

# 245 Great Western Highway, South Wentworthville

Planning Proposal  
Transport Impact Assessment



Prepared by: Stantec Australia Pty Ltd for Nick Ates c/o Mecone

on 10/07/2023

Reference: 301401363

Issue #: E

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### Quality Record

Issue	Date	Description	Prepared By	Checked By	Approved By	Signed
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# 1. INTRODUCTION

## 1.1. Background

A planning proposal is to be lodged with Cumberland City Council to increase building height and floor space ratio (FSR) and permit additional uses by amendment to the Cumberland Local Environment Plan 2020. The purpose of the planning proposal is to enable a mixed-use development comprising a new hotel/ motel and adaptive reuse of the existing heritage building for use as a café/ restaurant on the site at 245 Great Western Highway, South Wentworthville.

Stantec was engaged to prepare a Traffic Impact Assessment to accompany the planning proposal.

## 1.2. Concept Development Proposal

The planning proposal seeks to amend the site's existing planning controls under Cumberland LEP 2021 to:

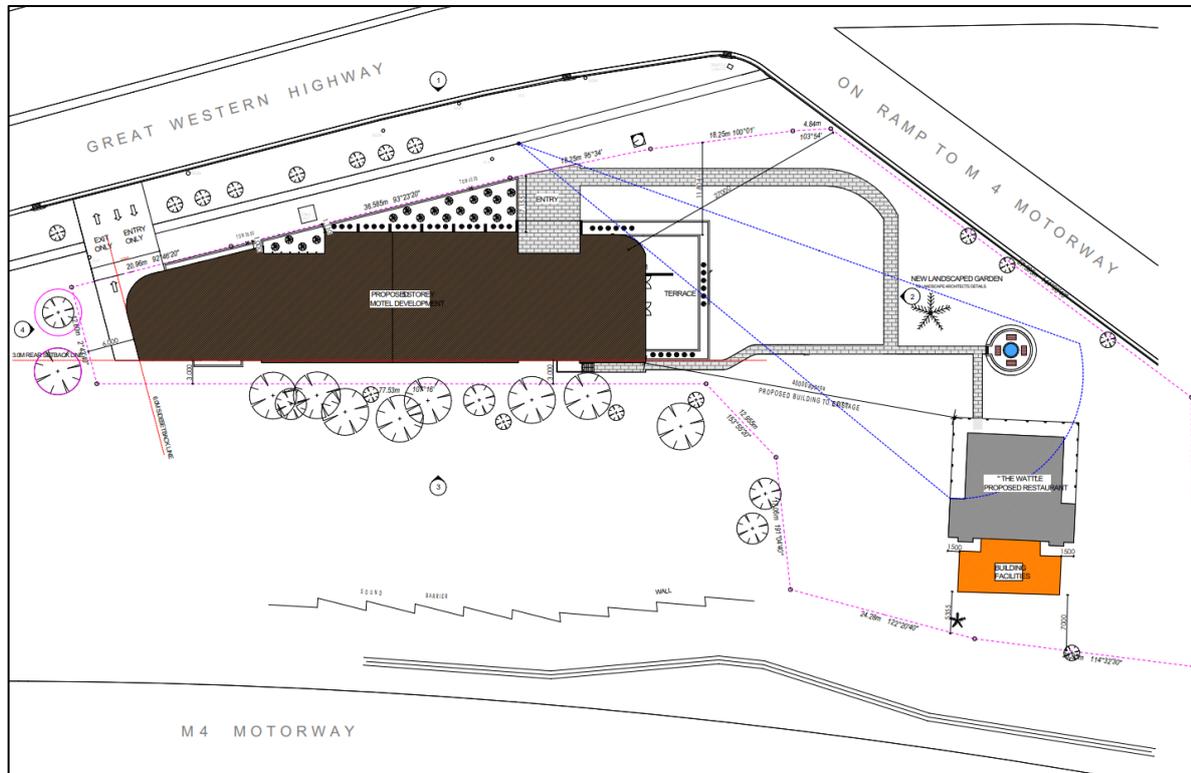
- Increase the site's existing maximum building height from 9m to 27m for the west only and maintain an existing 9m building height for rest of the site;
- Amend the FSR of the site to 1:1; and
- Add 'hotel or motel accommodation' and 'restaurant or café' as an additional permitted use to the lot by amending Schedule 1.

The concept design includes a part four storey and part six storey hotel/ motel development with rooftop dining providing 76 rooms including studios and one and two-bedroom rooms across 4,723.50 sqm GFA. Other facilities would include pool, gymnasium, conference room, and health and well-being centre.

The intention of the development is to restore the existing heritage listed cottage with a proposal to use as a café/ restaurant surrounded by landscaped garden areas. The existing heritage cottage covers 237 sqm GFA.

The proposal includes provision for 80 on-site parking spaces for use by the hotel/ motel and ancillary café/ restaurant, including three spaces to be signposted for use by service vehicles during the day and to serve as restaurant visitor parking on evenings. Motorcycle spaces and an additional hotel/ motel loading bay for use by vans/ utes and small rigid vehicles have also been allowed for. The indicative site layout is shown in Figure 1.1.

