North East Link Project
Manningham Club & Hotel, 1 – 11 Thompsons Road, Bulleen
Expert Evidence – Traffic & Transport

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16 July 2019
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Amendment Number: North East Link Project
Date of this Report: 16 July 2019
Address of Property: 1 – 11 Thompsons Road, Bulleen
Date(s) of any inspection: 10 July 2019
The party for whom the report has been prepared: This report has been prepared at the request of ALH Group Property Holdings Pty Ltd owners and operators of the Manningham Club & Hotel
The person from whom the expert received instructions: Ms. Amanda Johns of Minter Ellison

In accordance with the requirements of the Panel, my qualifications, experience and expertise to provide my opinions on this matter are summarised below:

**Name:** Valentine Premkumar Gnanakone
**Address:** 56 Down Street
Collingwood
Victoria 3066
**Professional Qualifications:** Bachelor of Engineering (Civil), RMIT University 2003
Master of Business Administration (MBA), Deakin University 2013
**Professional Registration:** Board of Professional Engineers of Queensland – Registered Professional Engineer of Queensland (RPEQ)
VicRoads Accredited Road Safety Auditor
**Professional Experience:** Director, onemilegrid, 2014 – present
Associate, Cardno, 2011 – 2014
Senior Traffic Engineer, Cardno, 2007 – 2011
Engineer, Grogan Richards, 2004 – 2007
**Areas of Expertise:** Car parking and traffic engineering design and compliance.
Traffic advice and assessment of land use and development proposals to local and state planning authorities, government agencies, corporations and developers for a variety of projects including low, medium & high density residential, commercial, retail, industrial, institutional, service orientated and mixed use projects.
Preparation and presentation of expert evidence before VCAT and Planning Panels.
Expertise to Prepare this Report: My professional qualifications, training and experience over a number of years on all forms of development and infrastructure projects qualifies me to comment on the car parking and traffic implications of the proposal.

Relationship to the Applicant: I do not have any private or business relationship with the applicant.

Instructions: I have been requested by ALH Group Property Holdings Pty Ltd to provide my expert opinions in relation to the following:
- the impact that the North East Link Project will have on the operation of the Manningham Club & Hotel with regard to access from Thompsons Road and Bulleen Road;
- the impact that the North East Link Project will have on the operation of the Manningham Club & Hotel with regard to access from Thompsons Road and Bulleen Road during construction;
- the implications of the proposed modified access arrangements to the Manningham Club & Hotel at Thompsons Road and Bulleen Road.

Facts, Matters, and Assumptions Relied Upon: North East Link Project ‘Map Books’ Specifically Map 22 and 23
North East Link Project Traffic and Transport Impact Assessment prepared by Smedley Technical & Strategic
North East Link Project EES Document – Chapter 9 – Traffic and Transport
North East Link Project Incorporated Document dated April 2019
Potential Land Acquisition Plan
Submission by Minter Ellison on behalf of the ALH Group Property Holdings Pty Ltd
Submission by Rigby Cooke on behalf of Marcellin College

Identity of Persons Undertaking the Work: Valentine Gnanakone, Director one mile grid (BE Civil, MBA)
James Dear, Associate one mile grid (BE Civil, B Com)

I have made all the inquiries that I believe are desirable and appropriate and that no matters of significance which I regard as relevant have to my knowledge been withheld from the Tribunal.

Valentine Gnanakone
Director – Senior Traffic Engineer
one mile grid

I have made all the inquiries that I believe are desirable and appropriate and that no matters of significance which I regard as relevant have to my knowledge been withheld from the Tribunal.

____________________________
Valentine Gnanakone
Director – Senior Traffic Engineer
one mile grid
INTRODUCTION

My name is Valentine Gnanakone and I am Director at onemilegrid where I practice as a traffic engineer.

I have been requested by Minter Ellison Lawyers on behalf ALH Group Property Holdings Pty Ltd to undertake an assessment of the traffic and access implications as a result of the North East Link Project (the Project) on the Manningham Club & Hotel (the Club) and present expert evidence to Planning Panels Victoria.

Specifically, I have been requested to provide my opinions in relation to the following matters:

➢ the impact that the Project will have on the operation of the Club with regard to access from Thompsons Road and Bulleen Road;
➢ the impact that the Project will have on the operation of the Club with regard to access from Thompsons Road and Bulleen Road during construction;
➢ the implications of the proposed modified access arrangements to the Club at Thompsons Road and Bulleen Road.

I have not been requested to review the potential car parking implications of the project on the subject site, nor have I been asked to review the potential impacts on loading. That said, I note there is potential for the Project to impact on these elements of the Club.

In the course of preparing this report, I have inspected the site and its environs, reviewed relevant data and background reports and assessed the traffic and access implications of the Project particular to the Club.

My evidence has been prepared in accordance with the ‘Guide to Expert Evidence’ published by Planning Panels Victoria.
3 EXISTING CONDITIONS

3.1 Site Location

The Club is located on the north side of Thompsons Road and the east side of Bulleen Road and is addressed as 1 – 11 Thompsons Road, Bulleen as shown in Figure 1.

