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Younghusband, Stage 2

Proposed Mixed-Use Development Transport Impact Assessment



Prepared by: GTA Consultants (VIC) Pty Ltd for Impact Investment Group on 11/03/2021 Reference: V168903 Issue #: D



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Quality Record

Issue	Date	Description	Prepared By	Checked By	Approved By	Signed
А	26/07/2019	Final	Andy Harmer	Andy Harmer	Chris Greenland	Chris Greenland
В	29/06/2020	Updated Final	Jackson Hamill- Beach	Andy Harmer	Chris Greenland	Chris Greenland
С	30/11/2020	Updated Final	Andy Harmer	Andy Harmer	Chris Greenland	Chris Greenland
D	11/03/2021	Updated Final	Andy Harmer	Andy Harmer	Chris Greenland	H. Human



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CONTENTS

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1.	Introduction	PLAN
	1.1. Background	1
	1.2. The Proposal	1
	1.3. Subject Site	2
	1.4. Purpose of this Report	3
	1.5. References	4
2.	Sustainable Transport Considerations	5
	2.1. Overview	5
	2.2. Surrounding Sustainable Transport Services / Network	6
	2.3. Bicycle Parking & Associated Facilities	11
3.	Car Parking	14
	3.1. Statutory Car Parking Requirements	14
	3.2. Car Parking Demand Assessment	14
	3.3. Adequacy of Parking Provision	16
4.	Site Access & Car Parking LAyout	18
	4.1. Vehicle Access	18
	4.2. Design Standards	18
5.	Loading & Waste Collection	20
	5.1. Statutory Requirements	20
	5.2. Loading Demand	20
	5.3. Proposed Loading Arrangements	20
	5.4. Waste Collection	21
6.	Traffic Impact	22
	6.1. Traffic Generation	22
	6.2. Traffic Impact	22
7.	Conclusion	23
	7.1. Amendment C309 to the Melbourne Planning Scheme	B-7



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PLAN

Appendices

- A. Green Travel Plan
- B. Planning Policy Background
- C. Swept Path Assessment Results

Figures

Figure 1.1:	Staging Plan and Site Layout	1
Figure 1.2:	Subject Site and its Environs	3
Figure 1.3:	Land Zoning Map	3
Figure 2.1:	ABS Journey-to-Work Data for Employees Working in Kensington (SA2) in 2016 (ABS)	5
Figure 2.2:	Historical Method of Journey-to-Work for Employees Working in Kensington (SA2) (ABS)	6
Figure 2.3:	Public Transport Map	7
Figure 2.4:	Public Transport Catchment Area (from Subject Site)	8
Figure 2.5:	Walking (Isochrone) Catchment Area from 5 to 30 Minutes	10
Figure 2.6:	Cycling (Isochrone) Catchment Area from 5 to 30 Minutes	11

Tables

Table 1.1:	Development Schedule	2
Table 2.1:	Nearby Public Transport Services	7
Table 2.2:	Statutory Requirement for Bicycle Facilities	12
Table 3.1:	Statutory Car Parking Requirements	14



1. INTRODUCTION



1.1. Background

A planning permit is currently being sought for a proposed mixed-use development on land located at 2-50 Elizabeth Street in Kensington. Impact Investment Group is delivering a multi-stage refurbishment and adaptive reuse of the former Younghusband Wool Store Complex, with the project including retrofitting and repurposing internally as well as developing vertically above the existing buildings.

The current application is pursuant to Buildings S3 and S4 as shown in Figure 1.1 below, which forms Stage 2 of the approved overall Younghusband project. A planning permit has already been previously approved for Stage 1 (which includes buildings S1 and S2), noting that the car parking for the Stage 1 application will be temporarily provided within the Building S5 site, until the current application is approved and this Stage 1 car parking can be relocated into the Stage 2 basement levels.



Figure 1.1: Staging Plan and Site Layout

1.2. The Proposal

The proposal for Stage 2 development within Buildings S3 and S4, will include a mix of retail and office uses as summarised in Table 1.1 on the following page.



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Table 1.1: Development Schedule

Building	Use	Size
	Office	A DVERTISED
S3	Retail	0 sqm PLAN
	Food and Drink	281 sqm
	Office	11,482 sqm
S4	Retail [1]	863 sqm
	Food and Drink	208 sqm
	Office	14,660 sqm
Stage 2 Totals (S3 + S4)	Retail	863 sqm
	Food and Drink	489 sqm

[1] Includes the 510sqm area for manufacturing sales.

Other transport components of the proposal include:

- A total of 170 bicycle parking spaces located on both the lower ground and ground floor levels. This provision comprises 152 staff and 18 visitor bicycle parking spaces. Further discussion regarding bicycle parking provision is provided in Section 2 of this report.
- A total of 178 on-site car parking spaces within 2 basement levels. This total provision includes 16 tandem parking pairs (32 spaces). As previously noted, a portion of these car parking spaces will be allocated to the Stage 1 development (60 spaces, as per the approved Stage 1 permit), relocating its temporary provision within the Building S5 site. Further discussion regarding car parking provision is provided in Section 3 of this report.
- Vehicle access to the site is proposed via a modified existing crossover on Elizabeth Street, which leads down a ramp into Basement Level 1. Additionally, both pedestrian and cyclist access is via the laneway to Elizabeth Street. Further discussion regarding car parking layout/access and traffic is provided in Section 4 and 6 of this report, respectively.
- A loading area is to be provided in Basement Level 1. The loading area can accommodate vehicles up to an 8.8m Medium Rigid Vehicle (MRV), which is the largest vehicle expected on site. Additionally, the adjacent loading bay can be accessed independently by a 6.4m Small Rigid Vehicle (SRV). Further discussion regarding loading is provided in Section 5 of this report.

GTA Consultants was engaged by the Applicant to undertake a Transport Impact Assessment for the proposed development of Younghusband Stage 2, as well as a Green Travel Plan (which is located in Appendix A of this report).

1.3. Subject Site

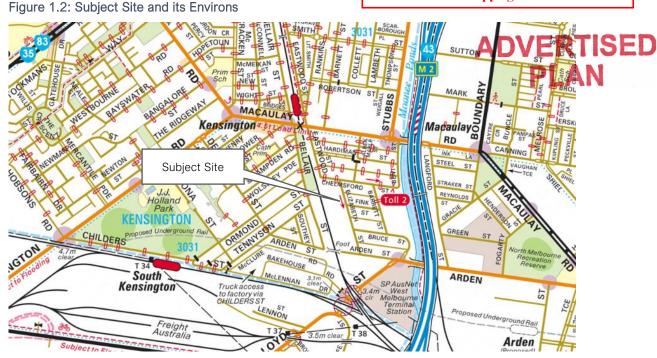
The Stage 2 subject site within the overall development of 2-50 Elizabeth Street, Kensington is approximately 3,800sqm in size, located within the City of Melbourne and within a Commercial 2 Zone (C2Z).

The surrounding properties primarily include a mix of residential, industrial and commercial land uses zones. The notable exception being the railway line reserve that abuts the site to the west.

The location of the site and the surrounding environs is shown in Figure 1.2 and Figure 1.3.



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Figure 1.3: Land Zoning Map





1.4. Purpose of this Report

This report sets out an assessment of the anticipated parking, traffic and transport implications of the proposed development, including consideration of the:

• the adequacy of the proposed pedestrian, bicycle and public transport access arrangements to the site



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- the adequacy of the proposed bicycle parking arrangements in terms of supply (quantum) and lavout ADVERTISED
- the adequacy of the proposed car parking provision.
- the adequacy of the proposed car park layout
- the adequacy of the proposed arrangements for loading and waste collection
- the acceptability of the traffic impacts of the proposed development, including the need for mitigating road works and appropriate vehicular access.

1.5. References

In preparing this report, reference has been made to the following:

- Melbourne Planning Scheme
- plans for the proposed development prepared by Woods Bagot, Revision A, dated 30 November 2020
- Transport Assessment, Younghusband Woolstore Kensington, prepared by Movendo, dated 19 July 2017
- Australian Standard / New Zealand Standard, Parking Facilities (AS2890)
- traffic and car parking surveys undertaken by GTA Consultants as referenced in the context of this report
- an inspection of the site and its surrounds
- other documents as nominated.



2. SUSTAINABLE TRANSPORT ADVERTISED CONSIDERATIONS

2.1. Overview

The site is easily accessible by public transport and has multiple on-road cycle lanes provided along nearby local and major roads, forming part of the principal bicycle network with VicRoads Strategic Cycling Network.

In this context, the proposed development is a prime opportunity to promote the vision of relevant transport planning objectives (refer to further discussion in Appendix B) by encouraging the use of public transport, cycling and walking and not encouraging and abundance of car parking within this area, and in turn a reliance on private motor vehicles.

ABS Journey-to-Work data (shown in Figure 2.1) indicates that a high percentage of the employees currently working in the Kensington area are using private motor vehicle as their preferred method of travel to work. However, Figure 2.2 demonstrates that use of private motor vehicle declined in the previous five years from 81.4% to 75.5%. Over the same period, use of public transport increased from 9.6% to 15.2%, while cycling and walking stayed relatively similar over the same period.

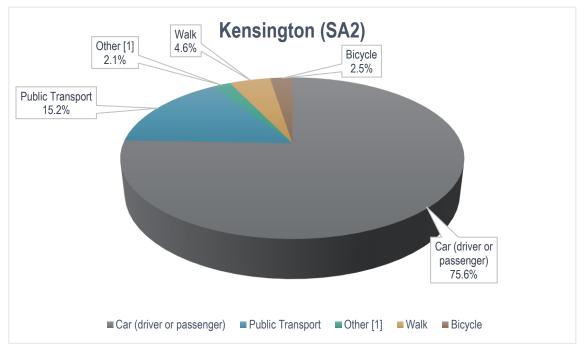
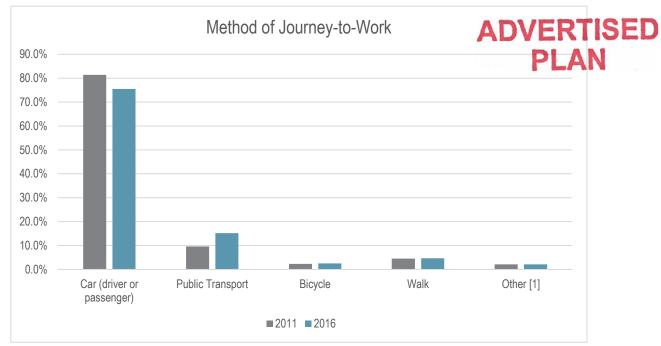


Figure 2.1: ABS Journey-to-Work Data for Employees Working in Kensington (SA2) in 2016 (ABS)



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2.2. Surrounding Sustainable Transport Services / Network

2.2.1. Public Transport

Figure 2.3 shows the site in relation to the existing public transport routes within its vicinity and illustrates that the site is well serviced by such routes, sitting 300m away from the nearest bus stop and approximately 400m away from Kensington station and 550m away from Macaulay Station. Additionally, the future North Melbourne station will ultimately be constructed near the site at the Arden Street / Lauren Street junction approximately 1km away.

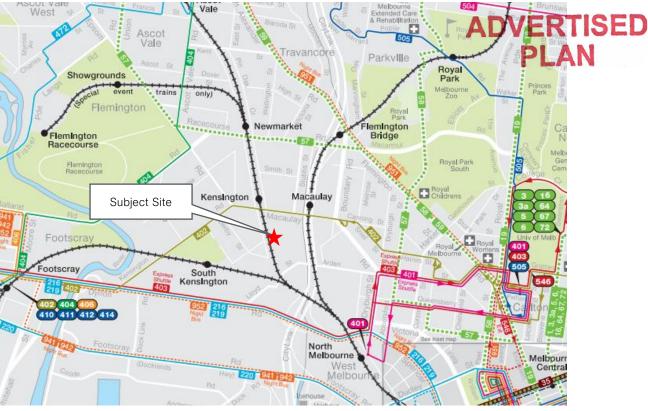
Table 2.1 shows the on / off peak frequency of all nearby public transport services and the distance of the closest stop in relation to the subject site. Based on the available services, Figure 2.4 shows an indicative heat map of the area that can be accessed from the development location in a 30-minute public transport journey.



SUSTAINABLE TRANSPORT

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Figure 2.3: Public Transport Map



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Table 2.1:	Nearby	Public	Transport	Services
	INCALDY	I UDIIC	Transport	

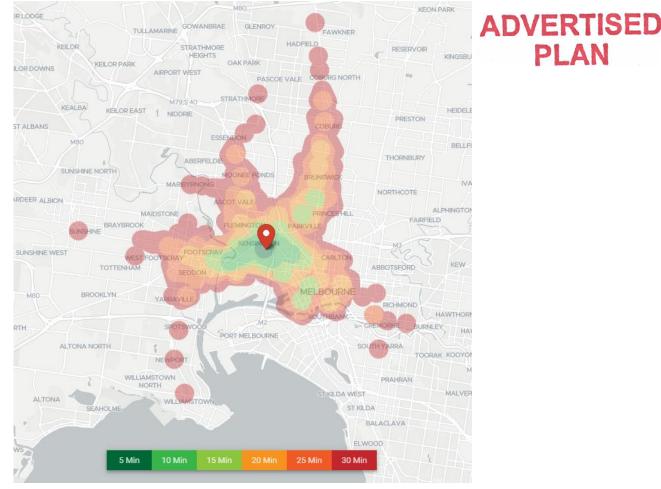
Service	Route	Route Description	Distance to Nearest Stop (m)	Frequency On / Off Peak
Train	Macaulay Station (Upfield Line)	Upfield to CBD	550m	On: 18 minutes Off: 20 minutes
Train	Kensington Station (Craigieburn Line)	Craigieburn to CBD	400m	On: 5 minutes Off: 20 minutes
Bus	402	Footscray Station to East Melbourne	300m	On: 10 minutes Off: 10 minutes



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2.2.2. Walking & Cycling Network

The site is surrounded by streets that generally all provide footpaths on both sides, providing sufficient pedestrian accessibility.

The location will also offer easy access for cyclists wishing to ride to work. There are on-street bicycle lanes provided along most of Chelmsford Street as well as along Macaulay Road. There is also the off-road shared path along the Moonee Ponds Creek (running beneath the elevated freeway).

The Principal Bicycle Network (PBN) is a network of on and off-road cycling corridors that have been identified to support cycling for transport and access major destinations in Metropolitan Melbourne. The PBN was reviewed and updated in 2012 by VicRoads and all local Councils.

The PBN is also a 'bicycle infrastructure planning tool' to guide State investment in the planning and development of the future metropolitan Melbourne bicycle network. In this regard, a subset of the PBN has been identified and elevated to higher level of priority, mainly on the basis of potential for separation from motorised traffic, making these routes more attractive to less experienced bike riders. These cycling corridors are referred to as Bicycle Priority Routes (BPRs) and form part of the modal priorities for the road network set out in the VicRoads SmartRoads framework. Strategic Cycle



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Corridors (SCC) form another subset of the PBN, and represent an initiative outlined in Plan Melbourne to support walking and cycling in Central Melbourne.

SCCs are intended to be corridors designed to provide high quality bicycle infrastructure V, ERTISED around, major activity areas in metropolitan Melbourne. Plan Melbourne outlines a subset of the SCCs for the proposed expanded central city area.

It is noted that the type of bicycle facility (i.e. on or off-road and separated or shared) has not been indicated as part of the PBN and BPRs. Rather, the PBN and BPRs show the proposed cycling network. The associated facilities should be delivered in accordance with the relevant standards and guidelines, such as the Australian Standards, Austroads Guides and VicRoads' Cycle Notes.

The PBN and BPRs in the vicinity of the site includes:

- Macaulay Road on-road bicycle lanes in both directions
- Chelmsford Street on-road bicycle lane in the western direction
- Moonee Ponds Creek off-road shared path.

