TRAFFIC IMPACT ASSESSMENT

PLANNING PROPOSAL – ENVIRONMENTAL LIVING RESIDENTIAL DEVELOPMENT

LOT 481 DP 1184693

250 REEVES STREET, SOMERSBY

PREPARED FOR: DARKINJUNG LALC

JUNE 2023

23/011

TRAFFIC IMPACT ASSESSMENT
DARKINGJUNG LALC.

PLANNING PROPOSAL – ENVIRONMENTAL LIVING RESIDENTIAL DEVELOPMENT
LOT 481 DP 1184693,
250 REEVES STREET, SOMERSBY.

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QUALITY ASSURANCE

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Issue	Date	Description	By
A	02/05/23	Draft	JG
B	07/05/23	Edit	JG
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This document has been authorised by

Date 28th June 2023

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CONTENTS

ATTACHMENTS

FIGURES

PHOTOGRAPHS

TABLES

1.0 INTRODUCTION

Intersect Traffic Pty Ltd (Intersect Traffic) has been engaged by Darkinjung Local Aboriginal Land Council (Darkinjung LALC) to prepare a Traffic Impact Assessment for an environmental Living planning proposal on Lot 481 DP 1184693 – 250 Reeves Street, Somersby. The proposal is likely to yield in the order of 14 large lot residential lots, between 1.1 ha and 1.9 ha in area.

Vehicular access to the large lot residential lots is by direct access to Reeves Street via individual rural access crossings constructed to Central Coast Council requirements. The proposed structure plan and land zoning plan for the proposal is shown in ***Attachment A*** with the new environmental living lots contained in the two areas zoned C4. The subject site is currently vacant rural land.

This report is required to support a planning proposal to Hunter and Central Coast Planning Panel as the consent authority for the rezoning of the land to support the proposed development. It will allow the Panel to assess the proposal in regard to its traffic impacts on the local and state road network. Further it is to be used to prepare a strategic Bushfire Plan for the site with emphasis on evacuation routes during a bushfire emergency.

This report presents the findings of the traffic assessment and includes the following.

1. An outline of the existing situation in the vicinity of the site.
2. An assessment of the traffic impacts of the proposed development including the predicted traffic generation and its impact on existing road and intersection capacities.
3. Determines any triggers for the provision of additional infrastructure.
4. Reviews bushfire evacuation routes and suitability of the road network during bushfire emergencies.
5. Reviews parking, public transport, pedestrian, and cycle way requirements for the proposed development, including assessment against Council's DCP and Australian Standard requirements.
6. Presentation of conclusions and recommendations.

2.0 SITE LOCATION

The subject site is generally located on the southern side of Reeves Street, Somersby east of the M1 Pacific Motorway, opposite the Goldsmiths Road intersection. It is approximately 4.7 km north of the Gosford CBD and 4.1 km south of Somersby village.

The planning proposal site only has road frontage to Reeves Street with access to the sub-arterial road network at Wiseman's Ferry Road via Reeves Street, Debenham Road North, and Bimbil Road as Reeves Street east of the site is currently a no through road. It is proposed that the environmental living lots created by the planning proposal will each have an individual property vehicular access to Reeves Street and no new public roads will be created by the proposed new development. The site is currently vacant well vegetated rural land. ***Figure 1*** below shows the site location from a local context.

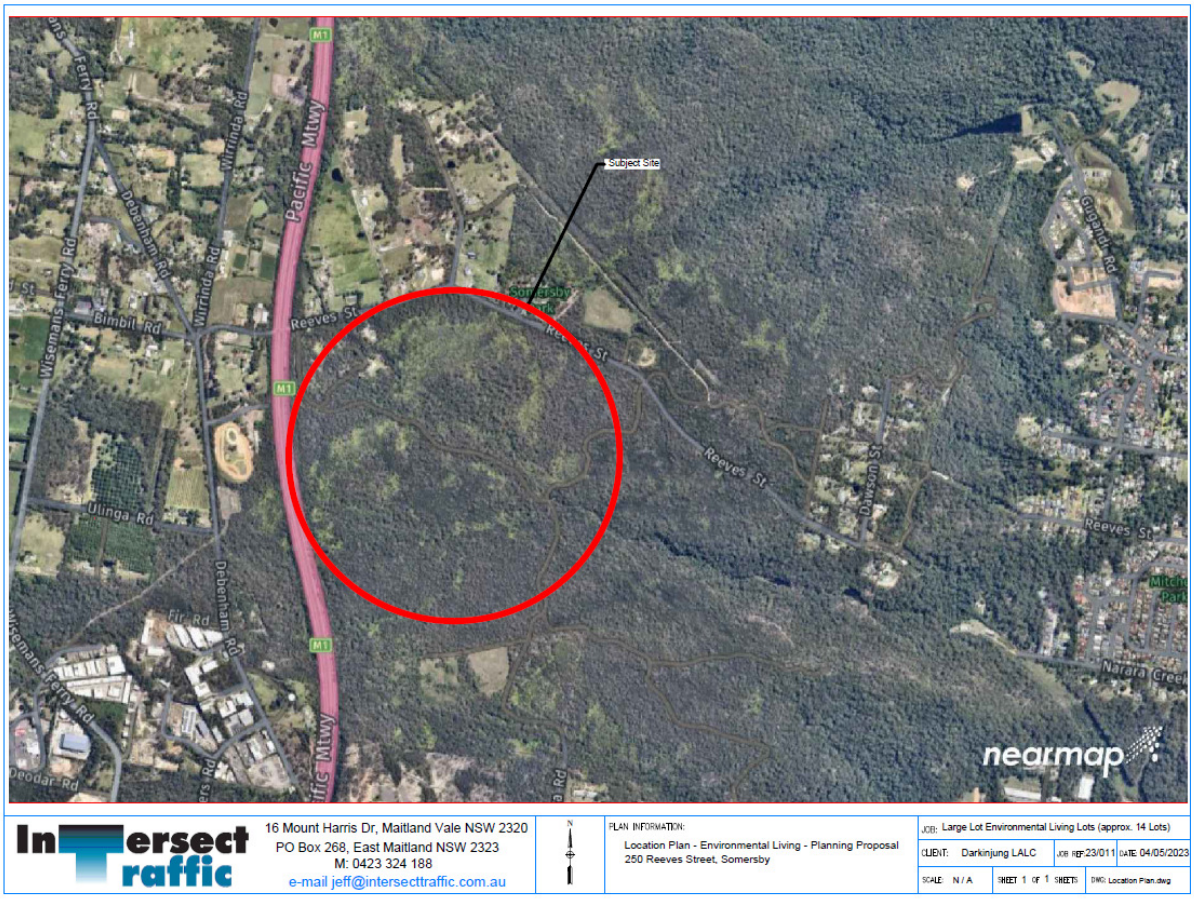


Figure 1 – Site Location

The site contains the following land title and has a total area of approximately 124.1 ha though the developable area is limited to approximately 19 ha.

- Part Lot 481 DP 1184693 – 250 Reeves Street, Somersby.

Pursuant to the Central Coast LEP (2022) the site is currently zoned RU2 – Rural Landscape and C2 – Environmental Conservation with the planning proposal seeking to rezone to mainly C2 – Environmental Conservation with two small pockets of C4 – Environmental Living fronting Reeves Street to allow individual lots and dwellings in these areas. ***Photograph 1*** shows the existing conditions at the site near the proposed C4 zoning while ***Photograph 2*** shows Reeves Street along the frontage of the site.

Photograph 1 – Development site from Reeves Street

Photograph 2 – Reeves Street along site frontage.