The Club is located across an irregularly shaped site which includes the main club building, a Dan Murphy’s and a BWS training facility.

Access to the site is available from Thompsons Road and Bulleen Road which leads to an internal road network and car parking area. The two access points are connected by the internal road network.

Figure 1 Site Location
3.2 Road Network and Access

3.2.1 Thompsons Road

Thompsons Road is a Declared Main Road which is aligned northeast to southwest in the vicinity of the site, connecting Bulleen Road through to Foote Street. In the vicinity of the site, Thompsons Road operates with two traffic lanes in each direction with a bus lane provided in the southwest bound carriageway. Thompsons Road currently carries in the order of 24,000 vpd.

Access to the site from Thompsons Road is achieved via an uncontrolled intersection allowing left and right turn entry movements from the southwest and northeast respectively, and left turn out movements to the northeast only. Right turn movements out of the site access are not permitted. It is noted that the left and right turn entry movements are facilitated by auxiliary turn lanes and furthermore the left turn entry movement is partially signalised associated with the pedestrian crossing signals immediately to the south.

Adjacent to the site access is an entry ramp to the Eastern Freeway (eastbound).

The site access leads to an internal road network serving the Club only. The internal driveway provides access to various car parking areas, a Dan Murphy’s bottleshop a porte cohere in front of the hotel, loading facilities and other associated uses. Of note, a BWS training facility is located immediately north of Thompsons Road and includes a drive through arrangement.

An aerial view of the Thompsons Road access point is provided in Figure 2, whilst a view of the Thompsons Road cross section is provided in Figure 3 and Figure 4.

Figure 2 Thompsons Road Existing Site Access
Figure 3    Thompsons Road Club Access
Figure 4  Thompsons Road looking NE (top) and SW (bottom)
3.2.2 Bulleen Road

Bulleen Road is a Declared Main Road and is generally aligned north to south in the vicinity of the site. Bulleen Road operates with two traffic lanes and a kerbside bicycle lane in each direction separated by a central median. There is a level difference between the north and south bound carriageways. Bulleen Road currently carries in the order of 45,000 vpd.

Access to the site is available from Bulleen Road which leads to the internal driveway which also connects to Thompsons Road. The Bulleen Road access currently enjoys fully directional movements with left and right turn entry movements and left and right turn exit movements permitted at the intersection. An auxiliary right turn lane assists motorists turning right from the south into the site, and a median break allows all other movements. It is noted that a fully directional access is located directly opposite this access point associated with the Carey Grammar sporting fields.

Directly to the north of the site is an adjacent driveway providing access to the Marcellin College grounds. It appears that this access is for maintenance vehicles only.

An aerial view of the Bulleen Road access point is provided in Figure 5, whilst a view of the Bulleen Road cross section is provided in Figure 6 and Figure 7.

Figure 5 Bulleen Road Existing Site Access
Figure 6  Bulleen Road Access
Figure 7  Bulleen Road looking S (top) and N (bottom)
4 THE PROJECT

4.1 General

The North East Link is a new freeway standard connection between the M80 Ring Road and an upgraded Eastern Freeway. The intention of the Project is to provide for a freeway standard orbital connection across Melbourne.

The subject site is located at the interface between the new link road and the upgraded Eastern Freeway. Of note, in the vicinity of the site, there will be tunnel portals, elevated roadways and interchanges, bikeways, busways, and a new park and ride facility.

An artist impression of the project in the vicinity of the site is provided in Figure 8.

Figure 8 The Project in the vicinity of the Subject Site
4.2 Proposed Works

Based on my view of the provided material, I understand that at this stage the following works are proposed in the vicinity of the site:

- Construction of a new park and ride facility;
- Construction of a new public road in the southeast corner of the site for the park and ride facility;
- Modifications to the existing Thompsons Road Club access;
- Construction of a busway with priority signalised intersection;
- Closure of the Club’s Bulleen Road access;
- Construction of an access road along the eastern boundary of Lyons Oval linking to the ‘Marcellin Access Road’;
- Construction of a new set of traffic signals to Bulleen Road;
- Elevation of Bulleen Road above the tunnel exit lanes;
- Ramps to and from the tunnel portals linking to the Eastern Freeway.
5 ACCESS REVIEW

5.1 Thompsons Road

I have had an opportunity to review the ‘Map Book’ and in particular Map 23 which illustrates at a high level the proposed works at the Thompsons Road access point during construction and operation.

My review and subsequent opinions follow.

5.1.1 Operation

Once operational, the drawings show a left turn slip lane into the site from the southwest, a right turn lane into the site from the northeast and a left out only to the northeast. From a functional sense, the intersection arrangements are largely unchanged from existing. Once into the site, a new roadway is proposed to provide access to a park and ride facility. Access to the Club will be via an ‘off shoot’ from the park and ride roadway into the Club’s current driveway. A short right turn lane provision is shown on the plans to access the Club driveway, and it appears that the BWS training centre exit will force all motorists out to Thompsons Road.