Pedestrian and Cycling Catchments

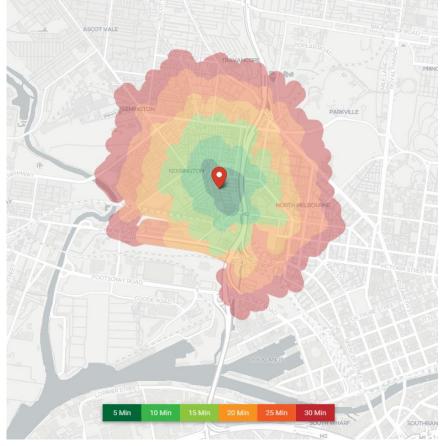
Beyond access to conveniences and from an accessibility viewpoint, an appreciation of the 30-minute walking and cycling catchments (with the subject site as the centroid), at five-minute intervals, is provided in the isochrone plan set-out in Figure 2.5 and Figure 2.6.

Further to the above, a review of the applicable walk score (<u>https://www.walkscore.com/</u>), which provides walk scores for the United States of America, Canada and Australia, for the subject site indicates a score of 84 or 'Very Walkable'. A score between 79 and 89 suggests that 'most errands can be accomplished on foot'.



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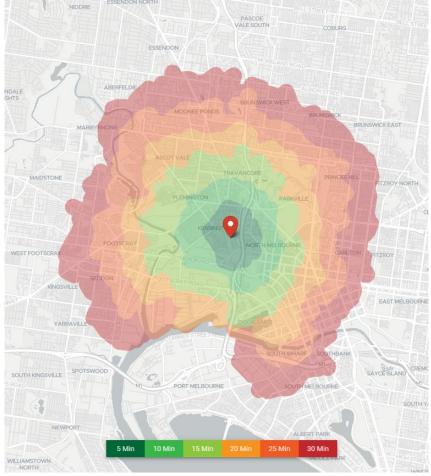
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2.3. Bicycle Parking & Associated Facilities

2.3.1. Overview

Clause 52.34 of the Melbourne Planning Scheme seeks to encourage cycling as a mode of travel through the provision of appropriate bicycle parking and associated facilities. The discussion and analysis presented below examines these requirements.

2.3.2. Statutory Requirements

Bicycle Parking Provision

The statutory requirements for the provision of bicycle facilities for the development proposal are set out in Table 2.2.



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Land Use	Size	Statutory Employee / Resident Rate	Statutory Visitor / Shopper Rate	Statutory Employee / Resident Requirement	Statutory Visitor / Shopper Requirement	SED
Office	14,660 sqm	1 sp / 300sqm NFA	1 sp / 1,000sqm NFA	49 spaces	15 spaces	
Retail	1,352 sqm [1]	1 sp / 300sqm LFA	1 sp / 500sqm LFA	5 spaces	3 spaces	
		Total		54 spaces	18 spaces	

Table 2.2: Statutory Requirement for Bicycle Facilities

[1] Includes the food and drink tenancy under the 'retail' land use category.

Table 2.2 indicates that the proposal has a statutory bicycle parking requirement of 72 bicycle spaces, including 54 employee spaces and 18 visitor spaces.

In this instance, the proposed on-site bicycle parking provision of 170 bicycle spaces exceeds the statutory requirement, with 152 spaces stored securely within the back of house area on lower ground floor and 18 publicly available spaces located either in the lower ground courtyard area or on the rear pedestrian link between the site and railway reserve.

This provision intentionally exceeds the statutory minimum bicycle parking rates, in the interest of encouraging cycling as a mode of transport to/from the site. The proposed higher provision is based on a rate of 1 space / 100sqm for the office employees, consistent with best practice design. The bicycle parking for visitors and the retail employees is provided in accordance with the statutory rates, with the office being the primary land use within the development.

On this basis, the proposed bicycle parking provision is considered to be appropriate for the development.

Associated Facilities

In addition to the requirement for bicycle parking, Clause 52.34-3 of the Melbourne Planning Scheme requires 1 shower for the first 5 employee bicycle spaces and 1 shower for each subsequent 10 employee bicycle parking spaces (if 5 or more employee bicycle spaces are required).

Application of the above rates indicates that the proposal generates a statutory requirement for 5 showers / change room facilities. However, a total of 20 showers / changerooms have been provided in the end of trip (EoT) facilities area, in order to provide an appropriate amount of facilities for the proposed bicycle parking provision above the statutory minimum. There are also 202 lockers available, 7 toilets and 2 urinals within the EoT area.

The abovementioned exemplar bicycle end of trip facilities over and above the minimum requirements have been provided with the intent to encourage cycling as a mode of transport to the site. By providing extensive first class EoT facilities, it helps to sway employees that could potentially choose to cycle to work in that direction, by making the process of showering and changing easy and time efficient. These facilities are considered to be sufficient to cater for the needs of the proposed parking provision.

2.3.3. Bicycle Parking Layout and Access

The proposed bicycle parking layout has been designed in general accordance with Clause 52.34 of the Melbourne Planning Scheme. The 20 visitor bicycle spaces are easily accessible by public visitors,



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located on ground / lower ground levels in the courtyard and the rear pedestrian laneway area. The employee bicycle spaces are stored securely on lower ground level and have a simple and direct access route that does not require the use of lifts, via the laneway to Elizabeth Street. This laneway TISED will act as an interim loading area for Stage 1 development until Stage 2 loading area is available, however will ultimately be a pedestrianised area.

The Australian Standard nominates that 20% of the provided bicycle spaces must be provided as a horizontal at-grade parking system. Of the total 170 bicycle parking spaces, 130 spaces will be provided as horizontal rails, which equates to 76% and therefore clearly meets this requirement.



3. CAR PARKING



3.1. Statutory Car Parking Requirements

Statutory requirements for the provision of car parking are set out in Clause 52.06 of the Melbourne Planning Scheme, with parking rates specified in Table 1 to Clause 52.06-5. As the site is within the Principal Public Transport Network Area, the rates in Column B of the table apply to this site.

An assessment of the statutory car parking requirements for the development proposal is set out in

Table 3.1: Statutory Car Parking Requirements

Land Use	Size	Statutory Rate	Statutory Requirement
Office	14,660 sqm	3.0 sp/100sqm NFA	439
Shop (Retail & Manufacturing Sales)	863 sqm	3.5 sp/100sqm LFA	30
Food & Drink	489 sqm	3.5 sp/100sqm LFA	17
	486 spaces		

The above assessment anticipates the development proposal has a statutory requirement of 486 car parking spaces. In this instance the proposed on-site parking provision of 118 car parking spaces (total of 178 spaces minus the 60 spaces allocated to Stage 1) does not meet the statutory requirement for Stage 2 (shortfall of 368 spaces) and a permit is being sought to reduce this requirement.

3.1.1. BCA Disabled Parking Requirements

In addition to the above, the BCA requires the provision of 1 disabled space per 100 parking spaces (or part thereof) provided for the office use. This equates to a requirement of two parking spaces for people with disabilities for use by Stage 2, which have been provided in close proximity to the lift cores on Basement 01.

3.2. Car Parking Demand Assessment

For circumstances where the statutory requirement is not met on-site, the Melbourne Planning Scheme indicates that a Car Parking Demand Assessment must assess the car parking demand likely to be generated by the proposal. The assessment must consider various factors, including:

- "The variation of car parking demand likely to be generated by the proposed use over time.
- The availability of public transport in the locality of the land.
- The convenience of pedestrian and cyclist access to the land.
- The provision of bicycle parking and end of trip facilities for cyclists in the locality of the land.
- The anticipated car ownership rates of likely or proposed visitors to or occupants (residents or employees) of the land.
- Any empirical assessment or case study."



V168903 // 11/03/2021 Transport Impact Assessment // Issue: D Younghusband, Stage 2, Proposed Mixed-Use Development

CAR PARKING

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In addition to the above, it should be noted that a masterplan transport assessment has been previously completed by others (Movendo report, dated 19/07/17) which set out the intended approach to providing on-site car parking for each of the three proposed stages of the Younghusband SED project. While this masterplan report did not form part of the Stage 1 planning permit application (it was provided for information purposes only), we understand that Melbourne City Council were LAN generally comfortable with the intended overall approach.

Additionally, the Stage 1 permit application adopted consistent parking rates as the Movendo masterplan assessments, and Stage 1 has since been reviewed and approved by Council. The masterplan and Stage 1 development assessments included consideration to appropriate car parking provision for the overall development, which has been incorporated in the following car parking demand assessment.

The masterplan assessment allowed for a total provision of 240 car parking spaces across the overall development area.

Furthermore, information provided to GTA indicates that 60 of the proposed 178 car parking spaces to be provided across Buildings S3 and S4, are to be allocated for use by the tenants within the Stage 1 development (Buildings S1 and S2), as per the parking provision on the approved Stage 1 permit. It is understood that the allocation of car parking for Stage 1 will be temporarily provided within the eastern part of the Building S5 site, until the current application for Stage 2 is constructed and the Stage 1 car parking can be relocated to the Stage 2 basement levels. As such, the provision of parking available for the proposed uses within Stage 2 is reduced to 118 spaces.

Having regard to these factors, an assessment of the likely car parking demand for each of the proposed land uses is presented below.

3.2.1. Office

The Movendo assessment adopted a car parking rate of 0.5 spaces per 100sqm for an office land use. This rate was accepted by Council for Stage 1 and as also been adopted for the purpose of this Stage 2 assessment, which equates to a demand for 73 car parking spaces.

3.2.2. Food & Drink

The Movendo assessment adopted a car parking rate of zero spaces for a food and drink use. This is considered appropriate in the context of the site and has also been adopted in this instance.

3.2.3. Retail / Shop

The Movendo assessment did not include any retail / shop land use as it may not have been originally envisioned for the site.

However, with consideration to the context of the site and its location, the retail tenancies are expected to operate in a similar manner to the food and drink tenancy in terms of car parking demand, without the need to provide on-site parking for employees or visitors. This is considered to be appropriate in this instance, given the relative size of the retail tenancies and how they are incorporated into a larger office development and therefore not likely to be the key attractor to the site. Indeed, the majority of visitors to these tenancies are expected to be a combination of walk-up trade or employees working within the building.



3.2.4. Car Parking Demand Summary

Based on the above, the total anticipated parking demand for the Stage 2 development is 78 caRTISED parking spaces.

3.3. Adequacy of Parking Provision

Clause 52.06-7 outlines a number of matters which the responsible authority must consider when granting a permit to reduce the car parking requirement.

The matters considered relevant in this instance are discussed in further detail in the following sections.

3.3.1. Policy Considerations

Appendix B of this report outlines a number of policies in place that are relevant to the subject site and the associated transport considerations. A key and consistent focus of these different policies is reducing the dependency on motor vehicle trips and to promote and increase alternative transport modes, including public transport, cycling and walking.

The site presents an excellent opportunity to promote the visions and objectives of these various polices, being located in an excellent position within walking distance to the following:

- multiple public transport options, including two different heavy rail lines
- a local activity centre along Macaulay Road with a variety of different retail shops, food and drink and commercial uses
- easy access to formal on and off-road bicycle routes within the Principal Bicycle Network.

In addition to the above, by providing less car parking on-site than anticipated by the car parking demand assessment, these policy objectives are further reinforced by limiting the ability to use vehicle travel to / from the site and help influence a mode shift towards these alternative transport options.

3.3.2. Alternative Transport Modes

As previously outlined, there are multiple alternative transport modes available and would be practical options given the site's location, including the following:

- public transport via two heavy rail line options or by bus
- cycling via the nearby formal on and off-road bicycle routes
- walking is also a viable option for travel to the site, being surrounded by residential areas as well as a variety of other mixed uses.

The above opportunities for alternative transport modes provide strong support for the proposed reduced car parking provisions on-site.

Furthermore, by providing less car parking on-site (particularly for the office land use) has a strong influence on employee travel behaviour and mode choice. If on-site car parking is plentiful, then employees will be more likely to elect to drive their own personal vehicle to / from work. However, by reducing the availability of employee parking on-site, this helps to force a change in travel behaviour and promote mode shift amongst staff, as driving to/from work can then become the more difficult / expensive / time consuming transport option.



3.3.3. Public Car Parking Availability

While the above matters primarily address the appropriateness of reduced long-term employee parking SED on-site, there will naturally still be a component of visitor parking demand to be catered for.

In this regard, on-street car parking surveys have been completed for the area surrounding the site. By reducing the survey footprint to only consider Elizabeth Street, Fink Street and Chelmsford Street (the three closest streets to the subject site), the minimum number of on-street parking vacancies recorded that are able to cater for short term parking demands were 16 spaces on a weekday and 84 spaces on a Saturday.

On this basis, there is considered to be sufficient on-street parking vacancies available to cater for any short-term visitor car parking demands that might be generated by the proposed office or retail uses.

3.3.4. Other Considerations

Given that the primary use within the proposed development will be the office use, the provision of car parking for each tenancy is advertised information that will be available to any potential future owners or tenants.

As such, the decision-making process for any potential future tenants will include consideration as to whether the relevant car parking allocation will be sufficient for their operational requirements. Therefore, only office tenants that can comfortably operate with a reduced parking provision would be expected to occupy the building.

3.3.5. Car Parking Adequacy Summary

With consideration to the above items, given that 60 of the 178 spaces that will be provided are to be allocated to Stage 1 tenancies, the proposed provision of 118 spaces for Stage 2 satisfies the anticipated demand of 73 car parking spaces.

This proposed reduction from the statutory requirement is considered to be acceptable in this instance, in the interest of encouraging more sustainable travel through alternative transport modes to/from the site, and noting that the anticipated car parking demand for Stage 2 is being met on-site.



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4. SITE ACCESS & CAR PARKING LAYOUT

4.1. Vehicle Access

The proposal includes access via an existing crossover to Elizabeth Street. As the building façade along the street frontage to Elizabeth Street is heritage listed, there is no opportunity to modify the vehicle entry point and associated crossover locations.

The existing southern crossover will act as the vehicle access point to the site, leading to the loading area and car parking levels. The existing northern crossover on the northern edge of Building S3 is understood to be the interim loading area for Stage 1 development, until the loading area in Stage 2 is available for use. Ultimately, this laneway will be a pedestrianised zone and will also provide access to the bicycle parking facilities.

Swept path assessments have been completed for the vehicle site access which confirms that the largest vehicle expected on-site (8.8m Medium Rigid Vehicle) is able to adequately complete the required movements in and out of the site access, as well as simultaneous two-way movement between a 99th and 85th percentile vehicle (B99 and B85).

For reference, the abovementioned swept path diagrams are provided in Appendix C of this report.

4.2. Design Standards

The proposed parking layout has been assessed in respect to the relevant Design Standards set out in Clause 52.06-09 of the Melbourne Planning Scheme.

A summary of compliance is set out below.

Design Standard 1: Accessways

- The main vehicle accessway measures 7.05m wide from wall to wall (6.482 at the door opening) and allows adequate space for simultaneous two-way vehicle movement.
- There is an entry / exit boom gate located within this initial section of the accessway, with a centre mounting unit measuring 405mm in width, resulting in approximately 3.2m wide lanes on either side of the centre boom gate mount.
- A swept path assessment has been completed through this main accessway area that confirms that the largest vehicle expected on-site (an 8.8 Medium Rigid Vehicle) is able to travel through the boom gates and maintain at least 0.3m clearance to both the walls and the centre boom arm mount. In addition, being an existing heritage listed structure there is no real opportunity to further modify the accessway design. Therefore, the proposed design is considered to be acceptable.
- As mentioned above, the existing building structure and external façade is being retained as it is heritage listed. Therefore, the vehicle entry cannot be modified in any way and a pedestrian visibility splay cannot be provided on the left-hand side as vehicles are exiting the site in this instance.



SITE ACCESS & CAR PARKING LAYOUT

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As there is no alternative option, a convex mirror is recording to be installed on the southern side of the site accessway, which would provide visibility between pedestrians and exiting vehicles. It is noted that the visibility splay is still provided to the right-hand side though the entry SED lane.