3.0 EXISTING ROAD NETWORK

3.1 Wisemans Ferry Road

Whilst Wiseman's Ferry Road would currently be classified as a sub-arterial road under a functional road hierarchy it has in the past i.e., pre F3 freeway, functionally operated as an arterial road connecting Gosford to other significant regions nearby and as such is constructed to a high standard. It currently is classified as a Regional Road. In the area of the site, it is two lane two way sealed rural road approximately 7 metres wide which is centre line marked. ***Photograph 3*** below shows the standard of Wiseman's Ferry Road near Bimbil Road. At the time of inspection Wiseman's Ferry Road was in good condition and a 70 km/h speed zone applied in this location.

Photograph 3 – Wisemans Ferry Road near Bimbil Road

3.2 Debenham Road North

Debenham Road North is a sealed local rural collector road under the care and control of Central Coast Council which runs north / south from the Somersby Industrial area (Chivers Street) to Wiseman's Ferry Road approximately 730 metre north-west of Reeves Street. In the vicinity of Reeves Street Debenham Road is approximately 5 m to 6 m wide allowing two-way traffic flow at reasonable speed. South of Reeves Street near Chivers Street Debenham Road is approximately 12 metres wide between upright kerb and gutter both sides of the road. A 60 km/h speed zoning applies to the road and at the time of inspection it was found to be in fair to good condition as shown in ***Photographs 4 and 5*** below. Debenham Road collects and distributes traffic from properties east of Wisemans Ferry Road to Wisemans Ferry Road as well as providing vehicular access to properties along its length. Debenham Road North connects to Chivers Road and Wisemans Ferry Road via give way controlled urban and rural T-intersections, respectively.

Photograph 4 – Debenham Road North near Chivers Street

Photograph 5 – Debenham Road North near Wisemans Ferry Road

3.3 Reeves Street

Reeves Street is a sealed local rural road under the care and control of Central Coast Council which east-west from Debenham Road North for approximately 2.8 km to Dawson Road which is a no through road. There is no physical connection to the constructed section of Reeves Street which connects to Mann Street 3.6 km east of the site. From Debenham Road North to the site, Reeves Street has a sealed pavement approximately 6 m wide allowing two-way traffic flow at reasonable speed. Between the site and Debenham Road North, Reeves Street crosses the M1 Pacific Motorway via a high standard two lone concrete bridge (overpass) which also contains a pedestrian path. A 60 km/h speed zoning applies to the road and at the time of inspection it was found to be in fair to good condition as shown in ***Photograph 2 (above) and 6*** below. Reeves Street mainly provides vehicular access to properties along its length as well as properties in Goldsmith Road and Dawson Street. Reeves Street connects to Debenham Road North and Bimbil Road via a four way give way controlled rural intersection.

Photograph 6 – Reeves Street near the M1 Pacific Motorway overpass.

3.4 Bimbil Road

Bimbil Road is a local rural road under the care and control of Central Coast Council mainly providing vehicular access to properties along its length. It has a sealed carriageway width of between 4.5 metres and 5 metres allowing two-way traffic flow but at lower speeds than the surrounding road network. Bimbil Road does provide a connection from Reeves Street to Wisemans Ferry Road which it connects to via a give way-controlled T-intersection. At the time of inspection, a speed zoning applied to Bimbil Road which was observed to be in only fair to poor condition. ***Photograph 7*** below shows Bimbil Road near Wisemans Ferry Road.

Photograph 7 –Bimbil Road near Wisemans Ferry Road

4.0 ROAD NETWORK IMPROVEMENTS

There are no known future road network improvements that would increase the capacity of the local and state road network in the vicinity of the site. Maintenance work on the local and state road network near the site will be ongoing in line with Central Coast Council and TfNSW annual works programs.

5.0 TRAFFIC VOLUMES

To determine existing traffic volumes on the road network, Intersect Traffic undertook manual intersection counts during typical AM and PM peak periods on Tuesday 2nd May (8 am – 9 am) and Thursday 4th May (3 pm – 4pm). These periods correspond to the likely peak traffic generating periods for the environmental living lots proposed with the planning proposal. Intersect Traffic has previously undertaken traffic counts on Wisemans Ferry Road at Howes Road and at Gindurra Road roundabout in September 2020 and these have been used to estimate current traffic volumes on Wisemans Ferry Road. Expected 2033 traffic volumes with a background traffic growth rate of 1.5 % per annum have also been calculated for this assessment.

Therefore, the current and 2033 traffic volumes on the local and state road network near the site adopted in this assessment are shown in ***Table 1*** below. Manual count sheets are provided in ***Attachment B.*** Note the traffic data will be updated at as part of a traffic impact assessment for the proposal during the development application process should the project progress to that stage.

Table 1– Two-way mid-block peak hour traffic volumes.

Road	Section	2023		2033 @ 1.5% p.a.	
		AM (vtph)	PM (vtph)	AM (vtph)	PM (vtph)
Wisemans Ferry Road	near Gindurra Road	242	270	280	314
Wisemans Ferry Road	Howe St to Debenham Rd North	129	169	149	197
Debenham Rd North	north of Reeves Street	47	60	55	70
Debenham Rd North	south of Reeves Street	71	72	82	84
Reeves Street	east of Debenham Rd North	49	33	57	38
Bimbil Road	west of Debenham Rd North	15	19	17	22

6.0 ROAD CAPACITY

The capacity of rural roads is generally determined by the capacity of intersections. However, Tables 4.5 & 4.6 of the *RTA's Guide to Traffic Generating Developments* provides some guidance on mid-block capacities for urban and rural roads and likely levels of service. These tables are reproduced below.

Table 4.5
peak hour flow on two-lane rural roads (veh/hr)
(Design speed of 100km/hr)

Terrain	Level of Service	Percent of Heavy Vehicles			
		0	5	10	15
Level	B	630	590	560	530
	C	1030	970	920	870
	D	1630	1550	1480	1410
	E	2630	2500	2390	2290
Rolling	B	500	420	360	310
	C	920	760	650	570
	D	1370	1140	970	700
	E	2420	2000	1720	1510
Mountainous	B	340	230	180	150
	C	600	410	320	260
	D	1050	680	500	400
	E	2160	1400	1040	820

The data for Table 4.5 assumes the following criteria:

- *terrain level* with 20% no overtaking.
- *rolling* with 40% no overtaking.
- *mountainous* with 60% no overtaking.
- 3.7 m traffic lane width with side clearances of at least 2m.
- 60/40 directional split of traffic.

Table 4.6
Environmental capacity performance standards on residential streets

Road class	Road type	Maximum Speed (km/hr)	Maximum peak hour volume (veh/hr)
Local	Access way	25	100
	Street	40	200 environmental goal
			300 maximum
Collector	Street	50	300 environmental goal
			500 maximum

Note: Maximum speed relates to the appropriate design maximum speeds in new residential developments. In existing areas maximum speed relates to 85th percentile speed.

Source: - RTA's Guide to Traffic Generating Developments (2002).

Assuming that the desirable worst level of service (LoS) on the road network is LoS C and that the local road network around the site represents rolling terrain with approximately 5 % heavy vehicles then the two-way mid-block capacity of the road network based on these tables for the local and state roads are as follows. Note Bimil Road and Reeves Street, who primarily have the main function to only provide vehicular access to properties, are considered roads where the environmental road capacity applies to maintain acceptable residential amenity for residents of the road. As the speed zoning on Wisemans Ferry Road and adjoining roads are generally less than 100 km/h a discount of 10 % has been applied to the capacity threshold values in *Table 4.5*.

- Wiseman's Ferry Road – 1,030 vtph.
- Debenham Road North – 1,030 vtph.
- Reeves Street – 300 vtph; and
- Bimbil Road – 300 vtph.

Current two-way traffic volumes on the local and state road network determined in ***Section 5*** are significantly less than the two-way local road network capacities determined above therefore significant spare capacity exists within the local and state road network to cater for additional development traffic generated by the planning proposal.

