21-23 Lexington Drive, Bella Vista

Strategic Transport Review
Transport Assessment

Prepared by: GTA Consultants (NSW) Pty Ltd for Capital Corporation

on 22/12/2020

Reference: N201490

Issue #: B

GTAconsultants

21-23 Lexington Drive, Bella Vista

Strategic Transport Review
Transport Assessment

Client: Capital Corporation

on 22/12/2020

Reference: N201490

Issue #: B

Quality Record

Issue	Date	Description	Prepared By	Checked By	Approved By	Signed
A	17/12/2020	Final	Mackenzie Brinums, Rhys Hazell	Rhys Hazell	Rhys Hazell	Rhys Hazell
B	22/12/2020	Updated to include minor updates	Mackenzie Brinums	Rhys Hazell	Rhys Hazell	

GTAconsultants

Melbourne | Sydney | Brisbane

CONTENTS

Figures

Tables

1. INTRODUCTION

01

1.1. Background

It is understood that a Planning Proposal is in the process of being lodged with The Hills Shire Council (Council) for development of the site at 21-23 Lexington Drive, Bella Vista. The development comprises of a total gross floor area (GFA) of around 27,700 square metres, including 23,500 square metres of commercial office space, 800 square metres for food and beverage premises, a 250 square metre gymnasium and 3,100 square metres for serviced apartments.

Stantec prepared a Traffic and Parking Assessment dated 5 June 2020 (herein referred to as the PP Transport Assessment) to support the Planning Proposal. Capital Corporation has subsequently engaged GTA Consultants (GTA) to provide an independent Strategic Transport Review of the PP Transport Assessment and make recommendations in relation to broader traffic and transport related matters that should be further considered as part of detailed planning for the site.

1.2. Purpose of this Report

The purpose of this Strategic Transport Review is to objectively consider the impact of future traffic generation, parking demand and accessibility characteristics of the proposal. It has also been prepared to confirm that the proposal is consistent with the evolving strategic transport context and further acknowledge the importance of considering transport matters in the surrounding area.

This report sets out an assessment of the impacts associated with the proposed development as represented in the PP Transport Assessment, with consideration of the following:

- strategic background and broader planning policy
- transport and development changes occurring in the area, including Sydney Metro and Government planning approach
- likely parking requirements for the proposal
- the traffic generating characteristics of the proposed development
- the transport impact of the development proposal on the surrounding road network
- suitability of the documented access arrangements for the site.

This report should be read in conjunction with the PP Transport Assessment.

1.3. References

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

- an inspection of the site and its surrounds completed on Thursday 6 February 2020
- Traffic and Parking Assessment, 21-23 Lexington Drive, Bella Vista – Planning Proposal, prepared by Stantec, dated 5 June 2020
- Kellyville and Bella Vista Station Precinct Concept Proposals, Post-Exhibition Response to Submission (RtS) – confirmation of parking rates, prepared by SCT Consulting, dated 22 April 2020
- Bella Vista Station Precinct Finalisation Report, prepared by Department of Planning, Industry and Environment [DPIE] dated November 2017
- The Hills Development Control Plan (DCP) 2012

- Transport for NSW (TfNSW), Guide to Traffic Generating Developments 2002 (Guide 2002) and Technical Direction Updated Traffic Surveys (TDT 2013/ 04a)
- other documents and data as referenced in this report.

2. SUMMARY OF PLANNING PROPOSAL

02

2.1. Site

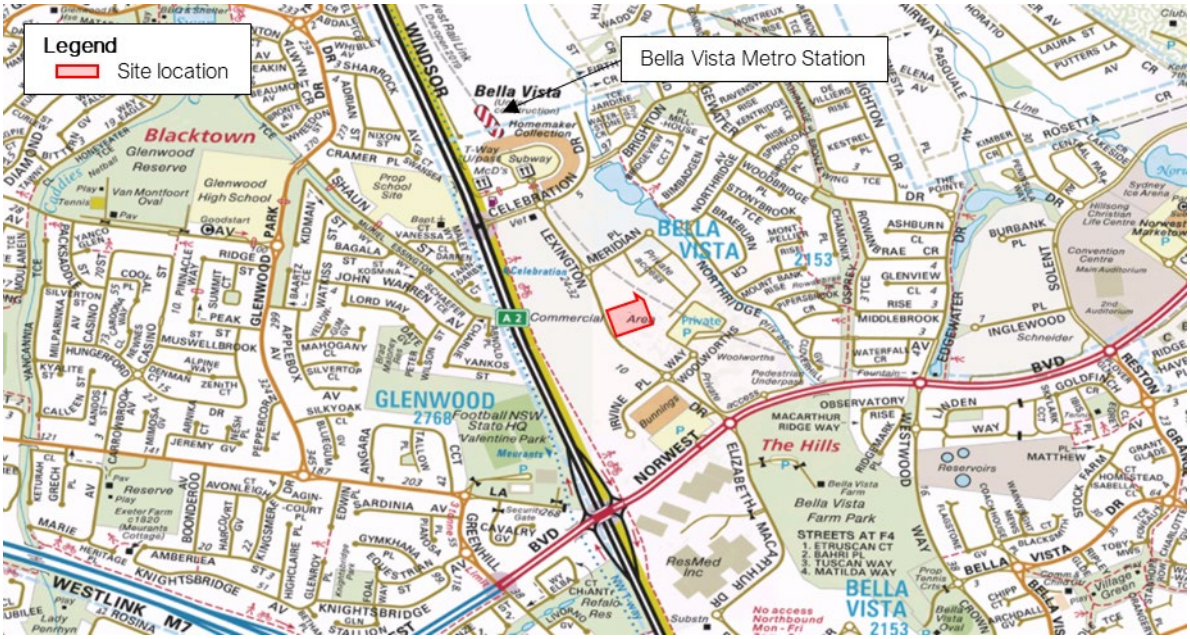
The site is located at 21-23 Lexington Drive, Bella Vista. It is vacant and has a frontage of about 85 metres to Lexington Drive along the western side of the site with a current B7 Business Park zoning. The surrounding properties primarily include commercial land uses.