Figure 1.1: Indicative site layout



Source: White Stars Development, project no. 21276, drawing no. A101, issue G, dated 15 June 2023

## 1.3. Purpose of this Report

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

- existing traffic and parking conditions surrounding the site
- suitability of the proposed parking in terms of supply (quantum) and layout
- service vehicle requirements
- pedestrian and bicycle requirements
- the traffic generating characteristics of the proposed development
- suitability of the proposed access arrangements for the site
- the transport impact of the concept development proposal on the surrounding road network.

## 1.4. References

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

- Holroyd Development Control Plan (DCP) 2013
- Holroyd Local Environmental Plan (LEP) 2013
- Cumberland Development Control Plan 2021

## INTRODUCTION

- Australian Standard/ New Zealand Standard, Parking Facilities, Part 1: Off-Street Car Parking AS/NZS 2890.1:2004
- Australian Standard, Parking Facilities, Part 2: Off-Street Commercial Vehicle Facilities AS 2890.2:2018
- Australian Standard, Parking Facilities, Part 6: Off-Street Parking for People with Disabilities AS 2890.6:2022
- plans for the proposed development prepared by White Stars Development, Job no. 21276, Issue G, dated 15 June 2023
- other documents and data as referenced in this report.

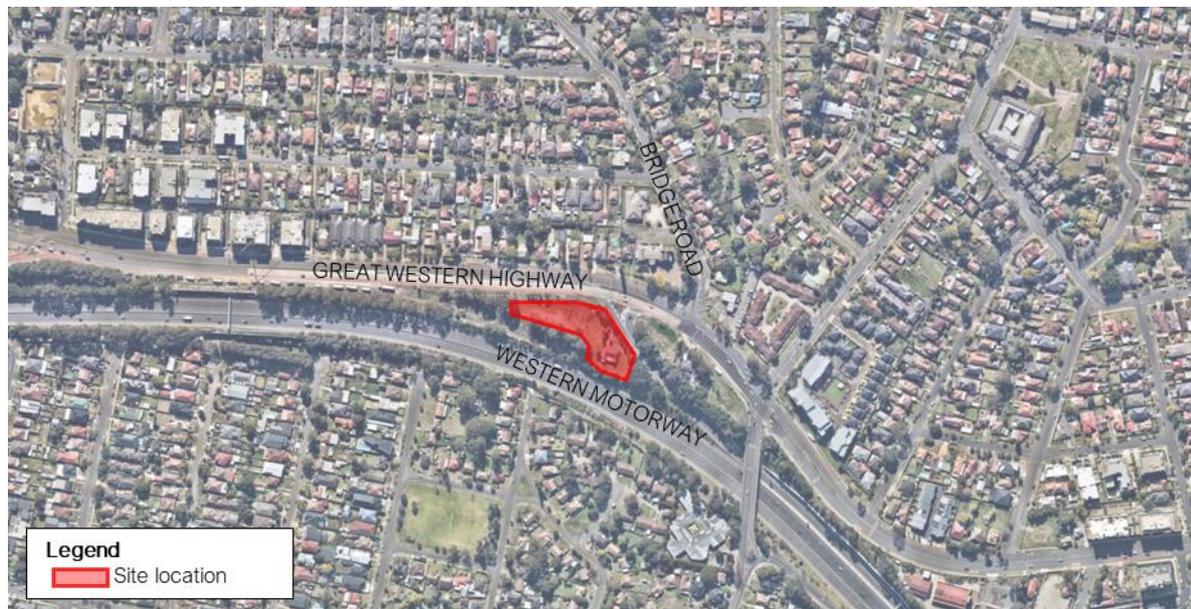
## 2. EXISTING CONDITIONS

### 2.1. Location

The site is at 245 Great Western Highway, South Wentworthville on land between the M4 Western Motorway and Great Western Highway. It has frontages of approximately 100 metres to Great Western Highway to the north and 56 metres to the M4 on-ramp to the east. The existing site is largely vacant, with a two-storey heritage listed cottage, 'The Wattles' in the south-east corner of the site.