7.0 ALTERNATE TRANSPORT MODES

Busways Gosford operates a limited public transport (bus) service to the area. Access to Route 32 (Gosford to Spencer via Mangrove Mountain and Somersby) at bus stops on Wiseman's Ferry Road near Bimbil Road (1.5 km from site) provides access to 5 morning and afternoon weekday services as well as a single morning and afternoon services on a Saturday. No Sunday services are provided. This service runs between the site and Gosford Railway Station / Gosford CBD as well as to Somersby, Mangrove Mountain, and West Gosford. The nearest bus stops are currently located on Wisemans Ferry Road approximately 1.5 km's west of the site. ***Photograph 8*** below shows the nearest bus stop & shelter near Bimbil Road. The local bus route map (extract) is provided below in ***Figure 2***.

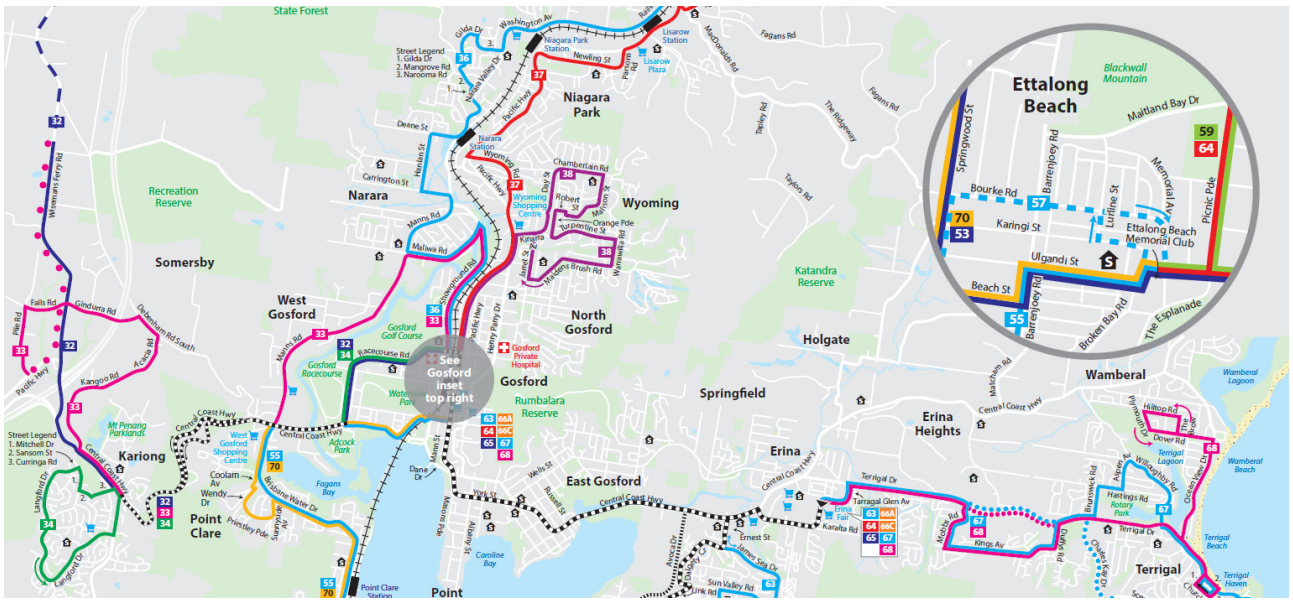


Figure 2 – Local Bus Routes

There are no constructed hardstand footpaths within the vicinity of the site so pedestrians in the area are required to use the grass verges or more likely share the road pavement with all other vehicles. Similarly, there are no designated on or off-road cycle ways in the area therefore cyclists using the road network would share the traffic lanes where necessary.

Photograph 8 – Bus stop / shelter Wisemans Ferry Road near Bimbil Street.

8.0 DEVELOPMENT PROPOSAL

The planning proposal involves the rezoning of part Lot 481 DP 1184693, 250 Reeves Street Somersby to include two small parcels of C4 – Environmental Living land areas adjacent to Reeves Street and allow these parcels to be subdivided to yield 14 Environmental Living residential lots between 1 ha and 2 ha's in area with access directly to Reeves Street.

The proposed structure plan for the planning proposal is provided within ***Attachment A*** while the subdivision plan is still being developed and will be provided at development application stage should this proposal proceed to this stage. As Reeves Street is a no through road east of the site all traffic generated by the development will have origin/ destination west of the site via Debenham Road North (north and south) and Bimbil Road west to and from Wiseman's Ferry Road being the sub-arterial road network.

As all new individual lots would have independent direct vehicular access to Reeves Street the proposal will not result in any new public roads and associated infrastructure.

9.0 TRAFFIC GENERATION

The *RTA's Guide to Traffic Generating Development's* provides specific advice on the traffic generation potential of various land uses. However, NSW RMS released a Technical Direction (TDT 2013/4) in May 2013 releasing the results of updated traffic surveys and as a result amended land use traffic generation rate.

In regard to low density residential dwellings the following amended advice is provided within the Technical Direction.

Daily vehicle trips = 10.7 per dwelling in Sydney, 7.4 per dwelling in regional areas
Weekday average evening peak hour vehicle trips = 0.99 per dwelling in Sydney (maximum 1.39), 0.78 per dwelling in regional areas (maximum 0.90).

Weekday average morning peak hour vehicle trips = 0.95 per dwelling in Sydney (maximum 1.32), 0.71 per dwelling in regional areas (maximum 0.85).

*(The above rates do **not** include trips made internal to the subdivision, which may add up to an additional 25 %).*

Adopting a maximum rate approach for regional areas the following additional development traffic from the proposed planning proposal can be calculated (rounded up) as shown below.

Daily traffic = 14 x 7.4 = 104 vtpd.
AM peak hour traffic = 14 x 0.85 = 12 vtph; and
PM peak hour traffic = 14 x 0.9 = 13 vtph.

These additional development traffic volumes have been adopted in this assessment.

10.0 TRIP DISTRIBUTION

Before carrying out any traffic assessment the additional peak hour traffic generated by the development needs to be distributed through the adjoining road network. This involves making a number of assumptions as to distribution patterns to and from the development. In distributing the peak hour traffic through the adjacent road network, the following assumptions have been made for this site.

- All trips from the industrial component will have final origin / destinations to Wiseman's Ferry Road.
- In the AM peak 80% of traffic is outbound and in the PM peak 70% of traffic is inbound.
- In the AM peak at the Debenham Road North / Reeves Street / Bimbil Road give way cross-intersection 65% of traffic has an origin / destination south, 25 % have an origin / destination north and 10 % have an origin / destination west.
- In the PM peak at the Debenham Road North / Reeves Street / Bimbil Road give way cross-intersection 55% of traffic has an origin / destination south, 25 % have an origin / destination north and 20 % have an origin / destination west.

These assumptions will result in the trip distributions shown in ***Figure 3*** for the relevant traffic movements.

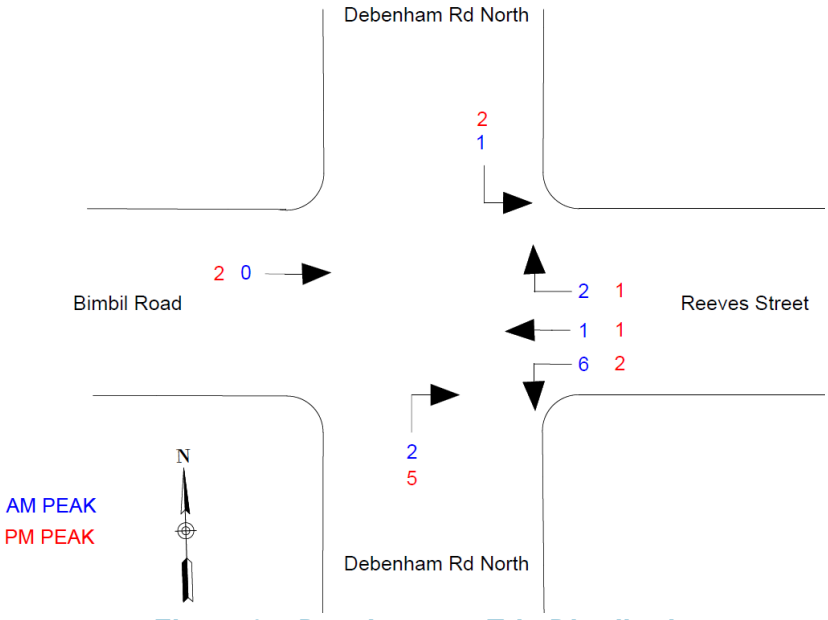


Figure 3 – Development Trip Distribution

11.0 TRAFFIC IMPACTS OF DEVELOPMENT

11.1 Road Network Capacity

It has previously been shown in ***Section 6*** of this report that the local road network is currently operating well within its technical mid-block capacity.

