The road network serving the site includes:

Forest Road	
Road Classification	State Road
Alignment	North - South
Number of Lanes	2 travel lanes including 1 parking lane in each direction of travel (outside clearway hours
Carriageway Type	Un-divided
Carriageway Width	12.5metres
Speed Limit	50kph
School Zone	No
Parking Controls	Northbound: No Stopping: 1/2P 10am-6pm Mon-Fri: 1/2P 8:30am-12:30pm Saturday: Clearway 6am-10am Mon-Fri
	Southbound: No Stopping: 1/2P 8:30am-3pm Mon-Fri: 1/2P 8:30am-12:30pm Saturday: Clearway 3pm-7pm Mon-Fri
Forms Site Frontage	No

Table 1 - Existing Road Network – Forest Road

Figure 6 - Forest Road – Southbound

Stoney Creek Road	
Road Classification	State Road
Alignment	East - West
Number of Lanes	2 travel lanes including 1 parking lane in each direction of travel (outside clearway hours)
Carriageway Type	Un-divided
Carriageway Width	12metres
Speed Limit	50kph
School Zone	No
Parking Controls	Eastbound: No Parking: Clearway 6am-10am Mon-Fri
	Southbound: No Parking: 1/2P 8:30am-3pm Mon-Fri: 1/2P 8:30am-12:30pm Saturday: Clearway 3pm-7pm Mon-Fri
Forms Site Frontage	No

Table 2 - Existing Road Network – Stoney Creek Road

Figure 7 - Stoney Creek Road – Eastbound

Kingsland Road South	
Road Classification	Local Road
Alignment	East - West
Number of Lanes	1 travel lane including 1 parking lane in each direction of travel
Carriageway Type	Un-divided
Carriageway Width	11metres
Speed Limit	50kph
School Zone	No
Parking Controls	1P 8:30am-6pm Mon-Fri: 1P 8:30am-12:30pm Saturday
Forms Site Frontage	Yes

Table 3 - Existing Road Network – Kingsland Road South

Figure 8 - Kingsland Road South – Eastbound

3.2 Public Transport

In assessing the accessibility of the site using public transport, reference is made to the NSW Planning Guidelines for Walking and Cycling (2004) (the Cycling and Walking Guide). This document recommends that a distance of 400-800m is a walkable catchment to access public transport and local amenities and 1.5km for cycling. Further details identifying the accessibility of these services are provided below.

3.2.1 Trains

The site is located approximately 1.7km south-west of Rockdale railway station as shown in Figure 11 (5 min drive or 20 min walk). The station is served by T4 Eastern Suburbs and Illawarra line, which operate typically at 15 minutes intervals through the day providing a direct connection to Sydney CBD and Sydney Domestic and International airport via the T2 line.

The station location would provide opportunity for patrons of the motel to travel to and from the city or the airport via taxi/train combination.

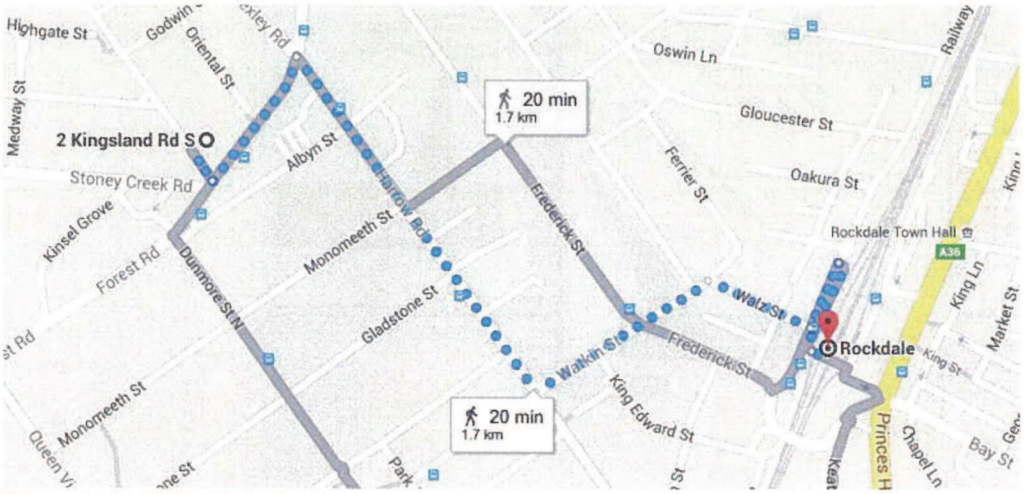

Figure 9 - Rockdale Train Station

Figure 10 - Sydney Trains Network

3.2.2 Bus Services

The site is well serviced by buses that provide for three (3) bus routes options and stops within 200m of the site. The locations are identified in Figure 11 with details of each service presented in Table 4.