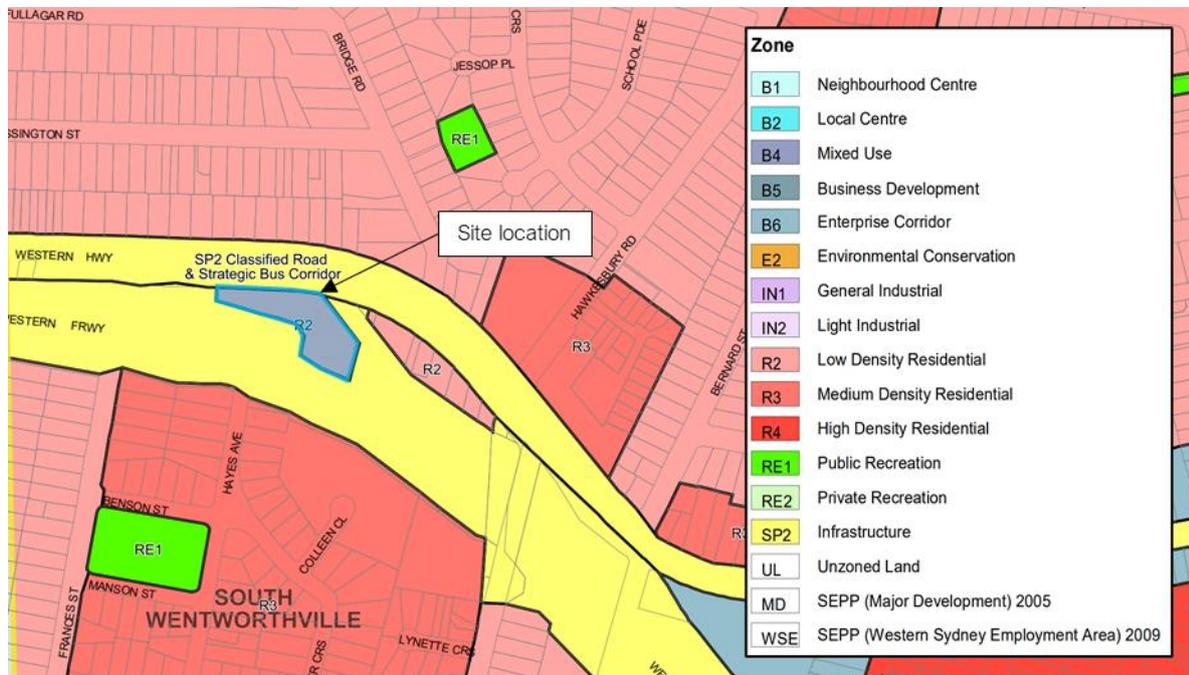
The site is currently zoned R2 – Low Density Residential and is surrounded a mix of residential housing types. The location of the site and its surrounding environs is shown in Figure 2.1 with the LEP land use map shown in Figure 2.2.

Figure 2.1: Subject site and its environs



Base image source: Nearmap

Figure 2.2: Land use map



Base image source: Holroyd LEP 2013

## 2.2. Road Network

### 2.2.1. Road Hierarchy

Roads are classified according to the functions they perform. The main purpose of defining a road's functional class is to provide a basis for establishing the policies which guide the management of the road according to their intended service or qualities.

In terms of functional road classification, State roads are strategically important as they form the primary network used for the movement of people and goods between regions, and throughout the State. Transport for NSW (TfNSW) is responsible for funding, prioritising and carrying out works on State roads. State roads generally include roads classified as freeways, state highways, and main roads under the Roads Act 1993, and the regulation to manage the road system is stated in the Australian Road Rules, most recently amended on 19 March 2018.

TfNSW defines four levels in a typical functional road hierarchy, ranking from high mobility and low accessibility, to high accessibility and low mobility. These road classes are:

**Arterial Roads** – Controlled by TfNSW, typically no limit in flow and designed to carry vehicles long distance between regional centres.

**Sub-Arterial Roads** – Managed by either Council or TfNSW under a joint agreement. Typically, their operating capacity ranges between 10,000 and 20,000 vehicles per day, and their aim is to carry through traffic between specific areas in a sub region or provide connectivity from arterial road routes (regional links).

**Collector Roads** – Provide connectivity between local sites and the sub-arterial road network, and typically carry between 2,000 and 10,000 vehicles per day.

**Local Roads** – Provide direct access to properties and the collector road system and typically carry between 500 and 4,000 vehicles per day.

### 2.2.2. Surrounding Road Network

#### Great Western Highway

Great Western Highway is a classified State Road and key corridor running along the northern site boundary. It is aligned in an east-west direction and provides two traffic lanes in each direction plus dedicated bus lanes in each direction, set within a 24-metre-wide carriageway. It has a posted speed limit of 60 kilometres per hour, increasing to 80 kilometres per hour immediately west of the site. Kerbside parking is not permitted on both sides of the road.

#### M4 Western Motorway

The M4 Western Motorway is a classified State Road connecting Penrith with Auburn and aligned in an east-west direction south of the site. It provides three eastbound and four westbound traffic lanes within a 28-metre-wide carriageway. It has a posted speed limit of 90 kilometres per hour with local area access via the eastbound on-ramp along the eastern boundary of the site. The on-ramp allows Great Western Highway traffic to enter the M4 via traffic signals that also facilitate the safe crossing of pedestrians across the Great Western Highway.

Modifications to the on-ramp east of the site on the M4 alignment itself are planned as part of the M4 Smart Motorway project, as detailed in Section 2.3.

#### Bridge Road

Bridge Road is a local road connecting with Great Western Highway at a signalised intersection 100 metres east of the site. It provides one traffic lane and one parking lane in each direction, set within a 12-metre-wide carriageway. It has a posted speed limit of 50 kilometres per hour with school zone restrictions in place during the school peak periods. Parking is permitted on each side of the road, with restrictions in place during school hours.

### 2.2.3. Surrounding Intersections

The key intersections in the vicinity of the site include:

- Great Western Highway/ M4 on-ramp (signalised)
- Great Western Highway/ Bridge Road (signalised).

