

Lewisham Station Upgrade

Traffic, Transport & Access Impact Assessment

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Lewisham Station Upgrade

Traffic, Transport & Access Impact Assessment

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

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1.0 Introduction

1.1 Background

Transport for NSW (Transport) proposes to provide accessibility upgrades at Lewisham Station, as part of the Safe Accessible Transport (SAT) program (The Proposal), which aims to make public transportation safer, more efficient and inclusive that will help our growing and aging population as well as create a more sustainable future. The Proposal would improve accessibility of the station in line with the requirements of the Commonwealth Disability Discrimination Act 1992 (DDA) and the Disability Standards for Accessible Public Transport 2002 (DSAPT).

1.2 Key Proposal features

The key features of the Lewisham Station upgrade include:

provision of four new lifts (Platform 1 to underpass, Platform 2 to underpass, underpass to Thomas Street and underpass to Victoria Street)

- modification of the underpass including drainage, lowered floor and new openings for lift access
- new canopies at lift entries and replacement canopies at Thomas Street and Victoria Street entrances to the station
- a new station building on Platform 1 including a family accessible toilet, a unisex ambulant toilet, station office, electrical services enclosure and a station storage room
- platform regrading and resurfacing, new tactile ground surface indicators (TGSIs) and relocated platform furniture
- a new station access ramp from Railway Terrace to Platform 2
- road adjustments and upgrades to station forecourts
- ancillary work including station power supply upgrade, protection and relocation of services

Subject to approval, the upgrade is planned for completion by November 2027.

1.3 Scope and objectives of this report

This Traffic, Transport and Access Impact Assessment report provides a high-level assessment of the potential impacts of the Proposal on transport, traffic, access and road safety. The purpose of this report is to:

assess the existing traffic and transport conditions within the Lewisham Station Precinct

evaluate the potential traffic impacts caused by the Proposal

assess the impacts associated with operation of the Proposal

recommend mitigation measures to manage impacts, if required.

1.4 Report structure

This report has the following structure:

Section 1.0 introduces the SAT program and Proposal

Section 2.0 describes the existing transport conditions at Lewisham Station

Section 3.0 provides a description of the Proposal

Section 4.0 outlines the potential impacts of the Proposal during construction

Section 5.0 outlines the potential impacts of the Proposal after construction

Section 6.0 provides a summary of the potential transport impacts and potential mitigations.

2.0 Existing conditions

2.1 Study area

Lewisham Station is located in the suburb of Lewisham, approximately 6.5 kilometres southwest of Sydney CBD within the Inner West Local Government Area (LGA). Lewisham is bound by Leichardt to the north, Dulwich Hill to the south, Petersham to the east and Summer Hill to the west.

The Proposal is generally located within the boundaries of the existing station, as shown in Figure 2-1.



Figure 2-1 Study area at Lewisham Station

Lewisham Station and the adjoining rail corridor are zoned for Rail Infrastructure (SP2). Land use surrounding Lewisham Station primarily consists of Low and High Density Residential (R2 and R4), with a Local Centre (E1) on the southern side of the rail corridor.

A large parcel of land on the northern side of the rail corridor is dedicated to Infrastructure for Community Facilities and Educational Establishments (SP2). Land use zoning at Lewisham Station and the surrounding locality is shown in Figure 2-2.



Figure 2-2 Land use zoning within locality surrounding Lewisham Station

2.2 Road network

2.2.1 Key corridors

Lewisham Station is surrounded by a mix of local and State road corridors. Key local roads include Victoria Street and Hunter Street to the south, and Thomas Street to the north. These roads currently have unmarked lanes and parking on both sides with a posted speed limit of 50km/h. A 40km/h school zone operates on Thomas Street from 8:00am to 9:30am and 2:30pm to 4:00pm on school days.

Railway Terrace is a State road corridor running east-west on the southern side of Lewisham Station, continuing to Old Canterbury Road and New Canterbury Road, both of which are also State roads. Railway Terrace is generally one lane in each direction, with no parking permitted and a posted speed limit of 50km/h. Railway Terrace is not identified as an approved freight route for vehicles over 19 metres. A right turn ban from Railway Terrace onto Victoria Street currently operates between 6:00am and 10:00am, and 3:00pm and 7:00pm on weekdays. Additionally, there is a right turn ban from Victoria Street onto Railway Terrace between 6:00am and 10:00am only on weekdays. Figure 2-3 shows the road network within the locality surrounding Lewisham Station.



Figure 2-3 Road network within locality surrounding Lewisham Station

2.2.2 Traffic volumes

2.2.2.1 Intersections

Traffic surveys were undertaken on Tuesday 2 November 2024 between 10:00am and 3:00pm and Saturday 5 November 2024 between 10:00am and 6:00pm at the following intersections:

- Railway Terrace and Victoria Street
- Railway Terrace, Old Canterbury Road and Longport Street (150 metres west of station).

The surveys were collected to determine existing traffic volumes on Railway Terrace and the potential impact of removing vehicle access from Railway Terrace onto Victoria Street proposed as part the Lewisham Station Upgrade.

To accurately capture the potential impact of removing this access, the intersections were not surveyed before 10:00am or after 3:00pm due to the following turning restrictions that operate at these intersections during weekday peak periods:

- no right turn from Longport Street (eastbound) onto Old Canterbury Road (southbound)
 - 6:00am to 10:00am, and 3:00pm to 7:00pm.
- no right turn from Railway Terrace (eastbound) onto Victoria Street (southbound)
 - 6:00am to 10:00am, and 3:00pm to 7:00pm.

Figure 2-4 presents a summary of traffic volumes during the weekday peak within the survey period (2:00pm to 3:00pm) at the intersection of Railway Terrace and Victoria Street.

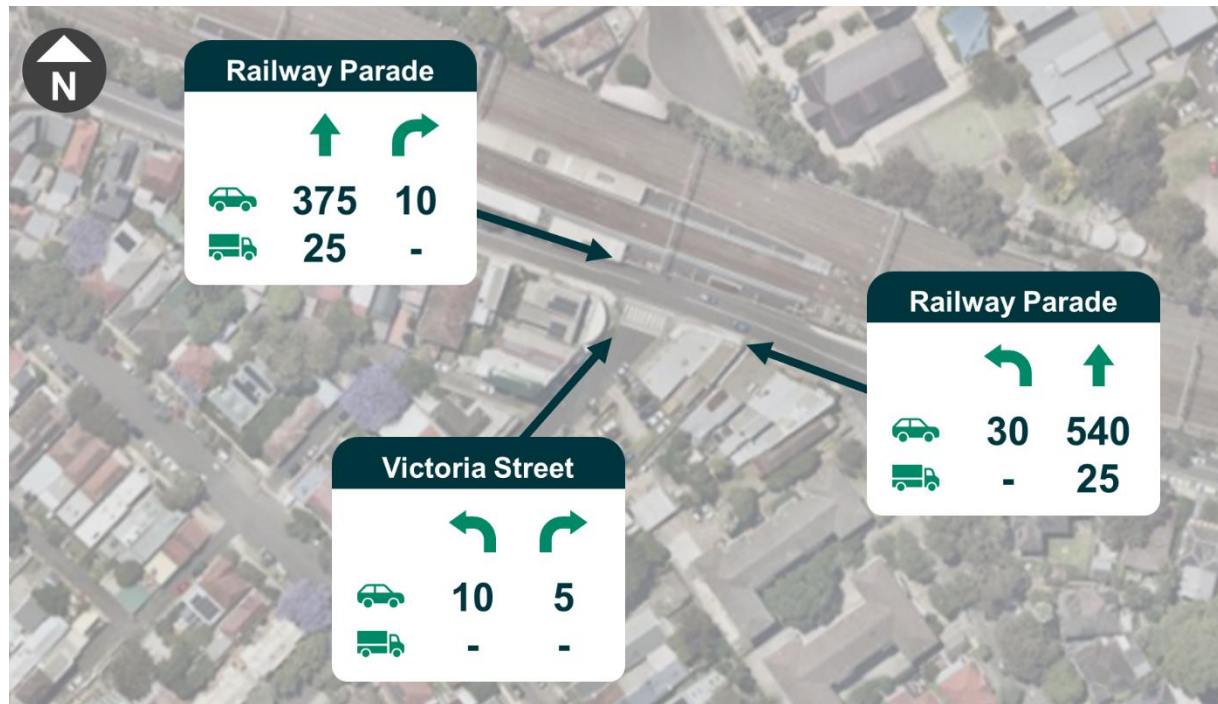


Figure 2-4 Traffic volumes during weekday peak one hour within survey period (10:00am to 3:00pm)

Figure 2-5 presents a summary of traffic volumes during the weekend peak within the survey period (11:15am to 12:15pm) at the intersection of Railway Terrace and Victoria Street.

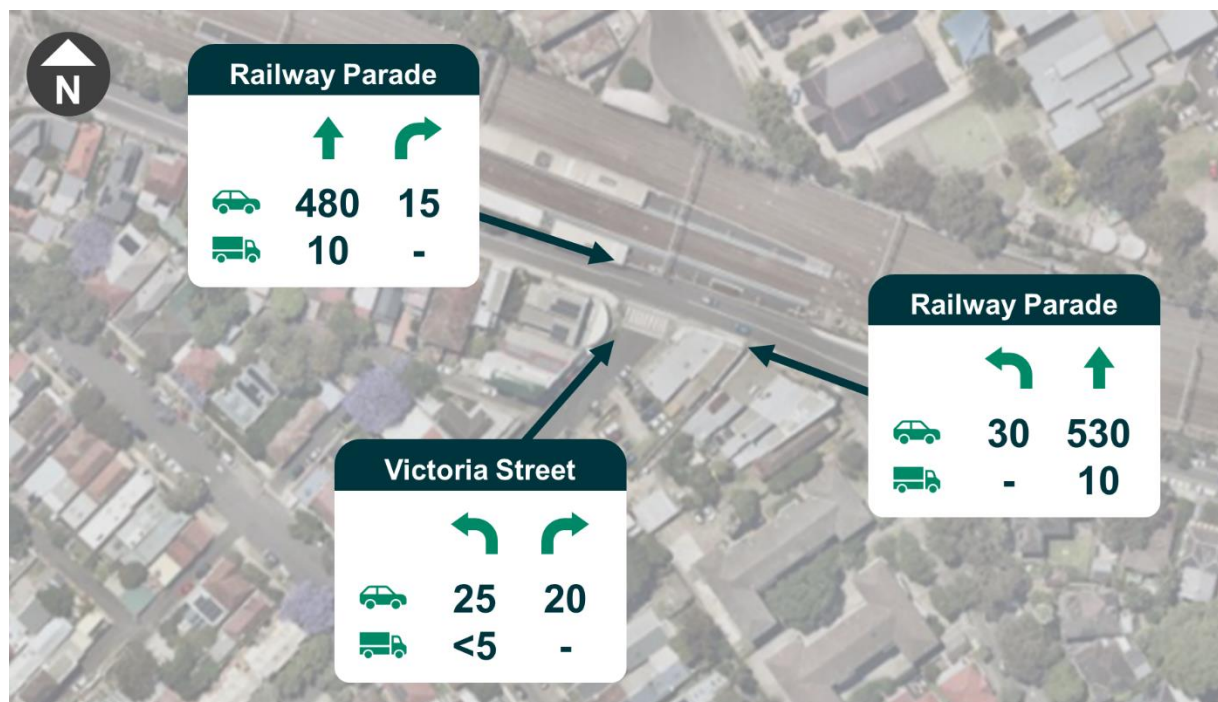


Figure 2-5 Traffic volumes during weekend peak one hour within survey period (10:00am to 6:00pm)

Figure 2-6 presents a summary of traffic volumes during the weekday peak within the survey period at the intersection of Railway Terrace, Old Canterbury Road and Longport Street.

