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|----------|----------------------------------------------------------------------------------------|------|------------------------------------------------------|
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| From: | Charlie Seventekin | At: | SLR Consulting Australia Pty Ltd |
| Date: | 14 October 2020 | Ref: | 20201014-610.18808-Westfield Hurstville ELP-FINAL |
| Subject: | Westfield Hurstville Entertainment and Leisure Precinct Traffic Impact Statement | | |

1 Introduction

SLR Consulting Australia Pty Ltd (SLR) has been engaged by Scentre Group Pty Ltd (Scentre Group) to prepare a Traffic Impact Statement (TIS) to accompany their development application based on the advice received from Georges River Council (Council) following a pre-lodgement meeting held on 02/07/2020, in which SLR traffic engineers were present.

The proposed Entertainment and Leisure Precinct (ELP) development seeks approvals for the following activities:

- Demolition of the existing ELP, associated roof plant and 69 car parking bays;
- Construction of a new ELP split over levels 3, 4 and 5 (new level), comprising:
 - Level 3 – food and drink premise (Eat Street);
 - Level 3 & 4 – indoor recreation space with ancillary amusement;
 - Level 5 – food and drink premise;
- New landscaped rooftop to be used for a variety of leisure-based community activities;
- Relocation of cooling towers and plant;
- New lifts, services and storage areas;
- Pedestrian upgrade works;
- Modifications to the existing pedestrian accessway along the northern boundary adjoining the childcare;
- Refurbishment of the north western / Cross Street façade between Park Road and Humphreys Lane;
- Site landscaping including construction of a new rooftop garden, alfresco dining area and hanging gardens;
- Modifications to the existing pedestrians accessway along the northern boundary;
- New lift lobby at street level on Park Road;
- New building and business identification signage zones.

The subject facility, ELP, will be located in Blue Car Park Level P5. Pedestrians can currently access to this car park via a flight of stairs at the intersection of Cross Street / Crofts Avenue or a pedestrian ramp at the northeast corner of the nearby public plaza.

Based on our discussions with the Council in the pre-lodgement meeting and our post-meeting review of the pre-lodgement meeting minutes, it was understood that Council has a number of concerns with the existing wayfinding, access, parking and general traffic aspects of the proposed development.

SLR undertook a site inspection on Saturday 29/08/2020 between 2:00pm and 5:00pm to observe the traffic & transport matters raised by the Council. A list of these concerns and SLR's recommendations to address them are provided in the following sections of this traffic impact statement.

2 Proposed Development

Westfield Hurstville Shopping Centres operates from 6:00am – 12:00am Monday to Sunday with all car parks, vertical transport and areas of the centre open and accessible. The proposed development will also operate from the opening of the shopping centre to 12:00am midnight, 7 days a week.

The proposed development will comprise the tenancies with the following gross floor areas (GFAs) outlined in Table 1.

Table 1: Proposed Development & GFAs

| Land Use | Proposed Development | Proposed Demolition | Net Change |
|----------------------------------------------|---------------------------------------------------------------------------|-------------------------------------------------------------------|----------------------|
| Retail Space | 10m ² on Level Retail 3 310m ² on Level Retail 4 | 0 | +320m ² |
| Recreation Facility with Ancillary Amusement | 890m ² on Level Retail 3 & 4 | 0 | +890m ² |
| Storage Space | 99m ² on Level Retail 4 | -43m ² on Level Retail 4 | +56m ² |
| Restaurants | 1,860m ² on Level Retail 4 & 5 | -623m ² on Level Retail 4 (Existing rooftop dining) | +1,237m ² |
| Toilets | 105m ² | -42m ² | +63m ² |
| Mall Retail 4 & 5 | 450m ² | -642m ² | -192m ² |
| Cumulative GFA | | | +2,374m ² |
| Car Parking | - | 69 spaces | -69 spaces |

Table 1 indicates that the proposed development would result in an increased GFA of 2,374m².

Existing GFA of Westfield Hurstville is 77,280m². With the inclusion of the proposed GFA increase of 2,374m² as part of this development, the overall GFA will be 79,654m² once the development is completed.

This would mean a net increase of approximately 3% in the total GFA of Westfield Hurstville.

Traffic engineering considerations and parking arrangements of the proposed development are discussed in Section 0 and Section 3 of this memorandum, respectively.

3 Parking Arrangements

Latest designs provided to SLR indicate that, the current parking supply within Westfield Hurstville is a total of 2,746 spaces. There is however a separate DA¹ in place which will result in the loss of 6 parking spaces. Based on this, the baseline (i.e. without the proposed development) parking supply is assumed to be 2,740 spaces.

It should be noted that, the developer will need to re-purpose (demolish) 69 parking spaces to accommodate the proposed development. This means that, the total parking supply will reduce to 2,671 spaces once the development is completed.

A review of the relevant DCP² (Hurstville DCP No. 2 Amendment 5) indicated that Westfield Hurstville (Site 18A in Page 119) has a specific parking rate as outlined in Table 2.

Table 2: Summary of Parking Assessment

| Scenario | Council Requirement | GFA | Parking Supply | Parking Required | Surplus of Parking |
|--------------------------|------------------------------------------------|----------------------|----------------|------------------|--------------------|
| Existing | 1 parking space for every 30m ² GFA | 77,280m ² | 2,740 | 2,576 | +164 |
| Proposed ELP Development | | +2,374m ² | -69 | +80 | -149 |
| Proposed TOTAL | | 79,654m ² | 2,671 | 2,656 | +15 |

Table 2 indicates that the modified parking supply will exceed the minimum requirements of Georges River Council's DCP.

3.1 Car Park Design Considerations

A review of the changed parking and circulation arrangements has been undertaken against the following relevant documents:

- Georges River Council DCP;
- Australian Standard for Parking facilities Part 1: Off-street car parking (AS2890.1);
- Australian Standard for Parking facilities Part 2: Off-street commercial vehicle facilities (AS2890.2);
- Australian Standard for Parking facilities Part 6: Off-street parking for people with disabilities (AS2890.6).

A summary of the assessment is presented in Table 3.

¹ This DA has been lodged with Georges River Council. Application reference is "DA2020/0224 PN 42056.

² <http://www.georgesriver.nsw.gov.au/StGeorge/media/Documents/Development%20control%20plan/Adopted-DCP-2-Section-4-Built-Form-Controls-9-August-2012.pdf>

Table 3: Car Park and Circulation Compliance Review

| Element | Proposed Design | AS2890.1 Compliant |
|-------------------------------------------------|-------------------------------------------------------------------------------------------------------|------------------------|
| 90° parking bays (User Class 2) ¹ | 2.5m x 5.4m | ✓ |
| Parking aisle width (User Class 2) ¹ | 6.6m + | ✓ |
| Parallel parking bays (passenger loading) | 2.1m x 5.4m (unobstructed end bays) 2.1m x 5.9m (centre bays) 2.1m x 6.2m (obstructed end bays) | ✓ - See comments below |
| Circulation aisle (one-way) | 3.5m + clearances | ✓ |
| Circulation aisle (two-way) | 5.5m + clearances | ✓ |
| Height clearance | 1.8m | ✓ |

¹ Whilst shopping centre car parks would typically be classified as user class 3A as per AS2890.1, these dimensions are consistent with the existing carparking spaces and considered appropriate under these circumstances.

The proposed concept designs feature a 2.5m wide and 11.7 m long loading zone to facilitate the collection of passengers travelling to the expanded ELP. Given the arrangement of the two bays in this area (1 x obstructed end bay and 1 x unobstructed end bay), the proposed zone dimensions exceeds the 11.6m x 2.1m required for parallel parking under AS2890.1, therefore satisfying the intent of the design standards.

It is recommended that the line-marking for this loading zone should be updated to reflect the dimensions summarised in Table 4.

A swept path assessment demonstrating appropriate manoeuvring for B85 and B99 vehicles is included in Appendix C. Based on the review summarised above, the proposed development satisfies the requirements of AS2890.1 and therefore satisfies the DCP requirements with respect to car parking and circulation design.

4 Traffic Engineering Considerations

4.1 Site Access

4.1.1 Vehicle Access

The existing Westfield Hurstville centre is serviced via a selection of driveway crossovers surrounding the site located on the following frontage streets:

- Park Road – direct access to Level 1, 2 and 3.
- Cross Street – direct access to Level 2.
- The Avenue – direct access to Level 1, 2 and 3.
- Rose Street – direct access to Level 3, 4 and 5.

These access locations in context of the proposed ELP is illustrated in Figure 1, colour-coded to correspond with the existing internal car parking levels and names.

Figure 1 Existing Vehicle Access Locations



Whilst there are a number of internal ramps and overpasses that interconnect the various carparking levels and provide indirect vehicle access to the rooftop parking, the most direct vehicle access to the proposed ELP is provided at the Rose Street crossover. Upon entering the Rose Street access, a series of two ramps lead directly to the P5 (blue) rooftop carparking level, leading to the proposed drop-off / pick-up zone and both customer and employee parking areas. Similarly, entering the ELP via the P3 entry on The Avenue and traversing two ramps will accommodate vehicle ingress to the ELP from the eastern development frontage.

SLR has provided recommendations to Scentre Group separately to this submission to where additional wayfinding signage may be provided throughout the internal parking areas to guide customers to the ELP should they enter the site from one of the other access locations.

4.1.2 Pedestrian Access

The site is well connected to the surrounding area for pedestrians and cyclists. Key pedestrian accesses are provided on Cross Street, Rose Street, Park Road and Forest Road. It is anticipated that the majority of pedestrian traffic accessing the ELP from the external network will utilise the existing pedestrian access on Cross Street and Forest Road.

Pedestrian access to the site from the surrounding network is illustrated on Figure 2. Additional discussion of the appropriateness of this new access is provided in Section 4.4 of this report.