## 2.3. M4 Smart Motorway

TfNSW has introduced intelligent technology to the M4 Motorway between the Pitt Street overpass in Parramatta and Great Western Highway in Lapstone. The works included the following:

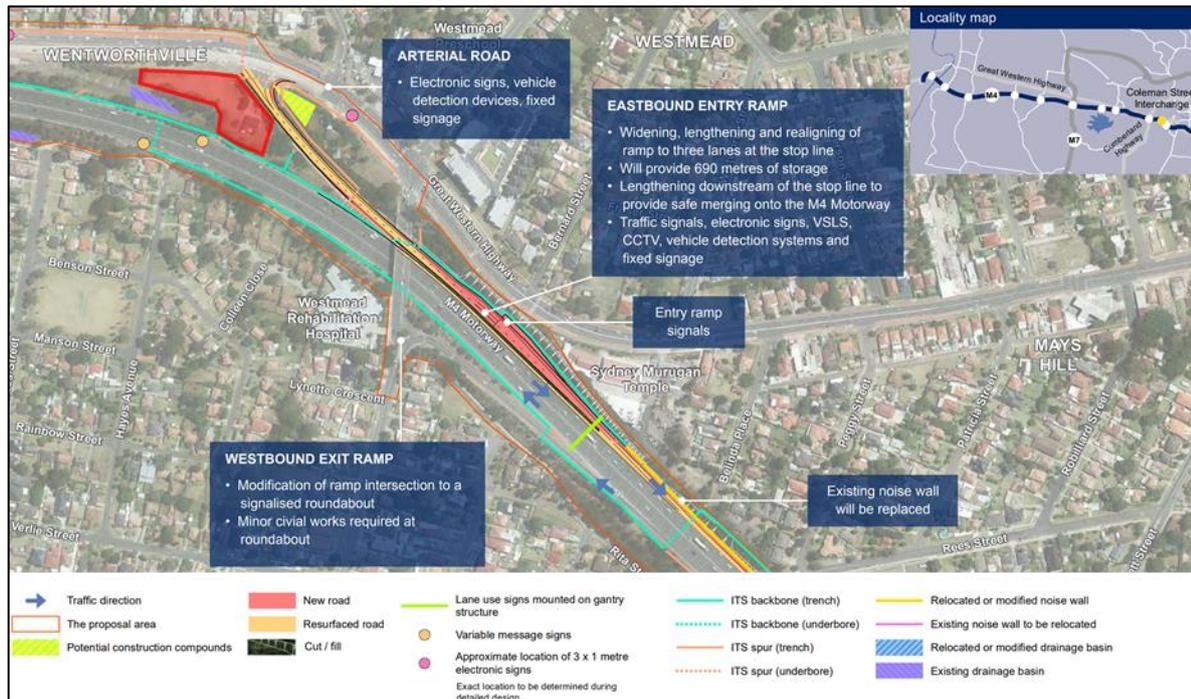
- introduction of Intelligent Traffic Systems (ITS)
- interchange works including widening, lengthening and re-alignment of the entry/ exit ramps, installing ITS infrastructure and minor modifications to arterial and major road intersections connecting to the motorway
- widening a 4.3-kilometre section of the M4 Motorway between Roper Road and Westlink M7 interchanges.

## EXISTING CONDITIONS

This specifically included works to the section of the M4 on-ramp from the Great Western Highway to provide greater storage capacity and merge lengths. Electronic signage and vehicle detection devices have also been installed in this location.

The works formed part of the M4 Smart Motorway project with the works to the on-ramp adjacent to the site shown in Figure 2.3.

Figure 2.3: M4 on-ramp works east of the site



Base image source: NSW Government M4 Smart Motorway Submissions Report, October 2015, Figure 3-2b