Design Standard 2: Car Parking Spaces

- As the car parking levels are being built to collaborate with the structural column grid of the existing building, there is limited flexibility in the column placement. Therefore, car parking spaces have had to be provided with 0.3m clearance to adjacent columns, because the required door opening clearance area could not be maintained with columns located immediately adjacent to the spaces.
- Noting the above, car parking spaces have been designed 2.6m wide x 4.9m long, accessed from a minimum 6.4m aisle, in accordance with the requirements of Clause 52.06 of the Planning Scheme.
- The car parking spaces for people with disabilities have also been designed to meet the Australian Standards design requirements, with an appropriate sized shared zone next to the spaces.
- There are a number of tandem car parking spaces proposed on both basement levels. This arrangement is considered to be acceptable given that all car parking on-site is expected to be allocated to the office tenancies and for use by employees only. It is noted that for each tandem pair, both car parking spaces must be allocated to the same tenancy, as the rear space will be dependent on the front one for access. The rear parking bays have been designed appropriately with an additional 0.5m in bay length.
- There are a number of dead-end aisles within the car parking levels, most of which are provided with a 1m aisle extension as per the Planning Scheme design requirement. However, where this aisle extension could not be provided, a swept path assessment has been completed that demonstrates the movements in / out of these end spaces can be completed with adequate clearance to the walls and adjacent parked cars. These swept path diagrams are included in Appendix C.
- Some further swept path assessments have also been completed on selected spaces that might be more difficult to access. All of these spaces can be accessed with adequate clearance and a maximum of a 3-point turn manoeuvre. This is considered to be acceptable as these spaces are all private allocated car parking for employees who will be repeat users that are familiar with the required manoeuvres in/out of their allocated spaces.

Design Standard 3: Gradients

- The main access ramp has been designed with appropriate grades to cater for heavy vehicle access to the loading and waste collection area. This includes maximum grades and transitions in accordance with the Australian Standards for an 8.8m long Medium Rigid Vehicle (MRV), being flat for the first 6.35m into the site and then 1:16 for 7m, 1:8 for the next 7m, then back to 1:16 for a further 7m before reaching a flat grade again.
- The other ramp between the two basement levels has been designed in accordance with Planning Scheme design requirements, with a maximum grade of 1:5 and 2.0m long transitions at the top and bottom of 1:8 and 1:10 respectively.





5. LOADING & WASTE COLLECTION

ADVERTISED PLAN

5.1. Statutory Requirements

Clause 65 of the Melbourne Planning Scheme indicates that 'Before deciding on an application or approval of a plan, the responsible authority must consider, as appropriate...The adequacy of loading and unloading facilities...".

5.2. Loading Demand

In this regard, information provided to GTA by the Applicant indicates that the loading area in basement level 1 is intended to cater for the requirements of both the Stage 1 and Stage 2 developments, with internal pedestrian connections to be provided to the Stage 1 buildings for transfer of goods.

It is understood that the loading area will need to cater for one 6.4m SRV and one 8.8m MRV sized vehicles. The MRV service bay will also need to cater for the waste collection vehicle.

5.3. Proposed Loading Arrangements

Based on the above requirements, the proposed loading area has been designed with two service bays, able to cater for independent vehicle access (i.e. no bays require the others to be vacant in order to access them) by an SRV and MRV.

Swept path assessment has been completed which confirms that the largest anticipated loading vehicle can enter and exit the site in forward direction and independently reverse into the service bays with adequate clearance to all solid structures and adjacent parked loading vehicles (refer to Appendix C).

There is a clear area behind the service bays for loading/unloading of goods to be undertaken and a direct access path to the main lift core to transfer goods to the appropriate level. For items being delivered to the Stage 1 buildings, there is a hallway connection from Building S4 through to S2, via the lifts.

A height clearance of 3.5m has been provided throughout the loading area, as well as the access route and manoeuvring area in/out of the loading bays. It is understood that this is the maximum height clearance of 3.5m that can be provided without modifying the heritage listed façade at the entry. This height clearance meets the Australian Standard design requirements for a 6.4m SRV. Any longer vehicles that wish to access the loading area would be limited to those with an operational height clearance of 3.5m. The Applicant has indicated that this will be sufficient for the anticipated loading requirements of the proposed uses. This could be enforced by an appropriately worded condition of permit to provide clear height clearance signage at the access entry.

As previously noted, the ramp grades to basement level 1 have been designed in accordance with the Australian Standard requirements for an 8.8m MRV.





LOADING & WASTE COLLECTION

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5.4. Waste Collection

Information provided to GTA indicates that private waste collection will be undertaken by a second SED waste collection vehicle. Additionally, the waste consultants have advised that this collection vehicle will be able to operate within the available 3.5m height clearance.

Swept path assessment has been completed which confirms that this sized waste vehicle is able to enter the site in a forward direction, reverse into the larger service bay to undertake the waste collection and then exit the site in a forward direction again (refer to Appendix C).

These arrangements are considered to be satisfactory.



6. TRAFFIC IMPACT



6.1. Traffic Generation

With regard to the anticipated traffic generation of the Stage 2 development, the previous masterplan assessment prepared by Movendo included a traffic assessment for the full development of the Younghusband masterplan. This assessment was not part of the Stage 1 planning permit application but was submitted to Council for informative purposes only and was generally accepted. Subsequently, the traffic assessment prepared for the Stage 1 planning permit application (also prepared by Movendo) adopted consistent traffic generation rates and methodology as this masterplan assessment and has since been reviewed and approved by Council.

This approved assessment for Stage 1 adopted a traffic generation rate of 0.4 vehicle movements per 100sqm of office floor area. As the other retail uses are not proposed to be allocated any car parking, they will not be expected to generate any vehicle traffic.

Application of this rate to the proposed Stage 2 development equates to an estimate of 59 vehicle movements in a peak hour.

For comparative purposes, it is noted that this traffic generation estimate calculates to be exactly consistent with a rate of 0.5 peak hour vehicle movements <u>per parking space</u>, which is a typical adopted rate on a per space basis for an office land use.

6.2. Traffic Impact

As noted above, a traffic assessment has already been completed by Movendo for Stage 1 of the overall Younghusband development project and this document has already been reviewed and approved by Council.

The proposed development is generally in accordance with the originally anticipated scheme for the overall site development (provided to Council for informative purposes only with the Stage 1 submission), noting that the proposed retail floor area was not originally included. However, it is not proposed to provide any car parking on-site for the retail tenancies, so therefore no additional traffic generation is expected from this land use.

With regard to the office traffic, the Movendo traffic assessment that was completed for the anticipated overall Younghusband development considered a total of 24,613sqm of additional office floor area across all stages. It is understood that Stage 1 included 6,649sqm of new office floor area (in addition to the existing 1,887sqm of office). Therefore, combining the Stage 1 office floor area with the proposed 14,660sqm associated with Stage 2 equates to a total of 21,309sqm of new office floor area across Stages 1 and 2. This is approximately 3,300sqm less floor area compared to the total that was allowed for in the Movendo assessment for the overall site.

On this basis, the traffic impacts of the development have already been accounted for in the Movendo assessment which determined the overall Younghusband development project would have negligible impacts on the surrounding road network. The development yields and traffic rates adopted for both Stage 1 and 2 are consistent with this overall assessment and therefore considered to be acceptable.





7. CONCLUSION



Based on the analysis and discussion presented within this report, the following conclusions are made

- The proposed development generates a statutory car parking requirement of 486 spaces.
- The proposed supply of 178 car spaces does not meet the statutory requirement and a permit is being sought to reduce this requirement.
- Advice from the Applicant indicates that 60 of the car parking spaces provided within the Stage 2 car park must be allocated for use by the Stage 1 development (consistent with the approved Stage 1 permit). Therefore, a total of 118 car parking spaces are proposed to be provided for the Stage 2 uses.
- The proposed reduced car parking provision of 118 spaces is considered to be acceptable in this instance, based on the following key factors:
 - consideration to relevant transport policies that seek to reduce reliance on private motor vehicle travel and encourage the use of alternative transport modes.
 - excellent access and walking distances to more sustainable transport modes, including two heavy rail train lines, a bus route, nearby formal on and off-road bicycle routes and nearby local activity centre along Macaulay Road.
- The proposed development generates a statutory bicycle parking requirement of 72 spaces, including 54 spaces for employees and 18 spaces for visitors.
- The proposed total provision of 170 bicycle parking spaces intentionally exceeds the statutory rates in the interest of encouraging cycling as a mode of transport to/from the site over vehicle travel. An excellent provision of showers/changerooms and lockers have also been provided to cater for the increased bicycle parking provision.
- The site is expected to generate up to 59 vehicle movements during the AM and PM peak hours.
- A traffic assessment has been previously completed by others that considers the impacts of the full anticipated Younghusband project development, which has already been reviewed and generally accepted by Council. As the proposed uses within Stage 2 are generally in accordance with what was originally allowed for in this anticipated overall site development assessment, the traffic impacts have already been previously addressed and therefore considered to be acceptable.





> ADVERTISED PLAN

A.GREEN TRAVEL PLAN





V168903 // 11/03/21 Transport Impact Assessment // Issue: D Younghusband, Stage 2, Proposed Mixed-Use Development

ADVERTISED

PLAN

Younghusband - Stage 2

Proposed Mixed-Use Development Green Travel Plan



Prepared by: GTA Consultants (VIC) Pty Ltd for Impact Investment Group Pty Ltd on 22/06/20 Reference: V168903 Issue #: A



ADVERTISED

PLAN

Younghusband - Stage 2

Proposed Mixed-Use Development Green Travel Plan

Client: Impact Investment Group Pty Ltd on 22/06/20 Reference: V168903 Issue #: A

Quality Record

Issue	Date	Description	Prepared By	Checked By	Approved By	Signed
А	22/06/2020	Final	Andy Harmer	Andy Harmer	Chris Greenland	the them.

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CONTENTS

ADVERTISED

1.	Introduction	PLAN
	1.1. Background	1
	1.2. Key Policy Directions	1
	1.3. Objectives of this GTP	3
	1.4. References	3
2.	Background	4
	2.1. Subject Site	4
	2.2. Existing Transport Infrastructure	5
	2.3. Existing Transport Usage	8
3.	Development ProposaL	10
	3.1. Land Uses	10
	3.2. Car Parking	10
	3.3. Bicycle Facilities	10
	3.4. Pedestrian Facilities	10
4.	Targets	11
	4.1. Preamble	11
	4.2. Post Occupancy Surveys	11
	4.3. Initial Mode Split Targets	11
5.	Actions	13
	5.1. Preamble	13
	5.2. Walking	13
	5.3. Cycling	13
	5.4. Public Transport	14
	5.5. Carpooling	14
	5.6. Travel for Work / Teleworking	14
	5.7. Implementation	15
6.	Monitoring and Review	16
	6.1. Overview	16
	6.2. Responsibility	16



V168903 // 22/06/20 Green Travel Plan // Issue: A Younghusband - Stage 2, Proposed Mixed-Use Development

Figures

Figure 2.1:	Subject Site and its Environs	VERTISED
Figure 2.2:	Land Zoning Map AD	VERIBED
Figure 2.3:	Public Transport Map	PLAN
Figure 2.3:	Existing Method of Travel to Work to Kensington (ABS 2016) - i.e. by place of Em	ployment 8
Figure 2.4:	Existing Method of Travel to Work to Melbourne (ABS 2016) - i.e. by place of Emp	ployment 9

Tables

Table 2.1:	Nearby Public Transport Provision	6
Table 4.1:	Nominal Mode Split Targets	12



ADVERTISED

1. INTRODUCTION

1.1. Background

A planning permit is currently being sought for a proposed office and retail development on land located at 2-50 Elizabeth Street in Kensington. The development forms Stage 2 of the overall masterplan for the Younghusband wool store site.

GTA Consultants have completed a Transport Impact Assessment (TIA) report for the proposal (dated 22/06/20) and have also been engaged to prepare the following Green Travel Plan (GTP) which will be submitted in conjunction with the TIA as part of the application.

This GTP is designed to assist in managing the transport needs of workers and visitors of the site. The aim of the plan is to reduce the environmental impact of travel associated with the operation of the site. In essence the GTP seeks to encourage alternatives to the single occupant motor vehicle.

The GTP is built upon an appreciation of the site's context, including its physical transport connections and expected operation characteristics.

A list of strategies is provided within this report aimed at encouraging walking, cycling, public transport and carpooling for travel to and from work to promote a mode shift.

1.2. Key Policy Directions

Transport is the second largest producer of greenhouse gas emissions in Victoria, after stationary energy production, emitting the equivalent of over 19 million tonnes of carbon dioxide (CO₂) per annum.

As a consequence, both State and local government authorities (including the City of Melbourne) are implementing policies to reduce the impact of vehicle travel on the environment by encouraging walking, cycling and public modes of transport. Not only is traffic congestion detrimental to the environment but Australian employers are increasingly bearing the cost of this congestion and according to the Bureau of Transport Economics that cost is continually increasing.

The overall aim of this plan is to go a small part of the way in minimising the reliance on single occupancy car journeys to and from the site, particularly given its location and accessibility to alternative travel modes.

By way of example, City of Melbourne has prepared a range of broad-level policy documents which set out similar goals and objectives aimed at improving and encouraging existing transport infrastructure and ultimately reducing the reliance on private vehicles. These policies are discussed below.

1.2.1. City of Melbourne Planning Scheme

Clause 18 (Transport) of the Melbourne Planning Scheme sets out local transport policy. It sets out the following key objectives in relation to sustainable transport:

- Planning should ensure an integrated and sustainable transport system that provides access to social and economic opportunities, facilitates economic prosperity, contributes to environmental sustainability, coordinates reliable movements of people and goods, and is safe
- To create a safe and sustainable transport system by integrating land use and transport
- To promote the use of sustainable personal transport



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To facilitate greater use of public transport and promote increased development close to high quality public transport routes.

1.2.2. City of Melbourne Bicycle Plan - 2016-2020



The Bicycle Plan is the City of Melbourne's action plan for a connected bicycle network, improving links to existing routes and making cycling more accessible for people of all ages and abilities.

There has been a significant effort to make Melbourne a bicycle friendly city and this plan aims to increase bicycle use to one in four vehicles entering the city in the morning peak and eliminating serious crashes from the network.

The key goals of this plan are listed below:

- Plan for future growth that includes high quality bicycle infrastructure, security and parking
- Deliver an interconnected network for people of all ages and ability to ride bikes
- Increase bicycle friendly facilities, support stations, and parking to make it easy to travel by bike and park
- Deliver a safer and well-lit environment for people to ride bikes
- Reduce the risk of riding a bicycle in the city and to promote motorist's awareness of cyclists on the road
- Encourage more people to take up riding or ride more frequently
- Evaluate changes, manage data and continuously improve our performance.

1.2.3. City of Melbourne Walking Plan 2014-2017

As part of the Transport Strategy, the City of Melbourne is committed to creating an enjoyable and safe walking environment for residents, workers and visitors. The Walking Plan looks at the many ways walking contributes to the city and how Melbourne's walking network could be improved.

Some of the key actions of the plan include:

- Improving the way pedestrians are included in transport planning and management decisions
- Creating an attractive walking environment and connected walking networks
- Addressing pedestrian crowding including around train stations and bus and tram stops
- Reducing pedestrian delays at signalised crossings.

1.2.4. City of Melbourne Transport Strategy

The City of Melbourne Transport Strategy recognises the link between how easily people can get into and around the city, and the city's economy. Some of the relevant key directions include:

- Integrate transport and land use planning
- Go anywhere, anytime public transport for inner Melbourne
- Create pedestrian friendly high-mobility public transport streets in the central city
- Make Melbourne a cycling city.



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1.3. Objectives of this GTP

This GTP has been prepared to assist in managing the transport needs of the proposed development's employees and SED visitors and should be read in conjunction with the City of Melbourne's Green Travel policies (see above).

In particular, the GTP aims to manage the environmental impact of travel to/from the development by encouraging more efficient use of motor vehicles (e.g. by reducing the reliance on single occupancy car journeys), as well as encouraging other modes of transport such as walking, cycling and public transport.

The GTP seeks to:

- Integrate the development with the existing transport facilities and network
- Encourage the use of sustainable methods of transport
- Assist in discouraging a reliance on private motor vehicles (i.e. single occupancy)
- Reduce the environmental impact of the development
- Set-out future mode splits and an action plan.

1.4. References

In preparing this assessment, reference has been made to the following:

- City of Melbourne Planning Scheme
- plans for the proposed development prepared by Woods Bagot, Revision A, dated 04 June 2020
- various technical data as referenced in this report
- other documents as nominated.



