 to 110. This allocation is a total of 1,070 spaces. The approximate line of delineation between the Long-stay Carpark for terminal operations (red) and the dedicated Astra Carpark for future allotment development (light blue) is depicted below in Figure 3.

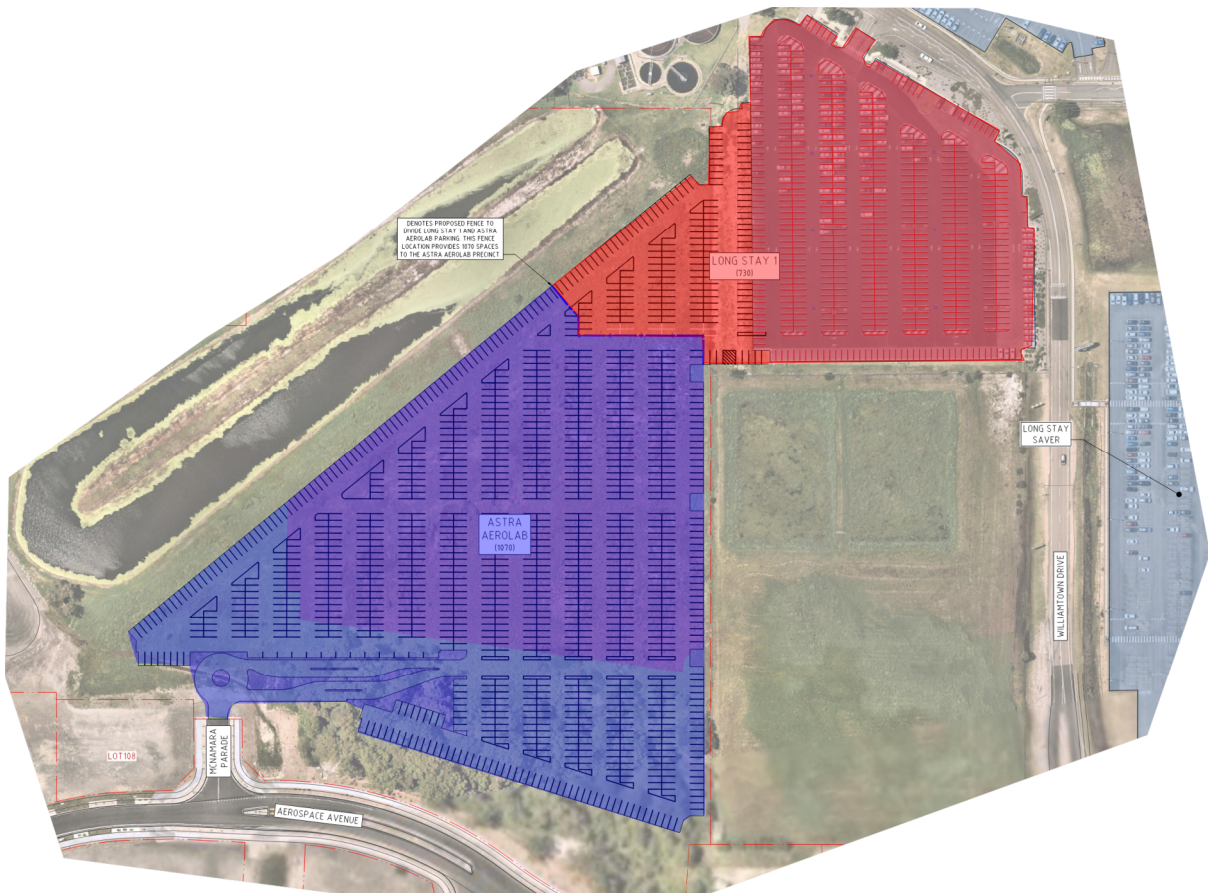


Figure 3 – Approximate Location of Delineation between Terminal Parking and Future Astra Development Parking.

Vehicle Access

Vehicular access to/ from the proposed carpark will be as follows:

- Public access is only proposed from the existing Stage 1 Astra Aerolab subdivision road network (i.e., the carpark will not be accessible from the airports Long-stay carpark) and a physical barrier (e.g. fence, vehicular barrier, etc.) shall be placed to prevent vehicular interconnection).
- Formal access control in the form of boomgate infrastructure is proposed at the road access to the carpark. The control is intended to restrict public access to that associated with the adjacent future development on Lots 103 to 110 inclusive.