Figure 2 Pedestrian Access Locations



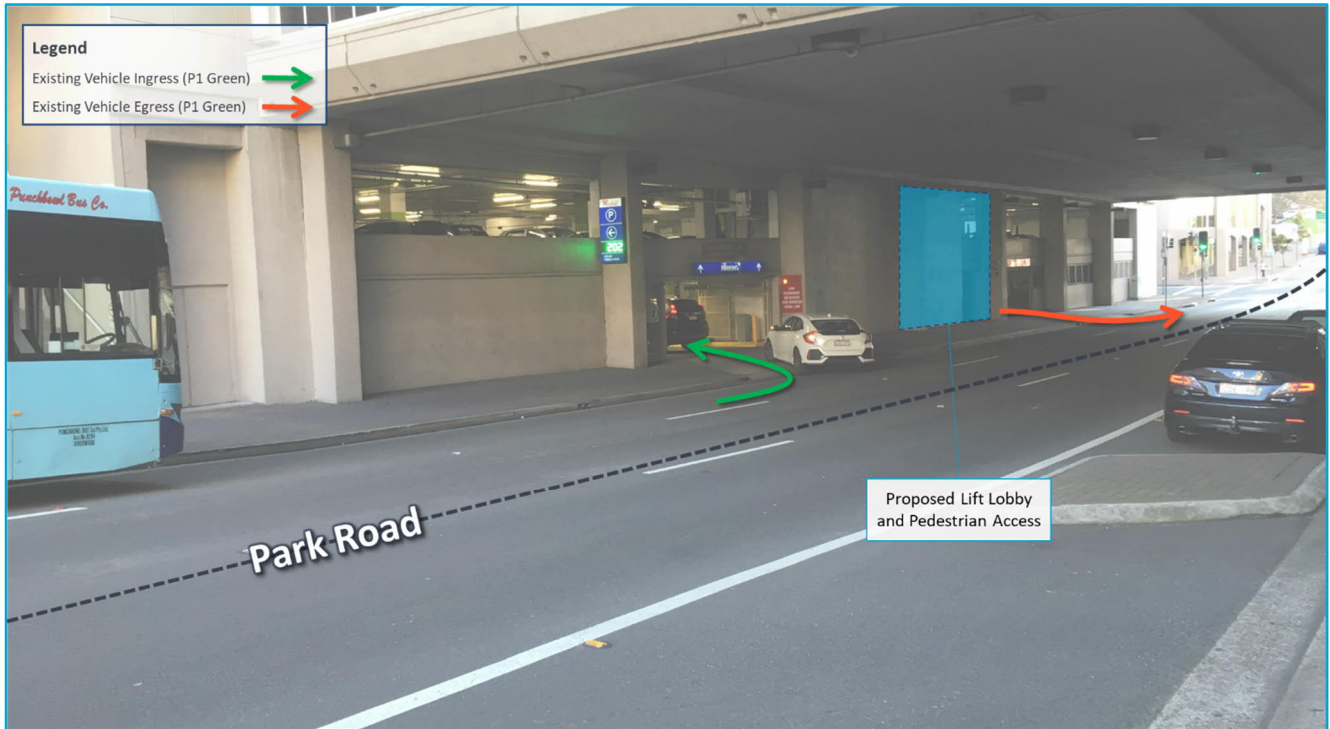
As detailed in Figure 2, primary access to the proposed ELP will be provided via an existing elevated footpath along the northern boundary of the site fronting Cross Street. This connection is facilitated by a number of existing ramps, walkways and a new flight of stairs.

Additional detail of the proposed pedestrian access route is detailed in the architectural drawings (prepared by Dexu – See Appendix A) as well as the accessibility reporting (prepared by Morris Gooding Access Consulting) which accompany this development application package.

The ELP project also proposes to provide a new pedestrian access point on Park Road through the extension of an existing internal passenger lift system. This new access will allow customers of the ELP (particularly those with a mobility impairment) to travel directly to Level 5 from the street level on Park Road which accommodates a number of bus stops that service public transit to the centre.

Figure 3 demonstrates where this new lift lobby will be located with respect to the existing vehicle accesses to the site from Park Road. It is understood that the existing concrete structure will be replaced with a transparent glass lift lobby providing a well-lit and visible entry point for customers of the existing centre and proposed ELP.

Figure 3 Proposed Lift Lobby – Park Road



It is understood that the existing taxi rank in the south of carriageway on Cross Street will be removed and a new pedestrian crossing will be provided at this location to allow a safer pedestrian movement at the intersection of Crofts Avenue and Cross Street. Plans for this pedestrian crossing is provided in Appendix B.

Council advised that a new taxi rank would be provided directly outside the new hotel development at 6 Cross Street. It is understood that the relocation of this taxi rank and the provision of the new pedestrian crossing would take place in 2021. The proposed new taxi rank would be only 40m walking distance from the existing taxi rank and is still considered highly accessible for the customers of Westfield Hurstville.

4.2 Potential Traffic Demands

Based on a review of Guide to Traffic Generating Developments (TDT 2013/04a)³ by TfNSW, SLR adopted 4.0 vehicle movements per hour per 100m² GFA for a typical Friday, which is recommended for shopping centres with a GFA of 70,000+m². Our trip generation assessment is provided in Table 4.

Table 4: Trip Generation Assessment

| Scenario | Yield (m ² GLA) | Friday PM | | Saturday Midday | |
|----------------------|----------------------------|------------------------------------------|-------------|------------------------------------------|-------------|
| | | Generation (vph / 100m ² GLA) | Trips (vph) | Generation (vph / 100m ² GLA) | Trips (vph) |
| Existing Development | 77,280 | 4.0 | 3,092 | 3.6 | 2,783 |
| Proposed Expansion | 2,374 | | +95 | | +86 |
| % Increase | 3.07% | | 3.07% | | 3.07% |
| Total | 79,654 | 4.0 | 3,187 | 3.6 | 2,868 |

Table 4 indicates that proposed development would result in an increase of less than one entry and one exit movements every minute across the peak hour (approx. 48 inbound and 48 outbound vehicles per hour), noting that this is a conservative estimate based on the following:

- The land uses proposed as a part of the ELP are likely to generate its highest traffic demand outside the peak hours of the surrounding road network.
- A portion of the customers of ELP is expected to be the existing customers of Westfield Hurstville. We have however assumed no passing-trade (drop-in traffic) in order to provide a conservative traffic distribution estimate (See Appendix D).

Based on the conservative assumptions above and given there are six entries and five exits to & from the proposed development, it is expected that the traffic impacts of the proposed development will be minimal.

4.2.1 Hurstville City Centre Transport Management and Accessibility Plan (TMAP)

Based on our discussions in the pre-lodgement meeting, it was understood that Georges River Council required the developer to review the Hurstville City Centre TMAP⁴ (dated 11 June 2019) and identify whether or not there are any aspects of the proposed development not complying with TMAP.

SLR has undertaken a review of TMAP and identified that Council had raised concerns with the congestion at the intersection of Forest Road and The Avenue in the peak hours. It is stated in the report that the single left-turn lane on The Avenue would not support the further traffic growth therefore changes to the lane configuration was proposed in GHD's TMAP report, dated April 2019. These changes include but not limited to;

- Banning the right-turn movement from The Avenue into Forest Road to aid the through movement. Right-turn movement at this location has a volume of less than 20 vehicles per hour therefore the ban would not have a severe impact.
- Provision of an additional left-turn lane at the north approach at The Avenue to increase the capacity.

³ <https://www.rms.nsw.gov.au/trafficinformation/downloads/td13-04a.pdf>

⁴ <http://www.georgesriver.nsw.gov.au/StGeorge/media/Documents/Development/Planning%20Controls/D19-144043-Hurstville-City-Centre-Transport-Management-and-Accessibility-Plan-2018-Council-Report-June-2019.pdf>

Based on this background information, SLR prepared a forecast development traffic distribution for the proposed ELP to demonstrate the estimated net increase in volumes at the nearby intersections.

Following assumptions were made to produce the development traffic distribution, as outlined in Table 5.

Table 5: Entry & Exit Assumptions for the Proposed ELP Development

| Direction | Cross St | Rose St | Park Rd - East | Park Rd - West | The Avenue - North | The Avenue - South |
|-----------|----------|---------|----------------|----------------|--------------------|--------------------|
| Entry | 30% | 30% | 10% | 10% | 10% | 10% |
| Exit | 35% | 35% | 10% | 10% | 10% | N/A |

Based on the assumptions outlined in Table 5, an increase of approximately 16 vehicles per hour could be expected in the Friday evening peak hour in the northern approach of Forest Road / The Avenue intersection. It was assumed that 25% (4 vehicles) of the traffic would travel straight through the intersection towards Treacy Street and 75% (12 vehicles) of the traffic would perform a left-turn movement into Forest Road.

The detailed development traffic distribution estimate is provided in Appendix D.

4.3 Potential Deceleration Lane on Park Road

During a site inspection on Saturday 29/08/2020, it was identified that vehicles on Park Road travel at high speeds in the northbound direction (downgrade slope) and perform hard braking when they see pedestrians crossing the access driveways on the either side of Park Road.

Figure 4 and Figure 5 indicate that there is a bus layover facility in the kerbside lane (in the west of the carriageway) and then an ample space in the kerbside lane with no stopping restrictions for approximately 15 metres which could be used to provide a deceleration lane.

A review of "Table 5.2 of Austroads Guide to Road Design – Part 4A: Unsignalised and signalised intersections" however indicates that approximately 35⁵ metres would be required for the provision of deceleration lanes where the posted speed limit is 50km/h and there is a downgrade slope.