The proposed planning proposal is likely to generate the following additional traffic on the local road network based on the trip distributions shown in ***Figure 3***.

- Wiseman's Ferry Road south of Gindurra Road – 8 vtph in the AM peak and 7 vtph in the PM peak.
- Wiseman's Ferry Road north of Bimbil Road – 4 vtph in the AM peak and 6 vtph in the PM peak.
- Debenham Road North (north of Reeves Street) – 3 vtph in the AM peak and 3 vtph in the PM peak.
- Debenham Road North (south of Reeves Street) – 12 vtph in the AM peak and 13 vtph in the PM peak.
- Bimbil Road (west of Debenham Road North) – 1 vtph in the AM peak and 3 vtph in the PM peak.

The addition of this traffic onto the existing traffic volumes determined in ***Section 5*** will not result in the two-way mid-block capacity thresholds for the local and state road network determined in ***Section 6*** to be reached. Even with 1.5 % per annum traffic growth over a ten-year period these road capacity thresholds are not reached. This is demonstrated in ***Table 2*** below.

Table 2 - Road Capacity Assessment

Road	Section	Capacity vtph	2023		2033 @ 1.5% p.a.		Development traffic	
			AM (vtph)	PM (vtph)	AM (vtph)	PM (vtph)	AM	PM
Wisemans Ferry Road	near Gindurra Road	1030	250	277	288	321	8	7
Wisemans Ferry Road	Howe St to Debenham Rd North	1030	133	175	153	203	4	6
Debenham Rd North	north of Reeves Street	1030	50	63	58	73	3	3
Debenham Rd North	south of Reeves Street	1030	79	79	90	91	8	7
Reeves Street	east of Debenham Rd North	300	61	46	69	51	12	13
Bimbil Road	west of Debenham Rd North	300	16	22	18	25	1	3

Therefore, it can be concluded that the local and state road network subject to suitable intersection controls being in place has sufficient spare two-way mid-block capacity to cater for the planning proposal. Further traffic data collection and a review of mid-block capacity analysis will be carried should the planning proposal proceed to a development application.

It is noted that upgrading of the shoulder and verges of Reeves Street along the frontage of the proposed C4 land is likely to be required by Central Coast Council to comply with their subdivision standards should the proposal proceed to development application stage. Overall additional traffic volumes on the local road network will be minimal therefore any nexus for pavement and shoulder widening on these roads would be minimal when apportionment of cost is considered. Existing developer contributions required for residential subdivision would be considered sufficient to meet the developers fair and reasonable contribution to any road network upgrades being considered by Council.

11.2 Intersection Capacity

In assessing intersection performance, it is noted that all the intersections in close proximity to the site are operating with low traffic volumes and thus with uninterrupted flow conditions. As existing and future traffic volumes on the road network should the planning proposal proceed to construction and occupation will remain below the thresholds contained in the following table taken from Austroads *Guide to Traffic Management – Part 6 – Intersections, Interchanges & Crossings (2009)* for which the guide states a detailed analysis to demonstrate adequate capacity is available is unlikely to be necessary as uninterrupted flow conditions would prevail.

Major road type[1]	Major road flow (vph)[2]	Minor road flow (vph)[3]
Two-lane	400	250
	500	200
	650	100
Four-lane	1000	100
	1500	50
	2000	25

Notes:

1. Major road is through road (i.e. has priority).
2. Major road flow includes all major road traffic with priority over minor road traffic.
3. Minor road design volumes include through and turning volumes.

Source: - Austroads Guide to Traffic Management – Part 6 – Intersections, Interchanges & Crossings (2009)

On this basis it is concluded that the proposed planning proposal will not result in a change to uninterrupted flow conditions through all existing and future intersections on the local and state road network near the site and further intersection analysis is not required.

Overall, it is concluded that the planning proposal will not adversely impact on the operation of the local and state road network intersections as these intersections have sufficient spare capacity to cater for the additional traffic generated by the planning proposal.

11.3 On-site car parking & vehicular access

On-site car parking in accordance with Central Coast Council DCP (2022) (CCC DCP (2022)) needs to be provided within the planning proposal. Whilst generally this will be assessed in detail in future development applications for development on the land contained in the planning proposal by way of comment with the lots having a minimum area of 1 ha there would be sufficient room on each lot to provide the required on-site parking for a residential dwelling detailed in the CCC DCP (2022) which is as follows.

Residential Dwelling

3 or fewer bedrooms – 1 space per dwelling
4 or more bedrooms – 2 spaces per dwelling

Similarly, the lots will have sufficient frontage to construct a residential access crossing to Central Coast Council requirements and as Reeves Street has a relatively straight, constant grade geometrical alignment along the frontage of the C4 lands, suitable vehicular sight distance would be available in accordance with Australian Standard *AS2890.1-2004 – Parking facilities – Part 1 Off-street car parking Figure 3.2.*

11.4 Bushfire evacuation route assessment

The two main evacuation routes available from the site during a bushfire emergency would be.

1. West along Reeves Road, then north along Debenham Road North, then further north along Wiseman's Ferry Road to Peats Ridge Road and the M1 Pacific Motorway; and
2. West along Reeves Road then south along Debenham Road North to Chivers Road then further south to Gindurra Road and south along Wiseman's Ferry Road to the Central Coast Highway.

Both routes are sealed and have road widths equal to or in excess of 6 metres wide therefore comply with NSW Rural Fire Service requirements for non-perimeter roads on evacuation routes (5.5 metres minimum). They allow bushfire fighting vehicles to pass residents evacuating from the bushfire emergency.

The roads are heavily vegetated in areas and the surrounding vegetation will need to be maintained to provide a 4-metre clearance along the road lengths.

Upon completion of the planning proposal there will be in the order of 60 dwellings in the Reeves Street catchment and with car ownership in the area averaging at 3 per dwelling (source: - Australian Bureau of Statistics) up to 180 vehicles could be evacuating Reeves Street at the same time. With Reeves Street, Debenham Road North and Wiseman's Ferry Road being two-way rural road, the evacuation route road network would have a two-way mid-block capacity of in excess of 1,000 vtph therefore has sufficient capacity to cater for vehicles evacuating a bushfire emergency as well fire fighting vehicles travelling to fight the bushfire.

Therefore, it is concluded that suitable bushfire evacuation routes that comply with the requirements of NSW Rural Fire Services Planning for Bushfire Protection, are available to support the site.

12.0 PEDESTRIAN & CYCLE FACILITIES

The proposed planning proposal as a relatively small development will not generate any significant increase in pedestrian and cycle traffic therefore no nexus would exist to provide additional facilities particularly given there are no existing facilities that could be extended or connected to. The payment of developer contributions at development application stage would be seen as the developments fair and reasonable contribution to regional infrastructure.

The planning proposal as a relatively small development will not generate any significant increase in pedestrian and cycle traffic therefore no nexus would exist to provide additional facilities particularly given there are no existing facilities that could be extended or connected to. The payment of developer contributions at development application stage would be seen as the developments fair and reasonable contribution to regional infrastructure.

13.0 PUBLIC TRANSPORT FACILITIES

The planning proposal as a relatively small development will not generate any significant additional public transport usage. The development has limited accessibility to public transport with the nearest service some 1.5 km's from the site. However, any additional demand would not be sufficient for a nexus to exist to extend the existing services to the site or provide additional infrastructure in the area.