Figure 11 - Public Transport Opportunities

Route No.	Frequency	Coverage
452	Weekdays: 20 minute intervals Weekends: 30 minute intervals	Beverly Hills - Rockdale via Hurstville
492	Weekdays: 30 minute intervals Weekends: 30 minute intervals	Drummoyne-Rockdale
493	Weekdays: 60 minute intervals Weekends: N/A	Rockdale-Roselands

Table 4 - Bus Service Summary

3.2.3 Sydney Airport

Sydney International and Domestic airports are located approximately 4km (International) and 8km (Domestic) northeast of the motel, providing a short drive of 10-15mins for patrons of the motel. Sydney Airport is a major transport hub providing connection to domestic and international flights for business and tourists, which potentially could utilise the motel facilities and reduce the necessity of car park use within the motel grounds, by utilising public transport or taxi services.

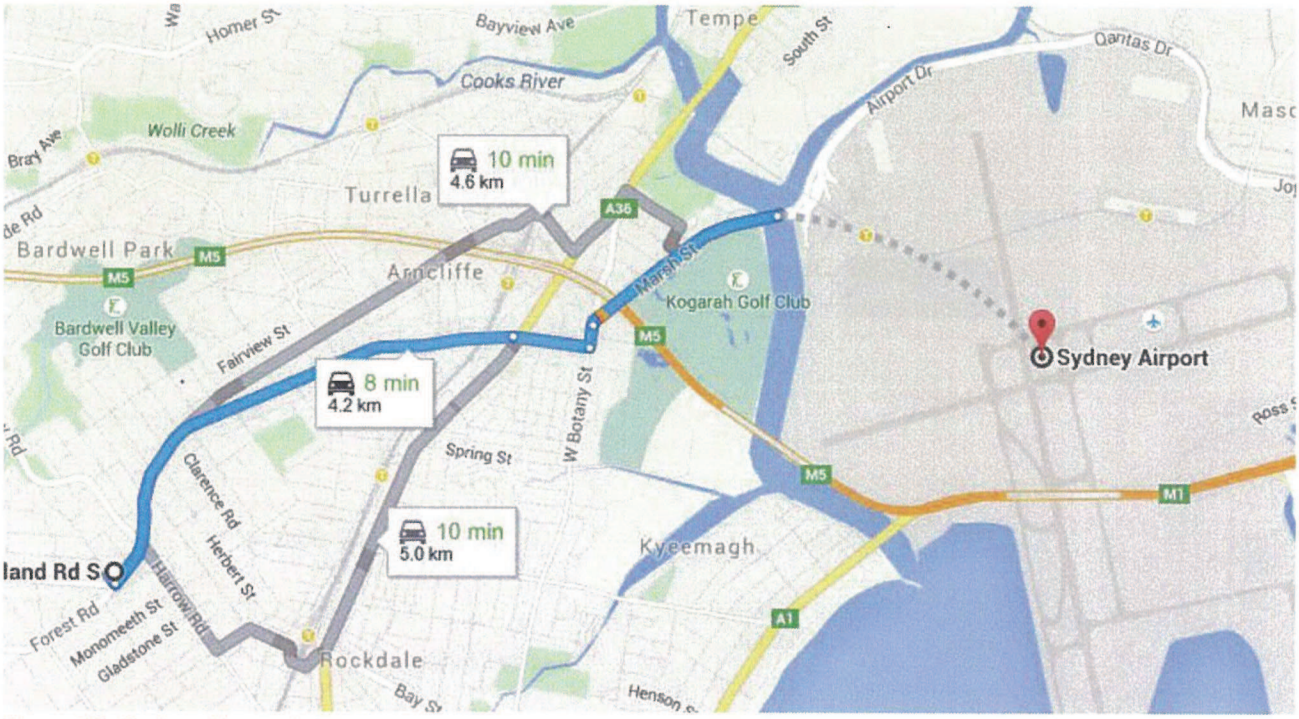

Figure 12 - Sydney Airport Access

3.3 Westconnex

The Westconnex project is currently in the planning and design stage. In preparation for construction and according to the traffic modelling presented in the EIS most surface roads in the vicinity of the Westconnex project will see a reduction in the weekday average traffic volume. As a result of the Westconnex project there are a number of roads where reductions across the network will result in increases on certain roads. This will include Stoney Creek Road, where a slight increase in traffic volume is expected. However, this will likely be offset by improved travel times in the nearby road network.

The maximum yield of the Planning Proposal generates a traffic volume that is insignificant in the context of the Westconnex project and the related impacts and improvements to traffic conditions on the broader network.

4 Development Traffic Assessment

4.1 Existing Traffic Volumes

In order to assess the current traffic conditions at the intersections on Forest Road at Stoney Creek Road and Kingsland Road, traffic surveys were undertaken to ascertain the traffic conditions on the typical weekday peak periods within a school term.