It is expected that the layover facility will need to be relocated to south by another 20 metres approximately, for the provision of a deceleration lane including taper.

⁵ Subject to detailed design.

Figure 4: Car Park P1 Green Ingress on Park Road (looking south-west) – SAT 29/08/2020

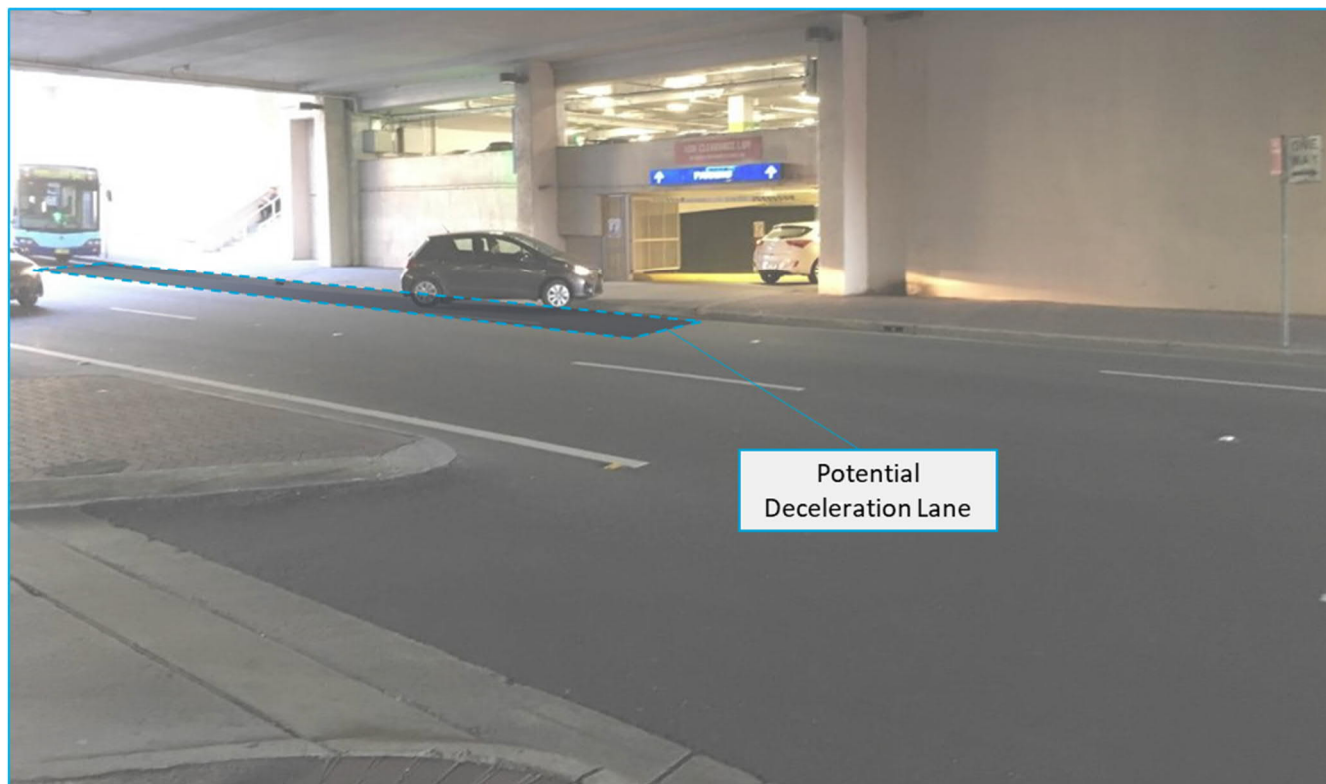
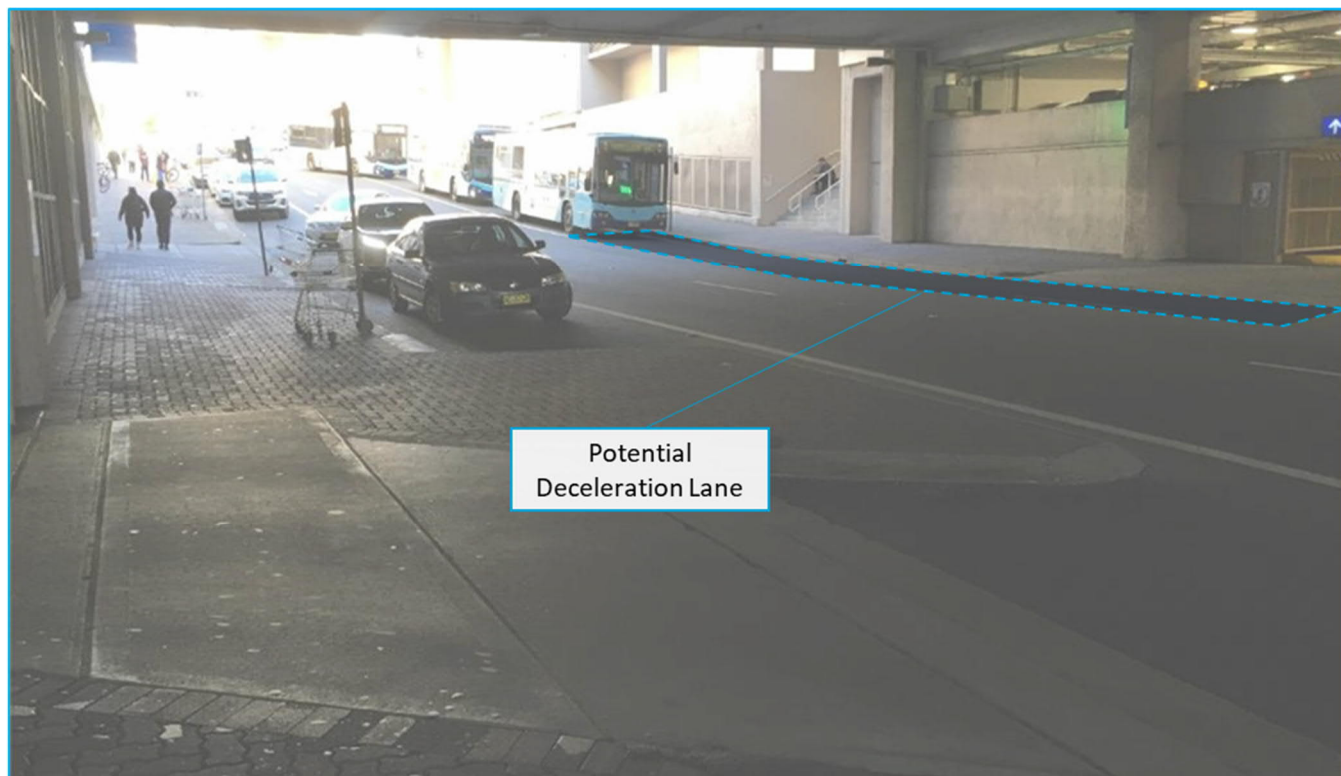


Figure 5: Potential for a Deceleration Lane (looking south-west) – SAT 29/08/2020



4.4 Pedestrian Crossings at Four Driveways on Park Road

During SLR's site inspection, minor interactions between pedestrian and vehicle movements were observed on a number of occasions. It was also identified that all four entry and exit driveways on Park Road do not have pedestrian crossings. Although there are pre-existing entry & exit treatments at these driveways, provision of pedestrian crossings at all four driveways on Park Road is recommended to reinforce pedestrian priority and minimise risk for unwanted conflict.

Figure 6 and Figure 7 demonstrate several observed examples of these interactions between pedestrian and vehicle which both feature high volumes during peak periods.

Figure 6: A pedestrian waiting for the vehicle to clear the footpath – SAT 29/08/2020



Figure 7: A vehicle gives way to a pedestrian – SAT 29/08/2020



Figure 8 demonstrates an example driveway design at Westfield Chatswood on Anderson Street, Chatswood. It is recommended that a similar design to be adopted for the driveways on Park Road.

Figure 8: Anderson Street, Chatswood – Entry to Westfield Chatswood



Whilst the proposed lift lobby on Park Road is located immediately adjacent to the P1 Egress driveway, the provision of additional design features such as a deceleration lane and painted pedestrian crossings would provide significant safety improvements over the existing configuration and reinforce pedestrian priority along this frontage.

For reference, it was observed that the existing vehicle driveway crossover on Cross Street features a similar pedestrian crossing and provides a much safer prioritised crossing for pedestrians.

4.5 TfNSW Referral

Based on our review of Clause 104 and Schedule 3 of State Environmental Planning Policy⁶ (2007) and Schedule of Classified Roads Network⁷, the proposed ELP expansion is not expected to require TfNSW (former RMS) concurrence.

This determination has been made given the proposed development does not have access to and is not within 90m of a classified road (State Road) and the size of the proposed expansion does not trigger the criteria in Column 2 of Schedule 3.

⁶ <https://www.legislation.nsw.gov.au/view/html/inforce/current/epi-2007-0641#sec.104>

⁷ <https://www.rms.nsw.gov.au/business-industry/partners-suppliers/lgr/documents/classified-roads-schedule.pdf>

5 Response to Other Council Queries

5.1 Pedestrian Wayfinding

It was understood that Council suggested improvements to the pedestrian wayfinding system for customers accessing the centre via the surrounding footpath network. We have identified that there are two main nearby transport hubs which most people use to get to Westfield Hurstville, as follows:

- Hurstville Train Station, through a public plaza on Crofts Avenue or an arcade on Forest Road, as indicated in Figure 9.
- Hurstville Bus Interchange, through Woodville Street and Crofts Avenue, as indicated in Figure 10.