Parking Compliance

All parking spaces have been designed to comply with the requirements of 'AS/NZS 2890.1:2004 Parking facilities – Off-street car parking'. The parking dimensions are proposed likely to be larger than that required by AS/NZS 2890.1 (minimum required parking space dimensions are 2.4m wide by 5.4m long in accordance with User Class of 1 for Astra Aerolab uses). The reason the parking spaces are proposed to be larger (approximately 2.7m x 5.6m) is a client driven desire to enhance user experience as well as provide flexibility for future uses. Minimum aisle widths shall be in accordance with AS/NZS 2890.1, which is 6.2m for 90 degree parking arrangements. From review of the proposed grading plan, the surface grading is proposed to comply with AS2890.1, with surface grades generally around 1.5% grade, which is considerably below the maximum allowable grades.

Pedestrian Accessibility

Pedestrian access is proposed to be managed by a network of dedicated footpaths to enable easy and efficient access between the Astra Aerolab pedestrian network, the airport parking facilities, the Terminal facilities, and the existing commercial precinct to the northeast.

Figure 3 below depicts the proposed and existing pedestrian path network within and around the proposed carpark. Paths are proposed to be comprised of concrete or similar sealed material and graded to comply with 'AS1428.1:2021, Design for access and mobility, Part 1: General requirements for access'.