ADVERTISED

2. BACKGROUND

2.1. Subject Site

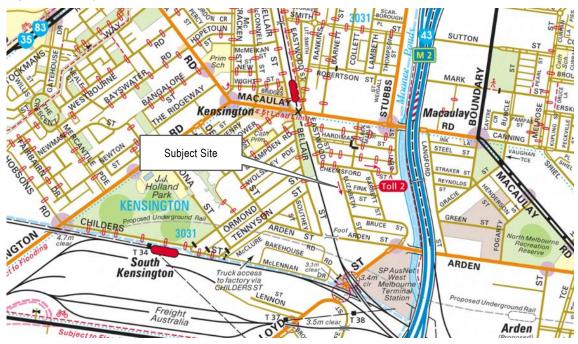
2.1.1. Overall Site

The Stage 2 subject site within the overall development of 2-50 Elizabeth Street, Kensington is approximately 3,800 sqm in size, located within the City of Melbourne and within a Commercial 2 Zone (C2Z).

The surrounding properties primarily include a mix of residential, industrial and commercial land uses. The notable exception being the railway line reserve that abuts the site to the west.

The location of the site and the surrounding environs is shown in Figure 2.1 and Figure 2.2.

Figure 2.1: Subject Site and its Environs



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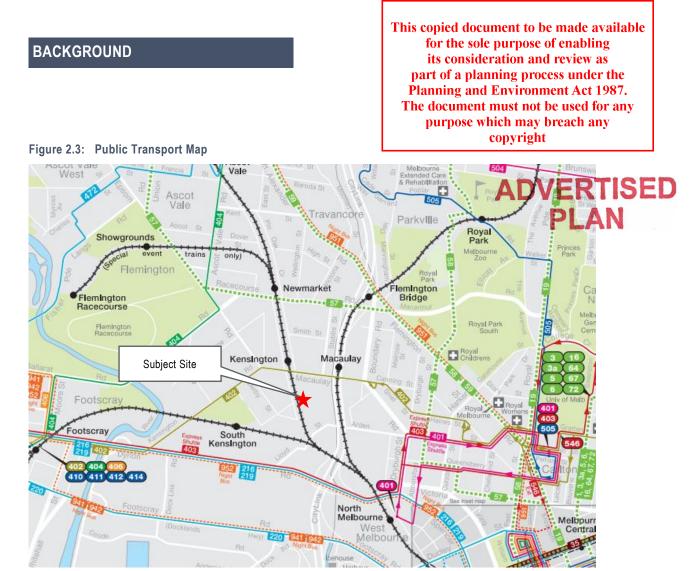
Figure 2.2: Land Zoning Map 431 429 411 47 SED 23A LITTLE HARDIMAN STREET 67 69 HARDIMAN STREET 63 67A 16 153-10 21 GRZ2 22 PARAD 15 9 45 47 31 39 **Overall Master** Plan Site PUZ1 MELBOURNE CH-1 GRZ2 KENSINGTON NOND STREET 8 2 4 6 10 FINK STREET BELLAIR STREET MUZ 26 22 31 C2Z 33 35 7 1 308-Ja BRUCE STR IN1Z 408 338 (Reproduced from Land Channel website)

2.2. Existing Transport Infrastructure

2.2.1. Public Transport

Figure 2.3 shows the subject site in relation to existing public transport routes within the vicinity whilst Table 2.1 summarises the road-based routes and major destinations that can be reached using these services.





(Reproduced from Public Transport Victoria website)



Service	Route No.	Route Description	Distance to Nearest Stop (m)
Bus	402	Footscray Station – East Melbourne via North Melbourne	~290m
Tram	57	West Maribyrnong to Flinders Street Station	~1,000m

Further to the above, the following train stations are within walking distance of the site;

- Macaulay train station on the Upfield line is approximately 550m from the site
- Kensington train station on the Craigieburn line is approximately 350m from the site
- South Kensington train station on the Werribee line is approximately 1,000m from the site
- The future North Melbourne train station approximately 1,000m from the site.

2.2.2. Pedestrian Infrastructure

The site is immediately surrounded by Chelmsford Street and Elizabeth Street. There are existing footpaths on both sides of each of these roads and generally all other roads in the vicinity of the site. There are no signalised intersections or specific pedestrian crossing facilities in the immediate vicinity of the site, however there are a number of local area traffic management measures in place on many of these roads to help create a low vehicle speed environment.



2.2.3. Cycling Infrastructure

The Principal Bicycle Network (PBN) is a network of on and off-road cycling corridors that have been identified to TISED support cycling for transport and access to major destinations in metropolitan Melbourne. The PBN was reviewed and ISED updated in 2012 by VicRoads and all local Councils.

The PBN is also a 'bicycle infrastructure planning' tool, to guide State investment in the planning and development of the future metropolitan Melbourne bicycle network. In this regard, a subset pf the PBN has been identified and elevated to the highest level of priority, mainly on the basis of potential for separation from motorised traffic, making these routes more attractive to less experienced bike riders. These cycling corridors are referred to as Bicycle Priority Routes (BPRs) and form part of the modal priorities for the road network set out in the VicRoads SmartRoads framework. Strategic Cycling Corridors (SCC) form another subset of the PBN, and represent an initiative outlined in Plan Melbourne to support walking and cycling in Central Melbourne. SCCs are intended to be corridors designed to provide high quality bicycle infrastructure to, and around, major activity areas in metropolitan Melbourne. Plan Melbourne outlines a subset of the SCCs for the proposed expanded city area.

It is noted that the type of bicycle facility (i.e. on or off-road and separated or shared) has not been indicated as part of the PBN and BPRs. Rather, the PBN and BPRs show the proposed cycling network. The associated facilities should be delivered in accordance with the relevant standards and guidelines, such as the Australian Standards, Austroads Guides and VicRoads' Cycle Notes.

The PBN and BPRs in the vicinity of the subject site run along both Macaulay Road and Stubbs Street, as well as along the Moonee Ponds Creek reserve area beneath the freeway overpass.¹

The existing cycling infrastructure nearby the site includes:

- Macaulay Road on-road bicycle lanes in both directions
- Stubbs Street on-road bicycle lanes in both directions
- Chelmsford Street on-road bicycle lane in the western direction
- Moonee Ponds Creek Trail off-road shared path.

2.2.4. Surrounding Road Network

Elizabeth Street

Elizabeth Street functions as a local traffic council road and is aligned in a north-south direction. It is a two-way road configured with one traffic lane in each direction. There is also on-street parking on each side, provided within a 16-metre-wide road reserve (approximately). It is noted that whilst the majority of Elizabeth Street is a two-way road, there is only one-way access from Chelmsford St and there its primary function is to facilitate vehicles travelling in a southbound direction towards Arden Street.

Chelmsford Street

Stubbs Street functions as a local traffic council road and is aligned in an east-west direction intersecting. It is a oneway road configured with one traffic lane (in an eastern direction) and one bike lane (in a western direction). There is also on-street parking on each side provided within a 19-metre-wide road reserve (approximately).

2.2.5. Surrounding Intersections

Key existing intersection in the vicinity of the site is Chelmsford Street / Elizabeth Street (unsignalised T-intersection).

¹ Further information regarding the PBN and BPRs is available at <u>https://www.vicroads.vic.gov.au/traffic-and-road-use/cycling/bicycle-network-planning</u>



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2.3. Existing Transport Usage

Guidance regarding existing transport usage has been sought from the Australian Bureau of Statistics ABS 2018 TISED Census 'Travel to Work' data.

The subject site is located within the 'Kensington (VIC)' ABS level 2 statistical area (SA2). Therefore, this **statistical** area has been utilised to analyse transport mode splits at the site's location, based on place of employment (as the development includes both office and retail uses). Due to the site's proximity to Melbourne CBD, for comparative purposes, data has also been provided for the Central Melbourne area, as it is expected to provide a reasonable comparison to the existing transport usage at the subject site.

It is noted that the method of travel to work data consolidates single mode trips with the final mode of travel (for employees) for any two or three mode trips, based on the census responses.

2.3.1. Employees Commuting to Kensington (SA2)

Figure 2.3 illustrates the split of travel modes for people employed within Kensington (SA2). The data for the mode split for employees commuting to Melbourne (SA2) are reproduced in Figure 2.4 for comparison.

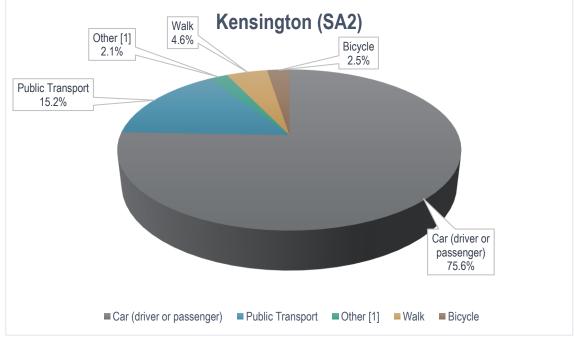
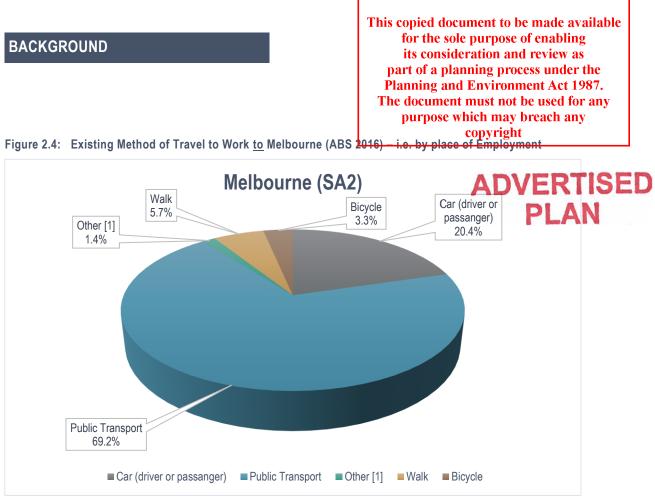


Figure 2.3: Existing Method of Travel to Work to Kensington (ABS 2016) - i.e. by place of Employment



^[1] Includes motorbike, truck, taxi and 'other' Census response



^[1] Includes motorbike, truck, taxi and 'other' Census' response

As indicated in Figure 2.3, the majority of employees in Kensington (SA2) still commute to work by private car (75.6%). This is approximately four times greater than those who commute to Melbourne by private car (20.4%). As expected, the majority of employees use public transport to commute to Melbourne (69.2%), which is approximately five times greater than to Kensington (SA2) (15.2%). Due to the focus of public transport infrastructure leading to/from Melbourne's CBD, it will naturally have the highest public transport utilisation.



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3. DEVELOPMENT PROPOSA

3.1. Land Uses

Stage 2 of the proposed development of 2-50 Elizabeth Street will include 2 new buildings (S3 and S4). The following provides a summary of the proposed development schedule:

- Office 14,660 sqm
- Retail / Shop 863 sqm
- Food & Drink 489 sqm.

3.2. Car Parking

It is proposed to provide a total of 178 car parking spaces across two basement levels, with 2 of these spaces to be disabled parking spaces. Information provided to GTA indicates that 60 of these spaces will be allocated to the Stage 1 uses, leaving 118 spaces for the Stage 2 proposal.

Vehicle access to the site will be from an existing crossover to Elizabeth Street.

3.3. Bicycle Facilities

It is proposed to provide a total of 170 on-site bicycle parking spaces, including 150 spaces within a secure end of trip area for employees and 18 spaces publicly available for visitors. An appropriate provision of showers and change rooms will be provided to service the increased bicycle parking provision.

3.4. Pedestrian Facilities

The primary pedestrian access to the Stage 2 development will be from a pedestrianised laneway/courtyard that runs between the Stage 1 and Stage 2 buildings.



4. TARGETS



4.1. Preamble

Based on the existing travel mode splits recorded in the vicinity of the site presented in section 2.3, the area is considered to have low utilisation of public transport and active travel modes. This observation is not consistent with current policies and strategies adopted by the City of Melbourne to promote the use of such modes.

Mode split targets are an important part of a GTP, as they;

- Show existing mode split for the area, as a baseline for the development.
- Analyse transport factors for the development based on access to sustainable and active transport (i.e. is the development likely to achieve a better or worse result than the surrounding suburb / area, based on no intervention).
- Articulate an inspirational target mode split to serve as a reference point, post occupancy.

The mode split target enables the GTP to be managed and monitored according to the aspirational targets. It is anticipated that these targets can be updated as necessary based on:

- Actual population and demographic of the development, post occupation.
- Actual travel characteristics of the development, post occupation.
- Opportunities arising from the analysis of the factors above.

As such, initial mode split targets have been set for the development which include consideration of the existing mode splits and their relative proportions between them, the transport facilities provided on-site, and what transport options could reasonably be used for access to/from the site.

4.2. Post Occupancy Surveys

Post occupancy surveys are critical to 'ground truth' the mode split targets and allow adaption and targeted actions to improve on the actual travel behaviour. They provide an opportunity to gather targeted, relevant data for the development, rather than relying on generic, area wide data from the Census or other sources. Post occupancy surveys should be conducted approximately 12-months post development, to allow travel patterns to settle down, but not so long as to allow them to become entrenched. Thereafter, they should be conducted every one-to-two years.

Post occupancy surveys act as a 'report card' for the development and can be promulgated in order to have a motivating and educating effect on users.

Post occupancy surveys should examine:

- Mode of travel for all trips (journey to/from work, work related trips).
- Destination and distance travelled.

The aim is to link distance, destination and mode, to allow the GTP to effectively target trips that may be able to be undertaken by more sustainable modes.

4.3. Initial Mode Split Targets

Mode split targets for employees of the developments have been nominated in Table 4.1. It is considered that these targets should be achievable, given the public transport, walking and cycling opportunities in close proximity to the site.



TARGETS

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More aggressive targets that typical have been adopted in this instance, given that proposed significant reduction in onsite car parking, which is expected to play a major role in influencing site users travel mode choice.

However, as stated above, these targets should be calibrated and updated shortly after the development is **Ecupied as SED** part of the ongoing GTP monitoring process.

Table 4.1: Nominal Mode Split Targets

Mode	Existing Kensington (SA2) (ABS 2016) By place of employment	Initial target for subject site
Walking and cycling	7.1%	16%
Public transport	15.2%	32%
Car as driver or passenger	75.6%	50%
Other [1]	2.1%	2%

[1] Includes motorbike, truck, taxi and 'other' Census response



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5. ACTIONS

5.1. Preamble

The followings actions for transport modes used in accessing the proposed development form the basis for implementation of the GTP. The actions below fall into the following categories:

- "To be provided as part of the development" actions are to be completed by the developer as part of the construction
- "Prior to occupation" actions are to be completed by the developer prior to occupation
- "Post occupation" actions may be completed by tenants as part of the ongoing GTP implementation. It should be stressed that these options are not mandatory and represent potential options subject to evaluation and review by the GTP implementation group.