Through a site inspection, we identified there is no pre-existing wayfinding signage for Westfield Hurstville in the area. Figure 9 and Figure 10 illustrate the routes which may benefit from increased wayfinding to Westfield Hurstville from these transport hubs. Because these routes are located within Council-controlled road verges, it is recommended that Council, Scentre Group and wayfinding consultant engage in further consultation to ensure that appropriate signage can be provided and also cross-referenced to the routes identified in this statement.

Figure 9: Wayfinding Signage from Hurstville Bus Interchange to Westfield Hurstville

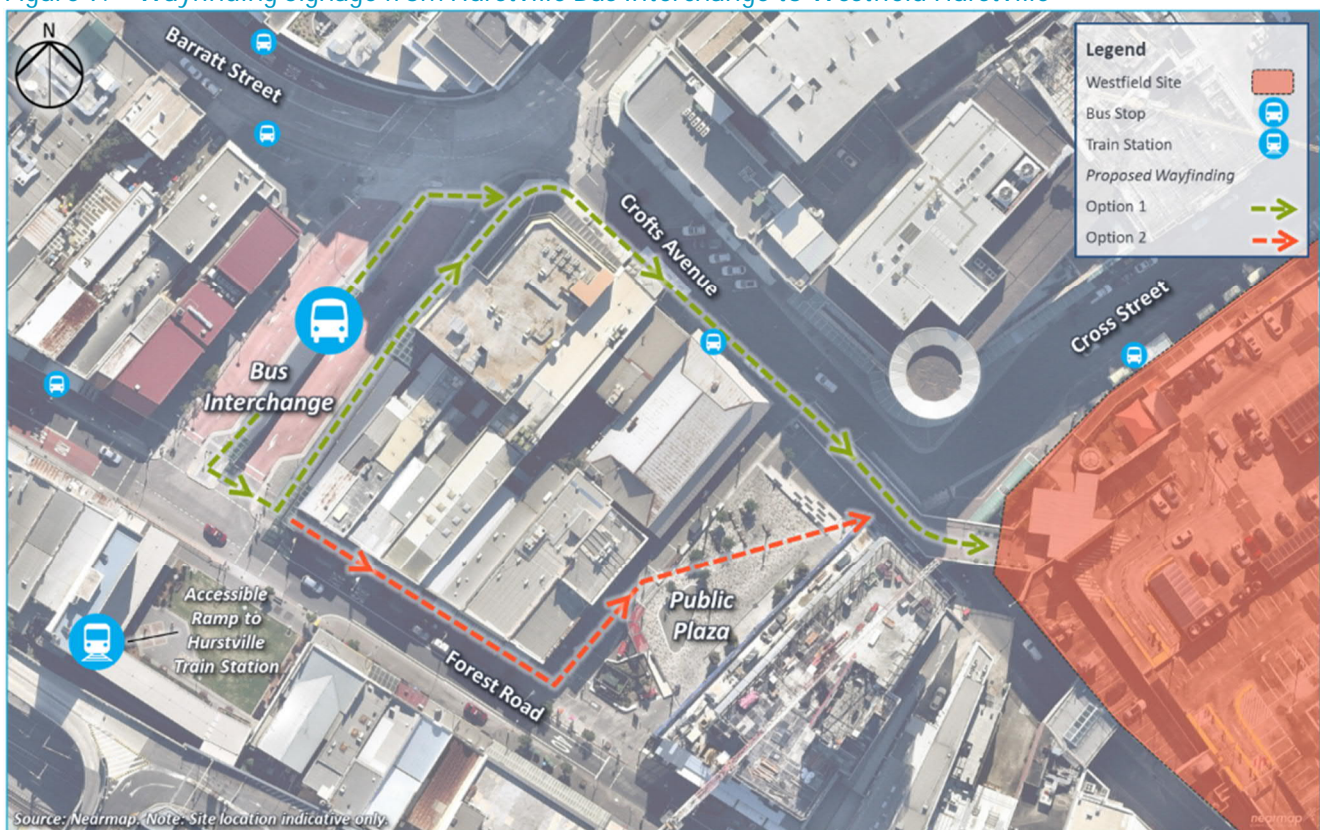
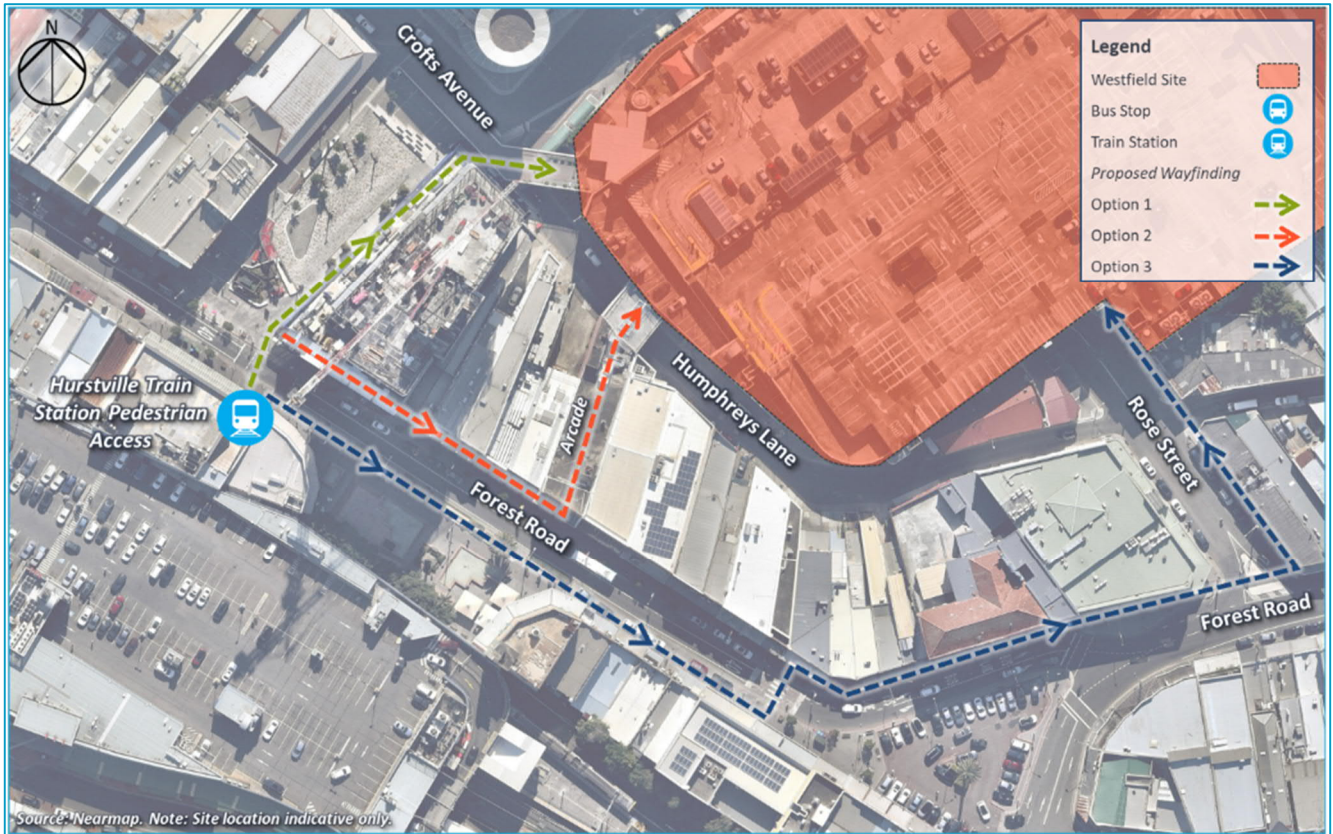


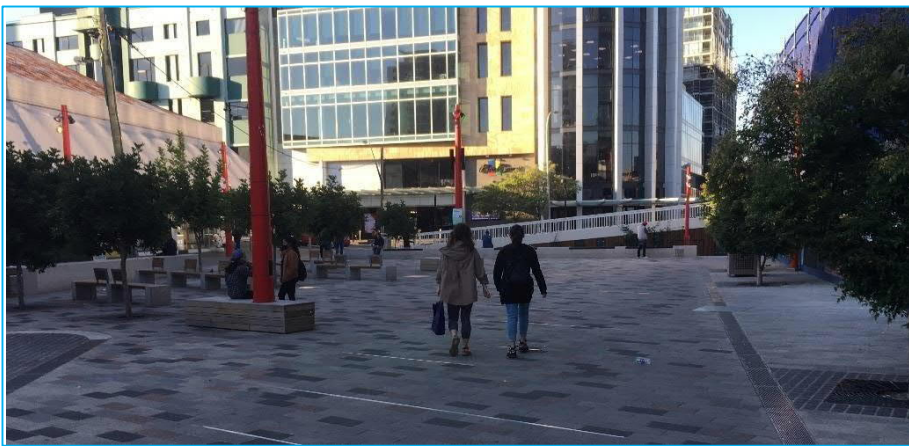
Figure 10: Wayfinding Signage from Hurstville Train Station to Westfield Hurstville



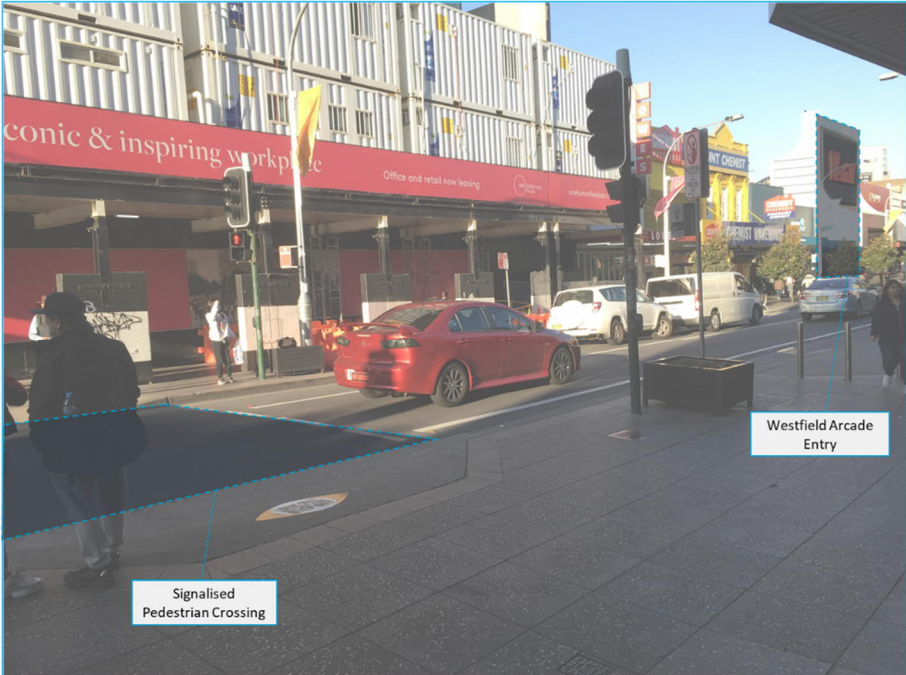
5.1.1 Key Accessibility Constraints and Opportunities

Through a site inspection, we identified the following key constraints and opportunities, summarised in Table 6.