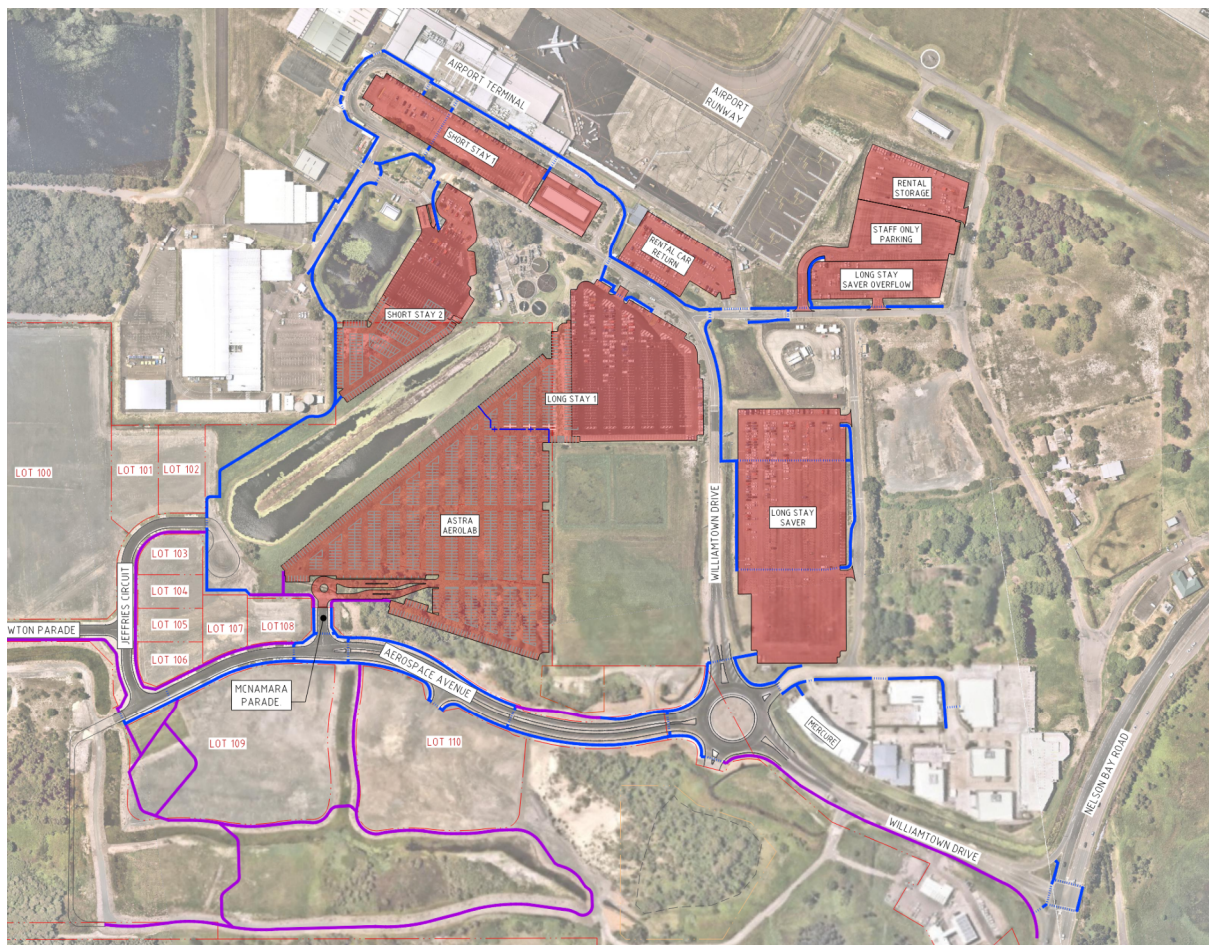


Figure 3 – Pedestrian path network.

Offsite Impact Assessment

There is no expected traffic generation as part of the proposed new carparks. All traffic generation is expected to be from the Airport Terminal and the Astra Aerolab aero-business development. Regional Traffic Impact Assessments have already been undertaken for the Terminal upgrade and Astra Aerolab as part of the Development Application for each of those projects, and subsequently any required traffic improvements or upgrades have already been conditioned by their respective Development Consents (e.g., Astra or Terminal consents). Given the proposed carparks are located on land that has already been assessed for regional traffic requirements, no quantitative traffic assessment has been undertaken, and nor is it required. Any and all traffic related impacts shall be considered during the Development assessment for each allotment development.

Conclusion

The proposed carpark has 314 additional spaces and will be accessed by vehicular traffic from the Astra Aerolab road network. Access is proposed to be restricted by using boom gate or similar devices and the carpark will allow 1,070 parking spaces for future Astra development.

There is no expected traffic generation as part of the proposed new carpark. All traffic generation is expected to be from the Airport Terminal upgrade and the Astra Aerolab aero-business development, both of which have already been assessed, and subsequently appropriate conditions imposed within their respective Development Consents.

An assessment for the expected parking spaces that will likely be required for the future development on lots 103 to 110 has been undertaken and estimated to be 844, however, the exact number of spaces shall be confirmed by assessed as part of each Development Application assessment once the exact form of each development is better known, hence the provision for more parking within the carpark area (a total of 1,070 spaces)

There is adequate parking available within the entire airport precinct to reasonably allow the dedicated allocation of 844 spaces for future development on lots 103 to 110. Therefore, the proposed carpark, as well as additional spaces from the approved airport Long-stay carpark, will be allocated for use by the future development of Lots 103 to 110. Parking for the allotment development (lots 103 to 110) shall be allocated purely for the use of those developments and shall not be used by the airport for customer parking.

This proposed carpark has no significant offsite traffic impacts and hence there are no required offsite upgrades or road network augmentation.

Yours sincerely,



Andrew Brown

Principal | Civil & Environmental Manager
BEng (Environmental) (Hons) MIEAust
CPEng NER (Environmental and Civil)

Limitation Statement

Northrop Consulting Engineers Pty Ltd (Northrop) has been retained to prepare this report based on specific instructions, scope of work and purpose pursuant to a contract with its client. It has been prepared in accordance with the usual care and thoroughness of the consulting profession for the use by Newcastle Airport Pty Ltd. The report is based on generally accepted practices and standards applicable to the scope of work at the time it was prepared. No other warranty, express or implied, is made as to the professional advice included in this report.

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Attachment A – Proposed Carpark Plans


DRAWN: J BEVITT
DESIGNED: J BEVITT
JOB MANAGER: A BROWN
VERIFIER:

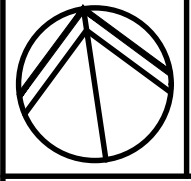



FOR INFORMATION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT
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3	ISSUED FOR INFORMATION	JB		AB	01.09.22	
4	ISSUED FOR INFORMATION	JB		LM	04.10.22	
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PROJECT	ASTRA AEROLAB
	WILLIAMTOWN, N.S.W. 2318

DRAWING TITLE	NEWCASTLE AIRPORT AND ASTRA AEROLAB CARPARKING PLAN
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JOB NUMBER	NL182640
DRAWING NUMBER	CD-03-C01.01
REVISION	7
DRAWING SHEET SIZE = A1	