5.2. Walking

Action	Date
Identify employees living near work that may be interested in walking to work	Post Occupancy
Produce a map showing safe walking routes to and from your site with times, not distances, to local facilities, such as shops and public transport stops	Upon Occupation
Provide lockers for keeping a change of clothes	Provided as part of the Development
Provide showers and changing room facilities	Provided as part of the Development
Take part in 'National Walk to Work Day'	Post Occupancy
Have some Travel Smart Get to Work days encouraging staff to come by alternative modes of transport	Post Occupancy
Have a few umbrellas handy at reception for rainy days – perhaps bearing the company logo	Post Occupancy
Encourage walking meetings to get the brain going, for those times when you don't need to take notes	Post Occupancy

5.3. Cycling

Action	Date
Establish an internal Bicycle Users Group (BUG). BUGs are formed by people who want to work together to improve facilities for cyclists and encourage cycling	Post Occupancy
Develop a 'bike buddy' scheme for inexperienced cyclists	Post Occupancy
Organise a cyclist's breakfast	Post Occupancy
Organise an after-work ride. It doesn't have to be long or strenuous and could end somewhere for dinner or drinks. The idea is to encourage people who might be reluctant to cycle to give it a go.	Post Occupancy
Provide sufficient bicycle parking to meet peak needs	Provided as part of the Development
Have good, secure bicycle parking in an easily accessible location	Provided as part of the Development
Ensure bicycle parking is clearly visible or provide signage to direct people to cycle bays	Provided as part of the Development



ACTIONS

Action

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Provide showers and changing rooms	Provided as part of the development	SE
Provide lockers for a change of clothes	Provided as part of the Development	
Produce a map showing all bicycle routes and infrastructure in the vicinity of the site	Upon Occupation	
Provide interest free loans for staff to buy a bicycle which they then pay back from their wages	Post Occupancy	
Provide insurance for those cycling on work business	Post Occupancy	
Supply a workplace toolkit consisting of puncture repair equipment, a bike pump, a spare lock and lights	Post Occupancy	
Provide a pool bicycle for staff to use when making short work trips during the day	Post Occupancy	
Participate in annual events such as 'Ride to Work Day'	Post Occupancy	

5.4. Public Transport

Action	Date
Develop a map showing public transport routes in the vicinity of the site	Upon Occupation
Put up a notice board with leaflets and maps showing the main public transport routes in the vicinity of the site	Upon Occupation
Provide leaflets or timetables in convenient locations	Upon Occupation
Place information on the work intranet with links to appropriate external websites e.g. PTV	Upon Occupation
Provide an interest free loan to buy an annual Myki / public transport ticket	Post Occupation
Encourage public transport use for business travel	Post Occupation
Ensure Myki are available at the workplace for work travel during the day	Post Occupation

5.5. Carpooling

Action	Date
Set up a carpooling database	Upon Occupation
Allocate priority parking spaces for carpoolers	Upon Occupation

5.6. Travel for Work / Teleworking

Ŭ	
Action	Date
Install teleconference facilities in offices and use to replace some regular meetings	Post Occupancy
Identify staff which may be suitable for teleworking.	Post Occupancy
List common office tasks which can be completed at home	Post Occupancy
Draw up a work from home agreement for participating staff members	Post Occupancy
Inspect the home office to ensure it complies with Occupation Health and Safety Standards	Post Occupancy



ACTIONS

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5.7. Implementation

Some of the identified actions will be constructed as part of the development proposal and no further molecular strategy will be required for these actions.

The implementation of post occupancy measured in the GTP requires a Working Group to be convened to manage the implementation of preferred actions. The Working Group would be led by a GTP Coordinator who would facilitate Working Group meetings and take responsibility for monitoring and reviewing the GTP. The primary aims of the Working Group would include;

- Review GTP initiatives and determine a program for implementation.
- Oversee completion of post occupancy surveys and follow up actions arising from these.
- Provide feedback on activities and initiatives.
- Update mode split targets in line with post occupancy surveys.
- Assist the GTP coordinator to promote activities and disseminate information.
- Advocate sustainable transport modes generally amongst employees.

The Working Group will conduct post occupancy surveys and update the GTP, to ensure that it remains a "live" document that is amended as necessary to meet the mode split targets.



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6. MONITORING AND REVIE

6.1. Overview

In order for the GTP to be effective it must be reviewed on a regular basis. It is important to ensure that that the GTP is meeting its objectives et out in Section 4, and that strategies are having their intended impact on transport choices for users of the site.

In order to account for the settling of activity levels at the site, it is recommended that post-occupancy surveys be undertaken to determine a 'baseline' against which future travel behaviour can be compared. This should also consider questions regarding the perceived and real barriers to utilising more sustainable travel modes such as walking, cycling and public transport. This will enable identification of opportunities for additional 'Actions' to overcome these barriers. It is also recommended that mode splits are reviewed annually for a period of five years after the development is occupied.

This review should be completed by undertaking travel mode questionnaire surveys for workers and visitors. The results of these surveys should subsequently be used to assess what the mode splits are, what modes should be targeted and determine the necessity of potential actions to achieve the desired level of change.

In the event that the monitoring process reveals that a shift away from the desired mode split targets is occurring, a number of measures could be adopted to further assist the achievement of the integrated transport goals. These measures could include:

- Review the car parking management plan to ensure on-site car parking spaces are being fully utilised for their purpose (i.e. some spaces could potentially be reallocated for use by shared cars/carpooling systems).
- Provide share cars within the on-site car park and investigate incentives for their use.
- Provide more detailed and personal travel information regarding nearby public transport services to occupiers.

6.2. Responsibility

The future tenants of the building will be responsible for the monitoring and management of the GTP.

It is suggested that a working group would comprise representatives of the future workers and/or the Owners Corporation and would be led by a GTP coordinator who would facilitate working group meetings and take responsibility for monitoring and reviewing the GTP.

The primary aims of the working group will include the following:

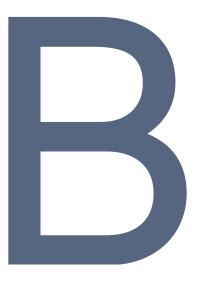
- Review GTP initiatives and determine a program for implementation.
- Oversee completion of post occupancy surveys and follow up actions arising from these.
- Provide feedback on activities and initiatives.
- Update mode split targets in line with post occupancy surveys.
- Assist GTP coordinator to promote activities and disseminate information.
- Advocate sustainable transport modes amongst workers.



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B.PLANNING POLICY BACKGROUND





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B.1. Plan Melbourne

The Victorian Government released the Metropolitan Planning Strategy, Plan Melbourne in 2016 Tan SED update of the previous plan released in 2014). The Plan looks to build on Melbourne's reputation as a global city of opportunity and choice, as it caters for an almost doubling of the population over the next 35 years (i.e. out to 2051).

The plan provides guidance on the way housing, commercial and industrial development will be provided, based off the following key nine principles, which are supported by a range of actions:

- Being a productive city that attracts investments, supports innovation and creates jobs.
- Provide housing choice in locations close to jobs and services.
- Have an integrated transport system that connects people to jobs and services and good to market.
- Be a distinctive and liveable city with quality design and amenity.
- City of inclusive, vibrant and healthy neighbourhoods.
- A sustainable and resilient city.
- Regional Victoria is productive, sustainable and supports job and economic growth.

The Plan discusses the importance of locating medium and high-density development near jobs, services and public transport to improve housing and transit choices, as well as to achieve 20 minute neighbourhoods – places where people have access to local shops, schools, parks, jobs and a range of community services within 20 minutes of their home.

B.2. Transport Integration Act

The Transport Integration Act is the primary transport statute for Victoria and has caused significant change to the way transport and land use authorities make decisions and work together. The Act enshrines a triple bottom line approach to decision making about transport and land use.

The Act requires that all transport agencies work together to achieve an integrated and sustainable transport system, and the land use agencies such as municipal councils and the Department of Planning and Community Development (only in relation to the development of the metro strategy or acting as a planning authority) take account of transport issues in land use decisions. The Act has been effective to date in changing the focus of organisations that traditionally only considered a single transport mode.

The Act:

- Unifies all elements of the transport portfolio to ensure that transport agencies work together towards the common goal of an integrated transport system.
- Provides a framework for integrated and sustainable transport policy and operations.
- Recognises that the transport system should be conceived and planned as a single system performing multiple tasks rather than separate transport modes.
- Integrates land use and transport planning and decision-making by extending the framework to land use agencies whose decisions can significantly impact on transport ("interface bodies").
- Re-constitutes transport agencies and aligns their charters to make them consistent with the framework.

The Transport Integration Act forms an overarching legislative framework for transport related state planning policies and has been integrated within the Victorian Planning Provisions (VPP).



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B.3. Victoria Planning Provisions

As per the legislative framework of the Transport Integration Act, various statutory planing ERTISED requirements are incorporated within the VPP. The relevant clauses are outline as follows:

- Clause 18.01 Integrated Transport
 - This clause requires the preparation of an Integrated Transport Plan (ITP) for all new 'major' developments. It is typical that this ITP be lodged to the Responsible Authority concurrently with the planning permit application.
- Clause 52.34 Bicycle Facilities
 - This clause aims to encourage cycling as a mode of transport through provision of convenient parking and end of trip facilities.
- Clause 52.36 Integrated Public Transport Planning
 - This clause seeks to ensure that development supports public transport usage. Under this Clause, Public Transport Victoria (PTV) acts as a referral authority for all major developments. PTV considers that such proposals should be consistent with the Department of Transport's "Public Transport Guidelines for Land Use and Development" and the objectives and standards in Clause 56.03-1 of the VPP.

B.4. SmartRoads Policy

SmartRoads is a VicRoads policy which sets 'modal' priorities on the road network and underpins many of the strategies significant to the operational directions that support broader strategies around land use and transport.

"There is no single solution to managing congestion on our roads. Sustainable management of congestion will require an integrated approach involving better management of the existing network, building new infrastructure, visionary land use planning, encouraging sustainable transport modes, and changes in behaviour by individuals, businesses and a level of government."¹

All road users will continue to have access to all roads. However, certain routes will be managed to work better for cars while others for public transport, cyclists and pedestrians during the various peak and off-peak periods. In this regard, the following is noted by VicRoads for the various modes assigned to arterial roads across the network that form part of the Network Operating Plans:

- "Facilitate good pedestrian access into and within activity centres in periods of high demand
- Prioritise trams and buses on key public transport routes that link activity centres during morning and afternoon peak periods
- Encourage cars to use alternative routes around activity centres to reduce the level of 'through' traffic
- Encourage bicycles through further developing the bicycle network
- Prioritise trucks in important transport routes that link freight hubs and at times that reduce conflict with other transport modes"

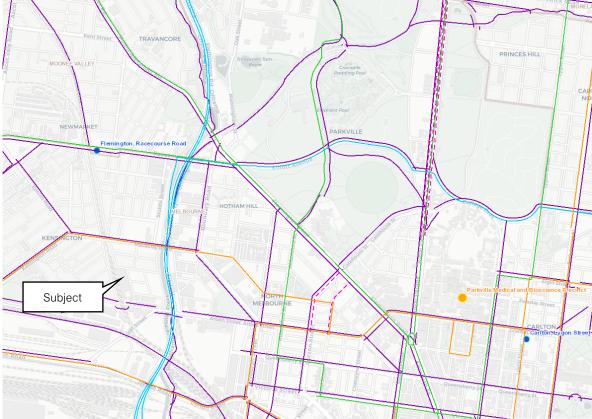
¹ Sourced from VicRoads



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The VicRoads SmartRoads Network Operating Plan for the area surrounding the subject site has been reproduced in Figure B.1. The plan indicates that Macaulay Road is identified as a bus priority route and bicycle priority route (BPR) and also forms part of the Principal Bicycle Network (PBN/ERTISE) Additionally, Moonee Ponds Creek Trail is also a BPR and forms part of the PBN.

Figure B.1: VicRoads SmartRoads Network Operating Plan - City of Melbourne



B.5. Arden-Macaulay Structure Plan (2012)

The Arden-Macaulay Structure Plan outlines the vision for urban development within the area to create a liveable and vibrant community based around 10 key principles:

- "Grow a prosperous place and viable community
- Ensure a harmonious transition of change
- Create liveable local neighbourhoods
- Integrate new development with the surrounding character
- Integrate the areas heritage into urban renewal
- Regenerate the area's public realm
- Develop liveable dwellings that house a diverse and inclusive community
- Create a connected and accessible place
- Support a culturally and socially engaged community
- Grow a city that prospers within the Earth's ecological limit"



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The Plan encourages fostering an environment that prioritises the attractiveness and effectiveness of public transport while identifying walking and cycling as key travel modes. It identifies specific transport related objectives such as:

- "Prioritise the growth of sustainable public transport modes and contain vehicular accessed and parking provision within that context
- Prioritise public transport, walking and cycling in existing and new roads"

The Plan also outlines several transport network upgrades which are shown in Figure B.2.

Amendment C190

Further to the Structure Plan, Amendment C190 Part 1 and Part 2 were approved by the Minister for Planning and gazetted on 23 October 2017 and 5 July 2018, respectively. This has introduced new land use controls to:

- *"encourage residential development by rezoning much of the existing industrial area to the Mixed Use Zone. Other uses such as shops, offices, education and entertainment may be permitted.*
- Encourage a new local shopping centre along Macaulay Road from the Moonee Ponds Creek to Melrose Street by rezoning the land to a commercial zone that encourages shops, restaurants, cafes.
- Encourage a new business centre on Racecourse Road near Flemington Bridge Station by rezoning the land along Racecourse Road between Boundary Road and Lambeth Street to a commercial zone that encourages offices and associated commercial uses.
- Provide a buffer between Allied Mills and new residential uses to its north and east by rezoning the area to the south of Chelmsford Street as far as Barret Street to a commercial zone that prohibits residential uses and encourages offices and industry."

The area affected by these changes are outlined in Figure B.3.



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(Figure 4.3 from the Arden-Macaulay Structure Plan, 2012)



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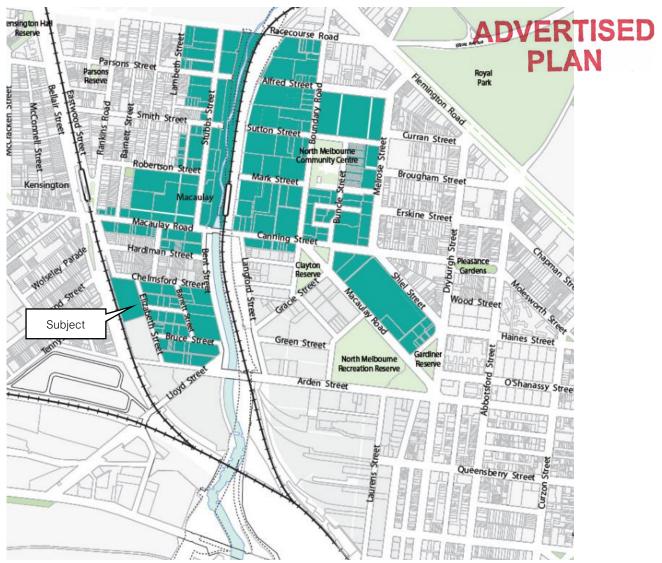


Figure B.3: Existing Land affected by Amendment C190

7.1. Amendment C309 to the Melbourne Planning Scheme

The recently proposed Amendment C309 to the Melbourne Planning Scheme affects the north-western Melbourne area and was recently recommended by a Planning Panel to be adopted with heavily reduced <u>maximum</u> parking rates. The recommendation to the Planning Minister includes a maximum parking limit rate of 0.5 spaces per 100sqm that would be applicable to office uses within this proposed overlay.

The subject site is outside of the overlay area but is in relatively close proximity to it and has a similar level of accessibility the overlay area. Therefore the principles behind the proposed new maximum rate of 0.5 car parking spaces per 100sqm for office land uses is considered to be relevant consideration to the proposed reduction in parking for the subject site.