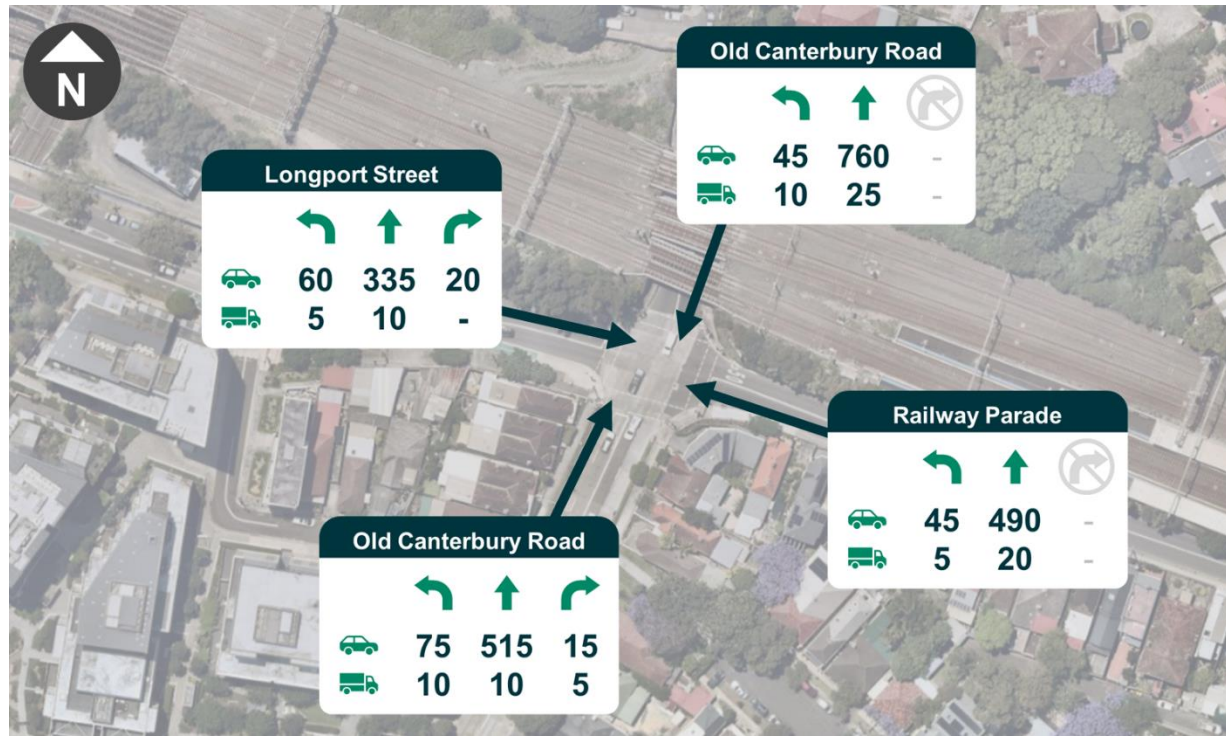


Figure 2-6 Traffic volumes during weekday peak one hour within survey period (10:00am to 3:00pm)

Figure 2-7 presents a summary of traffic volumes during the weekend peak within the survey period at the intersection of Railway Terrace, Old Canterbury Road and Longport Street.

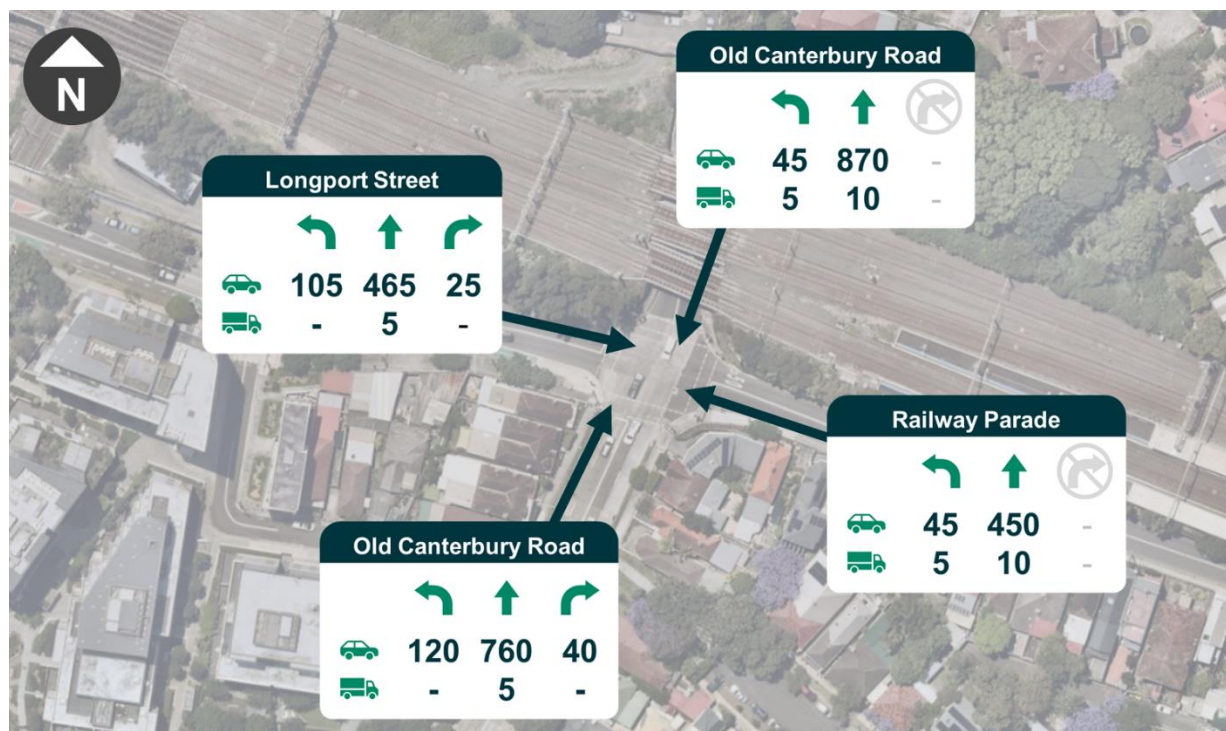


Figure 2-7 Traffic volumes during weekend peak one hour within survey period (10:00am to 6:00pm)

2.2.2.2 Mid-blocks

Mid-block traffic surveys were also undertaken between Wednesday 20 November 2024 and Tuesday 3 December 2024 at the following locations within the local road network surrounding Lewisham Station:

1. **Henry Street** between Henry Lane and Victoria Lane
2. **Hobbs Street** between Denison Road and Victoria Street
3. **Denison Road** between Hobbs Street and Hunter Street
4. **Hunter Street** between Railway Terrace and Hunter Street.

Figure 2-8 shows the average traffic volumes at the above locations during the AM weekday peak (8:00am to 9:00am) within the survey period.

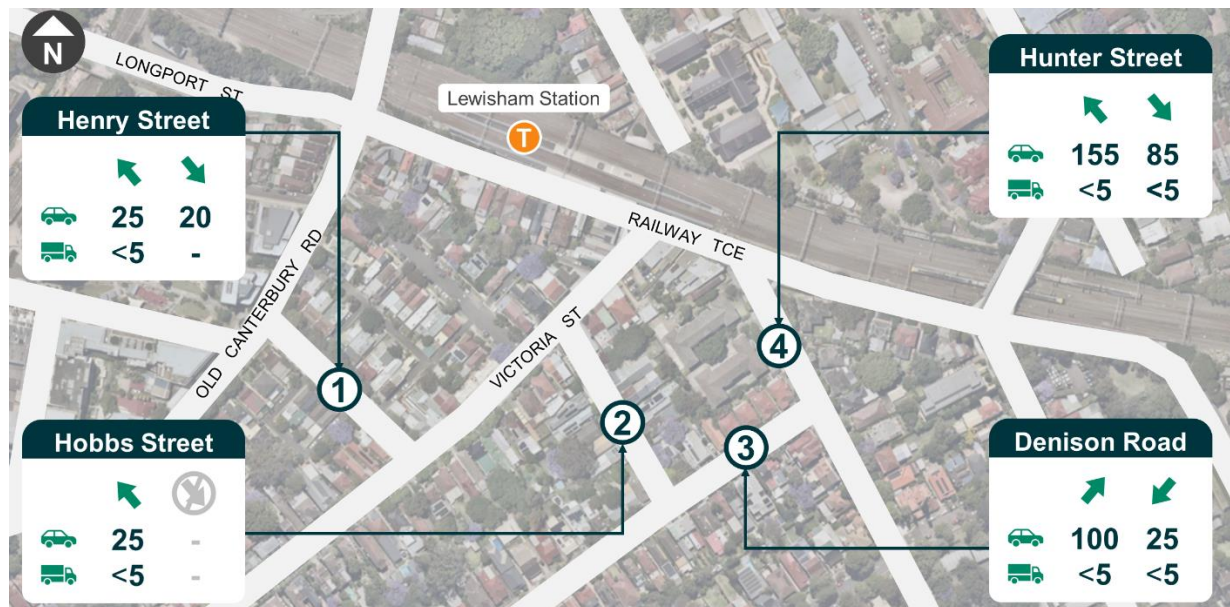


Figure 2-8 Average volumes during AM weekday peak within survey period

Figure 2-9 shows the average traffic volumes at the above locations during the PM weekday peak (5:00pm to 6:00pm) within the survey period.

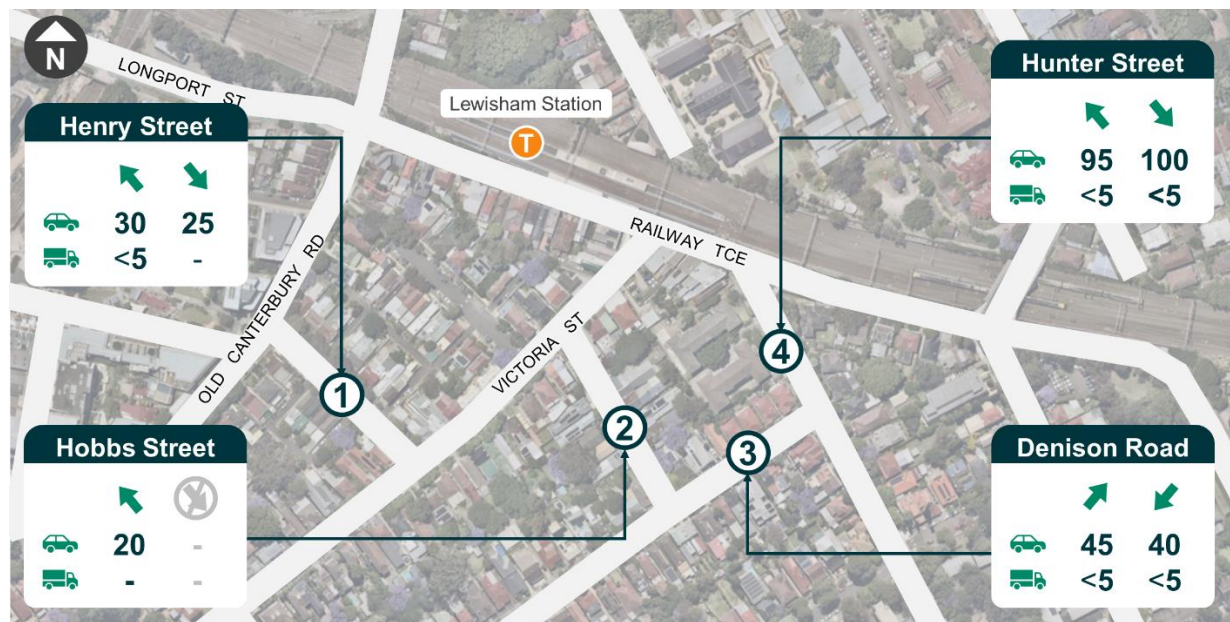


Figure 2-9 Average volumes during PM weekday peak within survey period

2.2.3 Road network performance

The intersection of Railway Terrace, Old Canterbury Road and Longport Street was modelled in SIDRA Intersection to assess current performance and determine the potential impact of removing vehicle access from Railway Terrace onto Victoria Street, proposed as part of the Lewisham Station upgrade.

