



14 Hamilton Road Albion Park

Revised Traffic Impact Assessment

LandTeam Australia Pty Ltd

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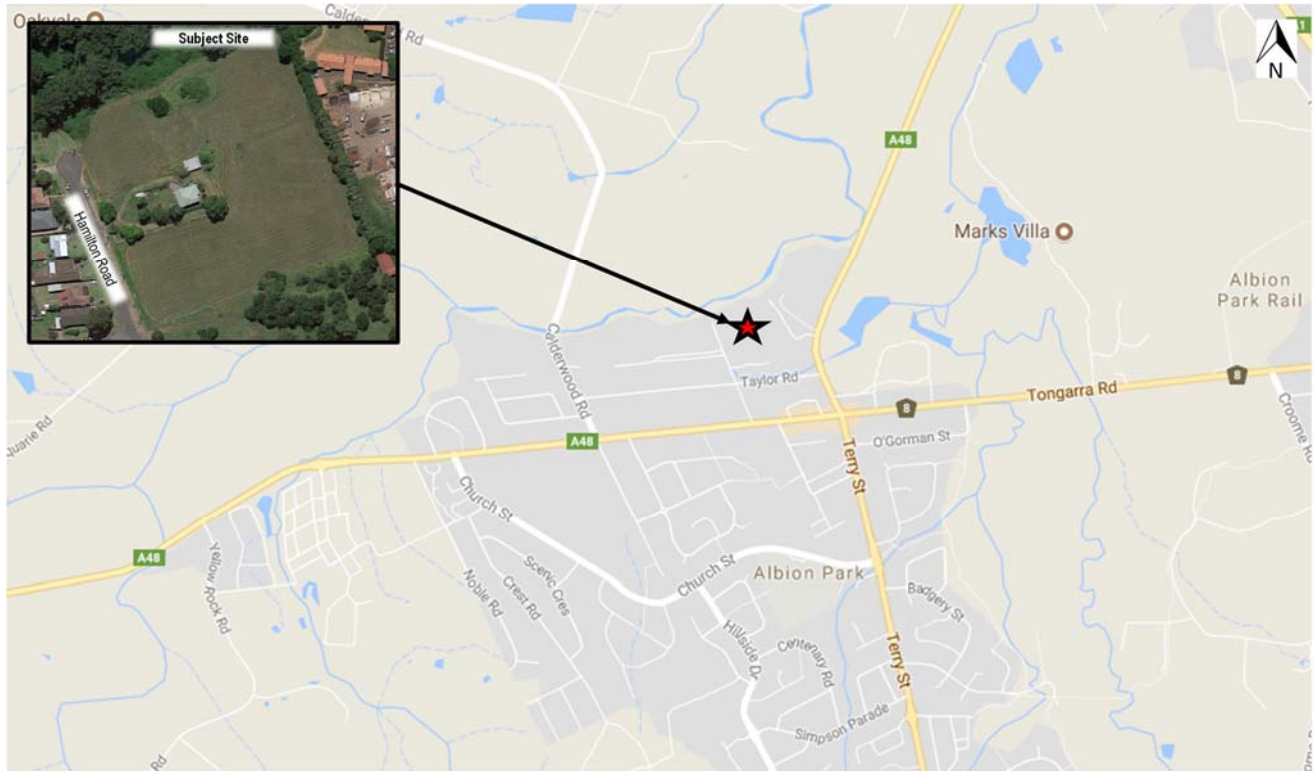
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1. INTRODUCTION

1.1 Background

Bitzios Consulting has been engaged by LandTeam Pty Ltd to prepare a traffic impact assessment for a proposed residential subdivision located at 14 Hamilton Road, Albion Park. The subject site location and its surroundings are presented in Figure 1.1.



Source: Google Maps

Figure 1.1: Subject Site Location

1.2 Scope

The scope of this assessment includes the following:

- Assessment of site access location and form, including sight distance checks
- Assessment of the development's car parking requirements in accordance with Council's Development Control Plan (DCP) and Australian Standards (AS2890)
- Assessment of the on-site parking layout for general traffic and service vehicle manoeuvring, including swept path checks using AutoTURN software
- Assessment of the public transport, pedestrian and cycling networks and connectivity within vicinity of the site.

