



Deicorp Projects (Tallawong Station) Pty Ltd

Road Safety Audit Report Construction Stage

Tallawong Station Precinct South

May 2020

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SYDNEY

Suite 603, Level 6, 12 Century Circuit
Norwest Business Park NSW 2153
P (02) 9659 0005 F (02) 9659 0006
E sydney@brs.com.au

CENTRAL COAST

Studio 5, 78 York Street
East Gosford NSW 2250
P (02) 4325 5255
E coast@brs.com.au

HUNTER

Unit 1, 17 Babilla Close
Beresfield NSW 2322
P (02) 4966 8388 F (02) 4966 1399
E hunter@brs.com.au

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SYDNEY
Suite 603, Level 6, 12 Century Circuit
Norwest Business Park NSW 2153
P (02) 9659 0005 F (02) 9659 0006
E sydney@brs.com.au

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Studio 5, 78 York Street
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P (02) 4966 8388 F (02) 4966 1399
E hunter@brs.com.au

1 Introduction

Barker Ryan Stewart has been engaged by Deicorp Projects (Tallawong Station) Pty Ltd to prepare a concept design road safety audit report for the management of construction traffic for a proposed mixed-use development comprised of residential apartments, retail and commercial space at 1-15 and 2-12 Conferta Avenue, Rouse Hill.

The two sites are currently unoccupied and have been cleared of vegetation. The sites are bisected by Conferta Avenue and bounded by Themeda Avenue and Tallawong Metro Station to the north, Cudgegong Road to the east, Schofields Road to the south, and the Tallawong Station commuter car park to the west.

The site is shown in **Figure 1.1** below.

The purpose of this report is to assess the proposed traffic management measures that will be undertaken during the construction phase of the development and to identify any elements of these measures or the road environment that may present a risk to the safety of road users.



Figure 1.1: Aerial Photo of Site (Source: NSW Government Six Maps)

A road safety audit is a term used internationally to describe an independent review of a road project or existing road to identify any safety or performance concerns. The audit team considers the safety of all road users and qualitatively reports on road safety issues or opportunities for safety improvement. The team also considers other factors that are relevant to the existing site.

A road safety audit is therefore a formal examination of a road project, or any type of project which affects road users (including cyclists, pedestrians, mobility impaired etc.) or an existing road or trafficable area, carried out by an independent competent team who identify and document road safety concerns.

A road safety audit is intended to help deliver a safe road system and is not a review of compliance with standards.

2 Background

A Construction Traffic Management Plan (CTMP) has been prepared for the project that includes a Vehicle Management Plan (VMP) and a Traffic Control Plan (TCP).

The CTMP provides details of the types of construction vehicles that will access the site and the routes they will use to access the site from the main road network. It indicates that the largest vehicles that will access the site are 19 metre articulated vehicles and 12.5 metre heavy rigid vehicles entering the site from Schofields Road, Cudgegong Road and Conferta Avenue and exiting the site via Conferta Avenue, Tallawong Road and Schofields Road.

The TCP prepared as part of the CTMP prescribes "Trucks" warning signs to be installed on all roads surrounding the site to provide advance warning for road users of construction vehicles accessing the site.

2.1 Assessment Process

This road safety audit has been conducted in accordance with the procedures set out in the Austroads Guide to Road Safety Part 6A: Implementing Road Safety Audits (2019). A site inspection was conducted on Tuesday 31 March 2020 and the details contained within the Construction Traffic Management Plan for the project reviewed to identify issues that may affect road user safety and other relevant issues.

Road safety audits are a formal process and the client's responses to the audit findings should be documented by the client in writing. A client is under no obligation to accept all the audit findings, however, the reasons for non-acceptance should be included within the written responses. Any corrective actions in response to the audit should be considered in conjunction with all other project considerations. It is not the role of the audit team to approve the client's responses to the audit.

The findings of the audit are outlined below in **Table 4**.

3 Risk Assessment

A risk rating based on the **likelihood** of a crash occurring as a result of the deficiency together with the potential **consequence** of that crash.

The risk ratings adopted are:

- ⇒ **Intolerable**
- ⇒ **High**
- ⇒ **Medium**
- ⇒ **Low**

Tables 1 to 3 below show the risk rating process.

Frequency	Description
Frequent	Once or more per week
Probable	Once or more per year (but less than once a week)
Occasional	Once every five to ten years
Improbable	Less often than once every ten years

Table 1: How often is the problem likely to lead to a crash? (Austroads, 2019)

Consequence	Description	Examples
Catastrophic	Likely multiple deaths	<ul style="list-style-type: none"> - High speed, multi-vehicle crash on a freeway - Car runs into crowded bus stop - Bus and petrol tanker collide - Collapse of a bridge or tunnel
Serious	Likely deaths or serious injury	<ul style="list-style-type: none"> - High or medium speed vehicle/vehicle collision - High or medium speed collision with a fixed roadside object - Pedestrian or cyclists struck by a car
Minor	Likely minor injury	<ul style="list-style-type: none"> - Some low speed vehicle collisions - Cyclist falls from bicycle at low speed - Left-turn rear-end crash in a slip lane
Limited	Likely trivial injury or property damage only	<ul style="list-style-type: none"> - Some low speed vehicle collisions - Pedestrian walks into object (no head injury)