The critical outputs from SIDRA are described in Table 2-1.

Table 2-1 SIDRA modelling outputs

Output	Description
Degree of saturation (DOS)	<ul style="list-style-type: none"> Ratio of the arrival (demand) flow rate to the capacity of the approach or intersection during a given flow period. Where DOS is close to 1.00, the traffic demand is effectively equal to the capacity of the approach or intersection
95 th percentile vehicle queue (m)	<ul style="list-style-type: none"> A statistical value which represents the queuing experienced on an approach to an intersection.
Average delay (seconds) and level of service (LOS)	<ul style="list-style-type: none"> Average delay is commonly used to assess the operational performance of intersections, with LOS used as an index.

The commonly used measure of intersection performance, as defined by Transport, is vehicle delay and LOS. Table 2-2 presents the criteria that SIDRA adopts in assessing the LOS. Common practice suggests that when intersection performance falls below a LOS D, investigations should be initiated to determine if suitable remediation can be provided.

Table 2-2 SIDRA LOS criteria

LOS	Average delay per vehicle (seconds)	Traffic signals and roundabouts	Give way and stop signs
A	Less than 14	Good operation	Good operation
B	15 to 28	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
C	29 to 42	Satisfactory	Satisfactory, but accident study required
D	43 to 56	Operating near capacity	Near capacity and accident study required
E	57 to 70	At capacity, at signals incidents will cause excessive delays	At capacity, requires other control mode
F	Greater than 70	Extra capacity required	At capacity, requires other control mode

Source: Guide to Transport Impact Assessment (TfNSW, 2024)

A summary of current performance during the weekday and weekend peaks within the survey periods presented in Section 2.2.2 at the intersection of Railway Terrace, Old Canterbury Road and Longport Street is shown in Table 2-3.

Table 2-3 Intersection performance – Existing 2024

Period	DOS	Average delay	Queue length	Level of service
Railway Terrace / Old Canterbury Road / Longport Street				
Weekday peak*	0.92	26 seconds	205 metres (East)	LOS B
Weekend peak*	0.90	34 seconds	300 metres (North)	LOS C

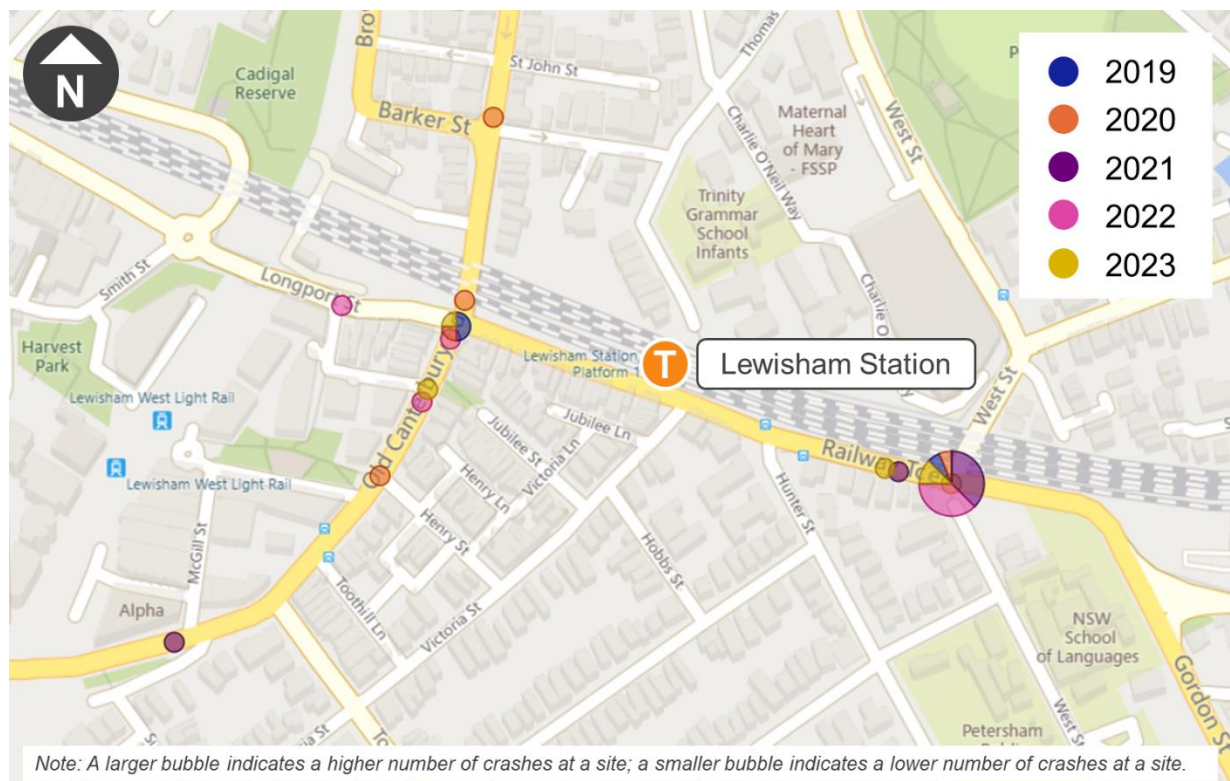
*Weekday and weekend peaks during the survey period only (Weekday: 10:00am to 3:00pm, Weekend: 10:00am to 6:00pm)

As shown in Table 2-3, the intersection of Railway Terrace, Old Canterbury Road and Longport Street operates satisfactorily at a LOS C or better during the weekday and weekend peak periods. Average delays are generally moderate, with increased queueing on weekends compared to weekdays. Queueing and delays are greatest on Railway Terrace on weekdays and the northern approach of Old Canterbury Road on weekends.

2.2.4 Road safety

During the latest finalised 5-year reporting period (2019 to 2023), there were 31 reported crashes within the locality surrounding Lewisham Station. This included six crashes with serious injuries and no crashes with fatalities. A cluster of 20 crashes occurred at the intersection of Railway Terrace and West Street (approximately 245 metres east of Lewisham Station), including three crashes with serious injuries. One incident at this intersection involved a pedestrian. Additionally, there was a smaller cluster of four crashes at the intersection of Railway Terrace and Old Canterbury Road, including one crash with serious injuries.

No crashes were reported within the immediate vicinity of either entrance to Lewisham Station on Thomas Street or Railway Terrace. Figure 2-10 shows reported crashes within the locality surrounding Lewisham Station between 2019 and 2023.



Data Source: TfNSW, 2024

Figure 2-10 Lewisham Station crash map

2.3 Car parking

Commuter car parking is not currently provided at Lewisham Station. Kerbside parking is available on Thomas Street to the north of the station, as well as Victoria Street and Hunter Street to the south.

Time-restricted parking spaces are likely to be utilised by residents and visitors to Lewisham local centre, Church of Saint Thomas Canterbury, Eileen O'Connor Catholic College and The John Berne School. Local permit holders are exempt from the time-restrictions that apply to parking on some of these streets.

Unrestricted parking is also available which may be used by some rail customers; however, this is also likely to be heavily utilised by residents. Figure 2-11 shows existing parking within the area surrounding Lewisham Station.

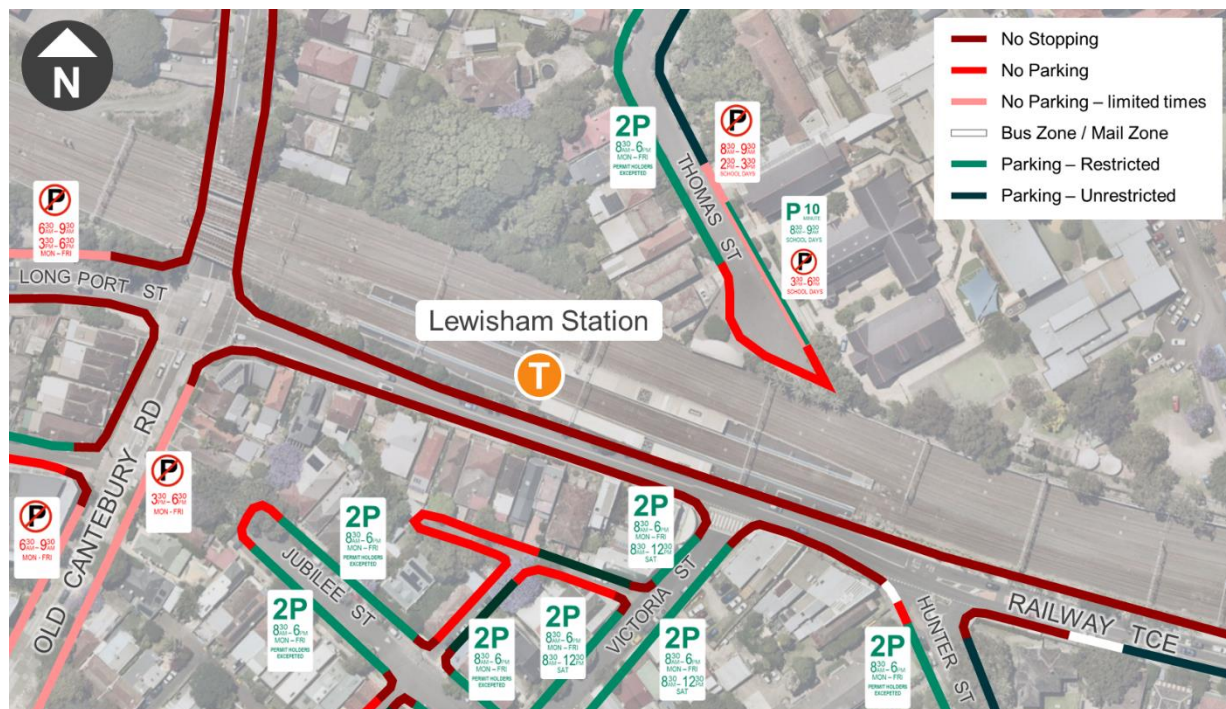


Figure 2-11 Existing parking within area surrounding Lewisham Station

2.4 Public transport

2.4.1 Station layout and access

Lewisham Station has one island platform and one side platform with two tracks. Four additional tracks bypass Lewisham Station to the north and are utilised by services on the T1 Western, T9 Northern, Central Coast and Newcastle, Blue Mountains and Regional NSW Lines.

Entrances to Lewisham Station are provided on Thomas Street to the north and Railway Terrace to the south with step-only access to an underpass between these entrances. Additional stairs connect the underpass to the station platforms. This station is not accessible for wheelchair users.

2.4.2 Station facilities

The following facilities are currently provided at Lewisham Station:

- hearing loop
- departure screens
- public address systems
- platform edge tactiles
- opal card top-up machine / ticket machine

- payphone
- departure screens
- emergency help point
- bicycle racks
- kiss and ride stopping area
- unisex toilet.

2.4.3 Rail services

Lewisham Station is served by the T2 Leppington and Inner West and T3 Liverpool and Inner West Lines, providing train services between the City and Parramatta, Liverpool or Leppington.