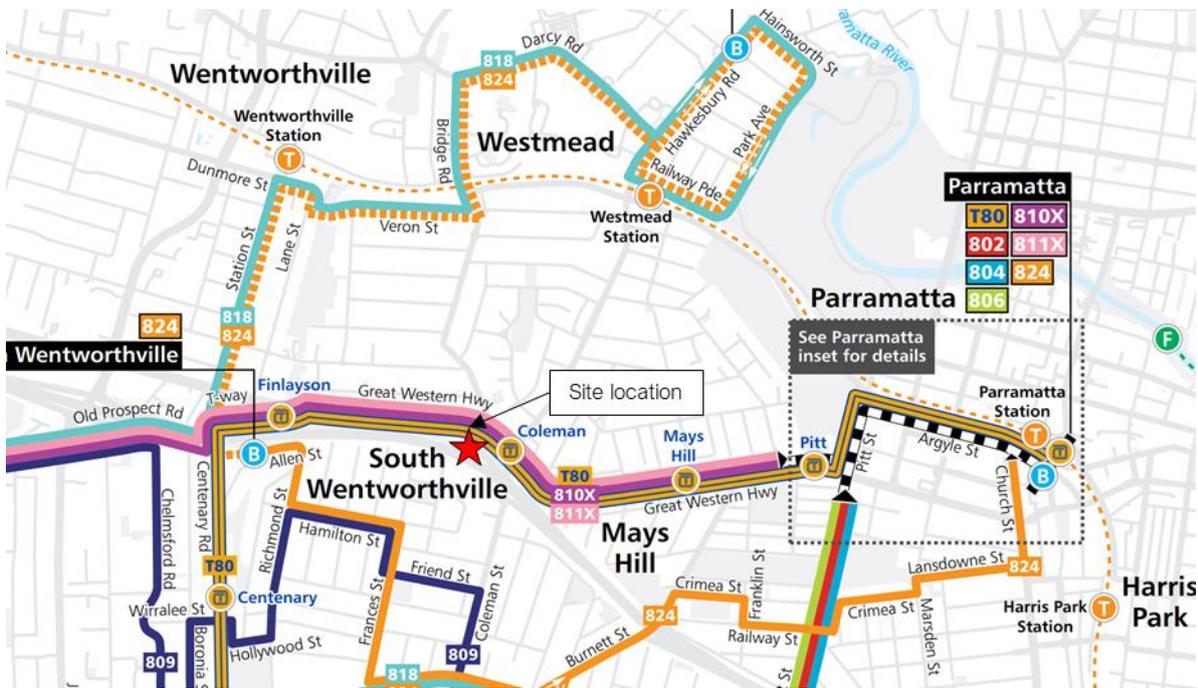
## 2.4. Transport Network

The site is adequately serviced by public transport with a bus stop 130 metres east of the site on Great Western Highway. The bus stop services three bus routes as summarised in Table 2.1 and shown in Figure 2.4.

Table 2.1: Bus services description

Route	Description	Frequency	
		Peak	Off-Peak
810X	Merrylands to Parramatta via Pemulwuy	15 minutes	60 minutes
811X	Pemulwuy to Parramatta via Beresford Road	25 minutes	60 minutes
T80	Liverpool to Parramatta via T-way	10 minutes	30 minutes

Figure 2.4: Surrounding bus network



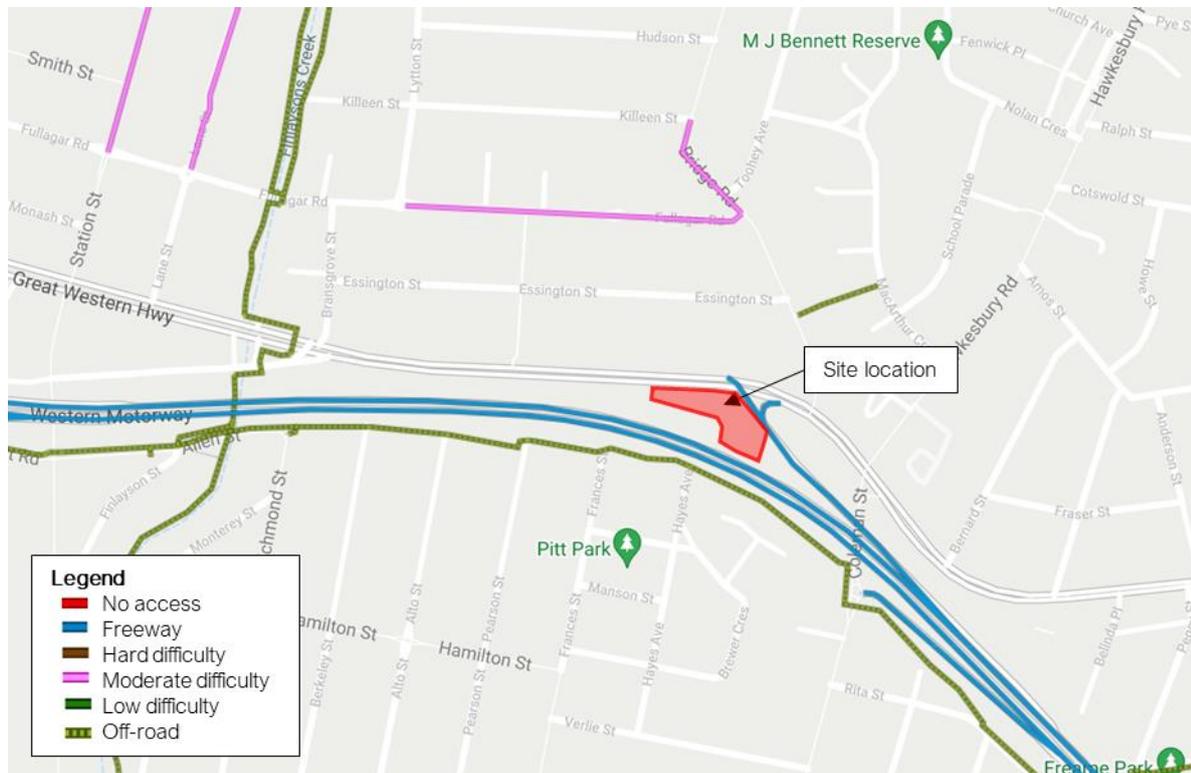
Source: [Transit Systems western network map](#), accessed June 2023

## 2.5. Walking and Cycling Infrastructure

The site has adequate access to walking infrastructure. A footpath is provided on the northern side of Great Western Highway and on both sides east of the Bridge Road intersection further to the east. Formalised crossing points exist at the M4 on-ramp intersection and at the Bridge Road traffic signals.

An on-road cycling path exists on the M4 and on select local streets in the vicinity. The surrounding cycling map is shown in Figure 2.5.