Based on my review of the Map Book and associated documentation, I have not been able to confirm the number of car spaces to be included within the Park and Ride Facility. It would be beneficial to understand the number of spaces envisaged within the Park and Ride Facility as this may have an impact on the operation of the intersection with Thompsons Road, particularly in the afternoon / evening during the ‘exit phase’, that is when a bus load of passengers are dropped off and the passengers subsequently depart in their cars shortly thereafter.

The Map Book also shows a separate priority roadway for buses (busway shown orange) that intersects with Thompsons Road before continuing along the Eastern Freeway alignment. At the intersection with Thompsons Road, it appears to show a signalised intersection arrangement which I assume would give priority to bus movements.

Overall once in operation, the functional access arrangements to the site will be largely unchanged, however with the introduction of the roadway to the park and ride facility I note the following:

➢ All entry movements to the Club will need to ‘Give Way’ to vehicles exiting the Park and Ride Facility (to Thompsons Road) when they access the Club.
➢ The right turn into the Club does not appear to be tested with regard to capacity.
➢ During the exit phase from the Park and Ride Facility, there could be conflict with arriving club patrons and departing commuters.
➢ There has not been any analysis of the exit phase from the park and ride facility and subsequent operation of the Thompsons Road access.

A view of the proposed works near the Thompsons Road access is shown in Figure 9.
5.1.2 Construction

During construction, the plans provide no detail with regard to how access will be maintained, staged, or temporarily achieved to the Club. I appreciate that this will be largely dependent on the final contractor and with a design and construct project these matters will be unresolved at this stage. As a matter of course, access should be maintained at all times, particularly as the Thompsons Road access to the Club is the primary access.

5.2 Bulleen Road

With regard to the Bulleen Road access, I have had an opportunity to review the ‘Map Book’ and in particular Map 22 which illustrates at a high level the proposed works at this location.

5.2.1 Operation

The drawings indicate that the existing Club access to Bulleen Road will be closed. I understand this is a result of Bulleen Road elevating above natural surface level to ‘clear’ the tunnel portals and exit lanes which consequently impacts the ability for the Club roadway to intersect. Due to insufficient detail provided, I am not aware of the level difference between the Club’s access road and the future Bulleen Road carriageway. Depending on this level difference, there could be an opportunity for a regraded access road to interest with Bulleen Road.

Notwithstanding, the Project seeks to alleviate the loss of access to Bulleen Road by constructing a link road around the western edge of Lyons Oval within the Marcellin College campus which will
connect to a new set of traffic signals in the current location of the Marcellin College main site access. The plans show a fully directional signalised intersection at Bulleen Road with only a single lane in each direction on the eastern approach of the intersection (into the site). Regardless of the Club, capacity could be of concern during peak drop off and pick up periods with only one lane being provided at this intersection.

With regard to the Club, the link road intersects with the Marcellin roadway offset approximately 35 metres from the intersection hold line. For any motorist accessing the Club from Bulleen Road they would need to turn right across the exit lane from the Marcellin roadway. No right turn lane provision has been shown to allow motorists to queue when turning right into the Club roadway in the event that they need to wait to give way. This has the potential to impact not only motorists accessing the Club but also school traffic.

I acknowledge that the two uses (school and the Club) will peak at different times however with numerous users of the sporting ovals at Marcellin, it is best practice to allow for some form of storage. The NELA have yet to confirm the status of the link road, which is important to maintain uninterrupted access, particularly noting that the existing Marcellin access has an operable gate.

The Bulleen Road access will experience some significant changes to operation when compared to existing. In this regard, I note the following: -

➢ The proposed access arrangements will mix school and Club traffic.
➢ There is only 1 traffic lane in each direction at the intersection. A second lane would assist with capacity.
➢ There is no provision for a right turn lane into the Club link road from the Marcellin roadway.
➢ Confirmation is required with regard to the status and ownership of the link road.
➢ Mixing school and Club traffic is not preferable.
➢ An option may exist (subject to levels) to elevate the Club access road to meet the new Bulleen Road level to avoid the need for a link road through Marcellin College grounds. I note this access would need to operate left in / left out.

A view of the proposed works near the Bulleen Road access is shown below.
5.2.2 Construction

Similar to Thompsons Road, during construction, the plans provide no detail with regard to how access will be maintained, staged, or temporarily achieved to the Club.

I appreciate that this will be largely dependent on the final contractor and with a design and construct project these matters will be unresolved at this stage. That said having reviewed the Traffic Assessment, I note that Bulleen Road will need to close in the vicinity of the site to facilitate the construction works.

No timeframes have been given in this regard.
6 \textbf{CONCLUSION}

As a result of the Project, modifications to the existing access arrangements to the Club will be required to facilitate the delivery of the project. In the vicinity of the site, significant works are proposed associated with elevated roadways, tunnel portals and busways (amongst other works).

Based on my review of the provided information, I am of the view that some further consideration is required with regard to the operation of the Club access. Of note, the operation of the Thompsons Road access when coinciding with the exit phase from the park and ride facility as well as the integration of the Club access with Marcellin College.