Platform 1 is serviced by trains towards the city whilst Platform 2 is serviced by trains towards Parramatta, Liverpool and Leppington. The number of services stopping at Lewisham Station during the AM and PM two-hour peak periods are shown in Table 2-4.

Table 2-4 Rail Services at Lewisham Station

Direction	AM Weekday Peak (7:00pm to 9:00am)	PM Weekday Peak (5:00pm to 7:00pm)
T2 Leppington and Inner West		
City to Parramatta or Leppington	8	15
Parramatta or Leppington to City	14	8
T3 Liverpool and Inner West		
City to Liverpool or Lidcombe	-	6
Liverpool or Lidcombe to City	7	-

Source: TfNSW, 2024

2.4.4 Bus network

Bus stops are provided on the southern side of Lewisham Station in both directions on Railway Terrace (Stop ID 204918 and 204927). The bus stops are serviced by the following routes:

- 413 – Campsie to Central Pitt Street
- N50 – Liverpool to City Town Hall via Strathfield (Night Service).

The westbound bus stop (Stop 204927) is accessed from Lewisham Station via the zebra crossing on Victoria Street and by crossing at the pedestrian refuge island on Hunter Street. The eastbound bus stop (Stop 2049218) is accessed via the same route by utilising the pedestrian refuge island crossing over Railway Terrace near the intersection with Hunter Street. There is no direct access along the northern side of Railway Terrace between this stop and the station.

Footpaths are provided for both stops, with a shelter and seating also provided for the westbound stop (Stop ID 204927). Figure 2-12 presents the bus stops and bus services servicing Lewisham Station.

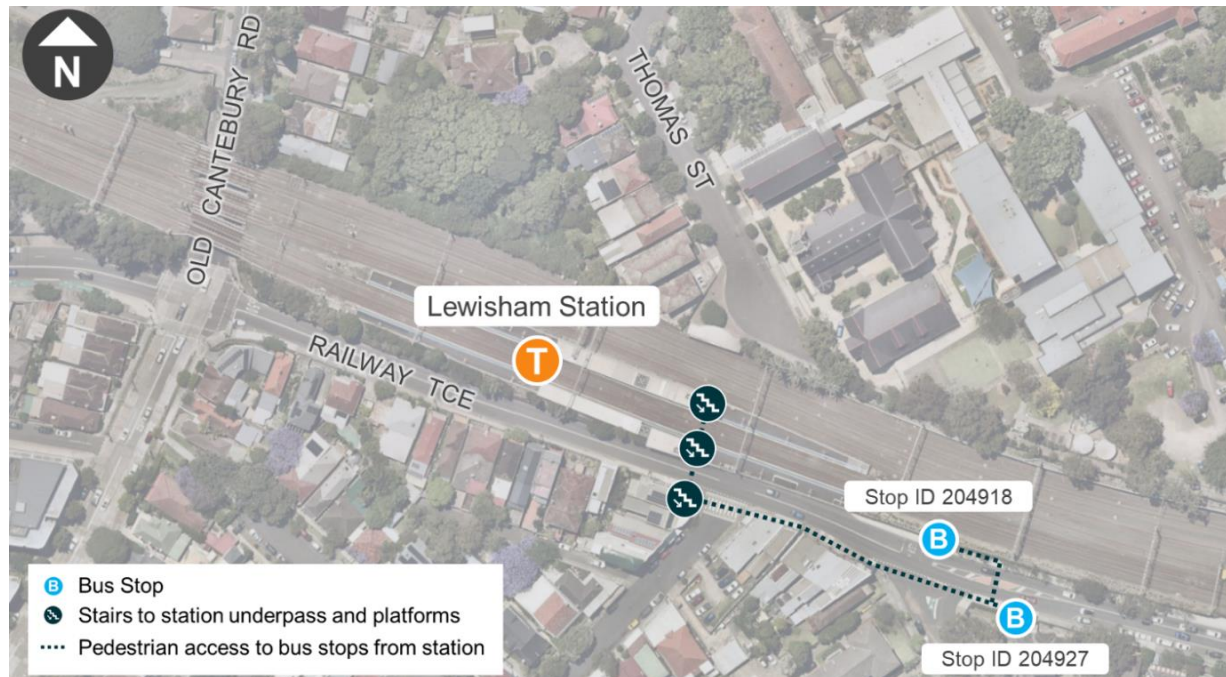


Figure 2-12 Bus stops at Lewisham Station

2.4.5 Light rail network

Lewisham West Light Rail Station is a 450 metre walk from Lewisham Station via Railway Terrace, Old Canterbury Road and Hudson Street. Lewisham West Station is serviced by the L1 Dulwich Hill line, with services towards Central to the north and Dulwich Hill to the south at a frequency of every 6 minutes during the peak and every 10 to 15 minutes off-peak and weekends.

Dulwich Hill West Station is accessible with step-free access from Hudson Street. Figure 2-13 shows the location of Lewisham West Light Rail Station and the L1 Dulwich Hill Line.



Figure 2-13 Lewisham West Light Rail Station and L1 Dulwich Hill Line

2.5 Active transport

2.5.1 Walking

As discussed in Section 2.4.1, Lewisham Station is accessed via an underpass, with entrances provided on Thomas Street to the north and Railway Terrace to the south.

At the northern station entrance on Thomas Street, footpaths are provided on both sides of the road. At the southern station entrance on Railway Terrace, a footpath is provided on the southern side only. Further east a footpath is provided on the northern side to accommodate access to the eastbound bus stop.

Victoria Street has footpaths on both sides, with an east-west pedestrian crossing provided at the intersection with Railway Terrace. It is noted that the total number of pedestrians using this crossing is more than double the number of vehicles entering and exiting Victoria Street throughout the day. This is likely due to its close proximity with Lewisham Station and adjoining mixed-use commercial centre.

Refuge islands are provided at the intersection of Railway Terrace and Hunter Street. Figure 2-14 shows pedestrian facilities surrounding Lewisham Station.

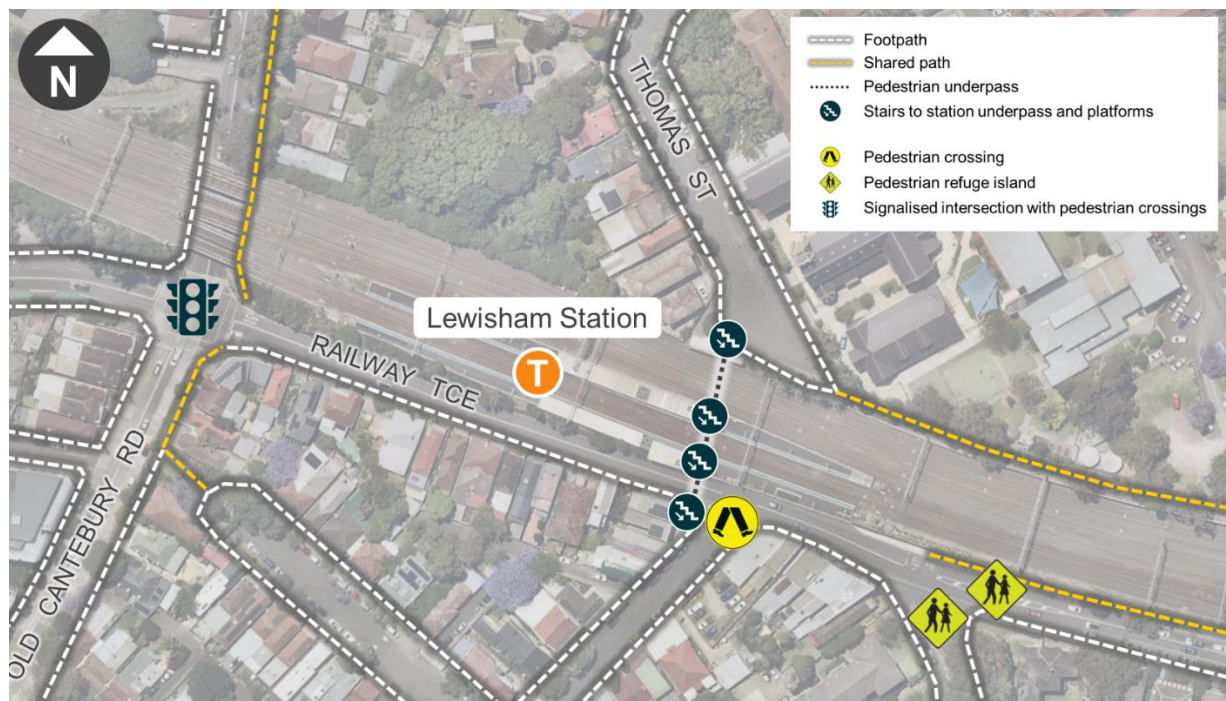


Figure 2-14 Pedestrian Facilities at Lewisham Station

2.5.2 Cycling

A shared path is provided on the northern side of Lewisham Station from the entrance on Thomas Street, continuing east along the northern edge of the railway alignment to West Street. A shared path is also provided on the southern side along Railway Terrace from Hunter Street, continuing east towards Crystal Street. The Shared Paths connect to the surrounding cycling network via local residential streets.

Bicycle parking at Lewisham Station is well utilised and is provided at both station entrances. Three bicycle hoops and five bicycle racks (11 bicycle parking spaces in total) are provided on the northern side with no weather protection. Three bicycle hoops also provided on the southern side under an awning from an adjacent building. The surrounding cycling network and bicycle parking at Lewisham Station are shown in Figure 2-15.



Figure 2-15 Bicycle Parking and Surrounding Cycle Network at Lewisham Station

2.6 Kiss and ride and taxi facilities

An informal kiss and ride 'stopping area' is provided at Lewisham Station on Thomas Street. Whilst this is not formally signposted, the turning head on Thomas Street has a No Parking Zone which legally allows drivers to stop for less than two minutes for passenger set-down and pick-up. Additionally, time-restricted parking and No Parking Zones are provided on Thomas Street adjacent to Eileen O'Connor Catholic College and the John Berne School from 8:30am to 9:30am and from 2:30pm to 3:30pm.

Kerbside access on the southern side of the station is limited to two hours and unrestricted parking spaces, however this is likely to be occupied at most times of the day by local residents and visitors to Lewisham local centre as well as some rail customers. There is currently no taxi rank provided at Lewisham Station. Refer to Section 2.3 for detailed information on existing carparking within the area surrounding Lewisham Station.