14.0 CONCLUSIONS

This traffic impact assessment for a large lot residential subdivision of part Lot 481 DP 1184693 – 250 Reeves Street, Somersby has concluded.

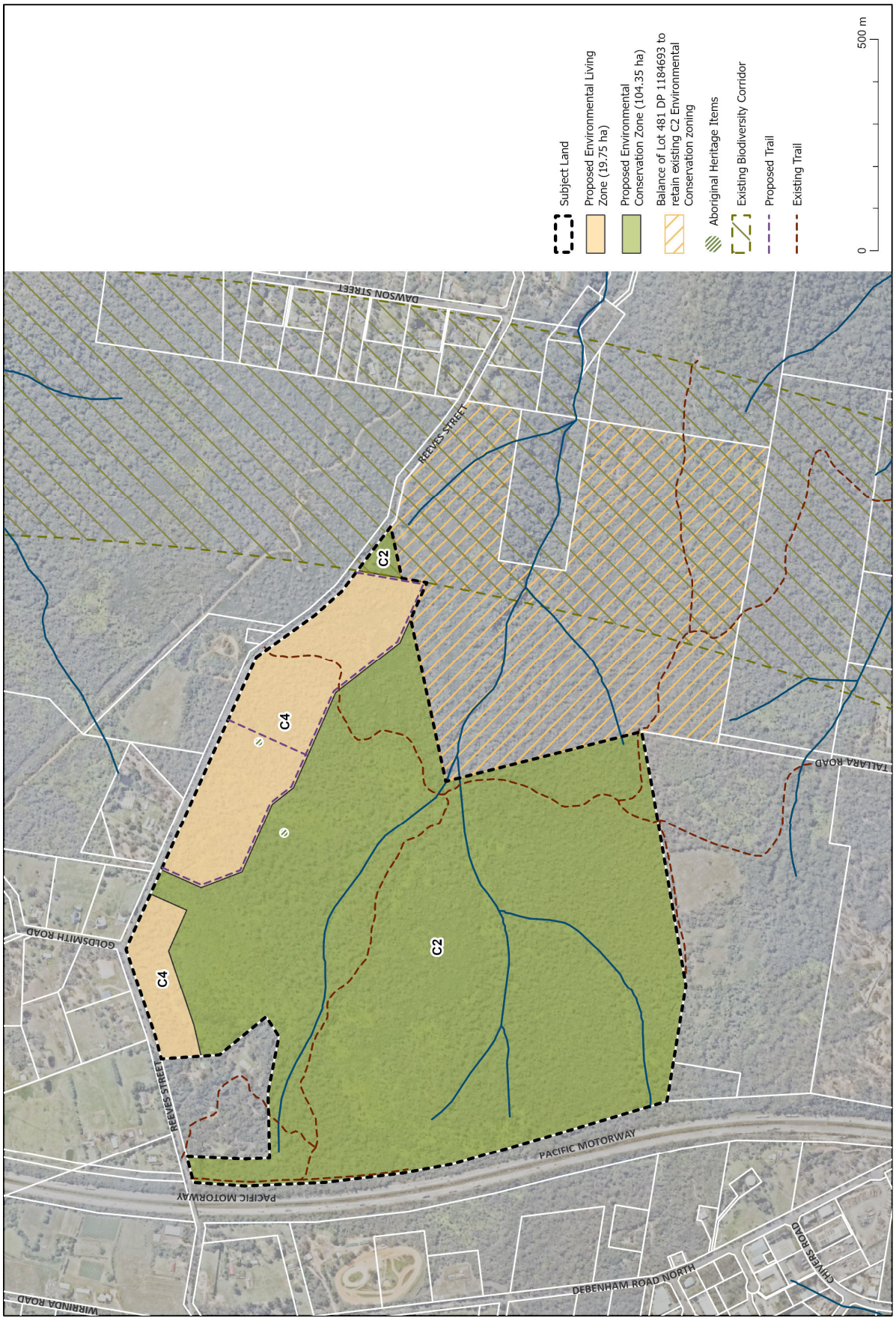
- Existing traffic volumes on the local road network are within the technical and environmental capacity standards determined by Austroads and TfNSW therefore the local and state road network has capacity to cater for additional traffic associated with new development in the area.
- The planning proposal when developed is likely to generate an additional 12 vehicle trips per hour during the AM peak and 13 vehicle trips per hour during the PM peak traffic periods.
- The local and state road network currently has sufficient spare capacity to cater for the development traffic generated by this development without adversely impacting on either current level of service experienced by motorists on the road or the residential amenity of existing residents.
- The planning proposal will not result in a change to uninterrupted flow conditions through all existing and future intersections on the local and state road network near the site therefore the planning proposal will not adversely impact on intersection operation on the local and state road network.
- With the residential lots within the proposal having a minimum area of 1 ha there would be sufficient room on each lot to provide the required on-site parking for a residential dwelling detailed in the CCC DCP (2022)
- The lots will have sufficient frontage to construct a residential access crossing to Central Coast Council requirements and as Reeves Street has a relatively straight, constant grade geometrical alignment along the frontage of the C4 lands, suitable vehicular sight distance would be available in accordance with Australian Standard *AS2890.1-2004 – Parking facilities – Part 1 Off-street car parking Figure 3.2.*
- The proposed new lots within the planning proposal are considered large enough to accommodate the car parking requirements within the Central Coast Council DCP (2022).
- Suitable bushfire evacuation routes, that comply with the requirements of NSW Rural Fire Services Planning for Bushfire Protection, are available to support the site.
- The planning proposal as a relatively small development will not generate any significant increase in pedestrian and cycle traffic therefore no nexus would exist to provide additional facilities particularly given there are no existing facilities that could be extended or connected to. The payment of developer contributions at development application stage would be seen as the developments fair and reasonable contribution to regional infrastructure.
- The planning proposal as a relatively small development will not generate any significant additional public transport usage. The development has limited accessibility to public transport with the nearest service some 1.5 km's from the site. However, any additional demand would not be sufficient for a nexus to exist to extend the existing services to the ite or provide additional infrastructure in the area.

15.0 RECOMMENDATION

Having carried out this traffic impact assessment for the planning proposal for a large lot residential subdivision of part Lot 481 DP 1184693 – 250 Reeves Street, Somersby it is recommended that the proposal can be supported from a traffic impact perspective as it will not adversely impact on the local and state road network and complies with all relevant Central Coast Council, Austroads, Australian Standards and TfNSW requirements.