Intersection surveys were performed on 15th June 2016 during the following times to record the AM and PM peak activity surrounding the development site:

- 7:00am – 9:00am and
- 4:00pm and 6:00pm.

The traffic survey results indicate that the road network peaks occurred at:

- 8:00am to 9:00am and
- 4:15pm to 5:15pm

Therefore, these hours have been adopted as the peak periods for the purpose of assessing the impacts of increased traffic resulting from the proposed development.

4.2 Existing Situation Intersection Modelling

The operation of the intersection has been assessed using the SIDRA intersection performance assessment software.

The SIDRA software package is designed to assess the operation of single intersections, with some provisions for coordinated vehicle arrivals, as well as providing various performance indicators (Level of Service, Average Delay, etc.). In the case of a signalised intersection, SIDRA is able to determine the most efficient traffic signal phasing and timings within given parameters, e.g. a fixed cycle length.

Typically there are four performance indicators used to summarise the performance of an intersection, being:

- Degree of Saturation – The total usage of the intersection expressed as a factor of 1 with 1 representing 100% use/saturation. (e.g. 0.8 = 80% saturation)
- Average Delay – The average delay encountered by all vehicles passing through the intersection. It is often important to review the average delay of each approach as a side road could have a long delay time, while the large free flowing major road traffic will provide an overall low average delay.
- Level of Service – This is a categorisation of average delay, intended for simple reference. RMS adopts the bands, defined in Table 5 below.
- 95% Queue lengths (Q95) - is defined to be the queue length in metres that has only a 5-percent probability of being exceeded during the analysis time period. It transforms the average delay into measureable distance units.

Level of Service	Average Delay (secs/vehicle)	Traffic Signals, Roundabout	Give Way & Stop Signs
A	<14	Good operation	
B	15 to 28	Good with acceptable delays & spare capacity	Acceptable delays & spare capacity
C	29 to 42	Satisfactory	Satisfactory, but accident study required
D	43 to 56	Operating near capacity	Near capacity & accident study required
E	57 to 70	At capacity. At signals, incidents would cause excessive delays. Roundabouts require other control mode	At capacity, requires other control mode
F	>70	Extra capacity required	Extreme delay, major treatment required

Table 5 - Intersection Performance - Levels of Service – RMS

A summary of the SIDRA results is presented in Table 6.

Peak Period	Intersection	Level of Service	Average Delay (secs)	Degree of Saturation	95% Queue Length (m) [1]
Weekday AM Peak	Stoney Creek Road / Forest Road	B	22.7	0.671	119.1
	Forest Road / Kingsland Road	A	1.0	0.156	2.4
Weekday PM Peak	Stoney Creek Road / Forest Road	C	35.0	0.948	155.5
	Forest Road / Kingsland Road	A	0.8	0.159	1.4

Table 6 – Summary of SIDRA Outputs Results (Existing Operation)

The results indicate that the intersections provide sufficient capacity to accommodate the current traffic volumes in the AM Peak and PM Peak.

[1] *Resulting 95%-ile queue reported for the approach exhibiting the greatest vehicle queuing.*

4.3 Development Traffic Generation

Based on the property zoning being sought by this Planning Proposal, there is the potential for the site to accommodate residential and Hotel uses. In order to estimate the traffic activity associated with the site, reference is made to the following trip generation guides, which have been applied to the development scenarios described in Section 2.2.

- Hotel Component;
  - 'Casual Accommodation' - RMS Guide to Traffic Generating Developments (2002)
- Residential Component;
  - 'High density residential flat buildings' – RMS Technical Direction, TDT 2013/04

4.3.1 Residential Traffic Generation Rates

The TDT 2013/14 is based on recent surveys conducted for high-density residential flat buildings across the Greater Sydney Region. It is currently considered to be the most relevant guide to estimating traffic generations for residential flat buildings containing (20) or more dwellings. This guide suggests the following rates:

- AM Peak Hour Rate: 0.19 trips / unit;
- PM Peak Hour Rate: 0.15 trips /unit.

4.3.2 Hotel Traffic Generation Rates

For traffic generation purposes, a tourist hotel best describes the proposed hotel, however no traffic generation data is available for NSW. The hotel is located in an environment that benefits from good access to public transport links.

The guide provides a rate for motel use and based on 100% occupancy, recommends a trip generation of 0.4 trips per unit (or room in this case) during the evening peak hour. No rate is presented for the morning peak, however there is no evidence to suggest it would be higher or lower than the evening peak.

This rate is considered conservative and motels would generally be located outside a metropolitan environment and would rely predominately of car usage. However as no trip generation data is available for hotels, this conservative rate has been adopted.