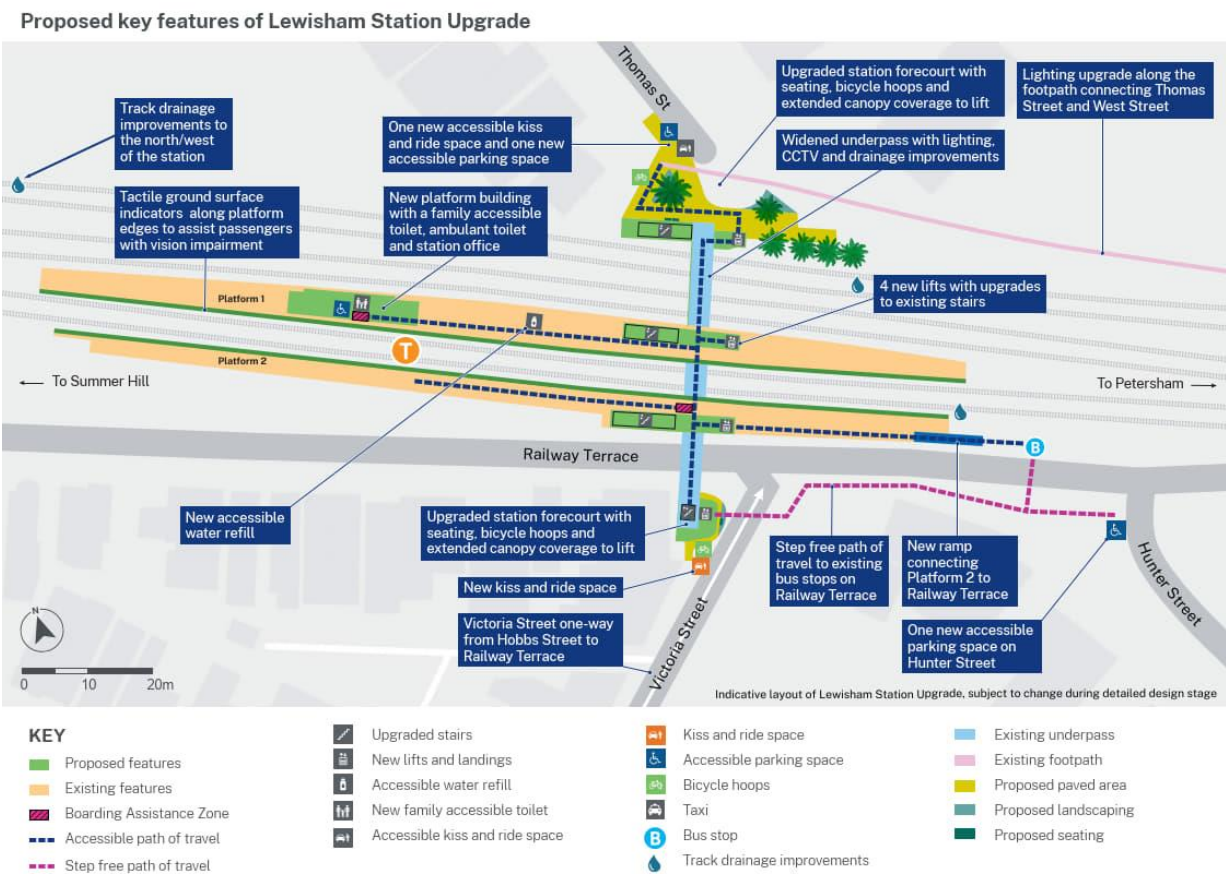
3.0 Proposed station upgrade

3.1 Scope of work

The purpose of the SAT program is the delivery of upgrades at stations across NSW in accordance with the *DSAPT* to comply with accessibility targets for public transport prescribed under the *DDA*. The scope of work for the Lewisham Station upgrade includes:

- provision of four new lifts
- modification of the existing underpass including drainage, lowered floor and new openings for lift access
- new canopies at lift entries and replacement canopies at Thomas Street and Victoria Street entrances to the station
- a new station building on Platform 1 including a family accessible toilet (FAT), a unisex ambulant toilet, station office, electrical services enclosure and a station storage room
- platform regrading and resurfacing, new tactile ground surface indicators (TGSIs) and relocated platform furniture.
- a new station access ramp from Railway Terrace to Platform 2
- road adjustments and upgrades to station forecourts including:
 - Victoria Street – adjustment to vehicle direction of travel, footpath widening and regrading, roadwork, paving, landscaping, new seating, relocation of bicycle hoops and a new kiss and ride space
 - Hunter Street – an accessible parking space, roadwork, kerb ramp and footpath adjustments
 - Thomas Street – adjustment to kerb alignment, roadwork, paving, landscaping, new seating, new bicycle hoops, a new kiss and ride space and footpath adjustment
 - Railway Terrace – adjustment to kerb ramps, footpaths and roadwork
- lighting, including to the pathway between Thomas Street and West Street
- ancillary work including station power supply upgrade, protection and relocation of services and utilities, handrails and fencing, new ticketing facilities including additional Opal card readers, improvement to station communications systems (including CCTV cameras and help points), landscaping, wayfinding and regulatory signage, drainage work including track drainage and public art.

Figure 3-1 shows the key features of the proposed Lewisham Station upgrade.



Source: Transport for NSW, 2024

Figure 3-1 Key features of Lewisham Station upgrade (indicative only, subject to detailed design)

3.2 Construction activities

Subject to approval, construction is expected to commence in early 2026 and continue for around 24 months. The first four months would be enabling work, and 20 months would be required for the main work to upgrade the station. Table 3-1 presents an overview of the proposed construction staging and key activities during each phase of the Lewisham Station upgrade.

Table 3-1 Indicative construction staging

Stage	Key activities
Site establishment and enabling work	<ul style="list-style-type: none">establishment of construction compounds (i.e. erect fencing, site offices, amenities and plant/material storage areas)establishment of temporary facilities (e.g. hoarding, construction staff toilets, station master's office etc.)relocation of servicesadditional site investigations and surveys.
Weekend Rail Possession No. 1	<ul style="list-style-type: none">complete service diversions and changeoversPlatform 1, Platform 2 and Railway Terrace lift piling worklocal underpass floor / wall breakout and removalPlatform 1 and Platform 2 stair breakoutnew station building excavation and buried ducting on Platform 1new Platform 1 and Platform 2 temporary stairnew underpass temporary floorcomplete temporary hoarding in platform work areatrack drainage improvements.

Stage	Key activities
Main Work No. 1	<ul style="list-style-type: none"> civil work at Thomas Street and Railway Terrace relocation of Telstra, Gas, Sydney Water services new platform building formwork and steel reinforcement railway Terrace lift piling work vegetation removal for padmount transformer civil work padmount transformer civil work.
Weekend Rail Possession No. 2	<ul style="list-style-type: none"> Platform 1 lift piling (trackside) Platform 2 lift piling Platform 2 stair work (damp-proof membrane, formwork and steel reinforcement) Platform 2 bin store area work reinstall temporary Platform 2 stairs local underpass drainage, waterproofing and blinding track drainage improvements.
Main Work No. 2	<ul style="list-style-type: none"> Railway Terrace civil work relocate Telstra, Gas, Sydney Water services drainage connections work new station building formwork and steel reinforcement on Platform 1 new platform ducting work on Platforms 1 and 2 crane in new padmount transformer.
Weekend Rail Possession No. 3	<ul style="list-style-type: none"> complete service diversions and changeovers along Thomas Street retaining wall Thomas Street lift piling work (trackside) Thomas Street staircase removal and temporary work to maintain stairway access continue Platform 1 lift piling work (trackside) platform 1 stair work (damp-proof membrane , formwork, steel reinforcement) new platform building concrete pour underpass wall breakout and removal re-install temporary underpass floor and Platform 1 stairs Railway Terrace piling work (contingency) padmount civil work Galvanised steel trough (GST) for new Ausgrid power supply.
Main Work No. 3	<ul style="list-style-type: none"> Thomas Street piling and civil work Railway Terrace lift and civil work station building structure work station building canopy work drainage connections work electrical Ausgrid supply and distribution boards work.
Weekend Rail Possession No. 4	<ul style="list-style-type: none"> complete Platform 1 lift piling (trackside). local underpass base slab (concrete pour) excavate Platform 2 for lift pile caps Platform 2 stair work (first concrete pour) Platform 2 bin store area work reinstall temporary Platform 2 stairs.
Main Work No. 4	<ul style="list-style-type: none"> Railway Terrace civil and lift work. station building structural work on Platform 1.
Weekend Rail Possession No. 5	<ul style="list-style-type: none"> excavate Platform 1 for lift pile caps Platform 1 stair work (first concrete pours) re-install temporary Platform 1 stairs

Stage	Key activities
	<ul style="list-style-type: none"> complete new underpass walkway complete Thomas Street lift piling work (trackside) Thomas Street stair (damp-proof membrane, formwork, steel reinforcement) complete Ausgrid supply.
Main Work No. 5	<ul style="list-style-type: none"> Thomas Street civil and lift work Railway Terrace civil and lift work Platform 1 and Platform 2 lift pile caps (form, steel reinforcement and pour) Platform 1 and Platform 2 lift excavation (Top Down) Platform building fit out work new platform lighting and comms work form and steel reinforcement Platform 1 and Platform 2 lift upstands.
Weekend Rail Possession No. 6	<ul style="list-style-type: none"> continue excavation for Platform 1 and Platform 2 lifts form, steel reinforcement and pour Platform 1 and Platform 2 lift upstands Platform 1 and Platform 2 stair work (concrete finishing) install underpass structural walls install canopy elements on new station building complete Platform 2 bin store area work Ausgrid supply changeover (from Sydney Trains) decommission existing Sydney Trains supply.
Main Work No. 6	<ul style="list-style-type: none"> civil work for Sydney Trains Supply Transformer Thomas Street lift and civil work platform building fit out civil work.
Weekend Rail Possession No. 7	<ul style="list-style-type: none"> Thomas Street lift and lobby excavation work Platform 1 lift wall work (trackside) install underpass services and wall cladding and finishes civils work for Sydney Trains supply transformer crane in new Sydney Trains padmount.
Main Work No. 7	<ul style="list-style-type: none"> Thomas Street lift and civil work Railway Terrace civil work Platform 1 and Platform 2 lift concrete work completion Thomas Street and Railway Terrace lift concrete work completion completion of platform lighting and comms work.
Weekend Rail Possession No. 8	<ul style="list-style-type: none"> crane in Platform 1 and Platform 2 lift and canopy top hats Platform 1 and Platform 2 stair completion Thomas Street stair completion Railway Terrace stair completion underpass upgrade completion commission new distribution boards and Sydney Trains supply Ausgrid supply transferred to backup complete canopy work on new platform building.
Main Work No. 8	<ul style="list-style-type: none"> Railway Terrace lift fit out civil work Platform 1 and Platform 2 lift fit out civil work finalise and commission services installation and tidy up work in underpass. Thomas Street and Railway Terrace canopy work entrance lighting and comms work Victoria Street / Railway Terrace roadwork and landscaping work Thomas Street roadwork and landscaping.

Stage	Key activities
Weekend Rail Possession No. 9	<ul style="list-style-type: none"> • Thomas Street lift and lobby excavation work • lift lobby completion • deliver Thomas Street canopy top hat • Thomas Street canopy work.
Main Work No. 9	<ul style="list-style-type: none"> • Thomas Street, Railway Terrace, Platforms 1 and 2 lift fit out work • Thomas Street and Railway Terrace canopy work* • commission platform lighting and comms work • commission new entrance lighting and comms • Victoria Street / Railway Terrace roadwork and landscaping • Thomas Street roadwork and landscaping • commission new lifts (x4). <p>*Note: opportunities would be explored to bring the canopy work forward, subject to detailed design and final construction methodology.</p>
Weekend Rail Possession No. 10	<ul style="list-style-type: none"> • resurfacing on Platforms 1 and 2 • install new platform furniture, tactiles etc. • commission final work.
Main Work No. 10	<ul style="list-style-type: none"> • tidy-up work • demobilisation of construction compounds • handover.

3.2.1 Working hours

The majority of work required for the Proposal would be undertaken during standard (NSW) Environment Protection Authority (EPA) construction hours, which are as follows:

- 7.00 am to 6.00 pm Monday to Friday
- 8.00 am to 1.00 pm Saturdays
- no work on Sundays or public holidays.

Certain work may need to occur outside standard hours and would include night work and work during routine rail possessions which are scheduled closures that would occur regardless of the Proposal when part of the rail network is temporarily closed, and trains are not operating. It is estimated that approximately 10 rail possessions would be required.

In addition, there may be some work such as geotechnical investigation, surveys or excavation activities that occur during mid-week possessions. Typically, these would occur between midnight and 4am between Monday and Thursday.

Out of hours work may also be scheduled outside rail possession periods to reduce the impact of the Proposal on the wider community and road network. This may include oversized plant and material deliveries, minor road work, and other platform work which would otherwise impact train passengers.