Table 2: What is the likely severity of the resulting crash type? (Austroads, 2009)

	Frequent	Probable	Occasional	Improbable
Catastrophic	Intolerable	Intolerable	Intolerable	High
Serious	Intolerable	Intolerable	High	Medium
Minor	Intolerable	High	Medium	Low
Limited	High	Medium	Low	Low

Table 3: The resulting level of risk (Austroads, 2019)

4 Audit Findings

Table 4: Audit findings

Audit Findings	Suggested Treatments	Risk	Responsible Officer	
			Accept Y/N	Comments
<p>1. The increase in the volume and frequency of heavy vehicle movements increases the risk of crashes with light vehicles, particularly at the Schofields Road / Cudgegong Road intersection where heavy vehicles will turn right across opposing traffic.</p>	<p>Appropriate warning signs should be installed on the northern side of Schofields Road on the eastbound approach to Cudgegong Road to raise driver awareness of heavy vehicle turning movements.</p>	<p>Occasional / Serious = HIGH</p>		
<p>2. Heavy vehicles exiting the site along Conferta Avenue towards Tallawong Road creates a risk of crashes with vehicles accessing the southern portion of the commuter carpark.</p> <p>The likely low travel speed in this area will reduce the severity of potential crashes.</p>	<p>Appropriate warning signs should be installed in Conferta Avenue and Aristada Street to raise driver awareness of heavy vehicle movements.</p>	<p>Occasional / Minor = MEDIUM</p>		
<p>3. Heavy vehicle movements at the Cudegong Road / Conferta Avenue intersection, the Tallawong Road / Conferta Avenue intersection and along Conferta Avenue will increase the risk to pedestrians crossing Conferta Avenue at these locations.</p>	<p>Appropriate warning signs should be installed on all roads surrounding the site to raise the awareness of pedestrians about heavy vehicle movements.</p> <p>In addition, it is recommended that traffic controllers stop pedestrian movements across Conferta Avenue between Aristada Street and Tallawong Road while heavy vehicles are exiting the site along Conferta Avenue.</p> <p>Note: All existing shared paths surrounding the site are required to remain accessible</p>	<p>Occasional / Serious = HIGH</p>		

Audit Findings	Suggested Treatments	Risk	Responsible Officer	
			Accept Y/N	Comments
	to pedestrians and cyclists at all times during the construction period.			
4. Construction vehicles using Themeda Avenue to enter and exit the site will create risks for pedestrians crossing Themeda Avenue to access the metro station and bus stops in Implexa Parade.	<p>Construction contractors should be provided with clear and concise instructions identifying that entry to and exit from the site will only be permitted via Conferta Avenue.</p> <p>In addition, the construction site entry at the Cudgegong Road / Conferta Avenue intersection should be clearly signposted.</p>	Occasional / Serious = HIGH		
<p>5. Construction vehicles, particularly concrete trucks waiting to access the site may obstruct traffic flow and / or restrict sight lines in Cudgegong Road, thereby increasing the risk of crashes.</p> <p>The likely low travel speeds in this area will reduce the severity of potential crashes.</p>	The Construction Management Plan for the site should include procedures and processes to safely and efficiently manage the arrival and departure of construction vehicles during concrete pours.	Occasional / Minor = MEDIUM		

5 Conclusion

The proposed traffic management measures that will be undertaken during the construction phase of the development have been audited as per the appropriate road safety audit guidelines. The audit findings have been produced for the consideration of all interested parties, including the client, Deicorp Projects (Tallawong Station) Pty Ltd, Transport for NSW and Blacktown City Council.

The audit findings should be responded to by the client for this project including any corrective actions that need to be addressed in the Construction Pedestrian and Traffic Management Plan. It is not the role of the audit team to approve the client's responses to the audit.

Although every endeavour has been made to identify road safety risks associated with the construction stage of the project, the auditors cannot guarantee that every issue that affects road user safety has been identified.

Auditors:



Robert Day
Auditor Level 3 (RSA-02-0368)

Appendix A Traffic Control Plan

BARKER RYAN STEWART
TOTAL PROJECT SOLUTIONS

Date: 16/04/2020 **Author:** ARON JAGGANNATH **Project:** TALLAWONG STATION PRECINCT SOUTH - TCP

Comments:
BASED ON TCP 195 OF RMS'S TRAFFIC CONTROL AT WORK SITES
CARD NUMBER: 0052035594
AERIAL PHOTOGRAPHY SOURCE: NEARMAP

NOTE: IT IS RECOMMENDED THAT TRAFFIC CONTROLLERS STOP PEDESTRIAN MOVEMENTS ACROSS CONFERTA AVENUE BETWEEN ARISTIDA AVENUE AND TALLAWONG ROAD WHILE HEAVY VEHICLES ARE EXITING THE SITE ALONG CONFERTA AVENUE



Appendix B Site Photos



Photo 1 – Schofields Road / Cudgegong Road Intersection



Photo 2 – Cudgegong Road / Conferta Avenue Intersection



Photo 3 – Tallawong Road / Conferta Avenue Intersection