Table 6: Observed Pedestrian Constraints and Opportunities

| Location | Comments |
|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Public Plaza, facing Northeast – SAT 29/08/2020 | |
|  | Public plaza provides an easy access to the pedestrian ramp from Forest Road and Hurstville Train Station. |
| Public Plaza, facing Humphreys Lane and Ground Level Entry to Westfield – SAT 29/08/2020 | |

| Location | Comments |
|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>Access to the ground level entry is difficult to navigate due to the construction hoarding and the gradient in the north-east corner of the public plaza being too steep.</p> |
| Ground Level Entry to Westfield under the Pedestrian Ramp – SAT 29/08/2020 | |
|  | <p>Although the gradient of Crofts Avenue appears to be slightly steep, a member of the public was observed to be making it to the bus interchange from Humphreys Lane on a mobility scooter with no outside assistance.</p> |
| Mobility Scooter Access to the Bus Interchange, Crofts Avenue – SAT 29/08/2020 | |
|  | <p>Pedestrian footpath network to the bus interchange appears to be wheelchair accessible as per on-site observations.</p> |
| Access from Forest Road to Westfield Hurstville – SAT 29/08/2020 | |

| Location | Comments |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>Combination of signalised crossings and a public pedestrian arcade from Forest Road to Westfield Hurstville provides an easy access to pedestrians who arrive at the area by train</p> |

5.2 Community Safety (Crime Prevention Through Environmental Design Principles - CPTED)

It is understood that Council requires clarity on how the ELP will operate during afterhours as the proposed ELP will be open until 12pm midnight.

Crime Prevention Through Environmental Design is a strategy supported by four pillars; Surveillance, Access Control, Territorial Reinforcement and Space Management.

5.2.1 Surveillance

Surveillance measures can be divided into three types, natural, technical and formal. Natural surveillance refers to normal use of space by users who can see or be seen by others. Technical or mechanical surveillance refers to electronic monitoring measures such as closed circuit or externally monitored cameras or help points. Formal surveillance refers to the use of guardians such as security guards.

In the context of Westfield Hurstville; it was observed that Hurstville City Centre is a very busy public place and Westfield Hurstville has a very high standard of natural, technical and formal surveillance.

5.2.2 Access Control

Access control refers to a range of treatments which restrict, divert or encourage people into, out of and around a development. Movements to, from and through a site can be restricted or encouraged with the use of natural, technical and organised access controls.

The proposed development is located at the rooftop of a very well-known shopping centre, Westfield Hurstville. With the installation of the proposed wayfinding upgrades, we expect that a customers' orientation (understanding of their whereabouts) will be significantly improved which in return will reduce the likelihood for them to get lost between the two transport hubs and Westfield Hurstville.

5.2.3 Territorial Reinforcement

Territorial Reinforcement involves actual and symbolic boundary markers, spatial legibility and environmental cues to connect people and space, to encourage connection with and ownership of public areas and facilities and to clearly communicate areas where people should or should not be and what activities are appropriate for those spaces.

That would be fair to say Hurstville Town Centre and Westfield Hurstville are strong boundary markers which are visited by the locals of the area on a frequent basis who can differentiate what activities are appropriate and what are not during their visits.

5.2.4 Space Management

Space management refers to the original presentation and ongoing maintenance of spaces, which can generate a sense that a place is cared for and “owned”, hence deterring criminal and antisocial behaviour. Spaces that are poorly maintained have been found to be more susceptible to criminal or anti-social behaviour.

Hurstville Town Centre and Westfield Hurstville are busy public places therefore Georges River Council and Scentre Group are expected to undertake the necessary ongoing maintenance activities.

5.3 Dedicated Pedestrian Pathway from Cross Street Entry

Through the review of Council’s pre-lodgement advice, it was understood that Council requires the developer to provide a dedicated pedestrian path for safe and efficient access for the customers of the ELP. Figure 11 illustrates the alignment of the two pedestrian access routes to the ELP from Cross Street & Crofts Avenue. The primary path utilises an existing walkway along the northern site boundary fronting Cross Street with a new stairway provided at its eastern end leading directly up to the ELP. It is understood that this route has been selected and designed in accordance with advice from the access consultant.

Figure 11: Proposed Pedestrian Pathway

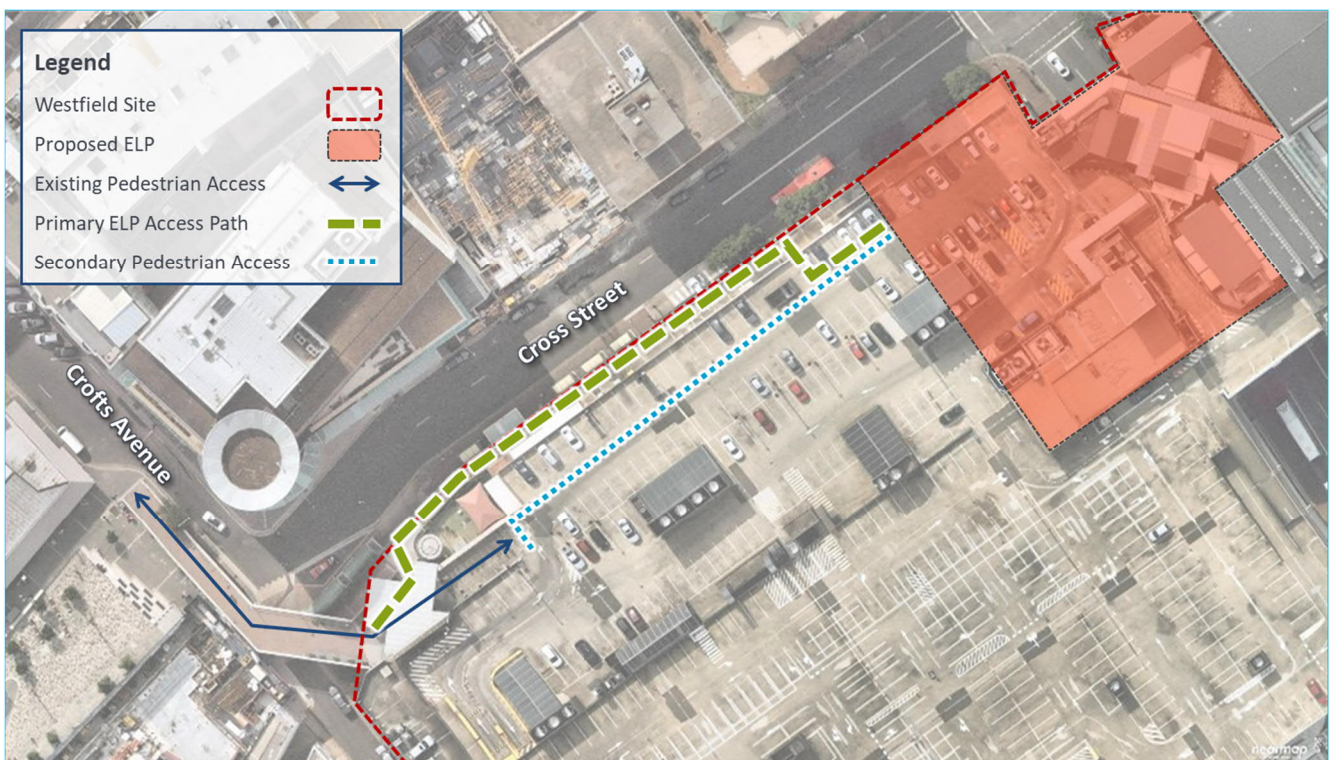
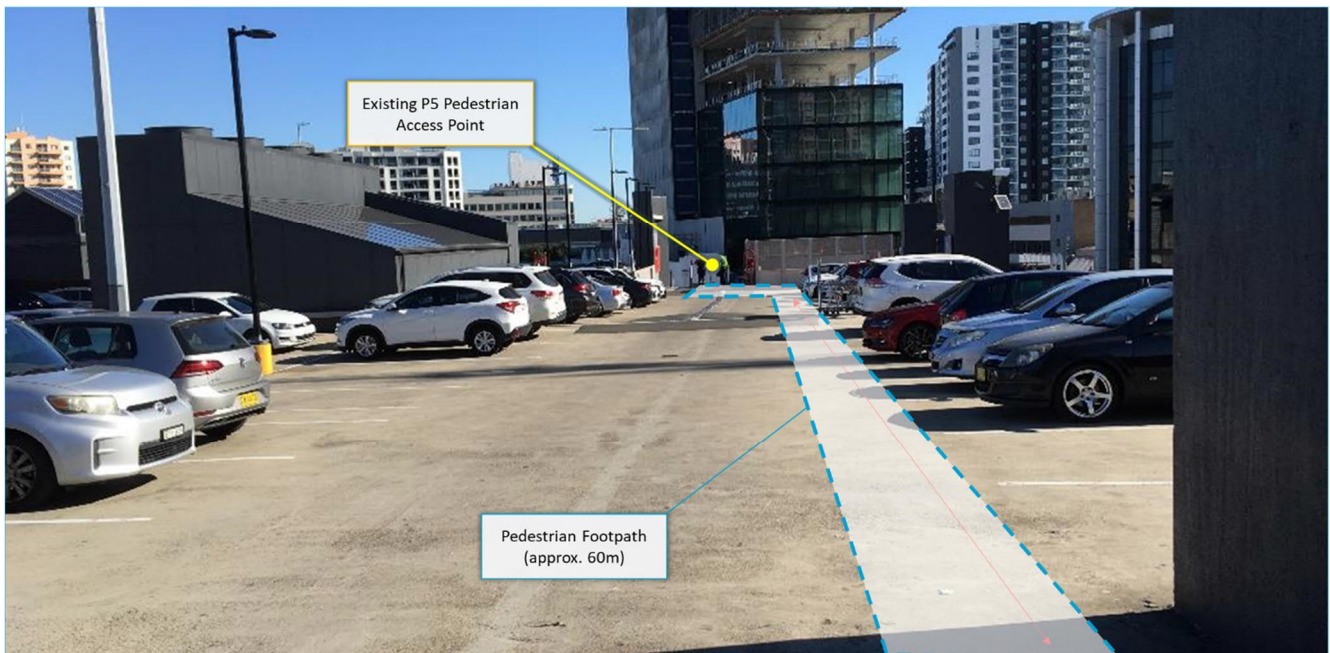