3.2.2 Workforce

It is anticipated that a peak workforce of up to 60 workers per day would be required during possessions. This would reduce to around 25 construction workers for work outside of possessions.

The number and type of workers would vary throughout the different stages of construction but would include workers such as:

- plant and machinery operators
- traffic controllers
- labourers
- utility providers

- tradespeople
- environment / engineering service providers
- project and site managers.

Final details of the workforce required for the Proposal would be identified during detailed design by the Contractor.

3.2.3 Plant and equipment

Table 3-2 presents a summary of plant and equipment that would be required for the Lewisham Station upgrade.

Table 3-2 Plant and equipment required for Lewisham Station upgrade

Equipment	Required use	
	Weekend Rail Possession Period	Non-Possession Period
Piling rig and equipment	✓	✓
Hi-Rail piling rig and equipment	✓	
Mobile cranes	✓	✓
Mini excavators	✓	
Excavators	✓	✓
Hi-Rail excavator and wagons	✓	
Concrete pump and truck	✓	✓
Spoil trucks	✓	✓
Mini rollers	✓	✓
Concrete saws	✓	✓
Concrete vibrators	✓	✓
Flatbed trucks	✓	✓
Forklifts	✓	✓
Grinders	✓	✓
Hand tools	✓	✓
Jackhammers	✓	✓
Lighting towers (diesel generators)	✓	
Suction trucks	✓	✓
Vibratory rollers	✓	✓
Dump trucks	✓	✓
Elevated work platforms	✓	✓
Road sweeper	✓	✓
Semi-trailers	✓	✓

Source: AECOM, 2024

3.2.4 Earthwork

Excavations and earthwork would generally be required for the following:

- the foundations and pits for the new lift shafts and lifts at each lift location
- the construction of regraded footpaths and station entrances
- lowering the underpass
- retaining walls
- other minor civil work including platform regrading, footings and foundations and drainage/stormwater work.

3.2.5 Construction compound and laydown areas

A maximum of two temporary construction compounds would be required to accommodate a site office, amenities, laydown and storage area for materials. Three suitable areas for the construction compounds have been identified in the following locations; however, only two would be used during construction:

- Thomas Street at Lewisham Station
- Alfred Street (within SP2 land use zone)
- Longport Street (within SP2 land use zone).

Two parking spaces for work vehicles would be provided within the Alfred Street construction compound and four parking spaces for work vehicles in the Longport Street construction compounds. There would be no parking provision for work vehicles within the Thomas Street construction compound.

Figure 3-2 shows the proposed construction compounds and laydown areas.



Figure 3-2 Proposed temporary construction compounds and laydown areas for Lewisham Station upgrade

3.2.6 Construction vehicle routes

The following State roads are proposed to be used for construction vehicle access to and from Lewisham Station.

- Great Western Highway (Parramatta Road) for vehicles approaching from the east and west
- Old Canterbury Road for vehicles approaching from the south.

The proposed routes minimise the use of local roads in the Lewisham area to reduce the potential impact on local road traffic and accommodate the size of construction vehicles used for delivery of large elements such as plant and equipment, crane components and large prefabricated elements.

Vehicle movements would need to be appropriately coordinated to ensure adherence with turning restrictions, height restrictions and load limits on the proposed routes. Relevant restrictions are shown in Figure 3-3 for inbound routes and Figure 3-4 for outbound routes.

Figure 3-3 shows the proposed access routes for construction vehicles travelling to Lewisham Station.

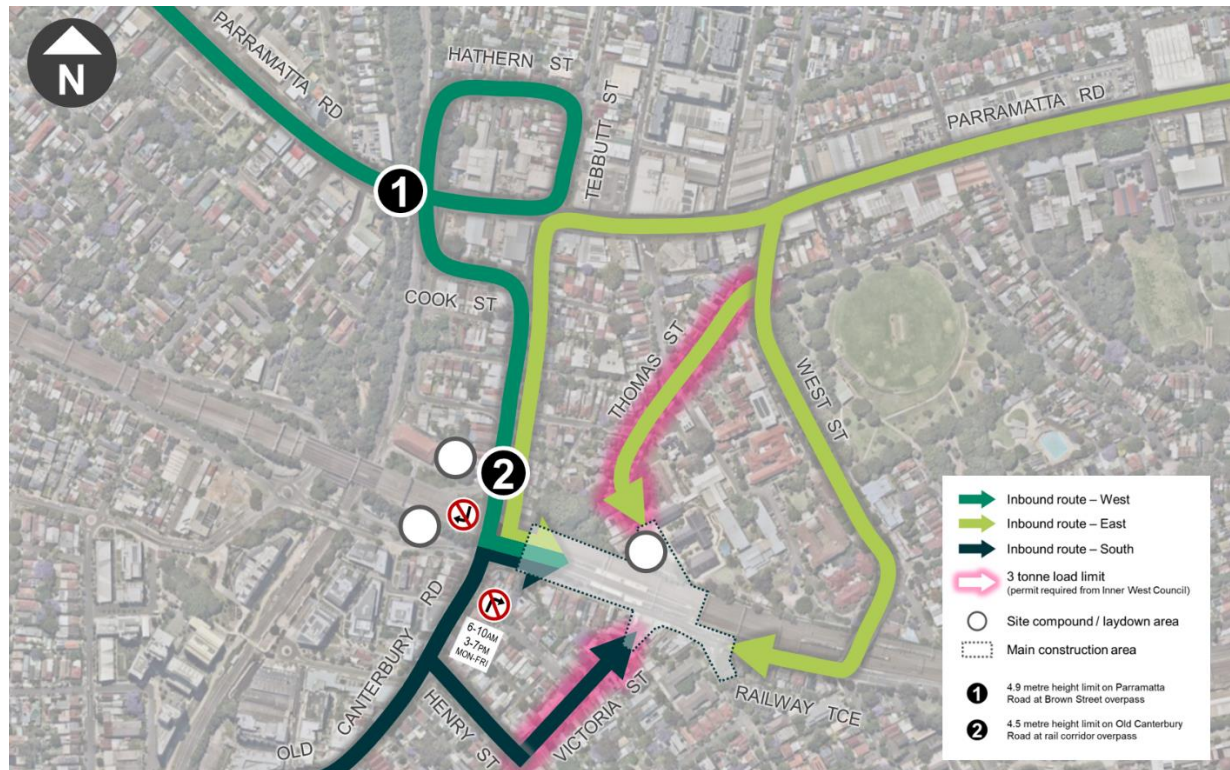


Figure 3-3 Proposed construction vehicle access routes to Lewisham Station (Inbound)

Figure 3-4 shows the proposed access routes for construction vehicles travelling from Lewisham Station.

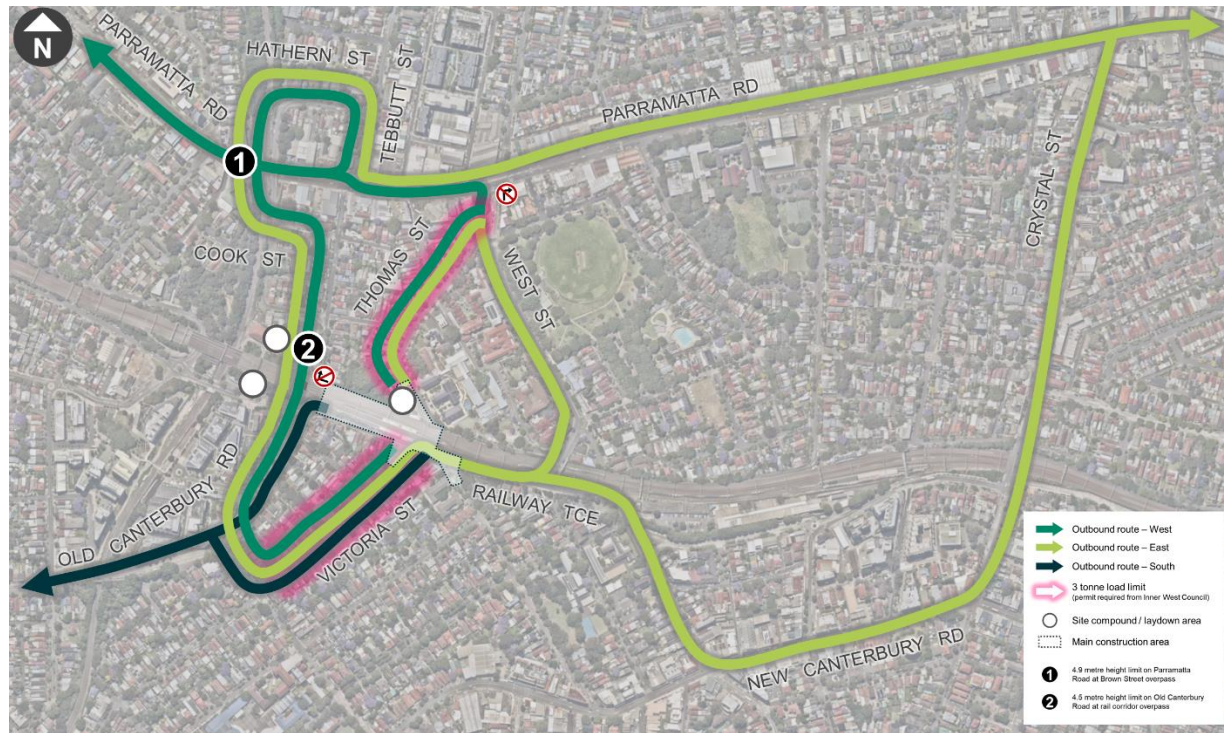


Figure 3-4 Proposed construction vehicle routes from Lewisham Station (Outbound)

Additional heavy vehicles would also travel to and from hi-rail vehicle access points at Stanmore, Petersham and / or Ashfield as follows:

- **Stanmore:** Up to ten heavy vehicles for four rail possessions. The access point is located on Railway Avenue, east of Warwick Street.
- **Petersham / Ashfield:** Up to ten heavy vehicles for six rail possessions. The access points are located on:
 - Petersham: Railway Terrace, north of Trafalgar Street
 - Ashfield: Grimmond Avenue, north of Liverpool Road.

Due to the proximity of Petersham Training College hi-rail access pad to Lewisham Station, it is assumed that this location would be prioritised over the Ashfield location, unless issues were encountered at Petersham.

4.0 Construction impacts

4.1 Road network

4.1.1 Road network performance

The majority of construction vehicles generated by the Proposal during construction are expected to be light vehicles (including utilities) for construction workers, with up to 25 light vehicles per day. This would increase to 60 light vehicles per day during weekend rail possession periods, noting that these are generally undertaken on weekends.

Up to 15 heavy vehicle movements are also anticipated each day which would generally consist of deliveries and spoil removal. Additionally, ten heavy vehicles would also travel to and from hi-rail vehicles access points at Stanmore for four rail possessions, and Petersham / or Ashfield for six planned rail possessions.

It is anticipated that construction traffic resulting from the Proposal would cause a minor increase in traffic volumes on key routes, which would fall within the range of daily variations. The majority of construction traffic would occur outside of network peak periods and would be distributed throughout the working day. On this basis, the overall impact of construction on the road network is anticipated to be minor.

Temporary closures of Thomas Street, Victoria Street and Railway Terrace would be required to accommodate certain construction activities. Any temporary closure of Railway Terrace would notably impact through-access for vehicles travelling east-west along the southern side of the rail corridor. It is likely that vehicles would be diverted onto New Canterbury Road, Toothill Street then New Canterbury Road to the south, or West Road and Parramatta Road to the north.

Whilst any closures of Railway Terrace would likely be undertaken on weekends to minimise impacts, up to 600 vehicles per hour would be diverted in each direction. Further assessment of detour routes and / or other traffic management would be required as part of any future Construction Traffic Management Plan (CTMP).