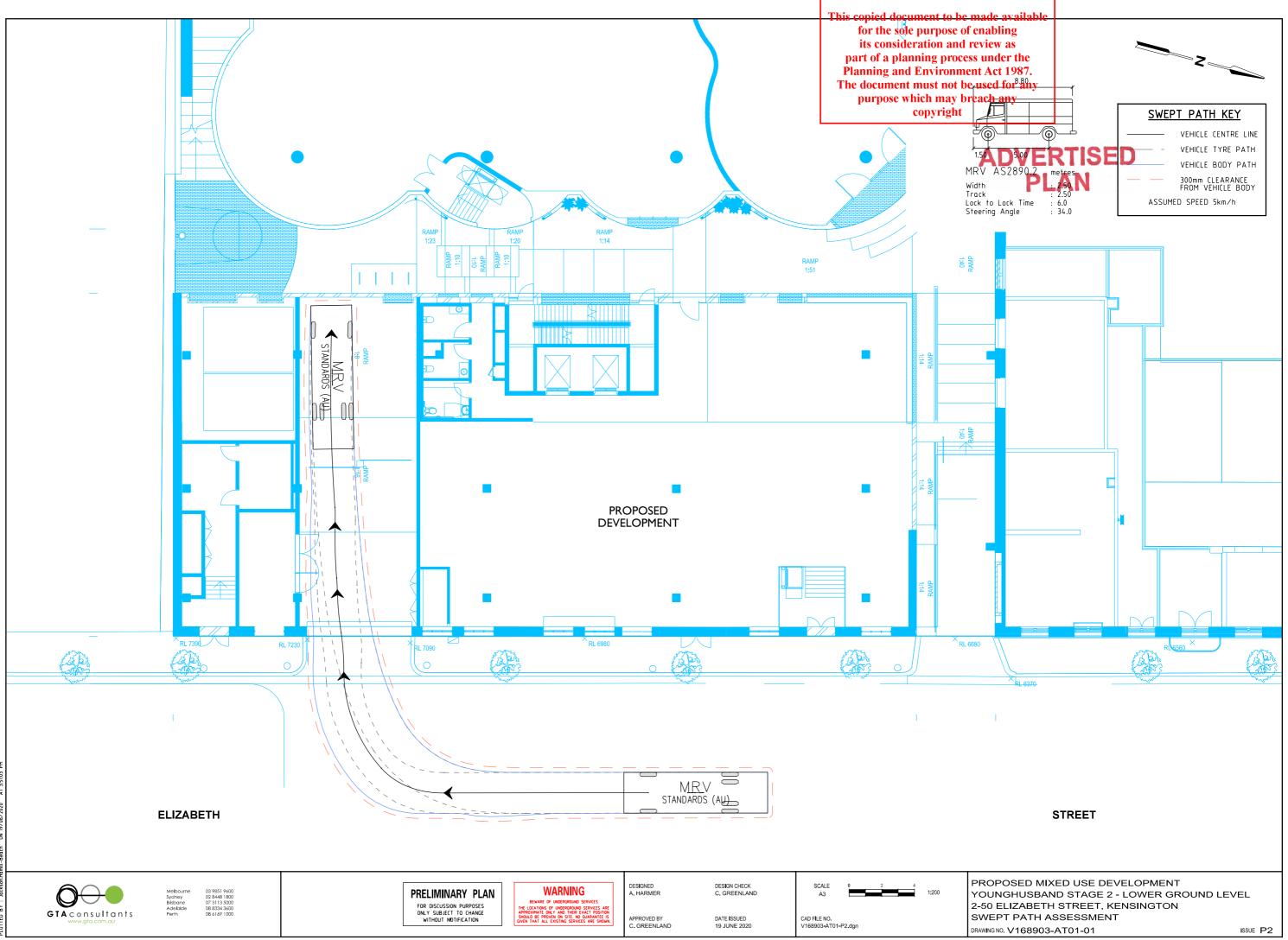
APPENDIX: SWEPT PATH ASSESSMENT RESULTS This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

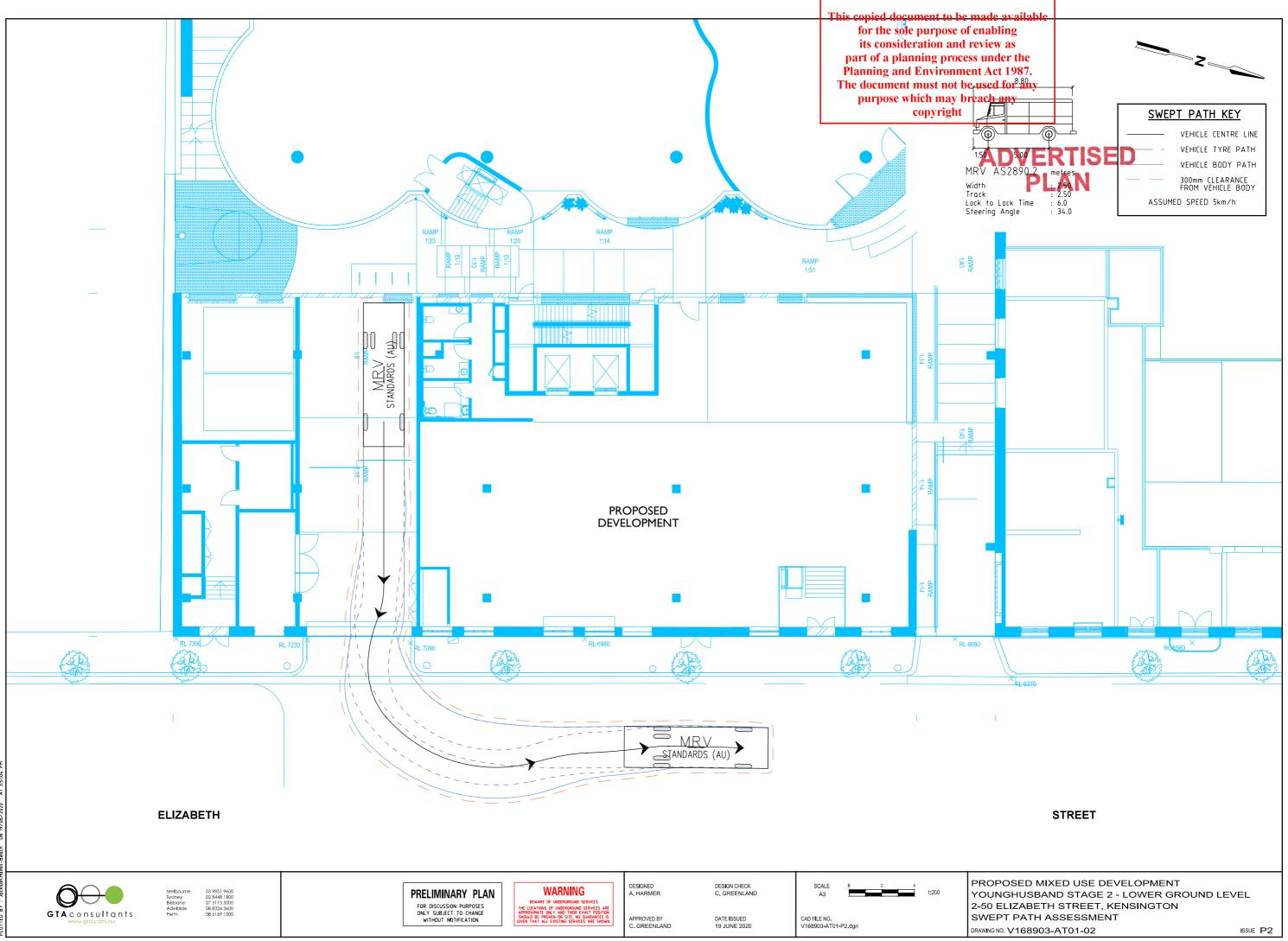
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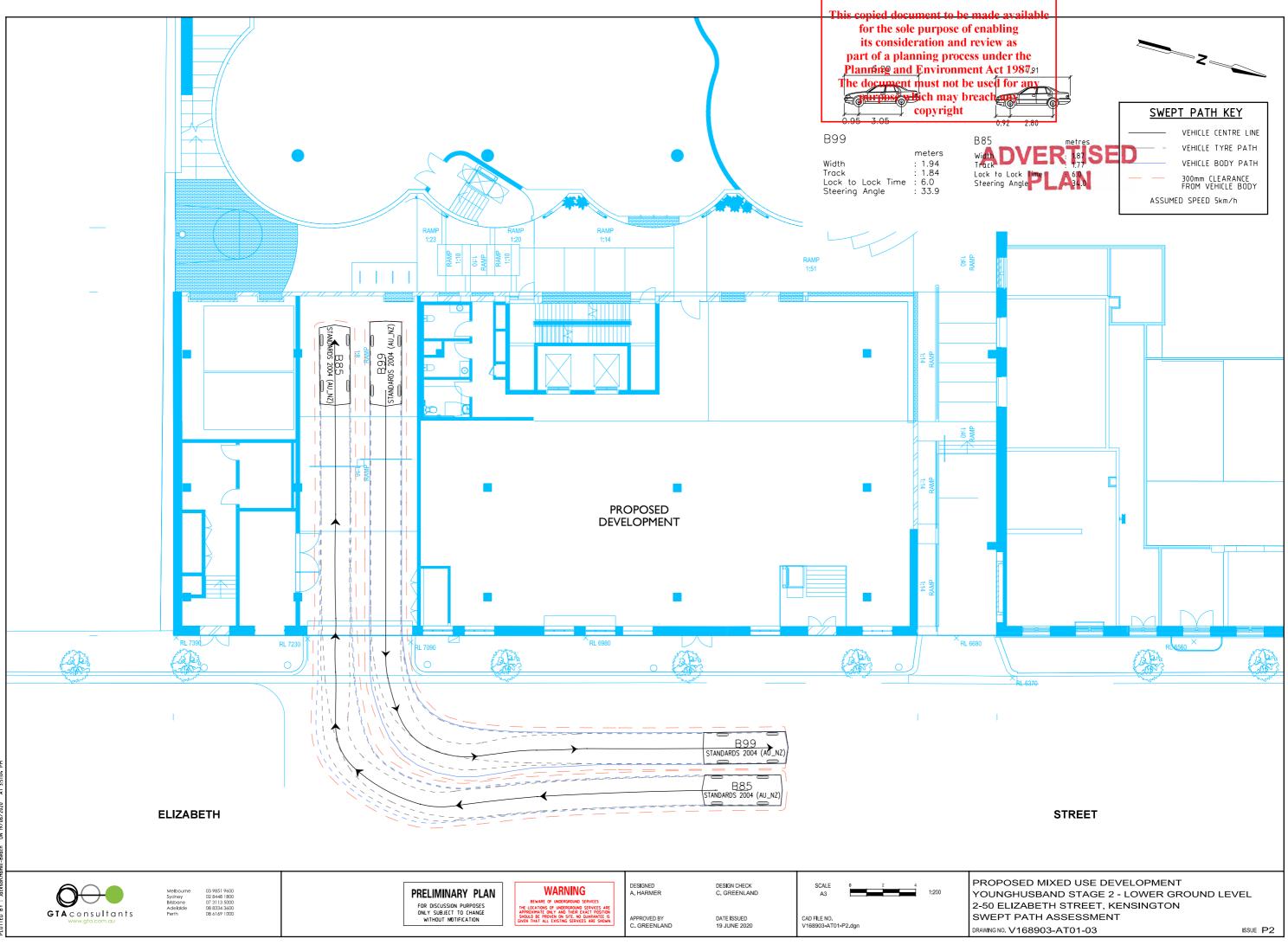


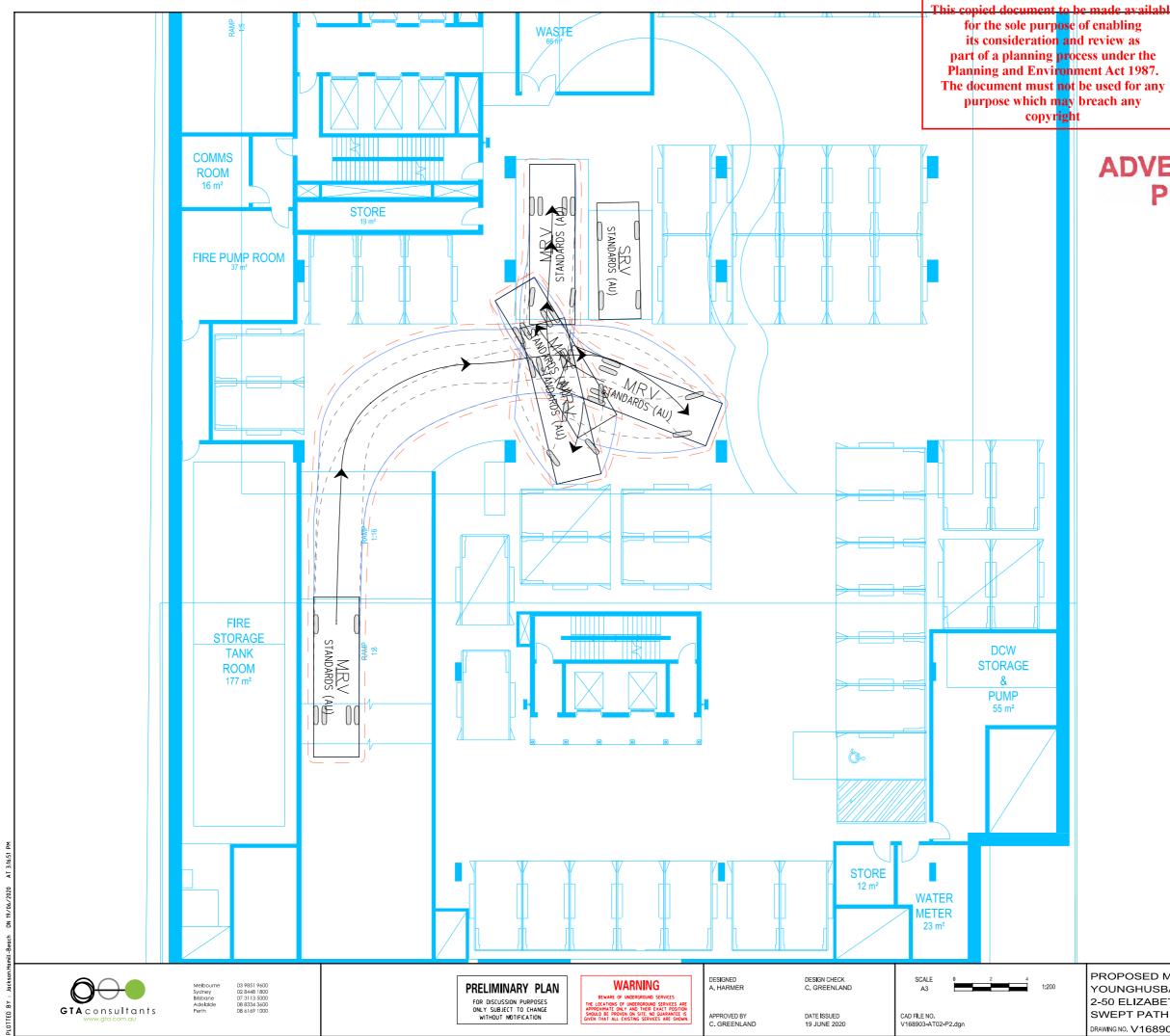


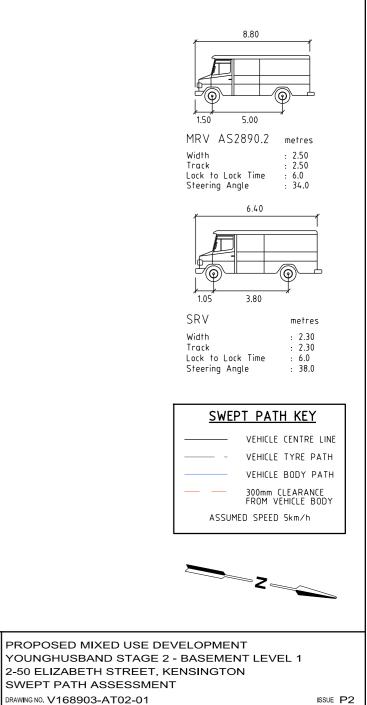
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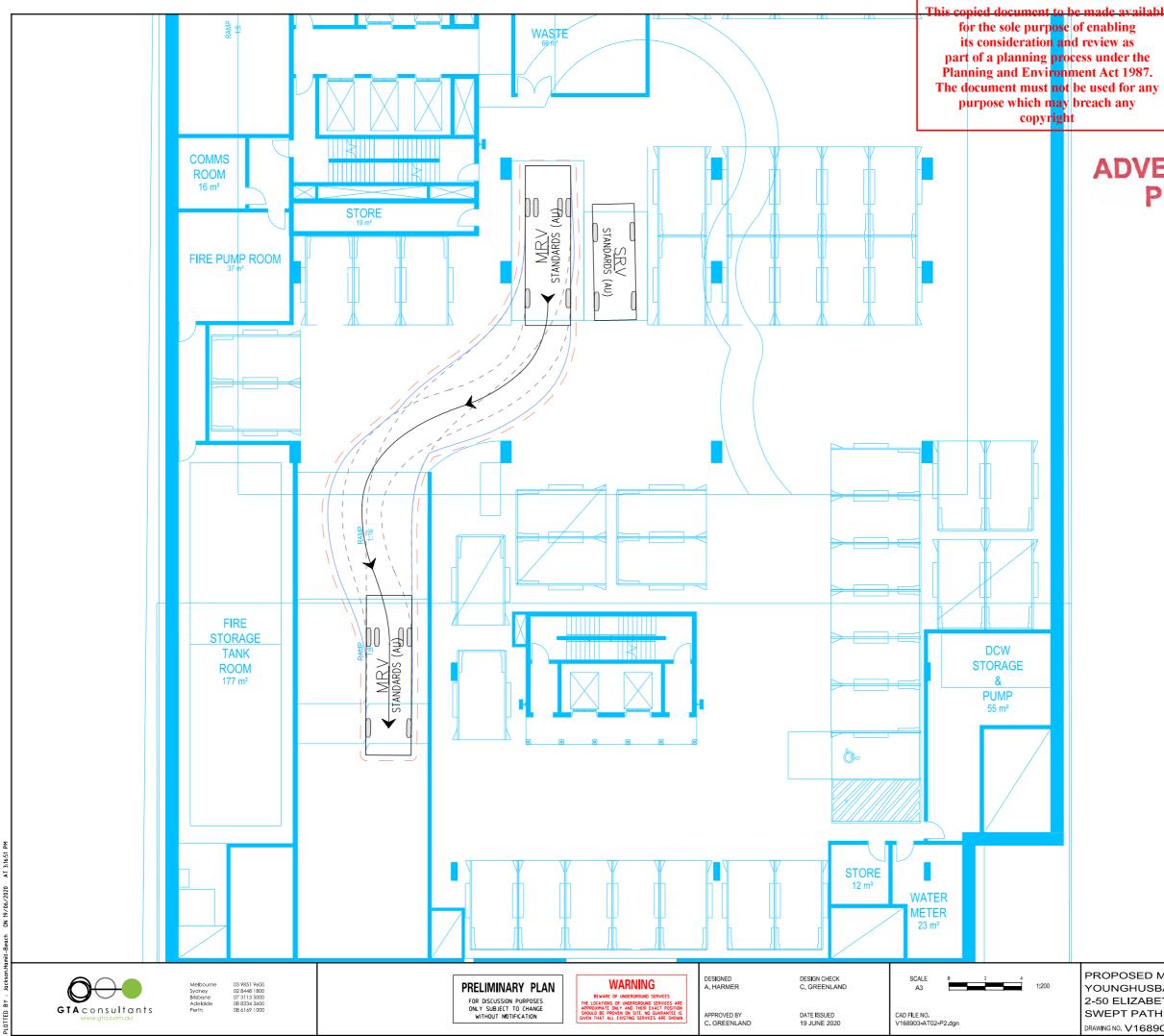