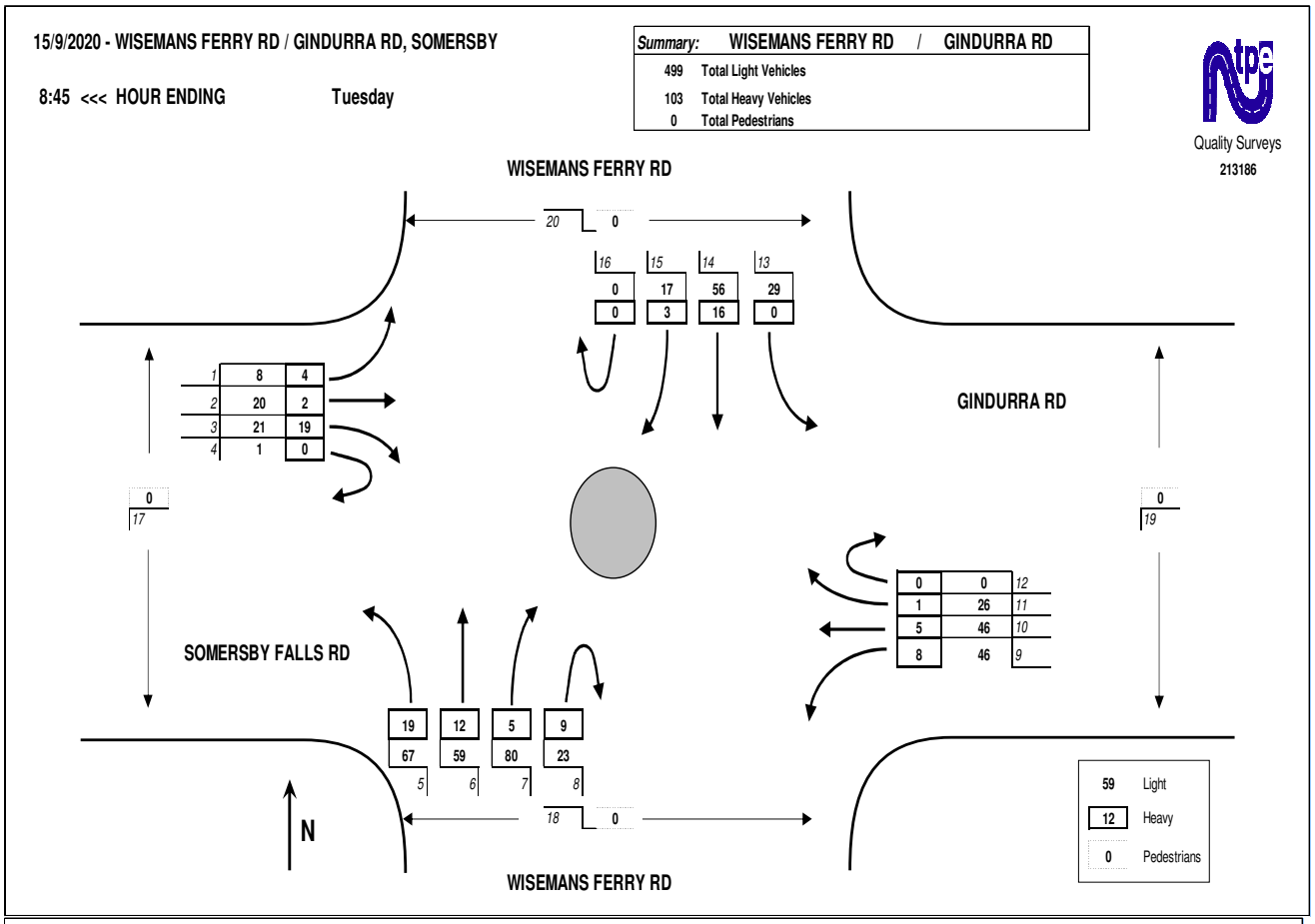
JR Garry BE (Civil), Masters of Traffic
Director
Intersect Traffic Pty Ltd

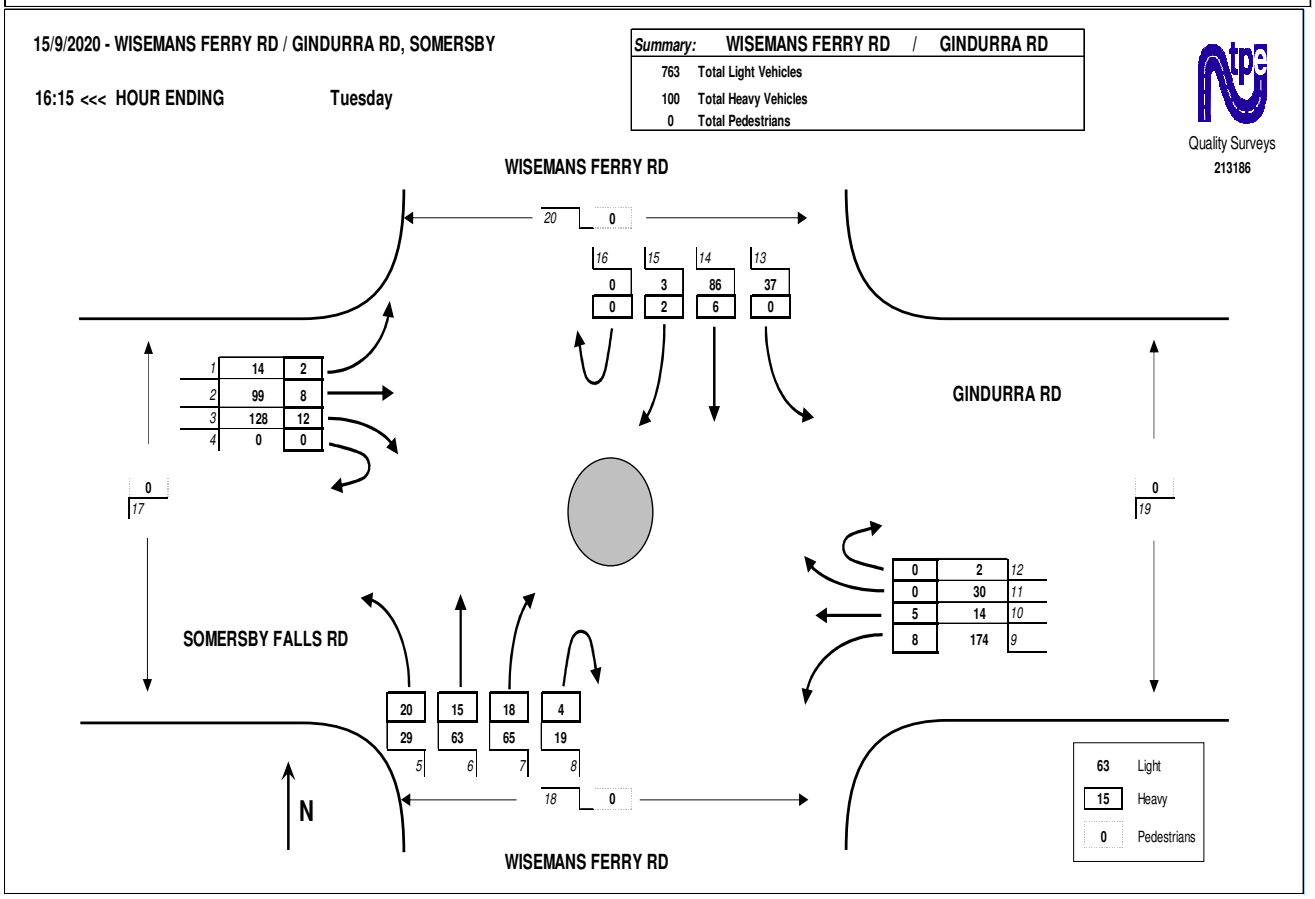
ATTACHMENT A
Development Plans


Subject Land
Proposed Environmental Living Zone (19.75 ha)
Proposed Environmental Conservation Zone (104.35 ha)
Balance of Lot 481 DP 1184693 to retain existing C2 Environmental Conservation zoning
Aboriginal Heritage Items
Existing Biodiversity Corridor
Proposed Trail
Existing Trail
0
500 m
DAWSON STREET
REEVES STREET
C2
C4
C4
C2
TALLARA ROAD
GOLDSMITH ROAD
REEVES STREET
PACIFIC MOTORWAY
PACIFIC MOTORWAY
DEBENHAM ROAD NORTH
CHIVERS ROAD
WIRRINDA ROAD
Map produced by The Spatial Lab Project: 1045 v4.0 22/6/2023