LEGEND

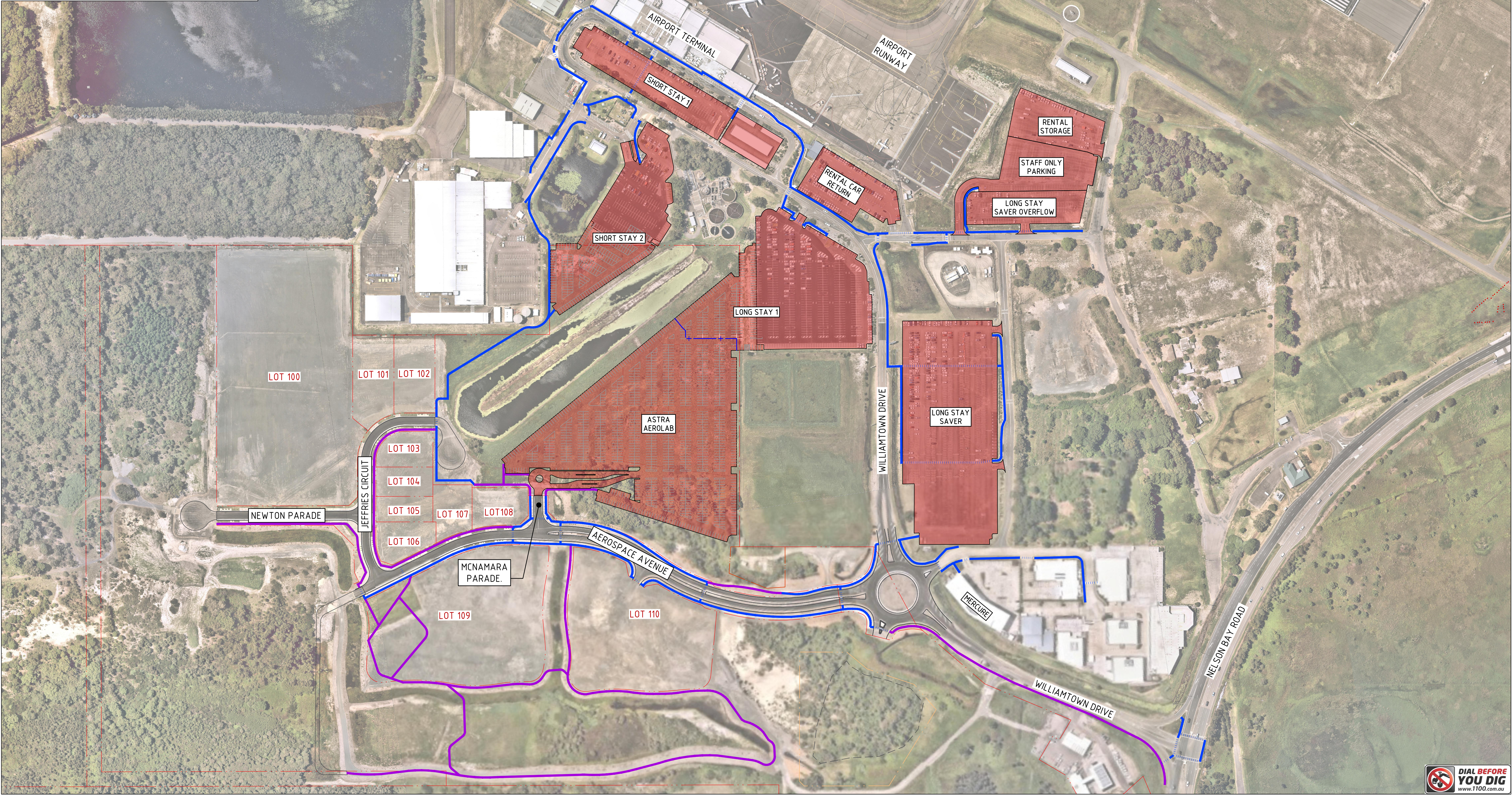
SITE BOUNDARY LINE

EXISTING PEDESTRIAN NETWORK


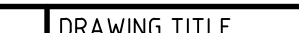

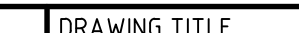



PROPOSED PEDESTRIAN NETWORK

PEDESTRIAN ROAD CROSSING

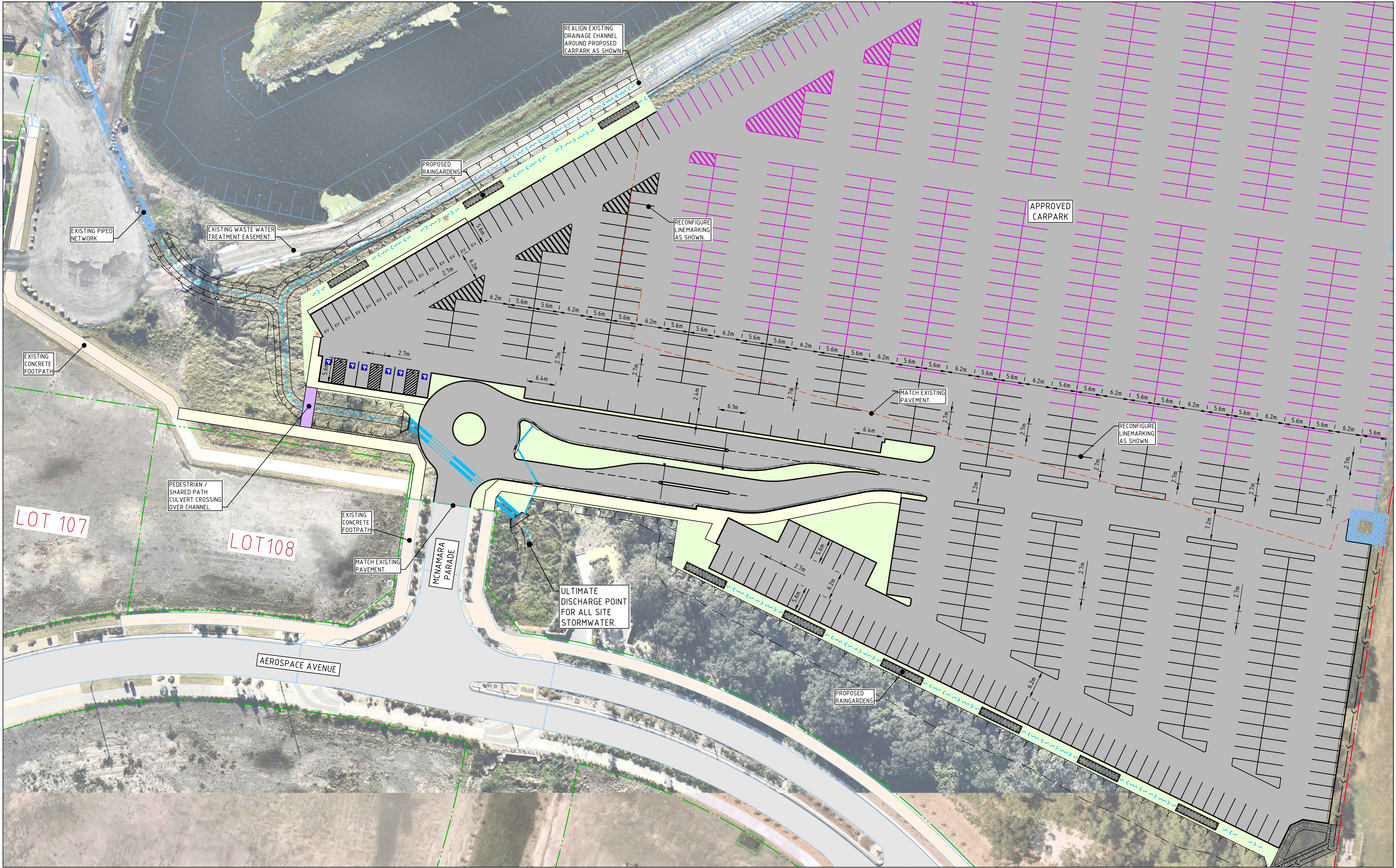
DENOTES CARPARKING



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3	ISSUED FOR INFORMATION		JB		AB	01.09.22								DRAWING NUMBER	REVISION
4	ISSUED FOR INFORMATION		JB		LM	04.10.22								CD-03-C02.01	7
5	ISSUED FOR INFORMATION		JB		LM	05.10.22									
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DRAWN: J.BEVITT
DESIGNED: J.BEVITT
JOB MANAGER: A.BROWN
VERIFIER: A.BROWN