4.1.2 Road safety

Short-combination trucks up to 19 metres long and portable cranes up to 14.5 metres long are generally anticipated to be the largest heavy vehicles accessing the relevant temporary construction compounds and laydown areas.

Appropriate measures such as traffic controllers would be required to minimise the safety risk posed by these heavy vehicles to other road users when entering and exiting the construction compounds and laydown areas. This is of particular importance for cyclists and pedestrians, including school students accessing Eileen O'Connor Catholic College or the John Berne School from Lewisham Station who would pass the proposed site compound on Thomas Street.

4.2 Parking

Two time-restricted parking spaces would be removed on Thomas Street throughout construction to accommodate a proposed temporary construction compound. Additionally, construction activities may generate car parking impacts for short periods of time for up to nine time-restricted spaces on Victoria Street and Hunter Street.

Two parking spaces for work vehicles would be provided at the Alfred Street compound and four spaces would be allocated within the Longport Street compound. There would be no parking provision for work vehicles within the Thomas Street compound.

As there would typically be up to 25 light vehicles per day accessing the compounds, it is likely that some on-street parking would also be utilised by workers during the construction period.

This may temporarily affect the availability of parking within the immediate vicinity of the site compounds. However, there is additional parking available within the broader locality surrounding Lewisham Station. Mitigation measures to minimise impacts to street parking in the vicinity, such as carpooling by workers would be included in the Construction Traffic Management Plan for the Proposal.

Up to seven time-restricted parking spaces would be permanently removed to accommodate new accessible parking spaces and kiss and ride zones, as further discussed in Section 5.2.

4.3 Public transport

Rail services would not operate from Lewisham Station during weekend rail possessions. As these closures are already planned, services would be impacted regardless of the Proposal.

The existing bus stops at Lewisham Station on Railway Terrace (Stop ID 204918 and 204927) may be temporarily relocated during construction to accommodate construction activities. Temporary bus stops would be provided within proximity of the existing stop locations, with advanced warning and signage to minimise the impact on passengers.

There would be no direct impact to the Lewisham West Light Rail Station as a result of this Proposal.

4.4 Active transport

4.4.1 Walking

Pedestrian access to Lewisham Station would generally be maintained during construction, however disruptions would still occur to accommodate certain construction activities. Impacts are likely to be greatest for pedestrians accessing the station when construction work for the lifts, underpass and footpaths is being undertaken.

Temporary closures of the station underpass are likely to be required to accommodate certain construction activities, particularly during weekend rail possessions. Figure 4-1 shows alternative pedestrian access routes during temporary closures of Lewisham Station underpass. Additional options to achieve reasonable safe alternative access across the rail corridor would be investigated during detailed design.



Figure 4-1 Alternative pedestrian access routes during temporary closures of Lewisham Station underpass

Pedestrians travel times would increase during any underpass closures with up to 500 metres added to cross the rail corridor via West Street or Old Canterbury Road. It is noted that most rail corridor possessions and associated closures of the underpass would occur on weekends when demand is considerably lower.

4.4.2 Cycling

Temporary closures of the shared paths on the northern and southern sides of Lewisham may be required to accommodate certain construction activities. As noted in Section 4.1.1, temporary closures of Thomas Street, Victoria Street and Railway Terrace are likely to be required which would impact through-access for some cyclists. Appropriate detour routes and / or other traffic management arrangements would be implemented if these corridors are temporarily closed.

Bicycle parking facilities at Lewisham Station would be removed and replaced with new facilities during construction.

4.5 Kiss and ride and taxi facilities

The informal kiss and ride stopping area on Thomas Street would be impacted to accommodate a proposed construction compound and laydown area. A temporary kiss and ride zone would be provided

during construction on the western side of Thomas Street, impacting up to two time-restricted parking spaces during construction.

There are no existing taxi facilities at Lewisham Station, therefore there would be no direct impact on taxi services.

5.0 Operational impacts

5.1 Road network

5.1.1 Proposed changes

The Proposal includes the removal of vehicle access from Railway Terrace onto Victoria Street to accommodate the kerb extension required for the lift access point to Lewisham Station on Victoria Street. The section of Victoria Street between Railway Terrace and Hobbs Street would be converted to operate one-way northbound only. As shown in Figure 5-1, vehicles would be diverted to Hunter Street or Henry Street.



Figure 5-1 Diverted Vehicle Access Routes to Victoria Street

A new permanent ban on vehicles turning left from Railway Terrace onto Victoria Street would require vehicles accessing Victoria Street from the east to be diverted via Hunter Street, Denison Road, and Hobbs Street. Assuming a 0.5% growth rate in traffic volumes between 2024 and the opening year of 2027, this diversion would reroute around 15 vehicles during the AM peak and 40 vehicles during the PM peak from the left turn. Due to the relatively low vehicle volumes, there is likely to be little to no impact on the overall road network operation or intersection performance.

A new permanent ban on vehicles turning left from Railway Terrace onto Victoria Street, would require vehicles accessing Victoria Street from the west to be diverted via Old Canterbury Road and Henry Street. It is noted that this diversion route would be unavailable on weekdays from 6:00am to 10:00am and from 3:00pm to 7:00pm due to an existing ban on vehicles turning right from Longport Street onto Old Canterbury Road. Additionally, a ban on vehicles turning right from Railway Terrace onto Victoria Street operates during the same time periods under existing conditions, as well as a permanent ban on vehicles turning right from Railway Terrace onto Hunter Street. Therefore, no right turns are currently permitted for vehicles travelling eastbound on Longport Street or Railway Terrace during the weekday peak periods.

As these conditions would remain the same with the Proposal, there would be no additional impact to the operation of the road network during the weekday peak periods. Outside these times with the new permanent ban on vehicles turning right from Railway Terrace onto Victoria Street, up to 16 vehicles per

hour would be diverted onto Old Canterbury Road and Henry Street on weekdays and up to 18 vehicles per hour on weekends, representing a minimal increase in traffic volumes on these corridors.

Access for vehicles turning left from Victoria Street onto Railway Terrace would be maintained under the proposed one-way configuration. Due to a new permanent ban on vehicles turning right from Victoria Street onto Railway Terrace, up to 15 additional vehicles per hour on weekdays and 30 vehicles per hour on weekends would also be required to turn left on Railway Terrace, continuing west onto Longport Street before performing a U-turn on the roundabout back onto Longport Street at the intersection with Smith Street, Grosvenor Crescent and Carlton Crescent. It is noted that a ban on vehicles turning right from Victoria Street onto Railway Terrace already operates during the AM weekday peak, therefore there would be no additional impact on the road network during this period.

Overall, the one-way proposal for Victoria Street would enhance the performance of the Railway Terrace and Victoria Street intersection by diverting vehicles onto alternative routes. Fewer vehicles would use the intersection while pedestrian volumes would remain the same. The potential impact of this closure on the intersection of Railway Terrace, Old Canterbury Road and Longport Street is further discussed in Section 5.1.2.

5.1.2 Road network performance

The intersection of Railway Terrace, Old Canterbury Road and Longport Street was modelled in SIDRA Intersection to assess the potential impact on performance as a result of removing vehicle access from Railway Terrace onto Victoria Street, as proposed in the Lewisham Station upgrade. The critical outputs from SIDRA and existing performance of this intersection are described in Section 2.2.3. Further information on the proposed changes to Victoria Street access is provided in Section 5.1.1.

A summary of anticipated performance during the weekday and weekend peaks presented in Section 2.2.2 at the intersection of Railway Terrace, Old Canterbury Road and Longport Street with and without the Proposal in the planned opening year of 2027 is shown in Table 5-1. Diverted traffic volumes presented in Section 5.1.1 were included in the modelling for the “with Proposal” scenario.

Table 5-1 Intersection performance – Without Proposal (2027) and With Proposal (2027)

Period	Scenario	DOS	Average delay	Queue length	Level of service
Railway Terrace / Old Canterbury Road / Longport Street					
Weekday peak*	Without Proposal	0.93	27 seconds	209 metres (East)	LOS B
	With Proposal	0.93	27 seconds	217 metres (East)	LOS B
Weekend peak*	Without Proposal	0.90	34 seconds	306 metres (North)	LOS C
	With Proposal	0.90	36 seconds	306 metres (North)	LOS C

*Weekday and weekend peaks during the survey period only (10:00am to 3:00pm)

As shown in Table 5-1, there is minimal impact on the intersection performance with the Proposal. The intersection would operate satisfactorily at a LOS C or better during the weekday and weekend peak periods under both scenarios, with moderate average delays and increased queueing on weekends compared to weekdays. Queueing and delays are greatest on Railway Terrace on weekdays and the northern approach of Old Canterbury Road on weekends.

5.2 Parking

The Proposal includes the provision of an accessible parking space near both entrances to Lewisham Station. On the southern side, an accessible parking space is proposed on Hunter Street near the intersection with Railway Terrace. On the northern side, an accessible parking space is proposed on Thomas Street at the turning head adjacent to the station.

The provision of one time-restricted space for kiss and ride and proposed kerb extension would lead to a permanent loss of four kerbside parking spaces on Victoria Street (two on the east side and two on the west side). Additionally, the provision of one accessible parking space on Hunter Street would result in the loss of one kerbside parking space.

On the northern side of the station precinct, there will be a permanent loss of two timed-restricted parking spaces. The provision of an accessible parking space and kiss and ride space within the turning head on Thomas Street would have no additional impact on the existing parking provisions as these would be located within an existing no parking zone.

Overall, the permanent loss of seven time-restricted parking spaces would have a minor impact on parking supply within the Lewisham Station precinct. Based on a desktop review in December 2024 of existing parking within a distance of around 100 metres from the station, time-restricted and unrestricted parking is available within the local road network to the north and south of the station, as shown in Figure 2-11.

5.3 Public transport

The Proposal does not include changes to bus or rail services and would not impact the operation (service operation or timetabling) of public transport in the vicinity of Lewisham Station. The Proposal includes improved interchange facilities and commuter access to Lewisham Station, which may increase rail patronage. No changes are proposed to the existing bus stops on Railway Terrace.

5.4 Active transport

5.4.1 Pedestrian network

The Proposal would deliver the following improvements for pedestrians:

- provision of four new lifts
- modification of the underpass including drainage, lowered floor and new openings for lift access
- platform regrading and resurfacing, new TGSIs and relocated platform furniture
- a new station access ramp from Railway Terrace to Platform 2
- adjustment to kerb ramps and footpaths on Victoria Street, Hunter Street and Railway Terrace
- lighting, including the pathway between Thomas Street and West Street.

The Proposal would improve the user experience and accessibility to the station, with the potential to encourage an increase in walking to the station.

5.4.2 Pedestrian capacity assessment

A spreadsheet static pedestrian flow assessment for the Proposal has been conducted and detailed in the Lewisham Station Concept Design Report (AECOM, 2024). This assessment evaluated the impact of the proposed key pedestrian infrastructure at Lewisham Station. Fruin's concept of LOS was utilised to determine the performance of pedestrian infrastructure based on a pedestrian's perceived level of comfort, satisfaction and frustration. Table 5-2 provides a description for each level of service.

Table 5-2 Fruin Levels of Service (LOS)

LOS	Description
A	Free circulation
B	Uni-directional flows and free circulation. Reverse and cross-flows with only minor conflicts.
C	Slightly restricted circulation due to difficulty in passing others. Reverse and cross-flows with difficulty.
D	Restricted circulation for most pedestrians. Significant difficulty for reverse and cross-flows.

LOS	Description
E	Restricted circulation for all pedestrians. Intermittent stoppages and serious difficulties for reverse and cross-flows.
F	Complete breakdown in traffic flow with many stoppages.