ATTACHMENT B

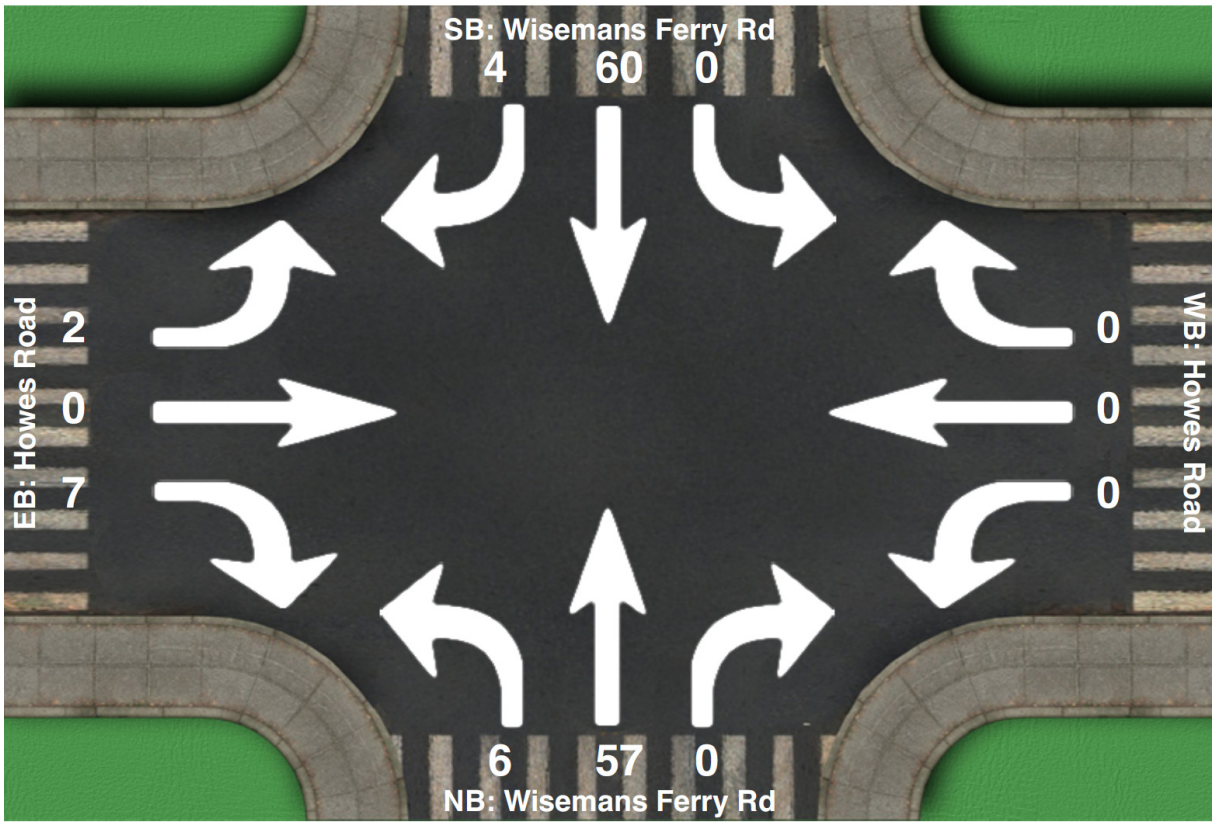
Traffic Count Data


15/9/2020 - WISEMANS FERRY RD / GINDURRA RD, SOMERSBY
8:45 <<< HOUR ENDING
Tuesday
Summary: WISEMANS FERRY RD / GINDURRA RD
499 Total Light Vehicles
103 Total Heavy Vehicles
0 Total Pedestrians
Quality Surveys
213186
WISEMANS FERRY RD
GINDURRA RD
SOMERSBY FALLS RD
WISEMANS FERRY RD
N
59 Light
12 Heavy
0 Pedestrians


15/9/2020 - WISEMANS FERRY RD / GINDURRA RD, SOMERSBY
16:15 <<< HOUR ENDING
Tuesday
Summary: WISEMANS FERRY RD / GINDURRA RD
763 Total Light Vehicles
100 Total Heavy Vehicles
0 Total Pedestrians
Quality Surveys
213186
WISEMANS FERRY RD
GINDURRA RD
SOMERSBY FALLS RD
WISEMANS FERRY RD
N
63 Light
15 Heavy
0 Pedestrians

Intersection Peak Hour

Location: Wisemans Ferry Rd at Howes Road, Somersby
GPS Coordinates:
Date: 2020-09-22
Day of week: Tuesday
Weather:
Analyst: Imogen



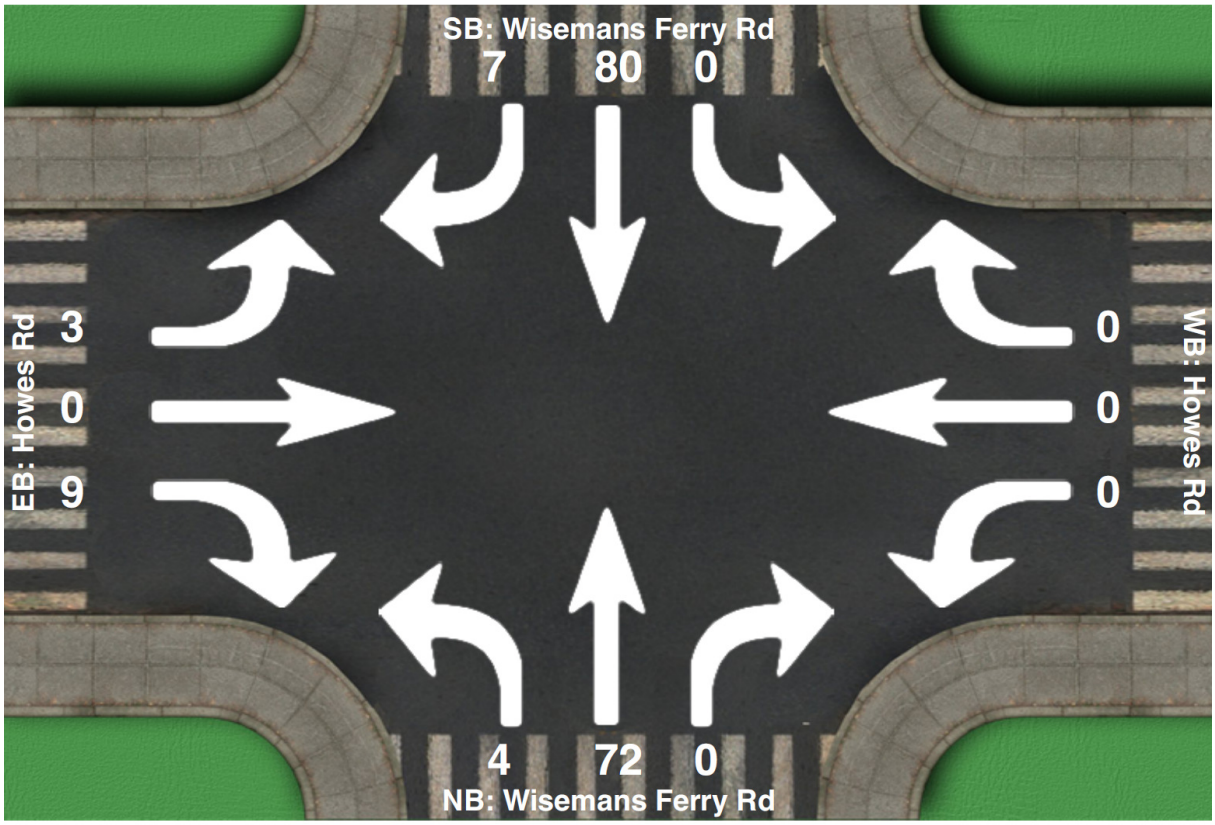
Intersection Peak Hour

07:15 - 08:15

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	0	60	4	0	0	0	6	57	0	2	0	7	136
Factor	0.00	0.65	0.50	0.00	0.00	0.00	0.50	0.68	0.00	0.25	0.00	0.58	0.85
Approach Factor	0.67			0.00			0.66			0.45			

Intersection Peak Hour

Location: Wisemans Ferry Rd at Howes Rd, Somersby
GPS Coordinates:
Date: 2020-09-23
Day of week: Wednesday
Weather:
Analyst: Imogen



