

Stantec Australia Pty Ltd Level 5, 75 Hindmarsh Square Adelaide SA 5000

11 April 2023

Project/File: 300304694

Richard Frimpong Town of Gawler PO Box 130 Gawler SA 5118

Dear Richard,

Reference: Evanston Park Code Amendment - Traffic Review

This letter has been prepared for the Town of Gawler for an independent review of the traffic assessment for the proposed Evanston Park Code Amendment. The independent review considers the potential impact of the Code Amendment on the local road network under the care and control of the Town of Gawler.

This letter provides the findings of the review based on consideration of the available Evanston Park Code Amendment traffic assessment documents. This letter considers the documents provided for the Code Amendment with regards to traffic analysis and impact assessment including:

- Letter dated 23 January 2023, MFY Consultants
- Modelling Report dated December 2022, MFY Consultants

### **Code Amendment Proposal**

The subject site is located at 550 – 560 Main North Road in Evanston and comprises an existing garden nursery use which is the subject of a Code Amendment. The existing land use is a General Neighbourhood with the Code Amendment seeking to rezone the land to an Employment Zone. This would enable the development of bulky goods uses within the site, which is identified as the anticipated use of the site.

Notably, the MFY Modelling Report states that the anticipated use incudes specifically "a hardware style development and smaller bulky goods tenancies", and indicates it will be developed for the "relocation of Bunnings facility on the corner of Main North Road and Tulloch Road to the subject site. The existing Bunnings development will be repurposed to a bulky goods tenancy."

The proposal includes access to Main North Road with a traffic signalised intersection to be installed to accommodate access to and from the site. An existing access point from the site to Sheriffs Street will be closed, with all traffic to directly enter and exit the site from Main North Road.

## **Existing Situation**

The existing site is located at 550-560 Main North Road in Evanston with frontages to Main North Road and Sherriff Street. Access to the site is available from Main North Road and Sheriff Street for the existing Vadoulis Garden Centre.



Reference: Evanston Code Amendment - Traffic Review

Sheriff Street and First Street form an intersection with Main North Road, however, only exit movements by left turn are permitted to Main North Road from these streets.

Traffic volumes were collected by Council between Monday 20 March 2023 and Sunday 26 March 2023 for Sheriff Street and First Street. The traffic counts indicate Sheriff Street carries on average 461 vehicles per day and First Street carries on average 1,481 vehicles per day. The surveys recorded the 85th percentile speed on each street are 45 and 58 km/h respectively. The peak hour on First Street recorded on average 169 vehicles per hour between 8-9am, which represents approximately 11% of the daily volume.

Based on this data, it is likely that First Street provides a cut-through route for traffic in the local network to the north of the site based the slightly higher AM peak hour volumes (typically 8-10% for residential streets). This assumption is also based on that First Street connects to Murray Street to the north and provides a direct link between Murray Street and Main North Road. Vehicles cannot travel northbound from Main North Road to First Street (or Sheriff Street) due to the intersection arrangement.

Sheriff Street carries very low traffic volumes and does not display a peak hour cut through issue based on the traffic volumes provided.

#### **Traffic Assessment**

Page 2 of the 23 January 2023 letter by MFY states that "detailed investigations have been completed to assess the requirements to support access for the development of a multi-tenancy bulky goods facility with a floor area of approximately 18,000 m2"

It further states the traffic generation rates for the assessment were provided as follows:

"the following traffic generation rates identified in the Guide for Traffic Generating Developments Technical Direction (TDT 2013/04a) have been adopted:

- larger tenancy: two trips per 100 m2 in the am peak hour, 2.85 trips per 100 m2 in the pm peak hour and 5.6 trips per 100 m2 on a Saturday; and
- smaller tenancies: one trip per 100 m2 in the am peak hour, 1.5 trips per 100 m2 in the pm peak hour and 3.9 trips per 100 m2 on a Saturday."

The Modelling Report includes the same rates.

There is a disparity between the rates used in the assessment and those provided in the *Transport for New South Wales Guide for Traffic Generating Developments Technical Direction (TDT 2013/04a)*. This is primarily for the weekday PM peak period where 2.85 trips have been used for the larger tenancy, however the Guide advises a rate of 4.2 vehicles per 100 m2 of gross floor area for Weekday peak hour vehicle trips for a Major Hardware store.