2. PROPOSED DEVELOPMENT

The proposed development (shown in Figure 2.1) is located within RU6 Transition zoned land and includes 29 low-density residential dwellings, three (3) of which are planned as duplexes, and one (1) community title lot with access via Hamilton Road.



Figure 2.1: Development Plan

Development plans are provided in **Appendix A**.

3. PARKING ASSESSMENT

3.1 Car Parking Requirements

Development plans show that each lot provides at least two (2) spaces per dwelling, one (1) of which is behind the building line and is at least 900mm from the side boundary for single lots, in accordance with Council's Development Control Plan (DCP) – Chapter 13 Parking, Traffic and Transport. For duplexes, two (2) spaces are provided per dwelling, in accordance with Council's DCP – Chapter 13 Parking, Traffic and Transport.

3.2 Internal Layout and Access

The parking access and layout has been assessed against Australian Standards AS2890.1:2004 Off-Street Car Parking Code, with comments as follows:

- Each lot's driveway should be provided at a minimum width of 3m, in accordance with the requirements of AS2890.1
- Pedestrian sight triangles have been provided on the egress side of the proposed crossovers in accordance with AS2890.1
- Both vehicular crossovers have been provided within a minimum width of 6m, in accordance with AS2890.1 and Council requirements
- A grade of 1:20 (5%) shall be provided from the property boundary for the first 6m into the site.

3.3 Internal Cross Section

The circulation roadway is 6m wide and has been designed in compliance with AS2890.1. It should be noted that the roadway provides a minimum horizontal clearance of 300mm to vertical obstructions more than 150mm in height, which complies with AS2890.1. Figure 3.1 illustrates the internal cross section of the site.

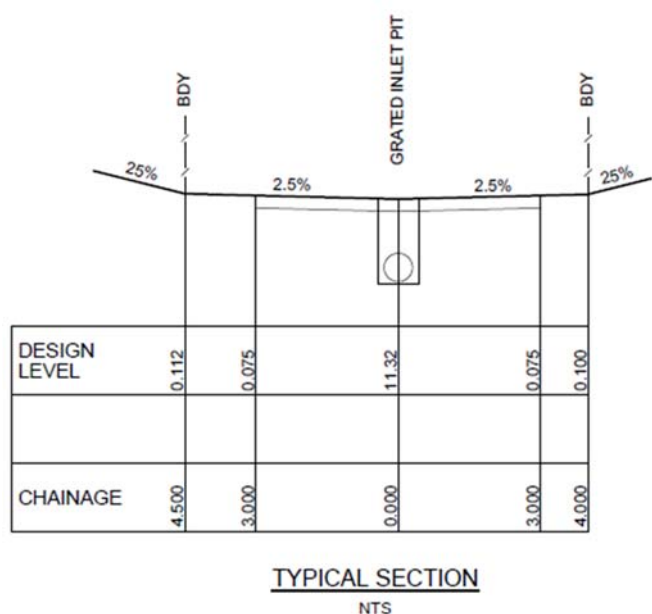


Figure 3.1: Internal Cross Section

3.4 Sight Distance Assessment

Sight distance to and from the proposed accesses were assessed in accordance with AS2890.1. Taking into consideration the design speed of 50km/h on Hamilton Road, the corresponding sight distance requirement is 69m as specified in AS2890.1. Figure 3.2 demonstrates that both accesses achieve the minimum requirement of 69m sight distance with the northern access having full vision of the cul-de-sac situated to the north. Figure 3.3 and Figure 3.4 show that there are no obstructions (e.g. roadside furniture) along the frontage on Hamilton Road. It also demonstrates that there is adequate room to widen Hamilton Road to meet the requirements of the proposed development.