Old Windsor Road is further west of the site and functions as a key north-south sub-arterial through north-west Sydney. Norwest Boulevard is a key east-west collector road further south of the site which provides a connection to Lexington Drive from Old Windsor Road. It also connects with Windsor Road at its western end which forms a key sub-arterial road through the area.

In early 2019, Sydney Metro North-West commenced operations, providing frequent metro services between Tallawong and Chatswood. The Bella Vista Metro Station is located approximately 500 metres north of the site, greatly improving public transport connectivity to the site and Bella Vista generally.

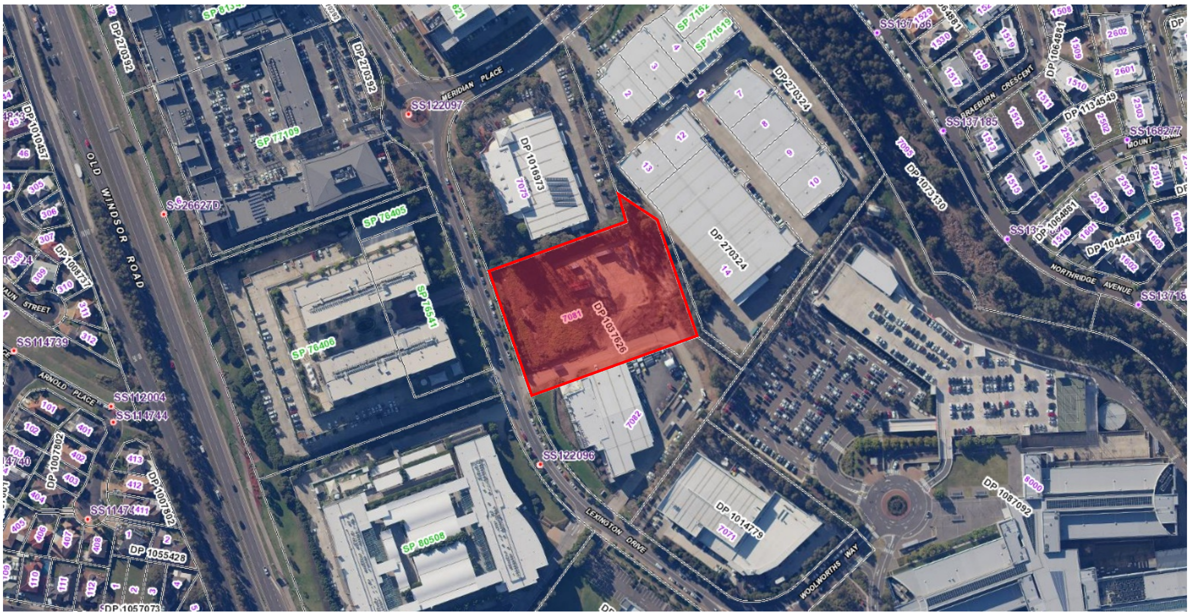
The location of the site and surrounding land uses within this context are shown in Figure 2.1 and Figure 2.2.

Figure 2.1: Subject site and its environs



Base image source: Sydway

Figure 2.2: Local context



Basemap source: Six Maps

2.2. Planning Proposal Overview

The proposal includes a mixed-use development comprised of a total gross floor area (GFA) of around 27,700 square metres, with uses including commercial office space, food and beverage premises, a gymnasium and serviced apartments. It includes five levels of parking with access proposed via two driveways on Lexington Drive. The southern driveway is along the southern boundary and forms an existing Right of Way with the adjacent 13-19 Lexington Drive site.

A summary of the planning proposal is outlined in Table 2.1.

Table 2.1: Planning Proposal area schedule

Use	Size
Commercial	23,541m² GFA
Food and beverage	800m² GFA
Serviced apartments	3,100m² GFA 58 apartments + 4 staff
Gymnasium	251m² GFA

2.3. Vehicle Access and Road Network

The planning proposal includes two separate two-way site access driveways on Lexington Drive. The southern driveway makes use of the existing Right of Way on the southern boundary (which benefits 13-19 Lexington Drive) and will form the primary site access driveway, with the northern access intended to function as the secondary driveway.