Figure 2.5: Surrounding cycle network



Base image source: [roads-waterways.transport.nsw.gov.au/maps](https://roads-waterways.transport.nsw.gov.au/maps)

## 2.6. Traffic Volumes

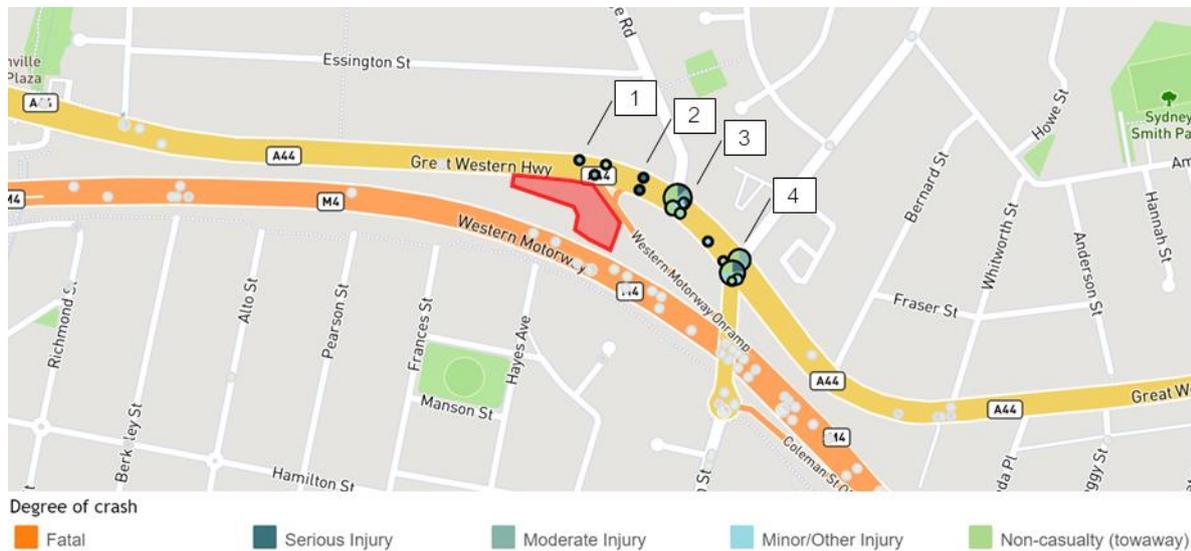
TfNSW provides average road traffic volumes for a selection of permanent and sample roadside collection device stations at key locations across New South Wales. The closest traffic volume station (Station Id: 68025) is on the Great Western Highway about 300 metres east of the site. Data indicates that along the site frontage, Great Western Highway carried an Annual Average Daily Traffic (AADT) volume of around 36,500 vehicles in 2019. No discernible growth between 2009 to 2019 was observed with volumes decreasing by approximately four per cent over the 10-year period.

Data for 2020 and 2021 was excluded due to travel restrictions associated with COVID-19 with the 2022 and 2023 data indicating around 33,250 vehicles per day. The peak hour volumes for westbound vehicles past the site shows about 800 vehicles in the AM peak hour and 1,450 vehicles in the PM peak hour.

## 2.7. Crash History Analysis

Analysis of the five-year period of available crash data between 2015 and 2019 has been completed based on crash data provided by TfNSW for the roads surrounding the site. The locations and severity of the crash data for the five-year period is shown in Figure 2.6 and detailed in Table 2.2.

Figure 2.6: Crash map from 2015 to 2019



Base image source: TfNSW Centre for Road Safety Interactive Crash Map

Table 2.2: Recorded crashes from 2015 to 2019

Location	Location ID	Number of crashes	Number of Injuries
Great Western Highway/ M4 Motorway	1	3	3
Great Western Highway	2	2	1
Great Western Highway/ Bridge Road	3	32	23
Great Western Highway/ Coleman Street	4	36	32
<b>Total</b>		<b>73</b>	<b>59</b>

The following key statistics can be drawn from the crash data:

- No fatalities were recorded during the five-year period.
- Approximately 75 per cent of crashes resulted in an injury.
- Over the five-year period 73 incidents occurred at key intersections surrounding the site with right through accounting for 37 per cent and rear ends 31 per cent of these.
- 14 per cent of incidents resulted in serious injury.
- Majority of incidents occurred at the Great Western Highway/ Bridge Road and Great Western Highway/ Coleman Street intersections, accounting for 93 per cent of incidents.
- Only three incidents occurred along the site frontage.

Although the surrounding roads have a crash history, these are largely clustered in and around the intersections and not along the site frontage. No incidents were attributed to vehicles exiting a driveway. As such, the in/ out movements are not anticipated to result in further traffic incidents. Notwithstanding comparable developments have access on Great Western Highway.

In addition, the site would generate relatively low volumes and could not be expected to impact the safety of the surrounding road network.

# 3. PLANNING PROPOSAL

## 3.1. Overview

The concept plan supporting the planning proposal incorporates a part four storey and part six storey hotel/ motel development and rooftop dining level across 4,723.50 sqm GFA. The concept design indicates that the planning proposal could provide for 76 rooms, hotel facilities such as a gymnasium, health and well-being centre and conference room, and rooftop terrace dining. The potential room breakdown is as follows:

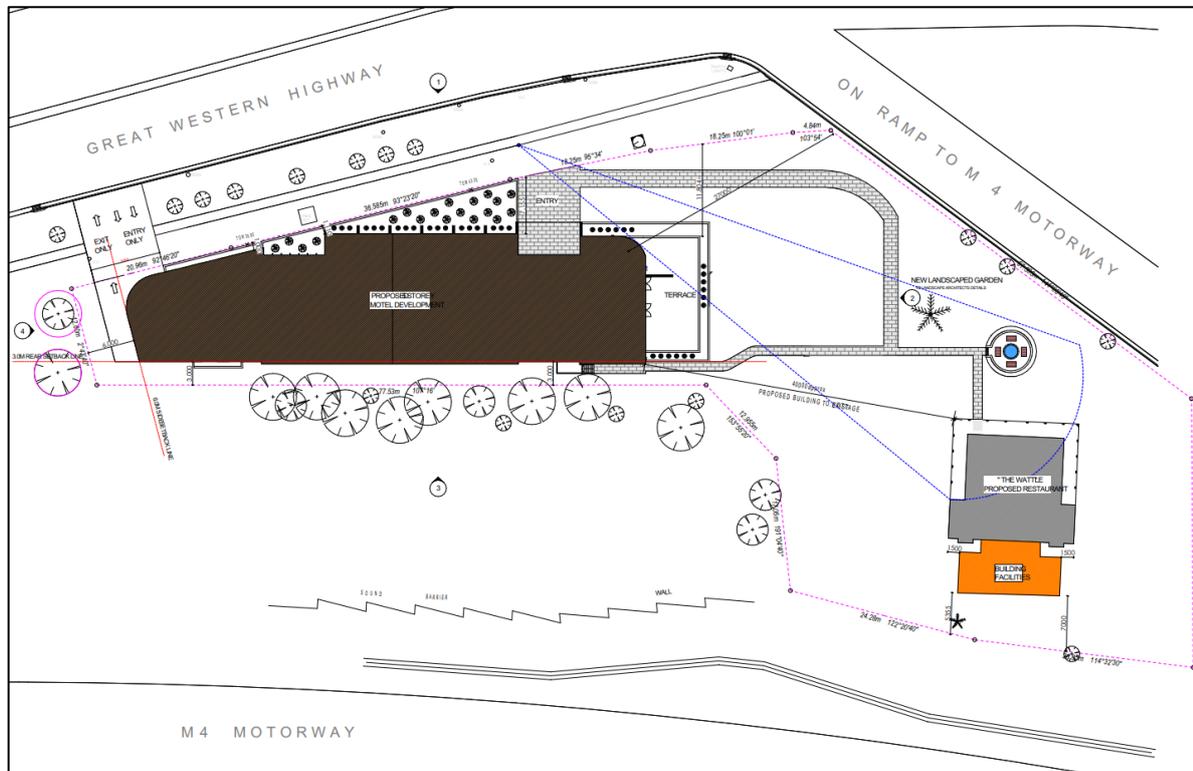
- 40 studio units
- 32 one-bedroom units
- 4 two-bedroom units.

The existing heritage cottage is proposed to be converted into a café/ restaurant. It is expected to operate as very much ancillary to the hotel/ motel with much demand expected from hotel/ motel guests, and to also be open to the public. The existing heritage cottage covers 237 sqm GFA.

Site access is proposed via a single access driveway on the Great Western Highway, restricted to left turns only. To ensure connection with the broader pedestrian network, a footpath is proposed along the site frontage connecting with the crossing facilities at the Great Western Highway/ M4 on-ramp intersection.

The indicative site layout is shown in Figure 3.1.

Figure 3.1: Indicative site layout



Source: White Stars Development, project no. 21276, drawing no. A101, issue G, dated 15 June 2023

## 3.2. Parking Provision

It is intended that all car parking spaces will be within a basement car park beneath the hotel/ motel. Motorcycle spaces and bicycle parking are also proposed within the basement.

## 3.3. Site Access and Loading/ Waste Collection

One entry/ exit driveway crossover is proposed on the Great Western Highway at the western end of the site. The driveway allows for the necessary sightlines, ensuring safe and appropriate site access given the posted speed limit and absence of conflicting movements through the area. All vehicles would enter and exit the site in a forward direction.

All loading is proposed within the basement close to the car park entry ramp with management measures to ensure practical access to the waste storage room. The loading bay would accommodate vehicles up to 6.4 metres long with the loading bay to also have capacity for two vans/ utes, as demand requires.

The spaces proposed for the heritage building will be signposted for (partial) use by service vehicles during the day and as visitor parking during the evening. The loading bays would accommodate vans/ utes, with at least the southern space also appropriate for use by small rigid vehicles.

# 4. PARKING AND TRAFFIC APPRAISAL

## 4.1. Parking Assessment

### 4.1.1. Preamble

Cumberland Development Control Plan (DCP) 2021 came into effect on 5 November 2021 superseding the Holroyd DCP 2013. The DCP provides guidance for the design and operation of development within a Local Government Area (LGA) to achieve the aims and objectives of the Local Environmental Plan (LEP).

The development controls include parking and access provisions.

### 4.1.2. Car Parking

Parking requirements for the development are summarised in Table 4.1 and indicates the need for up to 115 on-site parking spaces based on the restaurant operating independently of the hotel. Such details will be confirmed as part of a future development application.

Table 4.1: Statutory car parking requirements

Land Use	Size	Parking Rate	Parking Requirement
Hotel/ motel	76 rooms	1 space per room/ unit plus 1 space per 2 employees [1]	81
Café/ restaurant	237m <sup>2</sup> GFA	1 space per 7m <sup>2</sup>	34
<b>Total</b>			<b>115</b>

[1] Assume 10 rostered hotel/ motel employees.