This is similar for the smaller tenancy which the Guide advises a rate of 2.7 trips for Bulky Goods stores during the weekday peak periods (the PM peak period in particular).

The weekend peak hour rates used conform to the Guide.

There is no discussion regarding the change of rates in the reports nor justification for the use of lower rates. Hence the traffic assessments appear to be underestimating trip generation of the site during the weekday PM peak periods when considering the TfNSW guidelines.

11 April 2023 230411\_eca\_traffic\_review\_0.docx Page 3 of 4

Reference: Evanston Code Amendment - Traffic Review

Daily traffic volumes on the local road network are also not discussed in the report and should be identified as part of the traffic assessment. The traffic assessment should identify the impact of the proposed development on the adjacent streets.

Based on the floor areas provided, the daily traffic generation of the proposed development would be approximately 5,600 and 6,000 vehicles per day on weekdays and weekends respectively when using the TfNSW rates.

A review of the traffic assessment should be sought to confirm the anticipated traffic generation based on appropriate rates recommended by the Transport for New South Wales *Guide for Traffic Generating Developments Technical Direction (TDT 2013/04a)*, or justification for the use of lower rates provided. This may have an impact on the anticipated operation of the proposed traffic signals considered by the traffic assessment reports.

It is noted that distribution scenarios were considered for the traffic generated by the site as follows:

- Project Case: 50% to/from the north and 50% to/from the south; and
- Sensitivity Analysis: 70% to/from the north and 30% to/from the south.

Both scenarios appear to be satisfactory with regards to north and south, however consideration for traffic to and from Gawler East is limited to distribution at Potts Road. This is discussed later in this report.

A review of the traffic modelling for the proposed traffic signals appears to be consistent with the requirements of the Department for Infrastructure and Transport, and have been/will be subject to review by DIT. No access to the SIDRA files was available at the time of this report and a review of the specific settings in the SIDRA models was not possible.

Council should seek confirmation from DIT regarding the findings and outcomes of the modelling report for the proposed traffic signals.

# **Local Road Impacts**

The proposed Code Amendment will create a higher traffic generating use on the site than currently exists, with significant traffic generation compared to the existing situation. Given the anticipated use is proposed to be relocated from Tulloch Road to the south, it is likely that many trips associated with the existing use are already to some extent using the local road network and identified in the existing traffic volumes.

The relocation of the use will likely result in a reduction in traffic on Tulloch Road, but this will depend on the replacement uses in the existing Gawler Green Shopping Centre. However the anticipated use of the Code Amendment at the subject site will be a larger footprint than exists at Gawler Green Shopping Centre currently.

Hence, there is a possibility of some additional traffic using the local road network to access the subject site with the anticipated use. The impact of traffic using these routes will be relatively low however it could equate to 10-15% of the traffic generation of the proposed uses of the subject site given the extent of dwellings in the Gawler East area currently and in the future (i.e. Springwood). This would equate to approximately 500 to 750 vehicles per day that may use the local road network. It is noted that the Modelling Report considers 10% to and from the east of the site via Potts Road but no consideration of other local roads in the area.

Reference: Evanston Code Amendment - Traffic Review

It is acknowledged that the impact of this traffic on the local roads will be low however the modelling report should consider additional traffic that may use adjacent local roads in the area including First Street, Coleman Parade and Sheriff Street.

#### **Conclusions**

Based on this traffic assessment, the following has been found:

- 1. It is understood that the Code Amendment is being prepared to facilitate the relocation of an existing major hardware store use from the Tulloch Road area to the subject site on Main North Road in Evanston.
- 2. The traffic assessment for the proposed Code Amendment generally provides information with regards to the future operation of the traffic signals and arterial road network required for the operation of the anticipated uses.
- 3. Traffic generation rates for the proposed uses appear to be lower for weekday peak periods than recommended in the relevant guidelines referenced in the reports. These should be revised in the assessment or justification provided for the use of lower rates.
- 4. It is acknowledged that the impact of this traffic on the local roads will be low however the modelling report should consider additional traffic that may use adjacent local roads in the area including First Street, Coleman Parade and Sheriff Street.

Naturally, should you have any questions or require any further information, please do not hesitate to contact me on (08) 8334 3600.

Yours sincerely,

STANTEC AUSTRALIA PTY LTD

**Paul Morris** 

Senior Principal Transportation Engineer M.Trans&Traff, MAITPM paul.morris2@stantec.com