The Right of Way will provide access to Level 1 of the car park and the northern driveway access to Ground Floor. Internal ramps are proposed to connect all levels. A designated loading dock with

capacity for two vehicles up to 8.8 medium rigid vehicles is proposed on ground level, with access via the Right of Way. A shared area for set-down and pick-up activity is also proposed along the site frontage close to Lexington Drive, and connects the two access driveways.

The proposed site access arrangements are indicatively shown in Figure 2.3.

Figure 2.3: Proposed site access arrangements

Base image source: 21-23 Lexington Drive, Level 01 Plan prepared by Koichi Takada Architects, 9 April 2020

2.4. Car Parking and Loading

The PP Transport Assessment indicates that the planning proposal will result in a DCP 2012 parking requirement of around 676 parking spaces.

A total of 635 parking spaces including six car share spaces are proposed over five levels of parking as part of the planning proposal, with a breakdown as follows:

- Basement Floor: 170 spaces
- Ground Floor: 111 spaces
- Level 1: 93 spaces
- Level 2: 129 spaces
- Level 3: 132 spaces.

3. REVIEW OF REPORT METHODOLOGY

03

3.1. Preamble

GTA has completed a review of the PP Transport Assessment dated 5 June 2020. This review considers the report methodology and comments on the general approach from a traffic, transport and parking perspective and makes recommendations where relevant.

3.2. Car Parking

3.2.1. Parking Requirements

The car parking requirements for different development types are set out in The Hills DCP 2012. The current controls for the site recommend parking to be provided at a rate of one space per 25 square metres of commercial space. Based on the 23,541 square metres of commercial space, this results in a requirement of 942 spaces. This is considered excessive given the location of the site around 500 metres from Bella Vista Metro Station and North-West T-Way (on Old Windsor Road). The DCP 2012 for retail/ food and beverage and gymnasiums are also considered similarly excessive.

The Bella Vista Station Precinct Finalisation Report (Department of Planning, Industry and Environment [DPIE], 2017) detailed a plan to reduce parking rates around Bella Vista Station in light of the Sydney Metro North West services commencing. A summary of the proposed Bella Vista Station Precinct commercial and retail car parking rates provided in the Finalisation Report is provided in Table 3.1.

Table 3.1: Bella Vista Precinct Finalisation Report (DPIE, 2017) proposed parking rates

Land use	Within 400m of Station	Outside 400m of Station
General Retail	1 space per 50m^2 GFA	1 per 30m^2 GFA
Commercial	1 space per 80m^2 GFA	1 space per 40m^2 GFA

Subsequent to this report being prepared, Landcom submitted a Concept State Significant Development (SSD) Application for the development of the Bella Vista Station Precinct. It is understood that proposed parking rates have been further reduced to facilitate future mode share targets for the surrounding area. The revised commercial and retail parking rates for Bella Vista Station Precinct are shown in Table 3.1.

Table 3.2: Recommended parking rates for Bella Vista Station Precinct

Land use	Minimum	Maximum
General Retail	1 space per 130m^2 GFA	1 per 60m^2 GFA
Commercial	1 space per 145m^2 GFA	1 space per 100m^2 GFA

Source: SCT Consulting, Kellyville and Bella Vista Station Precinct Concept Proposals, Post-Exhibition Response to Submission (RtS) – confirmation of parking rates, dated 22 April 2020

An assessment[1] completed by SCT Consulting to support the proposed parking rates identified that the majority of the Bella Vista Station Precinct was within 800 metres of the Metro Station, with 800 metres considered as an industry accepted 10-minute walking catchment for public transport users. The

[1] Kellyville and Bella Vista Station Precinct Concept Proposals, Post-Exhibition Response to Submission (RtS) – confirmation of parking rates, prepared by SCT Consulting, dated 22 April 2020

assessment also referenced research by Sydney University which indicates that travel lengths even up to one kilometre attract a similar (70 per cent) proportion of walking trips.

Considering the above, GTA has also completed a review of commercial/ office rates applicable for other employment centres across Sydney, and in some cases where rail services are more established. The comparison is presented in Table 3.3.

Table 3.3: Comparison of relevant commercial/ office parking rates

Source	Commercial/ Office Rate
Bella Vista Station Precinct (within 400m of station)	1 space per 80sqm (Bella Vista Precinct Finalisation Report) 1 space per 145sqm (min.) and 1 space per 100sqm (max.) (SCT Consulting Assessment)
Ryde (Macquarie Park Corridor)	1 space per 100sqm
Parramatta CBD (incl. Parramatta Square)	1 space per 100sqm (max.) [1]
Green Square precinct	1 space per 125sqm (max.)
Rhodes revised Draft Precinct Plan	1 space per 150sqm (max.)
Average	**approx. 1 space per 115sqm**

[1] Parramatta LEP was recently gazetted to include a calculated rate (same as City of Sydney) for sites with an FSR greater than 3.5:1. For sites less than 3.5:1 FSR, the applicable rate is one space per 175m^2.

Table 3.3 illustrates that other key comparable employment centres allow significantly lower commercial parking rates when compared with The Hills DCP 2012. The Hills DCP parking rate is not considered sustainable for future development in Norwest with the proposed vision for Norwest being a strategic centre and does not encourage a mode shift towards more sustainable modes of travel.