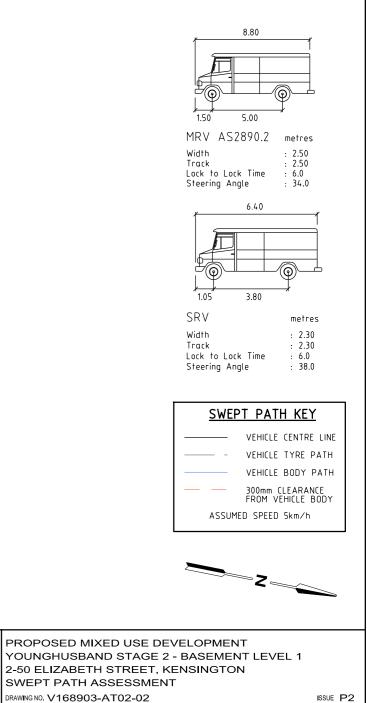




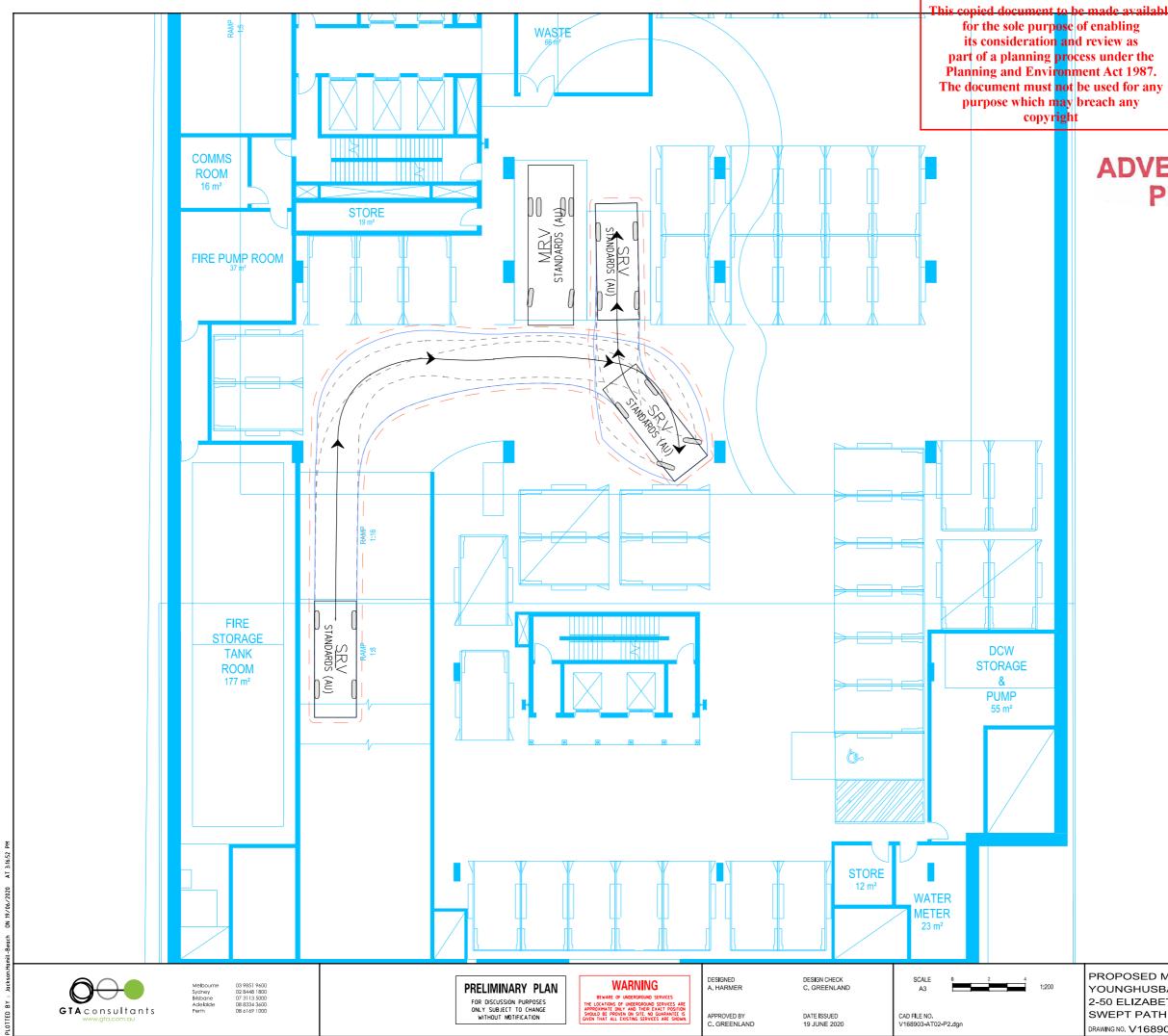


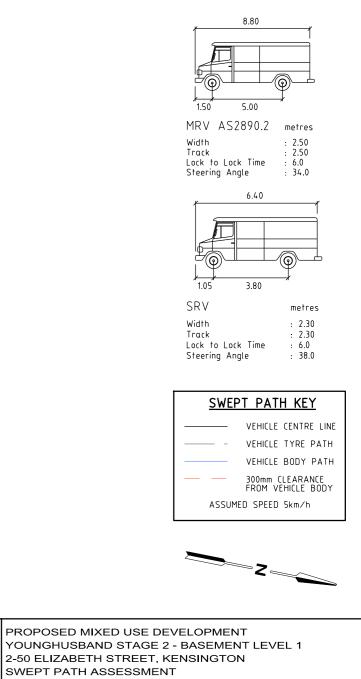
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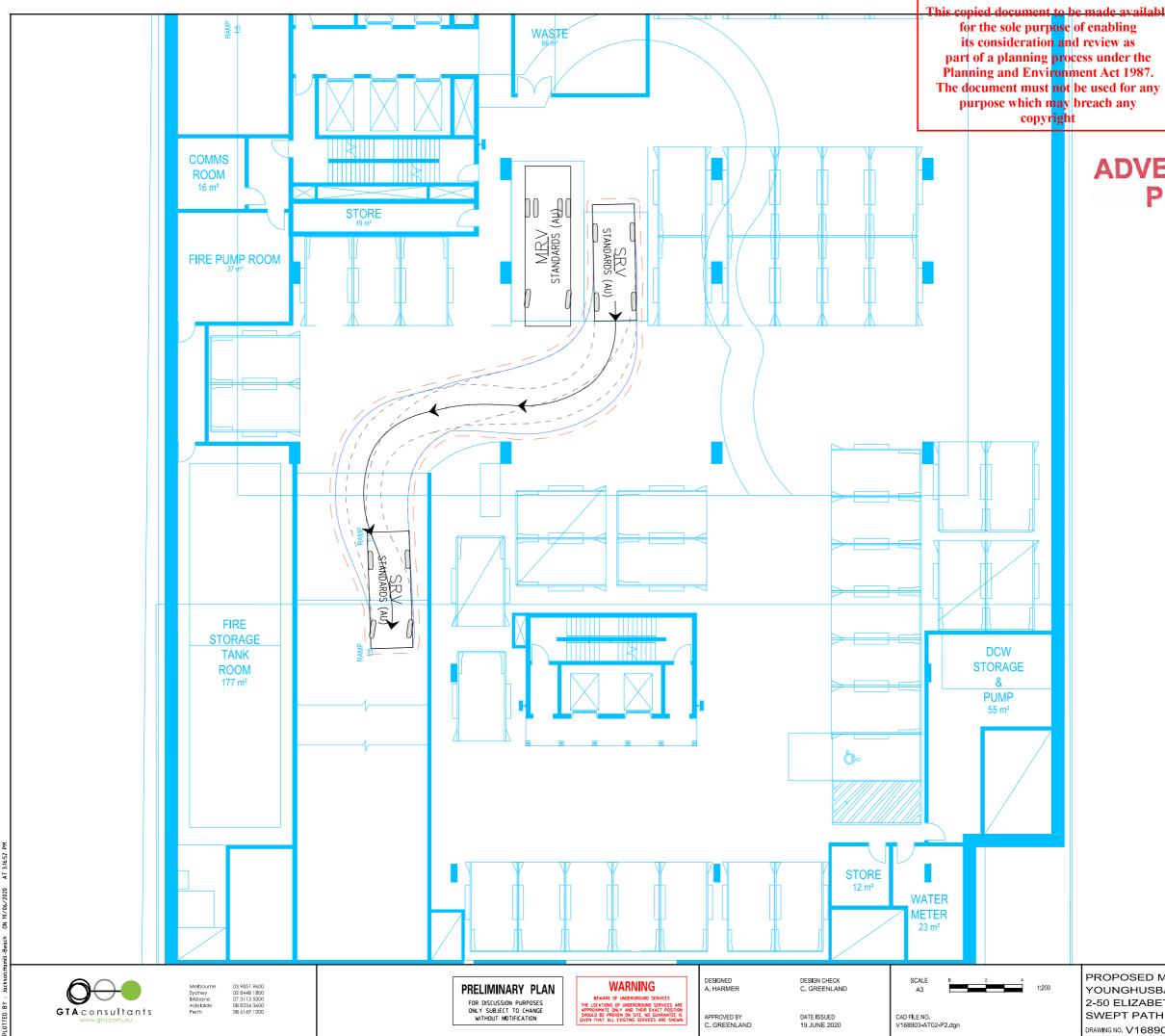


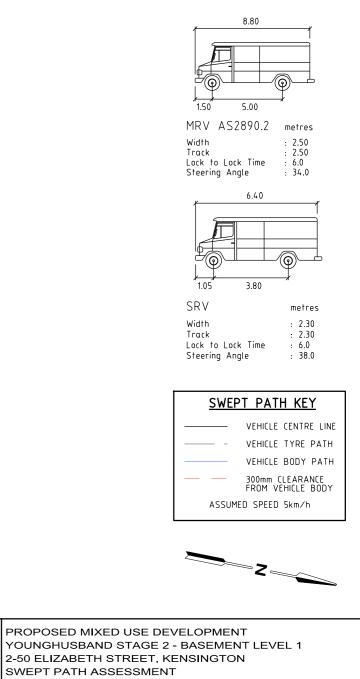
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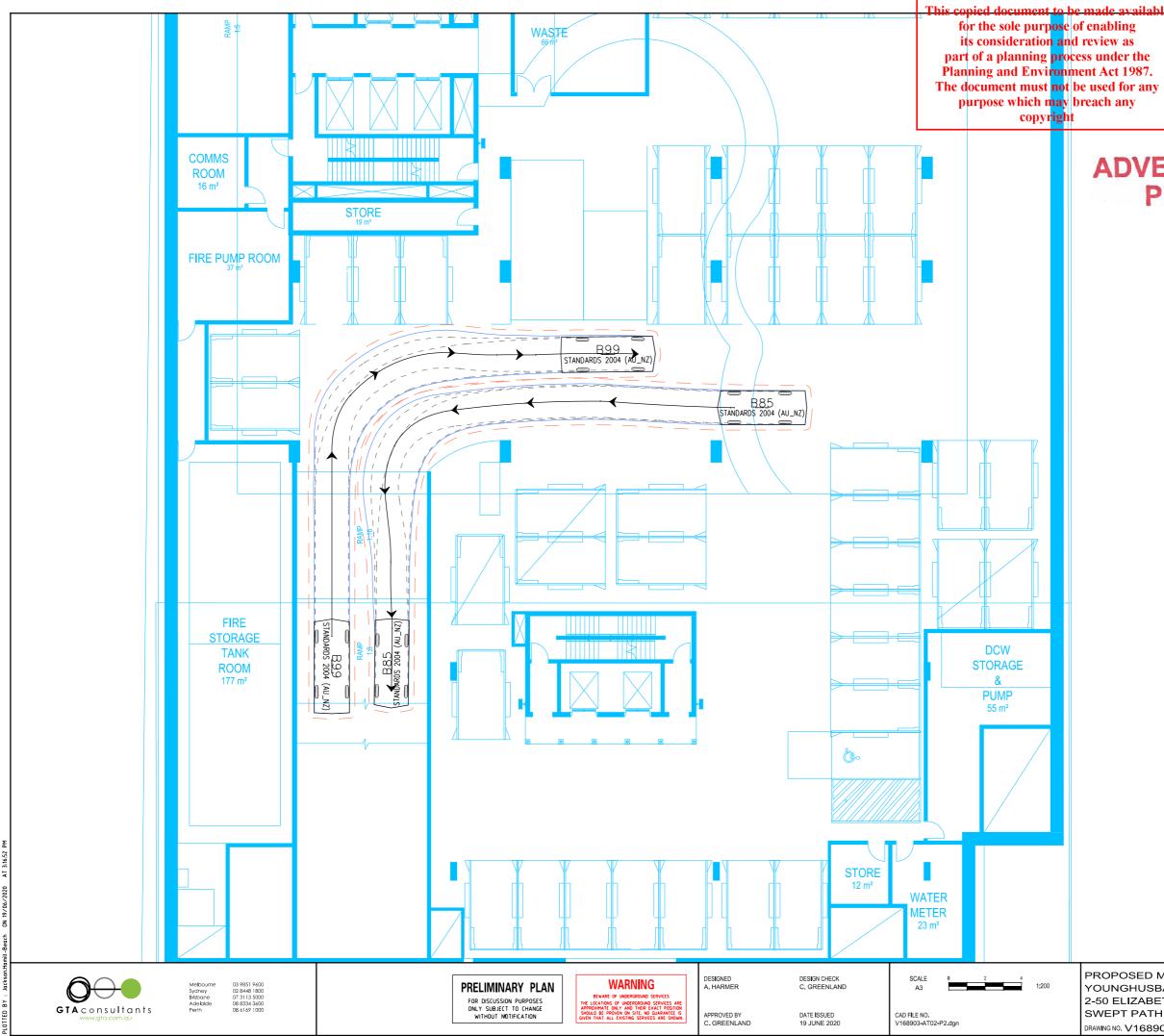