Figure 3.2: Sight Distance Assessment



Figure 3.3: Hamilton Road Southern Access (Facing South)



Figure 3.4: Hamilton Road Southern Access (Facing North)

3.5 Refuse Collection

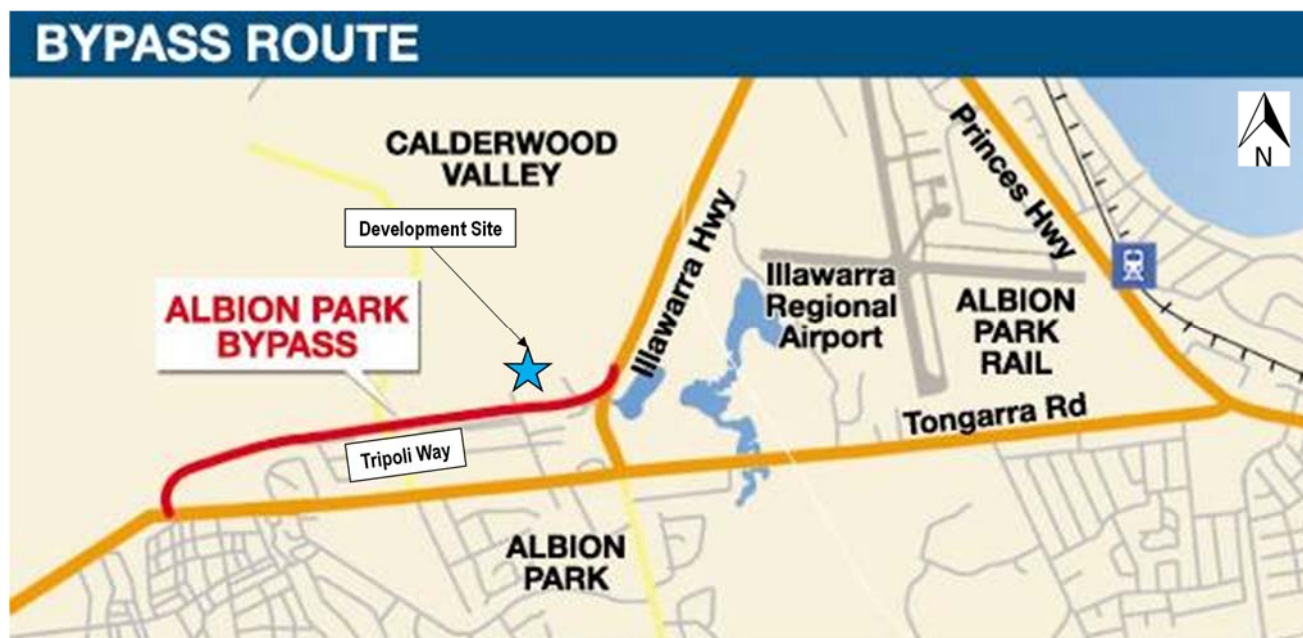
It is understood that refuse collection is to be undertaken on-site for each individual dwelling. Each dwelling is expected to be serviced by a side-loading Refuse Collection Vehicle (RCV).

3.6 Service Vehicle Access

Council's DCP does not specify a minimum requirement for service vehicles for residential properties. Swept paths provided in **Appendix B** demonstrate that a Heavy Rigid Vehicle (12.5m long) is able to ingress and egress the site in a forward gear. This service vehicle provision is consistent with what has been adopted in the surrounding area.

4. ALBION PARK BYPASS

Council has proposed to extend Tripoli Way to form a bypass of the Albion Park Town Centre in an east-west direction. The extension will allow for motorists to avoid travelling through Albion Park town centre via Tongarra Road (Illawarra Highway). The Tripoli Way extension will join the Albion Park Rail bypass at the Illawarra Highway north of Tongarra Road. Figure 4.1 outlines the bypass route for Albion Park.



Source: Illawarra Mercury

Figure 4.1: Albion Park Bypass Route

From a traffic and transport perspective, the proposed residential subdivision is unlikely to be impacted by the bypass given the bypass will run along the southern boundary of the site, as shown in Figure 4.1. The proximity of the proposed development to the bypass is not expected to impact access to and from the site.

Council officers were contacted on Friday 15th March 2019 to discuss any potential conflicts between the plans for the proposed development and the proposed bypass. They advised that detailed plans are not currently available for the bypass. More importantly, they advised that given the proposed development is expected to be approved and constructed prior to the finalisation of the bypass design and construction, that it did not warrant further consideration of the bypass and the future road network surrounding the site.

A review of the Wollongong Shellharbour (WOLSH) Tracks Model indicates that the existing Tripoli Way / Hamilton Road intersection will be modified as part of the Tripoli Way extension project. While the intersection form is to remain as a priority-controlled intersection, it is understood the Hamilton Road approaches will become the minor approaches.