A rate of one parking space per 40 square metres for commercial uses has been adopted in the PP Transport Assessment and while this is less than the current applicable DCP 2012 parking rates, it is considered appropriate to realise meaningful travel mode shift and to better align with State Government planning and other comparable centres across Sydney.

The proposed one space per 40 square metres associated with the remaining land uses is generally appropriate considering the limited floor areas of each of the retail/ food and beverage and gymnasium. It is also typical for these land uses to be readily used by office workers who either work in the same building or those in close proximity. As such, much of the parking demand (and vehicle trips) are associated with the primary commercial land use with few additional trips. These premises also tend to be dominated by weekday activity however should there be any such demand on weekday evenings or weekends, parking could be accommodated by the available commercial parking, under agreement.

The proposed parking rate for the serviced apartments of one space per room plus one space per two staff is consistent with DCP 2012 rates for hotel accommodation. Again, consideration of the primary generator of such activity should be considered in such locations. A rate of one space per two apartments could be considered more accurate, again with commercial arrangements in place in rare circumstances when demand is high. This would result in more equitable use of the available on-site parking for a variety of land uses across a greater proportion of the day and night.

3.2.2. Parking Layout

GTA has completed a high-level review of the car park layout against the requirements of the Australian Standard for Off Street Car Parking (AS/NZS2890.1:2004 and AS/NZS2890.6:2009). The review indicates that the car park is generally compliant with the relevant standards and is expected to operate efficiently.

3.3. Loading and Servicing

Application of The Hills DCP 2012 loading and servicing rates results in a recommended provision of five loading bays. GTA's experience with Council and TfNSW recommended rates for loading and servicing is that they generally result in higher provision than what is required.

For individual commercial tenancies, deliveries are typically by smaller service vehicles (including cars, vans, utes etc.) except for tenancy turnover periods (move-in/ move-out activity) and delivery of large items. Deliveries are typically couriers, postal and day-to-day commercial business-related activity. All are generally infrequent.

A review of the Operational Waste Management Plan prepared by Waste Audit and Consultancy Services dated June 2020 prepared as part of the proposal indicates general waste, organics and recycling would be collected four times a week for the commercial, food and beverage and serviced apartments. Based on this, waste collection is expected to account for up to three deliveries per day assuming waste collection for all uses occurs at the same time.

With consideration to the above, the commercial component of the development could generate between five and 10 service vehicles per day that require access to the loading dock. GTA's database of loading demand indicates that small food and beverage tenants typically receive an average of 1.1 to 3.1 deliveries per day per tenant. With the ground level including four separate tenancies, the loading demand is estimated to average around eight deliveries per day. Deliveries associated with the other uses are expected to be minor.

The duration of stay of delivery vehicles and waste collection vehicles is expected to be short and typically less than 20 minutes. The loading dock is expected to be open for a minimum 10 hours per day. Based on the provision of two formal loading bays, this equates to a theoretical capacity of 60 short-stay deliveries per day. It is understood that there are two parking spaces in the car park on ground level proposed to be designated to loading, which would accommodate some of the deliveries completed by smaller service vehicles (cars, vans, utes etc.).

Based on the anticipated 20 deliveries per day as outlined above, the proposed two loading bays would be sufficient to service the site, while also having capacity to accommodate the anticipated additional minor demand associated with the gymnasium and serviced apartments. The proposed design allows for access for vehicles up to 8.8 metre medium rigid vehicles which is considered appropriate to account for removalist vehicles and private waste contractor vehicles, noting that it is expected that most deliveries would be via smaller service vehicles.

As outlined in the PP Transport Assessment, a loading dock management system could also be implemented to distribute demand throughout the day and reduce the likelihood of multiple simultaneous deliveries.

3.4. Sustainable Transport

3.4.1. Active and Public Transport

The planning proposal considers the convenient movement of people through the site, with the design taking advantage of connecting with the existing surrounding pedestrian infrastructure. This includes footpaths on both sides of Lexington Drive for easy connection with Bella Vista Metro Station and North-West T-Way services to the north and Norwest Boulevard bus stops to the south. Formal crossing points are provided at the Lexington Drive/ Celebration Drive signalised intersection (and via a pedestrian bridge 100 metres further north)) to also facilitate future growth and aid connections between the T-Way and metro station.

The site is a 500-metre walk from Bella Vista Metro Station and associated bus facilities that will conveniently connect employees throughout the Hills District and broader Sydney. With Sydney Metro greatly increasing the coverage and convenience to access the Greater Sydney region (specifically Metro Stage 2 in 2023-24), there will be a natural reduced reliance on private car use which is a fundamental aspect of employment growth in the area.

Future public transport services will be capable of accommodating significant volumes of people during peak periods including the increase in public transport trips generated by the proposal.

Norwest on demand bus services also operate in the area. The services are run by CDC Hillbus MetroConnect with the on-demand buses picking up customers from an agreed point and travel between Norwest Station, Bella Vista Station and Hills Showground Station, making it easier to connect with Sydney Metro services. It operates during weekday peaks between 6am and 10am, and between 4pm and 9pm. Cost varies and depends on distance travelled.