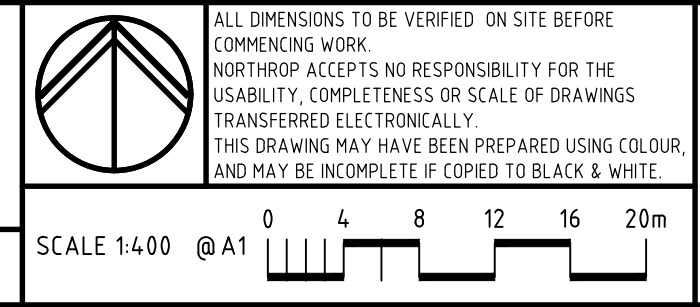


FOR APPROVAL

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PROJECT
ASTRA AEROLAB CARPARK WILLIAMTOWN NSW, 2318

DRAWING TITLE
ASTRA AEROLAB PROPOSED CARPARK

JOB NUMBER	NL182640
DRAWING NUMBER	CD-03-C3.01
REVISION	6
DRAWING SHEET SIZE = A1	

Attachment B – Parking Assessment for Astra Aerolab Development on Lots 103 to 110

24 August 2022

P2430 Northop carpark strategy Aerolab

Northrop Consulting Engineers
P O Box 180
Charlestown NSW 2290

Attn: Andrew Brown

Dear Andrew,

Review of parking demands for Astro Centre Aerolab complex, Williamtown NSW

Further to your recent email, we have reviewed the information provided for the above project and reviewed the plans to determine the parking options required to satisfy the development of the Astro Centre Aerolab complex. The project allows for the development of a number of buildings across Lots 103 to 110 and the project requires a strategy to accommodate the parking demands across the precinct.

A summary of the potential parking requirements, assessed against the Council DCP and the RTA Guide to Traffic Generating Developments is provided below.

Lot	Size	Rate	Requirement
103	1927 m2 site area 6,900 m2 NLA building	1 per 40 m2 office	172 spaces
104	1688 m2 Assume 6040 m2 NLA building	1 per 40 m2 office	151 spaces
105	1809 m2 site area Assume 8300 m2 NLA building	1 per 40 m2 office	207 spaces
106	4680 m2	1 per 40 m2 office	133 spaces
107	1974 m2 Assume 1,729 m2 NLA building	1 per 40 m2 office	43 spaces
108	1737 m2 site area Assume 1,521 m2 NLA Building	1 per 40 m2 office	38 spaces
109	10,200 m2	1 per 100 m2 Light industrial	120 spaces
110	Upto 4,200 m2 NLA Building	1 per 70 m2 office/light industrial use	60 spaces
		TOTAL	924 spaces



The following assumptions have been used:

- Lot 103 – plans allow for 6,900 NLA over 6 storeys plus ground floor
- Lot 104 and 105 – assume as per Lot 3 with 6 storeys plus ground floor and same ration of NLA to site area
- Lot 106 – allows for commercial use with small retail which will service on-site demands
- Lot 107 and 108 - assume as per Lot 3 with 6 storeys plus ground floor and same ration of NLA to site area
- Lot 109 – allows for light industrial type use with larger footprint and lower density of staff based on Canngear facility plan
- Lot 110 – Plans allow for upto 4,200 m2 NLA. Assume 50% office and 50% light industrial for average parking of 1 space per 70 m2.

The above parking rates are based on standard office rates and light industrial rates provided by Port Stephens Council DCP and similar to other DCP rates.