Figure 12 indicates the alignment of a secondary pedestrian route along the P5 rooftop carpark.

Figure 12: Proposed Pedestrian Path (Level 5 Carpark, photo taken from proposed ELP) – SAT 29/08/2020



This secondary connection may be formalised with a line-marked treatment guiding customers to the proposed ELP, however would be subject to detailed design. This connection would not compromise the objectives or intent of AS2890.1 along the carparking aisle.

5.4 Concept Construction Pedestrian and Traffic Management Plan (Concept CPTMP)

General principles of a traffic management exercise during the construction period of a development are to;

- Minimise the impacts to pedestrian and vehicle movements,
- Maintain existing pedestrian and vehicular accesses and public transport activities,
- Control and / or restrict construction vehicle movements,

The intent of this CPTMP is to provide a high-level summary for the traffic and transport aspects of the ELP development.

It is understood that Scentre Group's construction quality and environmental management plan would accompany the development application.

The intent of this document is to:

- Define the methods and project management elements used by Scentre Group to manage the execution of the project.
- Comply with the requirements of the Georges River Council recommendations as per the pre-lodgement meeting and minutes.
- Provide images and attachments in this document to understand the textual content and for ease of reference.
- Assist with the production of site procedures and Contractors method statements in performing the works.

5.4.1 Site Context

Westfield Hurstville is surrounded by a network of roads and has a frontage along Cross Street, Park Road, The Avenue and Rose Street. The proposed ELP development will be located at the rooftop of Blue Car Park, in Level P4 and P5 which have frontage to Cross Street and Park Road only. Therefore, construction activities will concentrate on Cross Street and Park Road.

5.4.2 Scope of Construction Works

It is understood that existing building has a total of four retail levels and made up of mostly concrete columns and slabs with elements of structural steel incorporated in strategic locations. It is expected that heavy machinery, rigid trucks, dog-trailers and concrete mixers will be used during the construction period.

Based on a review of Scentre Group's construction quality and environmental management plan, the following traffic and transport impacts should be mitigated as part of this development works:

1. Bus stop relocation on Cross Street.
2. Services relocation on Cross Street.
3. Installation of B Class hoardings on Cross Street and Park Road to allow for the demolition of the existing ELP and the construction of the proposed ELP.
4. Construction of B Class scaffold off Cross Street.

5.4.3 Staging and Program

It is expected that the overall project construction timeline for the works will be approximately 9 months, subject to weather and other factors.

Construction commencement is currently proposed for February 2024.

Table 7 provides a summary of construction staging and program.

Table 7: Construction Staging and Program

| Construction Stages | Construction Element | Expected Commencement Date | Expected Completion Date |
|---------------------|-------------------------|----------------------------|--------------------------|
| 1 | Site Mobilisation | 05/02/2024 | 15/02/2024 |
| 2 | Enabling Works | 21/08/2023 | 30/10/2023 |
| 3 | Main Construction Works | 15/02/2024 | 20/11/2024 |

5.4.4 Hours of Work

Per standard conditions from the Georges River Council, the developer will comply with the noise criteria for the typical construction hours of 07:00am to 05:00pm Monday to Saturday. If "out of hours works" are required, the developer will follow Council's standard process un obtaining relevant permits. It is however expected that the constructions hours will be limited to 07:00am – 07:00pm, Monday to Saturday.

5.4.5 Site Access

5.4.5.1 Vehicular

It is understood that the main access for construction vehicles will be via Cross Street. However, there are five other ingress and four egress points that can be facilitated.

A review of Scentre Group's construction quality and environmental management plan indicates that the developer has plans to minimise the access to the construction site from inside the shopping centre as contractors will be supplied with parking spaces on Level Retail 4 in the existing staff car parking zone. It is therefore expected that the construction will have minimal parking impacts in the surrounding local road network.

Vehicles presenting to the site will need to be booked-in at least 24 hours before they can deliver goods or be involved in the construction works.

It was also understood that information in relation to the expected vehicle trips will be provided in a separate and comprehensive CPTMP that is intended to be submitted to Georges River Council closer the commencement of construction works.

5.4.5.2 Workers

Workers will enter and exit the site through the open deck car park on Level Retail 4.

5.4.6 Hoardings and Security

It is understood that traffic controllers will be posted at the site access gates to control and manage the deliveries and assist the construction vehicles perform manoeuvres safely.

It is proposed that physical barriers would consist of a class B hoarding with full height scaffold on Cross Street, as indicated in Figure 13 and Figure 14.

Figure 13: Extents of the Proposed Scaffold and Works Zone on Cross Street

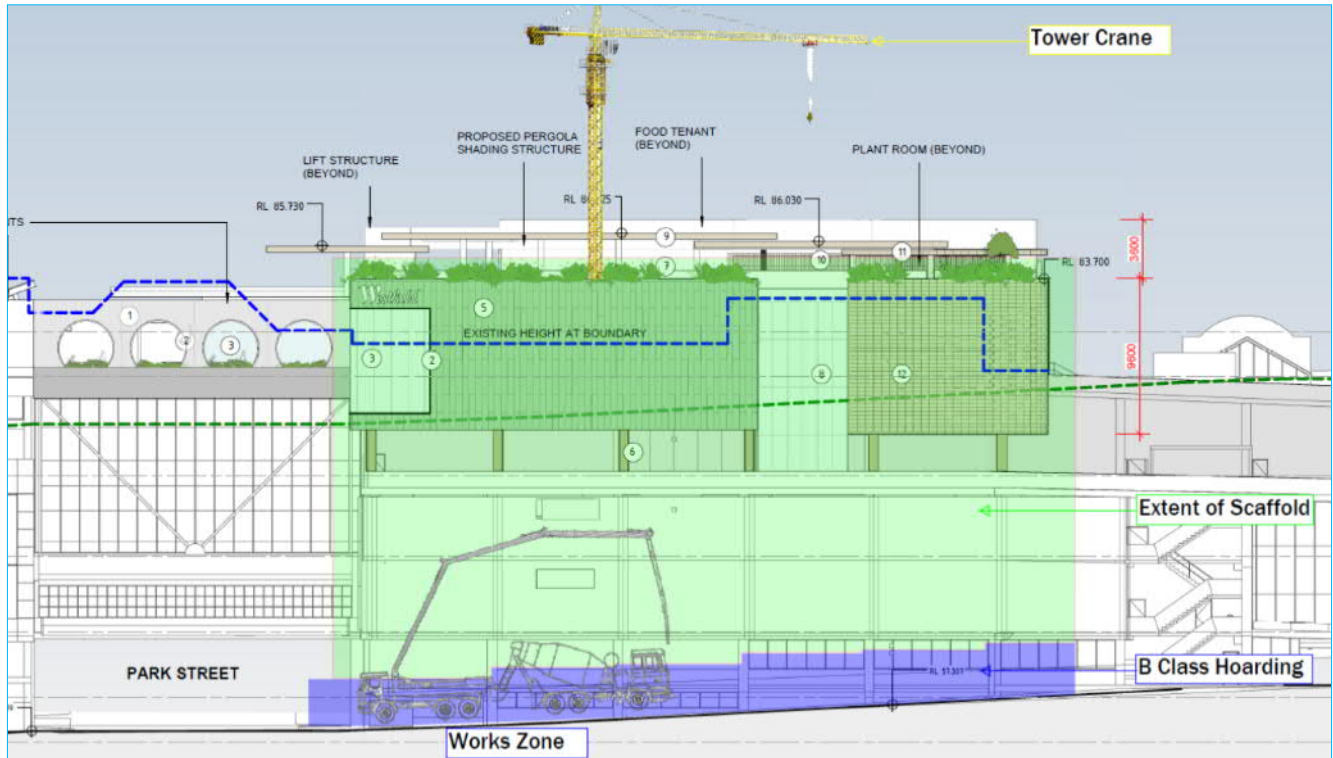
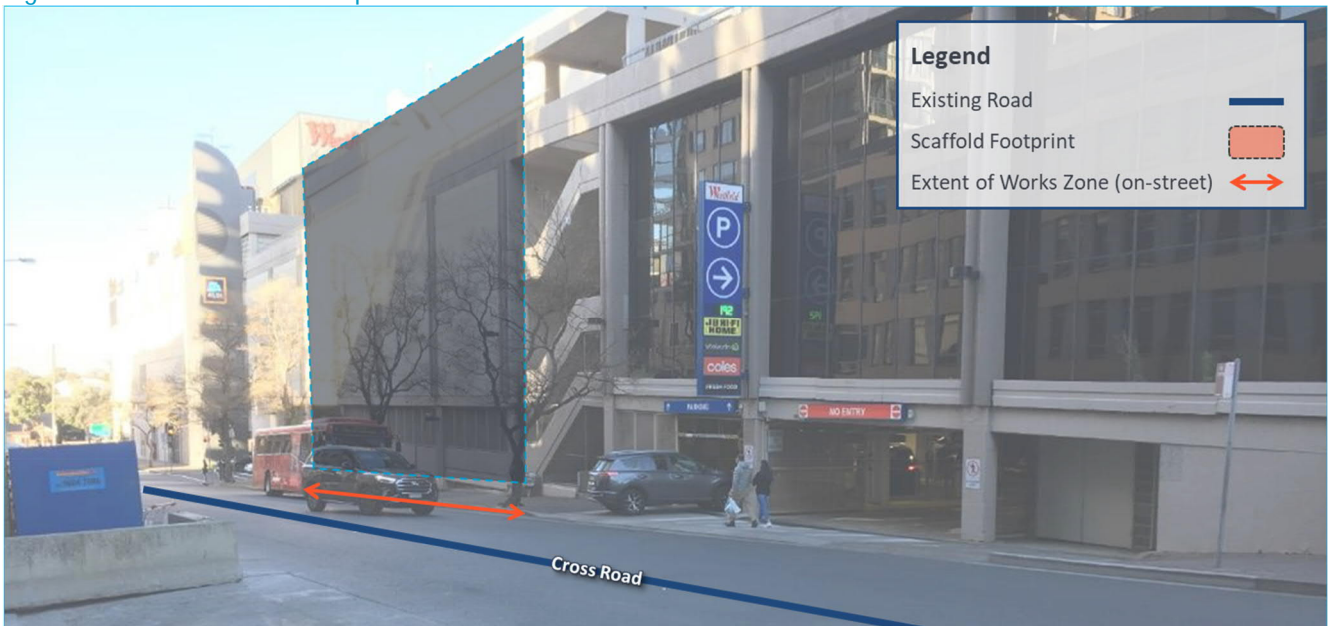