3.4.2. Bicycle Parking and Associated Facilities

The PP Transport Assessment refers to the bicycle parking requirements outlined in the Bella Vista Station Precinct Recommended DCP Amendments (this document was unable to be found to substantiate). This includes providing parking at a rate of one space per 600 square metres for commercial uses. Based on these rates, the proposed development is required to provide 43 bicycle parking space including 39 spaces for commercial uses.

By comparison, The Hills DCP 2012 requires bicycle parking for commercial developments to be provided at a rate of two spaces plus five per cent of the total number of car spaces where the commercial component of a new development exceeds 5,000 square metres GFA. Considering the 942 commercial car parking spaces otherwise required by Hills DCP 2012, this represents a slightly higher bicycle parking requirement of 47 bicycle parking spaces.

That said, both rates result in a relatively similar bicycle parking requirement of between 40 to 50 bicycle spaces which is likely able to be accommodated within the design as required.

3.4.3. Travel Demand Management Initiatives

Transport is a necessary part of life, but it has economic, public health and environmental consequences. The transport sector is one of the fastest growing emissions sectors in Australia, and therefore is one of the key opportunities for reducing greenhouse gases. As well as delivering better

environmental outcomes, providing a range of travel choices with a focus on walking, cycling and public transport will have major public health benefits and ensure a strong and prosperous community.

The physical infrastructure being provided as part of the development is only part of the solution. A green travel plan (GTP) will ensure that the transport infrastructure, services and policies both within and external to the site are tailored to the users and co-ordinated to achieve the most sustainable outcome possible.

A GTP is a package of measures aimed at promoting sustainable travel and reducing reliance on private vehicles. It is not designed to be 'anti-car', however aims to encourage and support people's aspirations for carrying out their daily business in a more sustainable way. Travel plans can provide measures to:

- Restrict car use (disincentives or 'sticks').
- Encourage or support sustainable travel, reduce the need to travel or make travelling more efficient (incentives or 'carrots').

It is recognised that a GTP has been prepared as part of the planning proposal. This could be developed further following future development approvals to consider specific tenancy initiatives and monitored should be ongoing following occupation of the development to encourage sustainable travel to and from the site.

3.5. Traffic Analysis

3.5.1. Existing Conditions

The PP Transport Assessment assessed the three key roundabout controlled intersections along the relevant section of Lexington Drive. These included at Meridian Place to the north and Woolworths Way and Norwest Boulevard to the south. The existing southern Right of Way and driveways opposite were also surveyed. With the exception of Norwest Boulevard, all study intersections were found to operate well with spare capacity. Norwest Boulevard congestion is widely recognised, with the modelling indicating such constraint with overall Level of Service E operation. This is broadly though not exactly consistent with State Government modelling, as discussed below.

It is noted that Woolworths Head Office is clearly a major traffic contributor in the precinct. Overall, it contributes about 30 per cent to all traffic on Lexington Drive north of Woolworths Way and more than 40 per cent south of Woolworths Way. This also amounts to about 20 per cent of all traffic using the Norwest Boulevard/ Lexington Parade roundabout.

3.5.2. Traffic Generation

The traffic generation rates of the proposal included as part of the PP Transport Assessment have been sourced from the TfNSW Guide 2002 and TDT 2013/ 04a. The below sections assess the suitability of the adopted traffic generation rates for each of the proposed uses and considers the likely impact in light of traffic conditions in the local area and precinct generally, especially with respect to ongoing broader strategic traffic modelling and State Government planning.

Commercial

A traffic generation rate of 1.6 and 1.2 trips per 100 square metres GFA in the AM and PM peak hours respectively has been adopted in the PP Transport Assessment. This is consistent with the average rates for office blocks in TDT 2013/04a.

Given the proposal provides a marginally lower commercial parking provision, traffic generation is best linked to parking supply rather than GFA. This renders more accurate results and better reflects actual travel mode share. A review of the traffic generation rates for commercial developments in Sydney referenced in the TDT 2013/ 04a indicates an average traffic generation rate of 0.49 and 0.33 trips per space during the AM and PM peak hours, respectively. This results in less traffic generation, as discussed below.

Retail/ Food and Beverage

A rate of five trips per 100 square metres GFA in the PM peak hour has been adopted in the PP Transport Assessment, consistent with the traffic generation rates for restaurants in the Guide 2002.

Although the intent for these uses are to function similar to standalone cafés/ restaurants rather than ground floor retail/ cafés that are definitively ancillary to the serviced apartments and commercial uses, much of the customer base would come from the site itself, or surrounding premises within a convenient walk. On this basis, a conservative 25 per cent reduction factor should be considered.

A 50 per cent reduction factor has also been adopted for the AM peak hour – this is typical industry practice for such uses.

Serviced Apartments

It is noted that there are no traffic generation rates defined in the Guide 2002 or TDT 2013/04a for serviced apartments. Notwithstanding, these typically accommodate guests for longer stay periods when compared with typical hotels. Considering the number of apartments proposed and proximity to frequent public transport services, the traffic generation rates adopted in the PP Transport Assessment of 0.19 and 0.15 trips per apartment in the AM and PM peak hours respectively could be considered appropriate. In such instances, a more generic and conservative rate of 0.25 trips per apartment per hour are also generally accepted by Council.