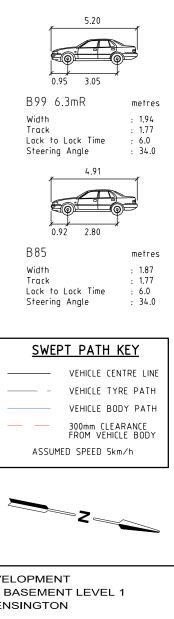
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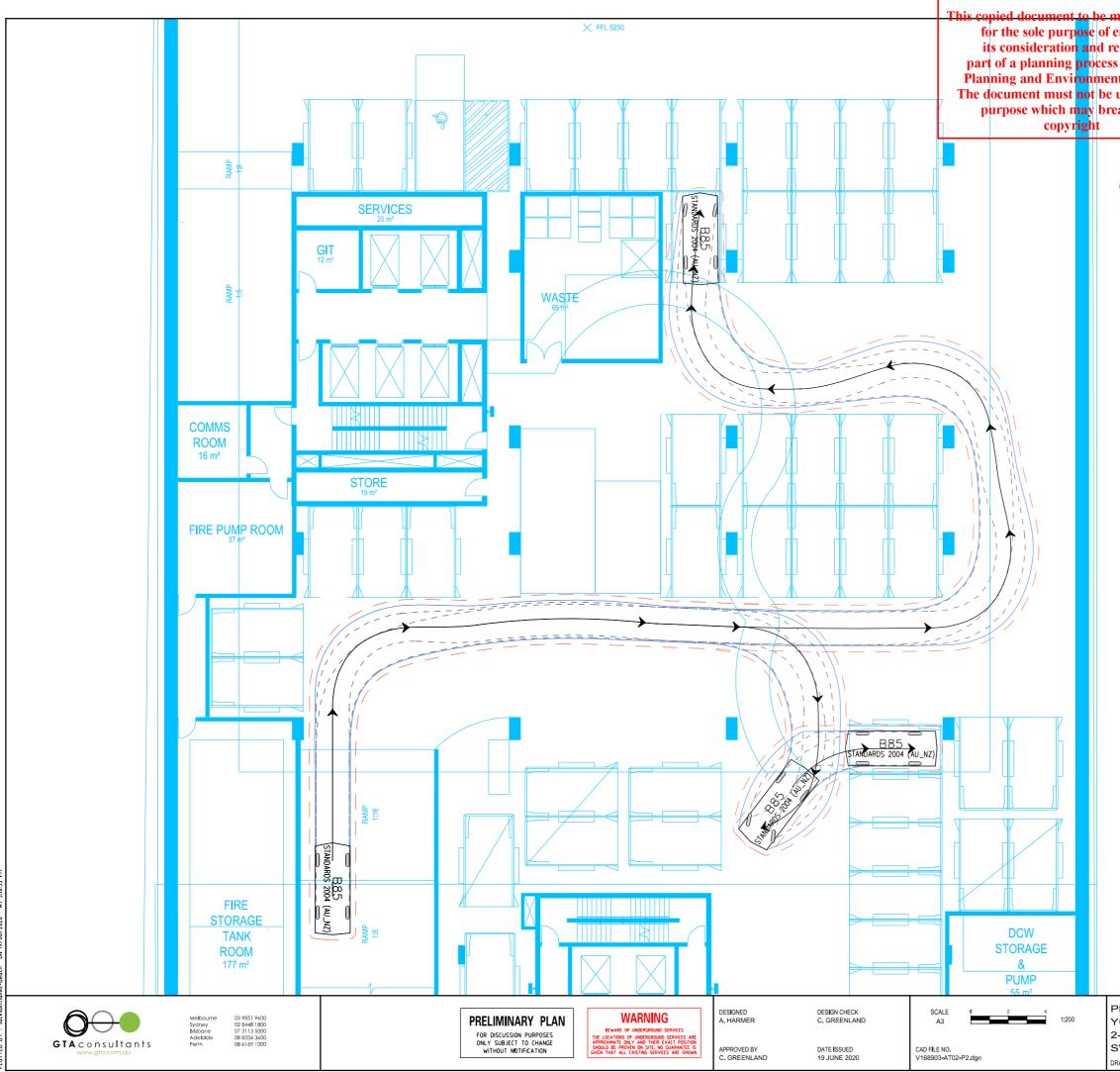


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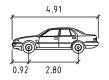




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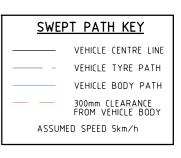


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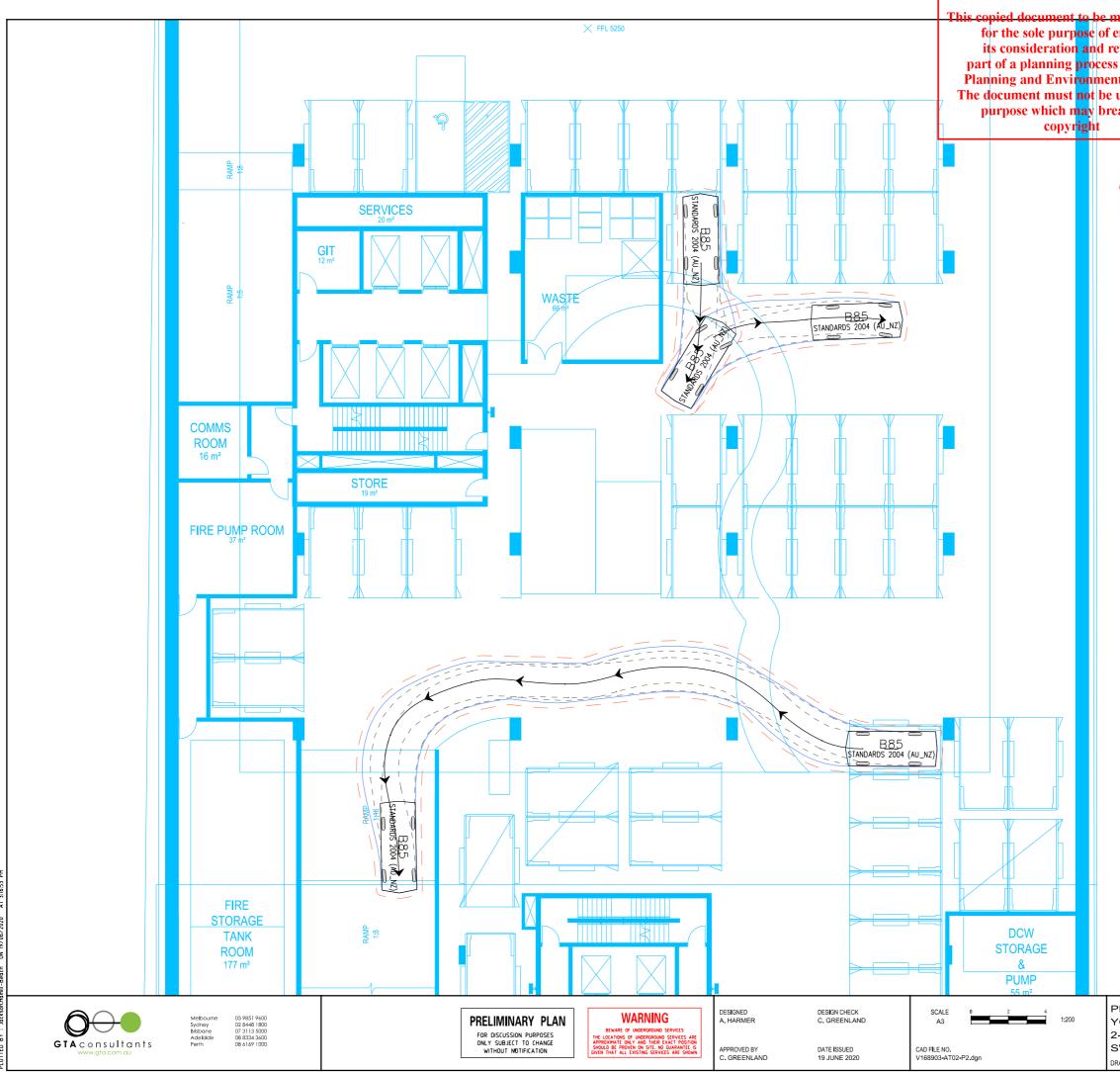
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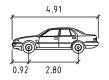
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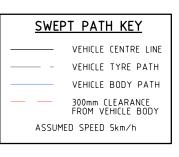
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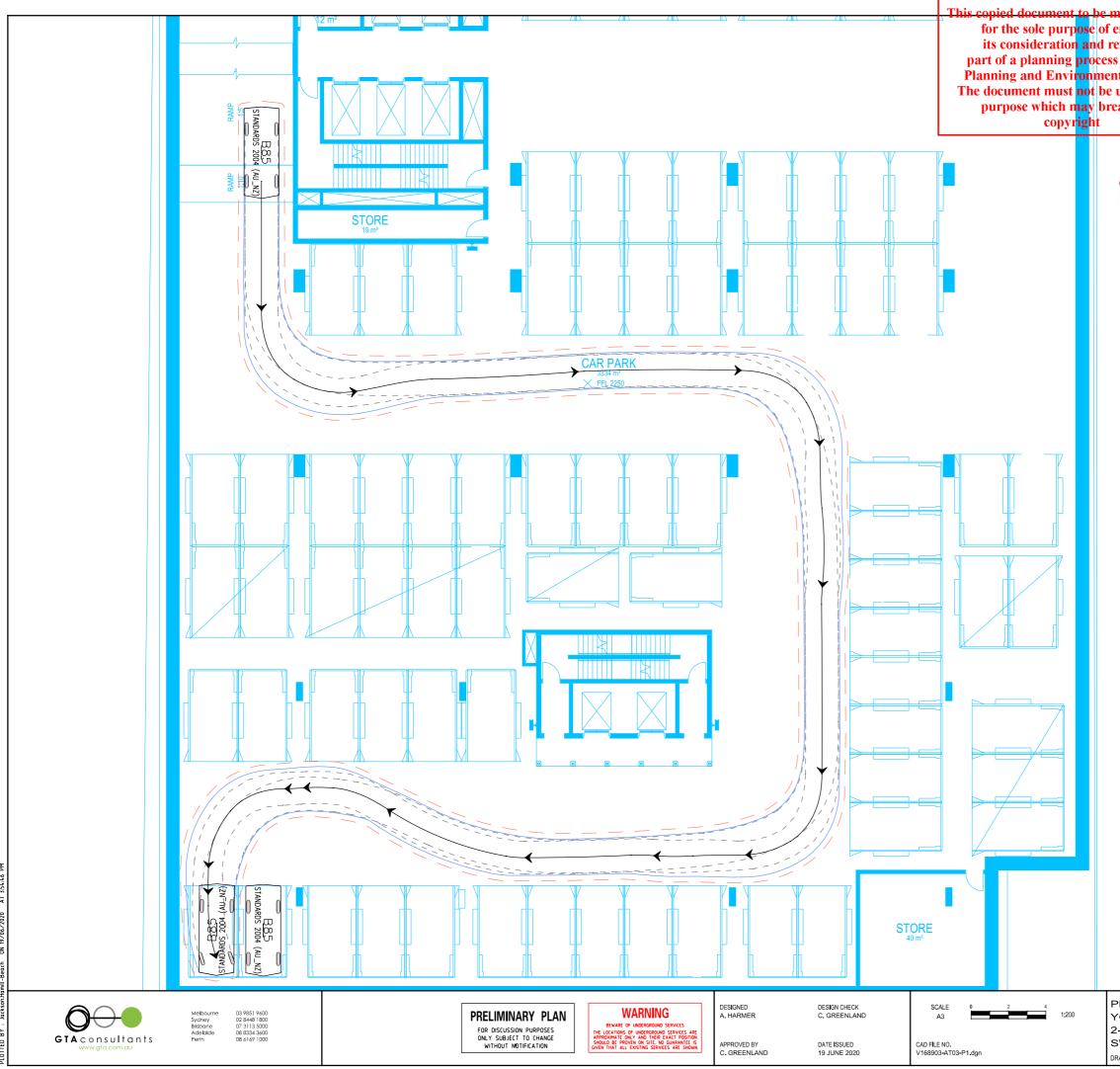
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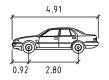
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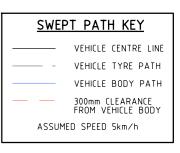
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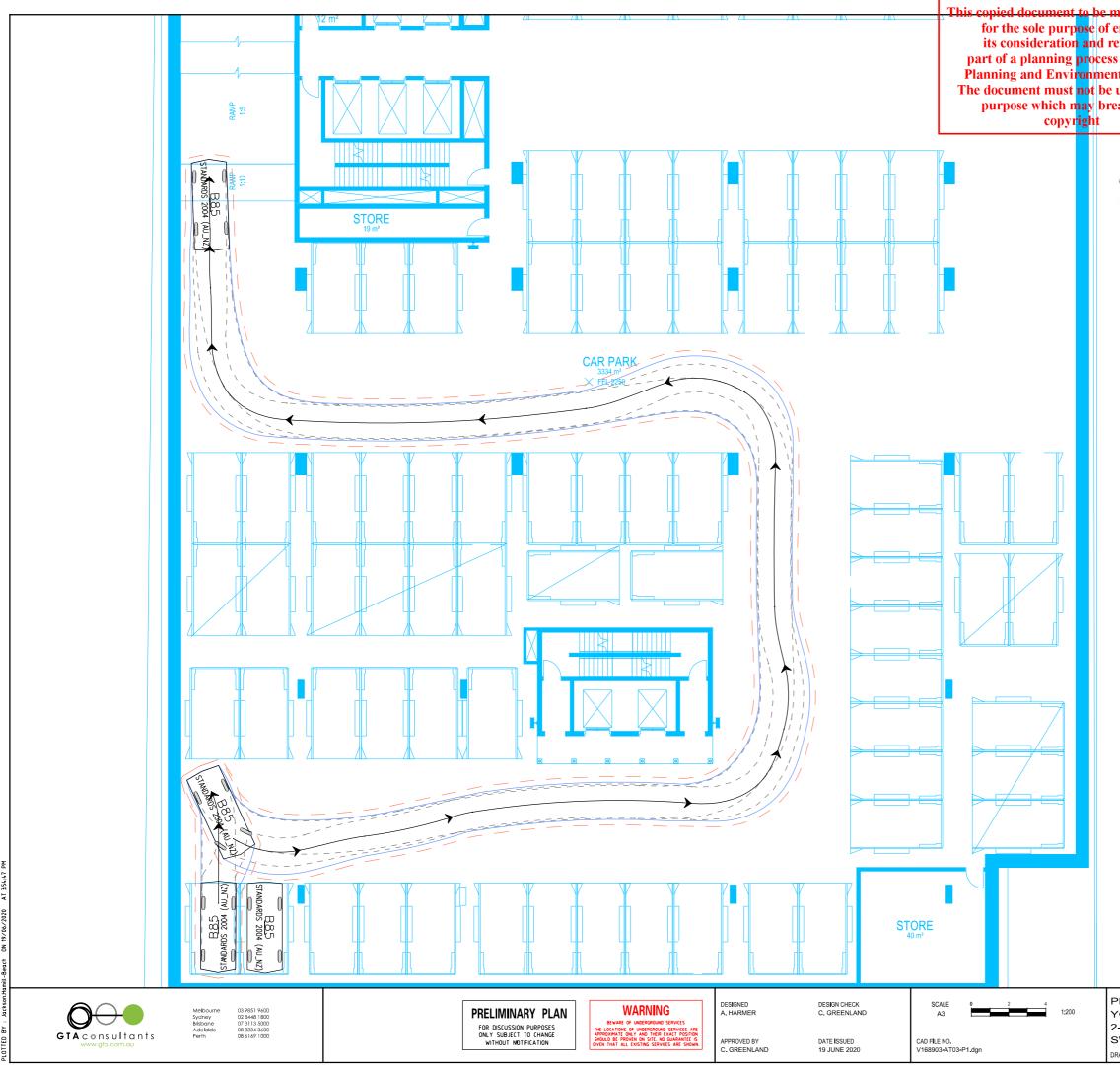
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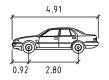
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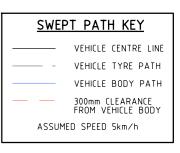
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