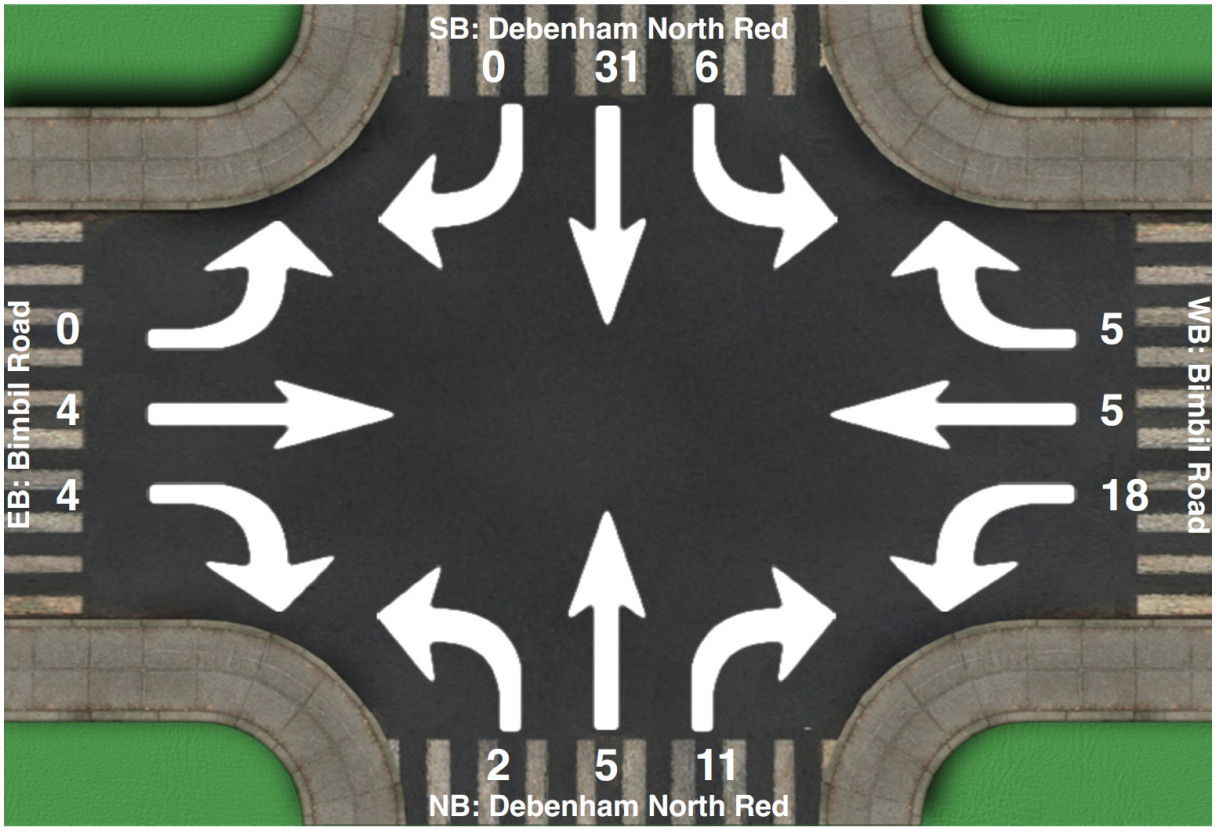
Intersection Peak Hour

15:00 - 16:00

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	0	80	7	0	0	0	4	72	0	3	0	9	175
Factor	0.00	0.95	0.88	0.00	0.00	0.00	0.33	0.90	0.00	0.38	0.00	0.45	0.93
Approach Factor	0.95			0.00			0.86			0.43			

Intersection Peak Hour

Location: Debenham North Red at Bimbil Road, Somersby
GPS Coordinates: Lat=-33.395907, Lon=151.293552
Date: 2023-05-02
Day of week: Tuesday
Weather:
Analyst: Jeff



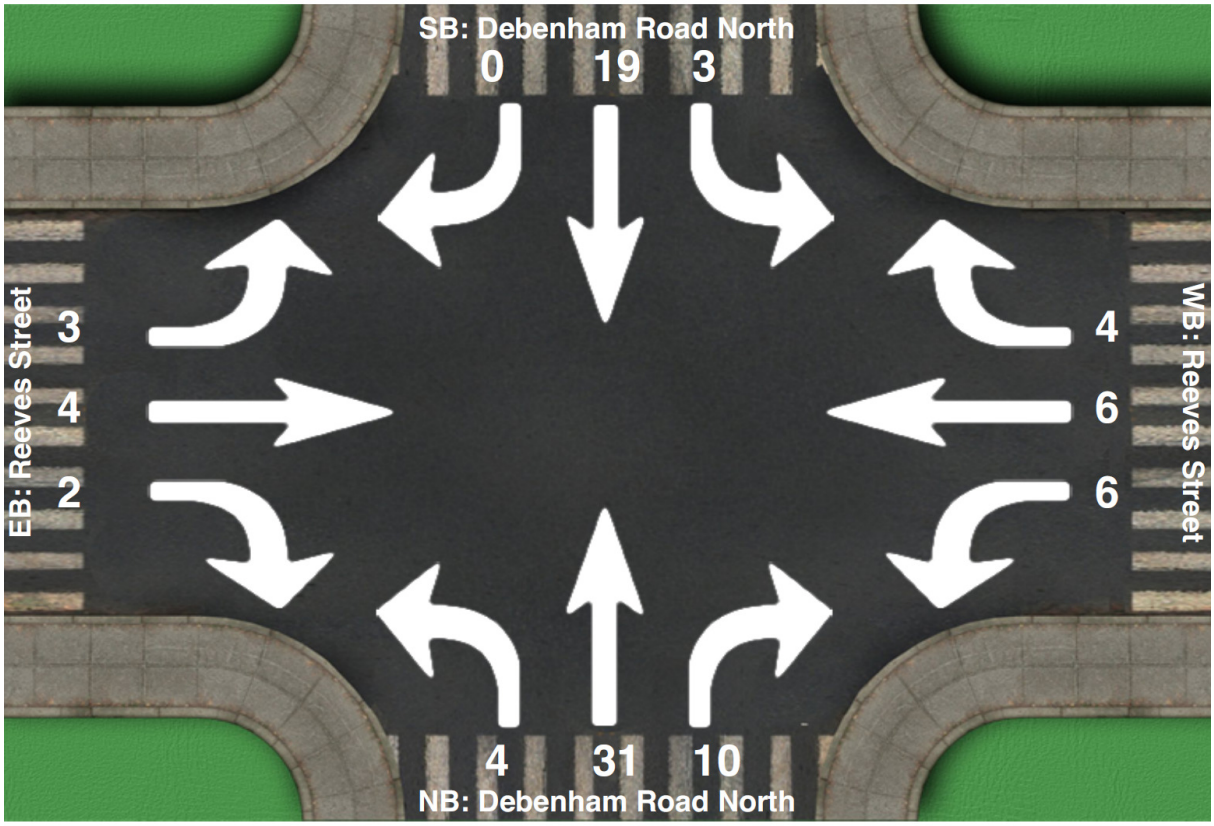
Intersection Peak Hour

08:00 - 09:00

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	6	31	0	18	5	5	2	5	11	0	4	4	91
Factor	0.50	0.78	0.00	0.56	0.62	0.62	0.50	0.62	0.39	0.00	0.50	0.50	0.78
Approach Factor	0.77			0.64			0.64			0.67			

Intersection Peak Hour

Location: Debenham Road North at Reeves Street, Somersby
GPS Coordinates: Lat=-33.395908, Lon=151.293860
Date: 2023-05-04
Day of week: Thursday
Weather:
Analyst: Jeff



Intersection Peak Hour

15:00 - 16:00

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	3	19	0	6	6	4	4	31	10	3	4	2	92
Factor	0.75	0.53	0.00	0.38	0.50	0.50	0.50	0.65	0.42	0.75	0.33	0.25	0.72
Approach Factor	0.55			0.67			0.66			0.38			