Gymnasium

A rate of nine trips per 100 square metres GFA in both the AM and PM peak hours has been adopted in the PP Transport Assessment, consistent with the Guide 2002 rates for sub-regional areas. This could be considered conservatively high given the likelihood that most trips would be linked to other more primary uses (commercial office workers etc.) and also likely to occur during the shoulder peaks rather than during the peak periods per se. In this regard, the lower rate of five trips per 100 square metres GFA could be considered more accurate.

Summary

Based on the above, Table 3.5 provides a revised estimate on the likely traffic generation for the proposal in the weekday AM and PM peak hours.

It is noted that the traffic generation estimates for the commercial uses have been conservatively based on a provision of one space per 40 square metres (or 589 spaces) as recommended in the PP Transport Assessment. The allocation to commercial uses may also be reduced when also considering the proposed six car share spaces.

Table 3.4: Traffic generation estimates based on recommended rates

Use	Size	Traffic generation rate (trips / hour)		Traffic generation estimates (trips / hour)	
		AM	PM	AM	PM
Commercial	23,541m² GFA (589 spaces)	0.49 per space	0.33 per space	289	194
Food and beverage	800m² GFA	2.5 per 100m² (less 25%)	5 per 100m² (less 25%)	15	30
Serviced apartments	3,100m² GFA 58 apartments + 4 staff	0.25 per apartment		15	15
Gymnasium	251m² GFA	5 per 100m²		13	13
			Total	**332**	**252**

Table 3.5 indicates that considering the reduced parking provision for commercial uses, the proposed development could be expected to generate around 330 and 250 trips in the AM and PM peak hours respectively. This represents a reduction of around 100 vehicle trips in each peak hour when compared with the estimates included in the PP Transport Assessment. Put another way, the reduction equates to around 25 or 30 per cent of all site generated traffic.

It is also noted that the proposed reduced commercial parking rates will result in a lesser traffic impact associated with the development compared to a DCP compliant parking provision. Further to this, the planning proposal with an FSR of 2.8:1 and associated reduced parking provision would also result in a lower traffic generation for the site than a 'compliant scheme' with the current LEP assigned FSR of 2:1 and DCP parking rates.

3.5.3. Traffic Distribution

GTA has reviewed the traffic distribution, directional split of traffic and split between the two site accesses and generally agree with the assumptions included in the PP Transport Assessment.

The proportional traffic arrival and departure profiles could be questioned with respect to food and beverage uses and the serviced apartments however the low volumes result in non-critical impacts to the broader road network. For example, food and beverage tends to have a relatively even arrival and departure split throughout the day and night (50 per cent in and 50 per cent out) while a greater proportion of serviced apartment guests tend to exit in the AM peak than those documented in the PP Transport Assessment. A more typical split would be to include 30 per cent arrival and 70 per cent departure profiles during the AM peak, effectively a reversal of the PM peak. In any event, the overall impacts would be negligible and amount to less than 20 vehicles in any one direction.

3.5.4. Traffic Impact

Road Network

The site connects well with a wide range of transport choices and provides for significant employment opportunities within easy distance of residential areas, consistent with the principles of a transit-oriented development. The introduction of Sydney Metro to Bella Vista and north-west Sydney is likely to be an ever-present incentive in the shift in travel behaviour of both the existing and future workforce.

This will result in a significant shift in the extent of traffic congestion that has been a common issue in the area over many years.

Current novel coronavirus impacts are also likely to result in meaningful impacts on many aspects of travel including time of day, workplace presence and travel mode choice. This is expected to dissipate over time however it is broadly recognised that some level of capacity should return to many traditionally constrained road environments and a slight rethinking of the strategy around the real impacts of developments on infrastructure is necessary.

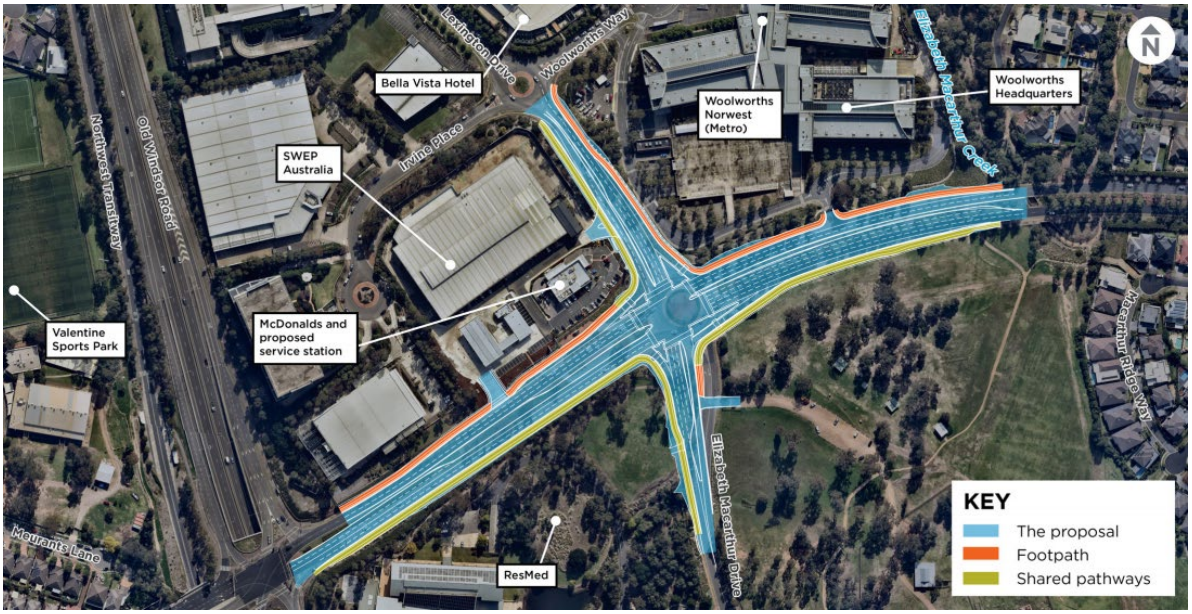
It is also worth noting that with more residents and mixed-use developments in the area, the 'tidal' flow of traffic in the peak direction will weaken over time. Less reliance on travel by private vehicle will also further benefit future traffic conditions.