Figure 14: Extents of the Proposed Scaffold and Works Zone on Cross Street – SAT 29/08/2020



5.4.7 Proposed Mitigation Measures

It is understood that a separate and comprehensive CPTMP will be prepared closer the commencement of construction works. As discussed earlier in this statement, the majority of the proposed works will be undertaken on Level Retail 4. It should also be noted that the majority of the construction vehicles will be parked inside the car park on Level 4.

Through a site inspection undertaken on Saturday 29/08/2020, it was understood that vehicles up to 1.8m in height will be provided parking spaces in the existing parking facilities. This is expected to cover all the vans and utility vehicles.

The enabling works where footing strengthening is required, there will be a requirement for specific traffic management measures as it is expected that there will be significant impacts on the vehicular and pedestrian circulation inside the car park.

CPTMP will also include the objectives that are specific to the location and work activities will be undertaken, as follows:

- Ensure that construction vehicles travel to and from site along designated truck routes.
- Ensure minimum disruption is caused to pedestrians and vehicles in Cross Street and Park Road.
- Maintain adequate access to businesses adjacent to the works.
- Limit on-street parking for construction vehicles.
- Ensure safety for vehicular and pedestrian activities.
- Provide manoeuvring facilities to prevent construction vehicles from reversing.
- Ensure all truck movements entering and exiting the site are controlled by licensed traffic controllers.

The developer will install a Class B hoarding on Cross Street to maintain the existing pedestrian routes and minimise disruption to pedestrians.

6 Summary & Conclusions

This traffic impact statement was produced to address the concerns raised by Georges River Council in their pre-lodgement meeting minutes. The re-development of Entertainment and Leisure Precinct at Westfield Hurstville will comprise the following attributes:

- 2,374m² (3%) increase in the existing GFA, with the majority of the land use being “restaurants”.
- Removal of 69 car parking spaces is proposed, however, updated parking supply will still meet the minimum requirements of Council DCP.
- A review of plans demonstrated that parking and circulation are compliant with AS2890.1.
- The proposed development would result in an increase of less than one entry and one exit movements every minute across the peak hour (approx. 48 inbound and 48 outbound vehicles per hour), noting that this is a conservative estimate based on the following:
 - The land uses proposed as a part of the ELP are likely to generate its highest traffic demand outside the peak hours of the surrounding road network.
 - A portion of the customers of ELP is expected to be the existing customers of Westfield Hurstville Shopping Centre. We have however assumed no passing-trade (drop-in traffic) in order to provide a conservative traffic distribution estimate (See Appendix A).

Based on the conservative assumptions above and given there are six entries and five exits to & from the proposed development, it is expected that the traffic impacts of the proposed development will be minimal.

- Through the review of Hurstville City Centre Transport Management and Accessibility Plan (TMAP), it was understood that due to the existing capacity issues, Council is considering proposing minor line marking and lane configuration upgrades in the northern approach of The Avenue and Forest Road intersection. It is expected that these upgrades will be sufficient to mitigate the increased left-turn volumes (approx. 17 vph) on The Avenue due to the proposed ELP.
- During a site inspection undertaken on Saturday 29/08/2020, it was observed that additional wayfinding suggestions could improve the accessibility for vehicles and pedestrians. It was noted that there are no signs that can direct a pedestrian from Hurstville Station or Hurstville Bus Interchange to Westfield Hurstville. Wayfinding signage for general traffic however was clear and sufficient.
- SLR's high-level construction pedestrian and traffic management plan (CPTMP) indicates that the majority of the construction vehicles (all vehicles up to 1.8m in height, i.e. vans and utility vehicles) will be provided an indoor parking space on Level 4. A works zone will be required on Cross Street for large vehicles, such as trucks and cement mixers. Hoardings and scaffolds will be required on Cross Street and Park Road, near the intersection of Park Road and Cross Street where the works will be concentrated. It was also understood that a more comprehensive CPTMP will be provided closer to the commencement of the works to provide information on the estimated heavy vehicle movement frequencies.

Yours sincerely



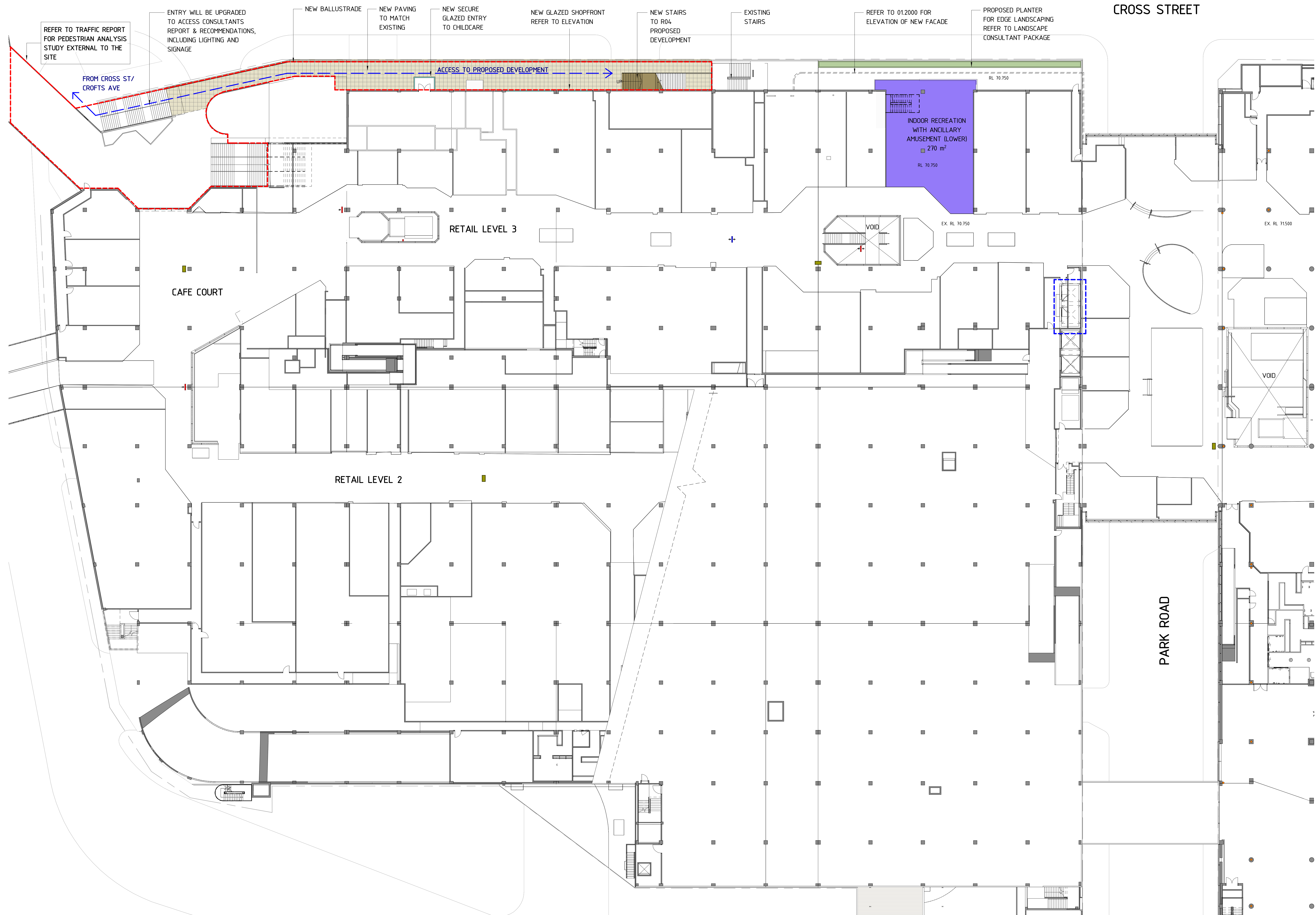
Charlie SEVENTEKIN
Senior Project Consultant
(Call at any time on 0477 001 763)