### 4.1.3. Accessible Parking

Given the Cumberland DCP does not state an accessible parking rate reference has been made to the Holroyd DCP 2013 which requires that two spaces per 100 visitor/ customer spaces be designated as accessible parking. As such two accessible spaces would be required as part of any future development application.

### 4.1.4. Bicycle Parking

Neither Holroyd DCP 2013 nor Cumberland DCP stipulate any bicycle requirements for hotel land uses. It is recommended that up to 15 bicycle parking spaces be provided considering the sites location and surrounding supporting cycling infrastructure.

Bicycle parking spaces, as a minimum, need to be designed in accordance with relevant Australian Standard (AS2890.3 Bicycle Parking Facilities).

## 4.1.5. Loading Requirements

For hotel accommodation, DCP 2021 and TfNSW Guidelines stipulate a loading requirement of one space per 50 bedrooms or bedroom suites, up to 200 bedrooms. This equates to two loading bays for the hotel use, with the basement able to practically accommodate two smaller service vehicles, such as vans and utes for daily deliveries. As is typical for hotel operations, basic management and timing of deliveries by small rigid trucks would be in place to ensure appropriate use. Deliveries would also be spread across the day and week with no distinct peak period.

On this basis the proposed loading arrangements and simple management measures are considered suitable.

## 4.2. Site Layout Review

A high-level review of the car park and site layout has been completed against the requirements of the Australian Standard for Off Street Car Parking (AS/NZS2890.1:2004). Overall, the car park is expected to operate efficiently, with the concept design to be further developed as part of any future development application.

Car parking spaces should be designed to a minimum 2.4 or 2.5 metres wide and 5.4 metres long, with a minimum 5.8 metres provided for adjacent parking aisles in accordance with AS2890.1. Accessible parking, including height clearances of 2.5 metres above the accessible spaces and shared areas should be designed in accordance with AS2890.6. The loading area and travel paths to and from would be designed in accordance with AS2890.2, with minimum 3.5 metre height clearances to services and structure.

The concept design of the access driveways, on-site parking and loading areas will be further detailed as part of any future development application, with circulation aisles, car space and loading bay dimensions and height clearances to be designed in accordance with relevant Australian Standards (AS2890 series).

## 4.3. Traffic Generation

Traffic generation estimates for the proposed development have been sourced from TfNSW Guidelines. The estimated evening peak hour traffic volumes generated by the development are summarised in Table 4.2.

**Table 4.2: Evening peak hour traffic generation estimates**

Land Use	Size	Traffic Generation Rate	Traffic Generation
Hotel/ motel	76 rooms	0.4 vehicle trips per room	30
Café/ restaurant	237m <sup>2</sup> GFA	5 vehicle trips per 100m <sup>2</sup> GFA	12
<b>Total</b>			<b>42 trips</b>

Table 4.2 indicates the site would generate up to 42 vehicle trips during the evening peak hour.

All site generated traffic would approach from the east and depart to the west along the Great Western Highway. Given the low traffic volumes generated by the proposal (representing about two per cent of the westbound evening peak hour traffic volumes as detailed in Section 2.6), this additional traffic is not expected to noticeably change the safety or function of the surrounding road network.

## 5. CONCLUSION

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

- A planning proposal for land at 245 Great Western Highway, South Wentworthville is to be lodged with Cumberland City Council for amendments to Cumberland LEP 2020 to enable a mixed-use development comprising a hotel and ancillary café/ restaurant use. The café/ restaurant proposes to adaptively reuse of the existing heritage building on the site.
- The concept design indicates that a part four storey and part six storey hotel could provide for 76 rooms, hotel facilities and rooftop hotel terrace dining across 4,723.50 sqm GFA. The existing heritage cottage covers 237 sqm GFA.
- The concept proposal considers provision of 115 on-site parking spaces for use by the hotel/ motel and ancillary café/ restaurant. These spaces will be in the basement beneath the hotel/ motel.
- Six motorcycle parking spaces and capacity for 15 bicycle spaces are also proposed within the basement car park.
- A minimum of two accessible parking spaces would need to be provided as part of any future development application.
- Based on the analysis of land uses and especially recognising the ancillary operation of the café/ restaurant, and hence daily practical use of the site, about 115 parking spaces would be required to adequately provide for the parking demands of the concept proposal.
- The concept proposal meets this requirement by way of 115 parking spaces and motorcycle spaces, with further detailed assessment to be included as part of any future development application.
- A dedicated loading bay with capacity for two small delivery vehicles (vans, utes etc.) or one 6.4 metre small rigid vehicle is proposed within the basement and for use by the hotel and café/ restaurant.
- Basic management of service vehicle deliveries is recommended to ensure appropriate use across the day and week.
- The basement car park layout will be reviewed against the requirements of relevant Australian Standards with site access and parking expected to operate well and to be further developed as part of any future development application.
- Based on the applicable rates in the TfNSW Guide, the proposal could generate up to 42 vehicle trips during the evening peak hour. On the basis that the café/ restaurant operates ancillary to the hotel, traffic generation would be about 30 to 35 vehicle trips and not expected to materially change the safety or function of the surrounding road network.