It is widely recognised that recent historical and current traffic conditions through Bella Vista (and Norwest, Castle Hill, etc.) are not considered representative of future conditions. The existing operation of the Norwest Boulevard/ Lexington Drive roundabout including the need to apply roundabout metering during peak periods demonstrates the capacity constraints at this location. Pedestrian amenity has also improved with provision of formal and safe crossing points in an area that has long been dominated by the car.

Based on the above, assessing the traffic generation of the planning proposal against the current transitional conditions would not likely provide meaningful results to aid and inform future traffic conditions. It is also important to consider other planned and future growth in the area as part of any traffic study.

In this context, it is important to note the recent November 2020 TfNSW release of a key project update. This involves the proposed intersection upgrade at Norwest Boulevard, Lexington Drive and Elizabeth MacArthur Drive. The project update acknowledges that the existing roundabout at this location is at (or beyond) capacity, causing long delays for road users and that as the area continues to grow and mature, the ever increasing workforce and resident population will place more pressure on this intersection. The State Government proposed intersection upgrade is shown in Figure 3.1.

Figure 3.1: Proposed Norwest Boulevard/ Lexington Drive/ Elizabeth MacArthur Drive intersection upgrade



Source: rms.nsw.gov.au/projects/norwest-boulevard-bella-vista/norwest-boulevard-bella-vista

The document indicates that the proposed intersection upgrade would:

- improve travel times along Norwest Boulevard, particularly at the Lexington Drive/ Elizabeth Macarthur Drive intersection
- cater to current and future travel growth on the intersection
- improve safety for all road users
- reduce congestion to other arterial roads such as the M7 Motorway and Old Windsor Road
- improve access and safety for cyclists and pedestrians
- support the movement and access needs of public transport
- improve pedestrian and cycle facilities with the introduction of signalised crossings on all four approaches to the Lexington Drive intersection.

Traffic modelling was completed to support the proposed intersection upgrade for a 2026 and 2036 future design year horizon which would presumably include consideration of development on the subject site. The future intersection operating conditions with and without the proposed intersection upgrade are summarised in Figure 3.2.

Figure 3.2: Future intersection operating conditions with and without the proposed upgrade

Intersection	LoS – 2017	2026		2036	
		LoS –Do nothing	LoS – with proposal	LoS –Do nothing	LoS – with proposal
Morning peak					
Lexington Drive / Elizabeth Macarthur Drive	F (96)	F (76)	C (38)	F (82)	C (42)
Evening peak					
Lexington Drive / Elizabeth Macarthur Drive	F (348)	F (596)	C (38)	F (523)	D (45)

Figure 3.2 indicates that even with consideration to background traffic growth for the surrounding area, the proposed upgraded intersection will operate at satisfactory levels of service in both peak periods in the 2036 future design year.

It is also understood that TfNSW has requested that modelling be completed for three additional intersections, and an assessment of a 2036 design year be considered. It is widely known that strategic traffic modelling is currently being completed for the Bella Vista and Norwest precincts (and other surrounding centres) as part of State and Local Government planning. The modelling scope includes existing and future traffic conditions and inclusion of future growth associated with uplift in the key centres. The strategic model will cover all key locations, including the intersections identified by TfNSW.

Such modelling is key to facilitating growth in the precinct over time in an environment in which metro services and other targeted transport initiatives will continue to mature and transform how people move. On this basis alone, an approach that considers detailed and isolated traffic modelling of a select few intersections unique to the proposal is impractical. Any isolated outcomes would soon be rendered pointless on release of the strategic model (expected in first quarter 2021). The site is currently vacant and its development to the assigned FSR of 2:1 within 5 to 10 years is likely to have been assumed in the land use and infrastructure planning for the area. On this basis, it is understood that the strategic model will include traffic generated by uplift on the site and based on the permissible zoning and FSR.

Adopting the traffic generation rates specified above would also affect the real or perceived traffic related impacts of the proposal. This is critical in the context of the site, broader planning principles and strategic modelling.

Site Access

It is understood that Council has previously raised concern regarding provision of a second access in addition to the existing Right of Way driveway on the southern boundary. In our view, the secondary access along the northern boundary of the site will be beneficial from both an operational and safety perspective. The existing Right of Way is located directly opposite two site access driveways associated with commercial sites on the western side of Lexington Drive.