Submission Details
Reviewed by: Benjamin Park
Authorised by: Tim Sullivan

Enclosed – Appendices A to D

APPENDIX A

Proposed New Access to ELP

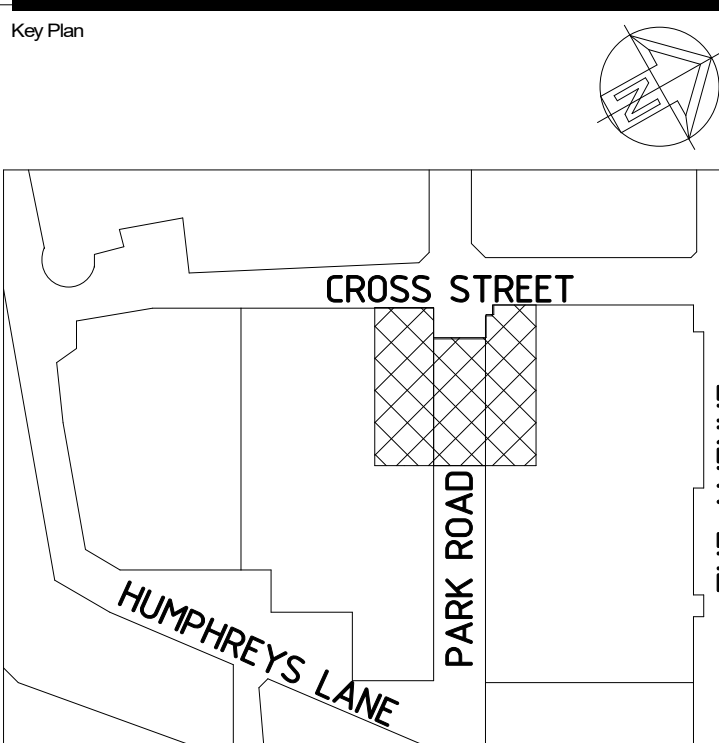


PROPOSED AREAS LEGEND

ENTERTAINMENT

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SCENTRE GROUP

WESTFIELD
HURSTVILLE

DEVELOPMENT
APPLICATION

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Phone (02) 9559 7000 Fax (02) 9559 6500
GPO Box 4004 Sydney NSW 2001
H20/000 287 265

Title

PROPOSED PLAN
LEVEL RETAIL 03

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Project No. Drawing No. Revision

4639

01.1003

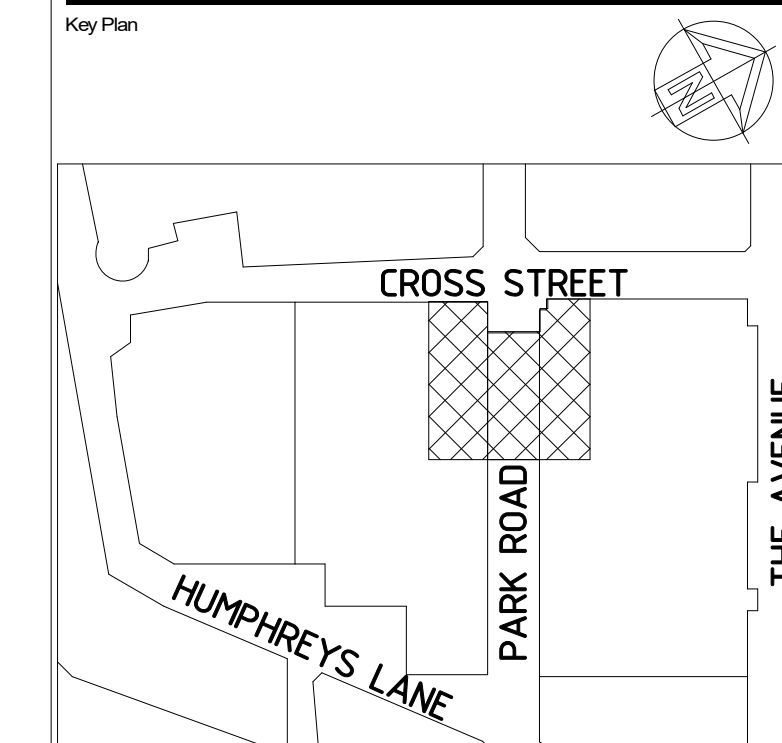
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PROPOSED AREAS LEGEND

- LSA
- MALLS
- PLANT/SERVICES
- RESTAURANT
- VERTICAL TRANSPORT

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APPLICATION

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GPO Box 4004 Sydney NSW 2001
HCD/000 287 265

Title

PROPOSED PLAN
LEVEL RETAIL 05
(PARKING P6)

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Project No: Drawing No: Revision:

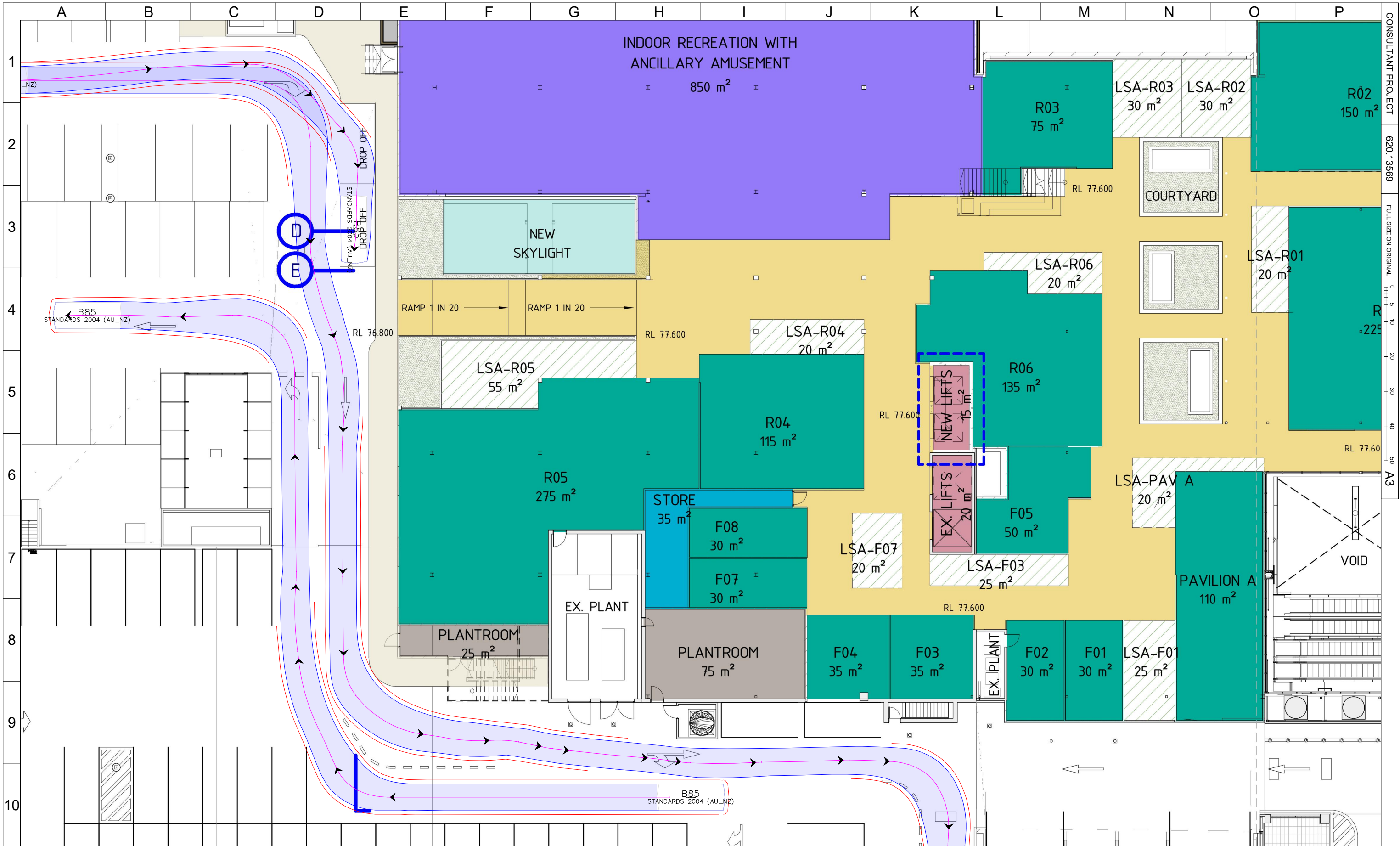
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APPENDIX B

Proposed Pedestrian Crossing

APPENDIX C

Swept Path Assessments



| | | | | | | | | | | | |
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| | | | | | | | | | | | PROJECT: Hurstville Westfield Rooftop DA |
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APPENDIX D

Development Traffic Distribution Estimate