5. EXTERNAL ROAD NETWORK

Hamilton Road fronting the site frontage currently provides a 18m wide road reserve, including a 7.5m wide carriageway and 3.5m wide western verge. Kerb and gutter are only provided along the western side.

The Shellharbour DCP Chapter 5 indicates that Hamilton Road is classified as a Collector Road, requiring a 9m wide carriageway, barrier kerb and a 1.2m wide footpath provision. Noting this, the section of Hamilton Road fronting the site should be widened to provide the 9m wide carriageway, with barrier kerb and a footpath provided for the length of the frontage.

6. ALTERNATIVE TRANSPORT MODES

6.1 Public Transport

There are two (2) bus stops within a 400m radius of the development site. The bus stop locations are shown in Figure 6.1 and are currently serviced by Bus Routes 76 and 77 approximately every 60 minutes.



Figure 6.1: Surrounding Bus Stops

6.2 Active Transport

There are limited active transport facilities surrounding the subject site. Pedestrian footpaths are provided on major roads surrounding the subject site, particularly on the road frontages of Albion Public School, however about 150m of road does not have a footpath along Hamilton Road. Figure 6.2 illustrates the pedestrian footpaths surrounding the subject site. Future pedestrian treatment options will need to be considered to allow for crossing once the Albion Park bypass project has been completed. The resulting upgrade to Tripoli Way will at minimum have the road classified as a major collector road. The intersection of Hamilton Road and Tripoli Way will need to be examined for potential treatment options.



Figure 6.2: Surrounding Pedestrian Facilities

7. SUMMARY AND CONCLUSIONS

The key findings of the traffic impact assessment for the proposed residential subdivision located at 14 Hamilton Road, Albion Park are as follows:

- The proposed retirement village development will consist of 29 low-density residential dwellings, three (3) of which will be duplexes and one (1) a community title lot
- The proposed development provides two (2) car parking spaces per dwelling and two (2) spaces per dwelling in each duplex
- The development's parking layout has been designed in accordance with considerations to the requirements of Council's DCP and Australian Standards (AS2890)
- Given the proposed development is expected to be approved and constructed prior to the finalisation and construction of the Albion Park Bypass, SCC officers advised that no further consideration of the proposal's impacts on the future road network are warranted
- Refuse collection is proposed to be undertaken on-site for each individual dwelling via a side-loading Refuse Collection Vehicle (RCV)
- The site can accommodate manoeuvring for a Heavy Rigid Vehicle (HRV)
- The section of Hamilton Road fronting the site should be widened to provide the 9m wide carriageway, with barrier kerb and a footpath provided for the length of the frontage
- Adequate public and active transport facilities are present surrounding the subject site but may need some further review and planning.

Appendix A: Development Plans



9 - 3 Bedrooms Un -	34%
14 - 2 Bedrooms Un -	54%
3 - Duplex un 1-bed-	12%

LEGEND:

	TOTAL SITE AREA - 19,442m ²
	ENVIRONMENTALLY SENSITIVE LAND - 4846m ²
	-DEVELOPMENT AREA - 14,596m ²
	DEEP SOIL ZONES >15% - 2,410.68m ² or 16.51%
	TOTAL LANDSCAPING AREA - 4,389.78m ² or 30.08%

	HOUSE / GFA - 3,098.81m ² / FSR 21.23%
	ALFRESCO > 15m ² - 435m ²
	COMMUNITY BUILDING

0 5m 10m 30m

Scale 1 : 600
60m

Date:	Description:	Issue:
13.10.2017	DRAFT ISSUE	A
12.04.2019	DRAFT ISSUE	H
18.12.2019	DRAFT ISSUE	N
15.01.2020	DRAFT ISSUE	O

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Project :	LOT 1, DP 1069961, HAMILTON ROAD, ALBION PARK, NSW			
Drawing Title:	SITE PLAN			
Project No.:	T2_2020_02	Drawing No.:	A02	
Date:	JANUARY 2020	Scale:	1 : 600	Sheet: A3
		Issue:	O	

Appendix B: Swept Path Assessment