Such driveway configurations tend to create several potential conflicts between turning vehicles. This is further complicated during peak periods when the frontage road carries higher traffic volumes. The proposed northern driveway would alleviate any such real or perceived constraints at the southern access and better balance the distribution of traffic across the site.

By splitting the traffic demand between two access driveways, boomgate capacity at the car park entrances is also maintained with any potential queuing during the morning peak unlikely to present any concerns with respect to public road (or Right of Way) impacts. Adequate sight distances are also assured at both access driveways, having regard for the speed environment and existing road environment. It is also noted that most commercial properties fronting Lexington Drive are afforded at least two driveways (some include three) with the proposal consistent with the setbacks and design intent prevalent in the area.

Overall, the proposed site access arrangements spread the traffic impacts and avoid unnecessarily concentrating these at a single location. The southern driveway (the Right of Way) is existing and needs to be maintained. The northern access alleviates any such constraints that may otherwise be experienced at the southern access.

It is also understood that Council has also raised concerns in relation to the proposed north-south porte-cochere that travels along the western site frontage and building façade. Such a layout is supported as it can be readily accommodated and sympathetically designed as a shared zone with a low speed, low volume environment.

4. CONCLUSION AND RECOMMENDATIONS

04

CONCLUSION AND RECOMMENDATIONS

GTA has completed a Strategic Transport Review of the Traffic and Parking Assessment prepared by Stantec dated 5 June 2020 for the 21-23 Lexington Drive, Bella Vista Planning Proposal. The purpose of the review is to objectively consider the impact of future traffic generation, parking demand and accessibility characteristics of the proposal. The review is to inform the client of potential traffic and transport aspects which could be further investigated in the Planning Proposal or Development Application for the site, as well as provide recommendations for broader traffic and transport aspects that should be further considered as part of detailed planning for the site.

The three key transport related items include the following:

1. intended site layout and vehicle access arrangements
2. applicable and achievable parking rates, and associated traffic generation
3. traffic modelling context (considering strategic planning and modelling approach)
4. incorporation of the site and its public domain within the surrounding precinct.

In summary, the following conclusions and recommendations are made:

- The current parking requirements in The Hills DCP 2012 are excessive and do not adequately recognise the site's location (around 500 metres south) of the Bella Vista Metro station.
- The proposed reduced parking rates are considered appropriate in reflecting the future intent of the precinct.
- Bicycle parking rates provided in the Bella Vista Station Precinct Recommended DCP Amendments and The Hills DCP 2012 result in a similar bicycle parking requirement, with any minor variance likely able to be accommodated within the design as required.
- Given the proposal to provide a lower commercial parking provision, traffic generation is best linked to parking supply rather than GFA, especially should even lower parking rates be considered viable.
- Based on the revised traffic generation estimates included in this review (applied to turnover of spaces rather than GFA), the site would generate around 330 and 250 trips in the AM and PM peak hours respectively. This represents a reduction of around 100 vehicle trips in both peak hours from those defined in the PP Transport Assessment.
- The planning proposal with an FSR of 2.8:1 and associated reduced parking provision would also result in a lower traffic generation for the site than a 'compliant scheme' with the current LEP assigned FSR of 2:1 and DCP parking rates.
- The site connects well with a wide range of transport choices and provides for significant employment opportunities within easy distance of residential areas, consistent with the principles of a transit-oriented development.
- The introduction of Sydney Metro to Norwest and the greater north West Sydney aims to continue the shift in travel behaviour of both an existing and future workforce. This in-turn would positively affect known traffic congestion in the area, evidenced by TfNSW planned road network upgrades.
- It is widely recognised that existing traffic conditions through Norwest (and Bella Vista, Castle Hill, etc.) are not representative of future conditions. Pedestrian amenity has also improved with provision of formal and safe crossing points in an area that has long been dominated by the car.
- Assessing the traffic generation of the planning proposal against the current transitional conditions would not provide meaningful results to accurately inform future traffic conditions. It is also important to consider other planned and future growth in the area as part of any traffic study.

CONCLUSION AND RECOMMENDATIONS

- With strategic traffic modelling currently being completed by Local and State Government agencies an approach that considers detailed and isolated traffic modelling of a select few intersections unique to the proposal is impractical. Any isolated outcomes would soon be rendered pointless on release of the strategic model (expected in first quarter 2021).
- The site is currently vacant and its development to the assigned FSR of 2:1 within 5 to 10 years is likely to have been assumed in the land use and infrastructure planning for the area.
- On this basis, it is understood that the strategic model will include traffic generated by uplift on the site and based on the permissible zoning and FSR. Such strategic modelling is key to allowing the precinct to develop over time in an environment in which metro services and other targeted transport initiatives will transform how people move.
- The proposed site access arrangements spread the traffic impacts and avoid unnecessarily concentrating these at a single location. The southern driveway (the Right of Way) is existing and needs to be maintained and the northern access alleviates any such constraints that may otherwise be experienced at the southern access.
- The shared area also facilitates efficient use of the site can be supported from a traffic and transport perspective as it can be readily accommodated and sympathetically designed as a shared zone with a low speed, low volume environment.

GTAconsultants

www.gta.com.au