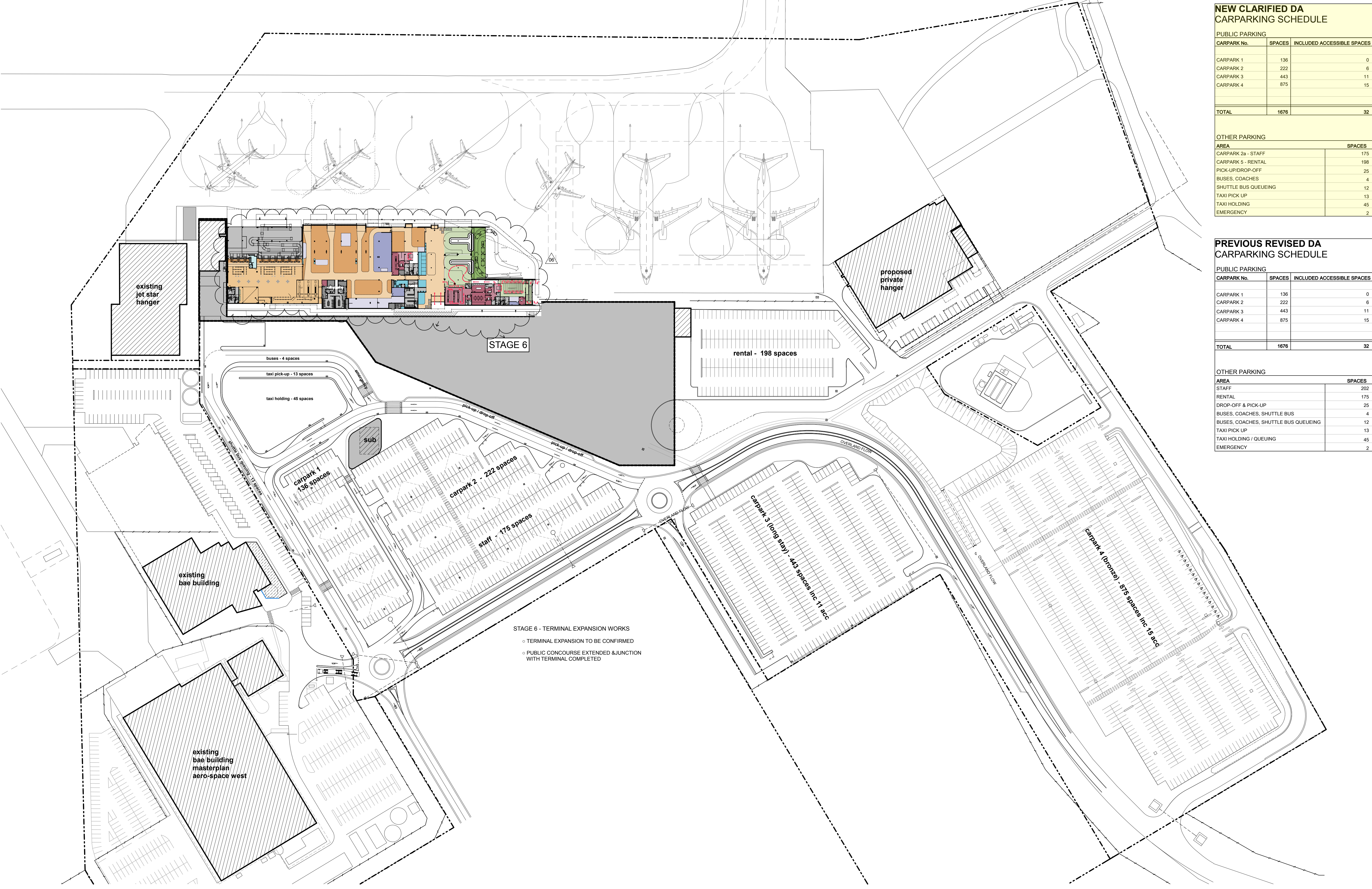
The actual parking rate could differ, depending on the end user and the design of the space accordingly.

Yours sincerely,



Sean Morgan
Director

Attachment C – Approved Terminal Plan depicting Parking Assessment



NEW CLARIFIED DA CARPARKING SCHEDULE		
PUBLIC PARKING		
CARPARK No.	SPACES	INCLUDED ACCESSIBLE SPACES
CARPARK 1	136	0
CARPARK 2	222	6
CARPARK 3	443	11
CARPARK 4	875	15
TOTAL	1676	32
OTHER PARKING		
AREA	SPACES	
CARPARK 2a - STAFF	175	
CARPARK 5 - RENTAL	198	
PICK-UP/DROP-OFF	25	
BUSES, COACHES	4	
SHUTTLE BUS QUEUEING	12	
TAXI PICK UP	13	
TAXI HOLDING	45	
EMERGENCY	2	

PREVIOUS REVISED DA CARPARKING SCHEDULE		
PUBLIC PARKING		
CARPARK No.	SPACES	INCLUDED ACCESSIBLE SPACES
CARPARK 1	136	0
CARPARK 2	222	6
CARPARK 3	443	11
CARPARK 4	875	15
TOTAL	1676	32
OTHER PARKING		
AREA	SPACES	
STAFF	202	
RENTAL	175	
DROP-OFF & PICK-UP	25	
BUSES, COACHES, SHUTTLE BUS	4	
BUSES, COACHES, SHUTTLE BUS QUEUEING	12	
TAXI PICK UP	13	
TAXI HOLDING / QUEUEING	45	
EMERGENCY	2	