Source: SPSG, 2005

Table 5-3 and Table 5-4 include the LOS criteria that have been adopted to guide the assessment of operational performance, particularly pedestrian circulation and movement, at Lewisham Station. These LOS have also been used to critique proposed station design for the upgrade of Lewisham Station.

Table 5-3 Walkway LOS criteria

LEVEL OF SERVICE	DENSITY (ped / m ²)		SPACE (m ² / ped)		FLOW RATE (ped / m / min)	
	Min	Max	Min	Max	Min	Max
A		0.31	3.25			23.0
B	0.31	0.43	2.32	3.25	23.0	32.8
C	0.43	0.72	1.39	2.32	32.8	49.2
D	0.72	1.08	0.93	1.39	49.2	65.6
E	1.08	2.15	0.46	0.93	65.6	82.0
F	2.15			0.46	82.0	

Source: J Fruin, *Pedestrian Planning and Design*

Table 5-4 Stairs LOS criteria

LEVEL OF SERVICE	DENSITY (ped / m ²)		SPACE (m ² / ped)		FLOW RATE (ped / m / min)	
	Min	Max	Min	Max	Min	Max
A		0.54	1.86			16.4
B	0.54	0.72	1.39	1.86	16.4	23.0
C	0.72	1.08	0.93	1.39	23.0	32.8
D	1.08	1.54	0.65	0.93	32.8	42.7
E	1.54	2.69	0.37	0.65	42.7	55.8
F	2.69			0.37	55.8	

Source: J Fruin, *Pedestrian Planning and Design*

Results from the pedestrian flow assessment indicates that the newly proposed station infrastructure is expected to satisfactorily accommodate the forecasted 2042 plus 15% demands at Fruin LOS C or better during the AM and PM peak periods. Refer to the Lewisham Station Concept Design Report (AECOM 2024) for further detailed information and results of the assessment.

5.4.3 Cycling

The Proposal includes removing and replacing existing bicycle parking facilities at both station entrances. The existing bicycle rack and hoops on Thomas Street would be relocated and replaced with seven hoops, resulting in three additional bicycle parking spaces. The three existing bicycle hoops next to the station entrance on Victoria Street would be relocated and replaced.

Feedback was provided by Inner West Council on the Proposal in relation to the proposed closure of access for vehicles from Railway Terrace onto Victoria Street. Concerns were raised that the redistribution of eastbound vehicles onto Hunter Street, Denison Road and Hobbs Street would impact the safety of cyclists on these corridors. Each of these roads are identified for “prioritised cycling access” in the Inner West Council’s *Cycling Strategy and Action Plan*.

The Transport Cycleway Finder currently identifies Hunter Street and Denison Road as “General Roads”, reflecting a mixed-traffic environment where cyclists either ride within the parking lane or traffic

lane. Hobbs Street is identified as a “Quiet Street”, reflecting a low-volume mixed-traffic environment where cycling is permitted in both directions despite access being restricted to one-way only for vehicles.

Figure 5-2 shows the cycling facility types on Hunter Street, Denison Road and Hobbs Street (per the Transport Cycleway Finder), corridors identified for prioritised cycling access by Inner West Council and traffic survey locations. The data from these surveys is presented in Table 5-5.

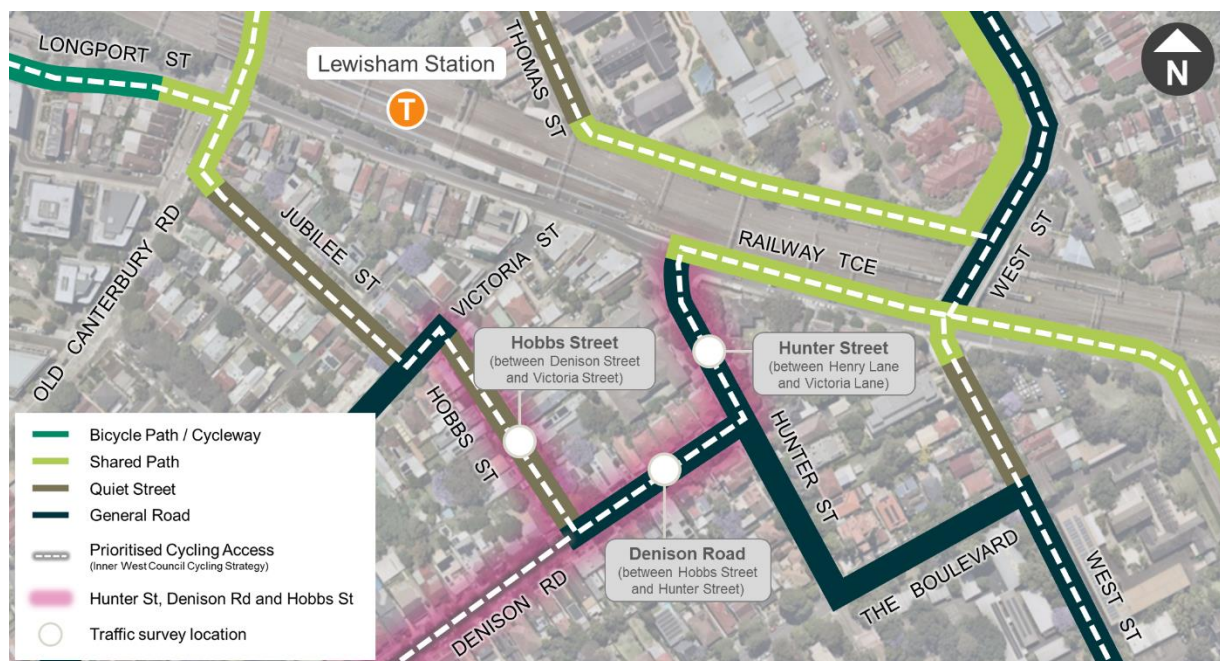


Figure 5-2 Cycling facility types, locations identified for prioritised cycling access and traffic survey locations

Table 5-5 presents average traffic volumes on Hunter Street, Denison Road and Hobbs Street (as presented in Section 2.2.2) under current conditions during the AM and PM weekday peak periods.

Table 5-5 Current volumes on Hunter Street, Denison Road and Hobbs Street during AM and PM weekday peak periods

Corridor	AM peak (08:00-09:00)		PM peak (17:00-18:00)	
	2024		2024	
Hunter Street (between Henry Lane and Victoria Lane)	Northbound	Southbound	Northbound	Southbound
	155	90	95	105
Denison Road (between Hobbs Street and Hunter Street)	Eastbound	Westbound	Eastbound	Westbound
	100	25	45	45
Hobbs Street (between Denison Street and Victoria Street)	Northbound*		Northbound*	
	25		20	

*Hobbs Street is one-way northbound only for vehicles. Cyclists are permitted to travel southbound.

As discussed in Section 5.1.1, the proposed closure of access from Railway Terrace onto Victoria Street would result in the diversion of around 15 westbound vehicles during the AM peak and 40 westbound vehicles during the PM peak. Outside of peak periods, up to 16 eastbound vehicles per hour would also be diverted from Victoria Street onto Old Canterbury Road and Henry Street on weekdays and up to 18 vehicles per hour on weekends.

As Denison Road and Victoria Street run parallel for around 800 metres south of Hobbs Street, it is likely that the majority of diverted vehicles would continue along Denison Road, with a limited number of vehicles turning onto Hobbs Street then Victoria Street. The above increases in traffic volumes are therefore likely to have a limited impact on cyclists, particularly on Hunter Street and Denison Road where traffic volumes are already relatively high during weekday peak periods.

Given the high traffic volumes on these corridors under existing conditions, the existing mixed-traffic environments on Hunter Street, Denison Road and Hobbs Street already presents a sub-optimal safety environment for cyclists that would see no discernible worsening as a result of the Proposal.

5.5 Kiss and ride and taxi facilities

The Proposal includes the provision of kiss and ride spaces on each side of the station. On the northern side, one space would be provided on Thomas Street at the turning head adjacent to the station entrance. On the southern side, one space would be provided on Victoria Street to the south of the lift access point. The provision of formal kiss and ride zones would allow safe and efficient locations for passengers to be dropped-off or picked-up from the station which is likely to reduce unsafe drop-offs and pick-ups within the station precinct.

A taxi zone is not proposed as part of the Proposal. It is anticipated that taxis would use the kiss and ride zones or kerbside parking to drop-off or pick-up passengers.

6.0 Summary

6.1 Traffic, transport and access impacts

The following impacts are anticipated during construction of the Proposal:

- minor increases in daily traffic volumes due to construction workers and delivery vehicles accessing construction compounds and laydown areas, resulting in little to no impact on the road network
- temporary closures of Thomas Street, Victoria Street and Railway Terrace, resulting in minor detours and increased travel times for road users
- temporary closure of parking on Thomas Street, Victoria Street and Hunter Street to accommodate construction activities
- permanent removal of up to seven parking spaces to accommodate accessible parking spaces and kiss and ride zones, resulting in a slight reduction of available parking
- potential temporary relocation of bus stops on Railway Terrace, resulting in minor impacts for bus users
- minor impacts for pedestrians due to the temporary closure of footpaths near Lewisham Station
- notable impacts for pedestrians during any closures of Lewisham Station and underpass, with alternative routes adding notable increases in travel distance
- potential temporary closures of shared paths on the northern and southern side of the rail corridor, east of Lewisham Station.

It is expected that operational impacts of the Proposal would be positive, particularly for people with disability, older people, people with prams or luggage and others who may be experiencing mobility problems.

It is noted that the removal of access from Railway Terrace onto Victoria Street may inconvenience some road users, including those accessing Lewisham Station and the adjoining local centre. However, this change would improve safety for pedestrians and cyclists, as well as creating opportunities for placemaking within the local centre. Overall station accessibility would improve due to the provision of four new lifts, upgraded bicycle parking facilities, two new accessible parking spaces and kiss and ride facilities.

The opportunity to further improve safety and connectivity for active transport users of the Proposal will be considered during detailed design.

6.2 Mitigation and management measures

The following mitigation and management measures are recommended to minimise impacts during construction of the Proposal:

- prior to the commencement of construction, a Construction Traffic Management Plan (CTMP) would be prepared as part of the Construction Environmental Management Plan (CEMP) and in accordance with relevant guidelines. The CTMP would outline how construction of the Proposal would avoid, mitigate and manage risks involving construction activities, users of the traffic and transport network and local residents.
- the community would be notified in advance of proposed transport network changes through appropriate media and other appropriate forms of community liaison.
- investigation of opportunities to bring lighting of the pedestrian path forward in the program to be utilised as a pedestrian diversion during underpass closures.
- investigation of opportunities to minimise periods of closure of the pedestrian underpass and to provide reasonable safe alternative access across the corridor.

- advance notification to nearby emergency services of any temporary road closures, including details of available detour routes.
- further investigation of construction traffic routes including weight and height restrictions, and measures to mitigate impacts to school zones.
- investigation of opportunities to provide temporary bike parking on both sides of the corridor and drop/off pick up locations on Thomas Street during the construction period wherever feasible and reasonable to do so.
- investigation into alternative parking arrangements would be carried out, as required, in consultation with Inner West Council prior to the commencement of construction.
- adequate information would be provided to affected bus customers if bus stops on Railway Terrace are relocated and would include advanced notification and appropriate signage to alternative bus stops.
- adequate information and alternative transport options would be provided to affected pedestrians during scheduled closures of the Lewisham Station underpass including advanced notification and appropriate wayfinding and directional signage along detour routes.

The Proposal would improve the accessibility for all customers at Lewisham Station. No additional mitigation and management measures are required during operation of the Proposal.