

**CENTRAL GOLDFIELDS SHIRE
AMENDMENT C12**

PROPOSED REZONING RETAIL DEVELOPMENT

**92-96 BURKE STREET & 59 BURNS STREET
MARYBOROUGH**

Prepared by:

ANDREW O'BRIEN & ASSOCIATES PTY. LTD.

• Traffic Planning • Road Safety • Traffic Engineering • Transport Planning

Suite 2, 22 Gillman Street

HAWTHORN EAST VIC 3123

Ph: 9811 3111

Fax: 9811 3131

For:

Pomersan Pty Ltd

PO BOX 703

NORTHBALWYN VIC 3104

1. INTRODUCTION

THIS IS A WITNESS STATEMENT TO THE PLANNING PANELS VICTORIA - in relation to a proposed retail development on the land located at 92-96 Burke Street, Maryborough.

Andrew O'Brien & Associates Pty Ltd has been engaged by Pomersan Pty Ltd to conduct a traffic impact assessment and prepare expert evidence for presentation at the planning panel hearing.

In the course of preparing this report, the site has been inspected, plans and relevant documents for the proposed development have been examined, and the traffic implications of the proposed development have been assessed.

2. EXPERT WITNESS STATEMENT

- Name & Address:* Andrew Philip O'Brien P.T.O.E
Suite 2, 22 Gillman Street, HAWTHORN EAST, VIC, 3123
- Qualifications:* B.E. (Civil), University of Melbourne
B.A. (Economics & Politics), University of Melbourne
C.T.P.&C., University of New South Wales
P.T.O.E. Certified Professional Traffic Operations
Engineer (No. 300) USA
- Professional Memberships:* Hon M.I.T.E., F.A.I.T.P.M.
- Experience:*
- 14 years Country Roads Board, Road Traffic Authority;
 - 2 years at TTM Consulting
 - 20 years at Andrew O'Brien & Associates Pty Ltd
- Additional Activities:*
- Board member of ITE (Institute of Transportation Engineers) Australian Section, including Secretary, Vice-president, and President - (1982 to present);
 - Director – International Board of Direction ITE, Washington (1996-1998);
 - Sessional lecturing and seminars in traffic and transport engineering at Footscray IT, Warrnambool IAE, Monash University, Melbourne University, University of Maryland;
 - Presenter at International Road Safety Audit courses and Traffic Calming courses in USA Canada, and Europe;
 - Author of numerous refereed papers, articles and conference presentations;
 - Author in Ogden & Bennett (& Taylor) Traffic Engineering Practice (several editions) and ITE Traffic Engineering Handbook 1999.
- Particular Experience:* I have had continuous experience in all aspects of traffic engineering, traffic planning, transport planning and road safety engineering since 1971. I have substantial experience and expertise in traffic and safety aspects of road design, road safety investigations and auditing, traffic engineering operations, traffic research, traffic management of both arterial roads and local areas, and traffic impact assessment of developments including

traffic generation and parking.

This qualifies me to make my report on the issues as instructed.

***Assumptions, facts,
and matters relied
upon:***

- Plans of the proposal prepared by Buckerfield Architects (2/5/2007);
- "Draft" Planning Permit (Permit No. 116/06);
- Traffic Impact Report prepared by Andrew O'Brien & Associates (August 2006);
- Letters from VicRoads to Central Goldfields Shire council date 22 December 2006 and 23 January 2007.

3. EXISTING CONDITIONS

3.1 Location & Land Use

The subject site is located within the township of Maryborough and is bounded by Tuaggra Street to the north-east (also known as the Pyrenees Highway), Burns Street to the south-east and Burke Street to the north-west. A triangular-shaped portion abuts the site to the east (located at the corner of Tuaggra Street/Burns Street) and does not form part of the subject site.

The site covers an area of approximately 13,700 square metres with a frontage of approximately 48 metres to Tuaggra Street, approximately 93 metres to Burns Street and approximately 140 metres to Burke Street.

The site is occupied predominantly by old buildings currently partly tenanted and is zoned *Business 4* under the Central Goldfields Planning Scheme.

3.2 Road & Street Network

Tuaggra Street is also known as the Pyrenees Highway and is zoned *Road Zone – Category 1*. It provides one of the main access routes into Maryborough (from the east). In the vicinity of the site it provides one traffic lane in each direction as well as a parallel parking lane on each side.

Burns Street is a local street that runs between Tullaroop Road to the north-east and Hilton Street to the south-west. In the vicinity of the site it provides one traffic lane in each direction as well as a parallel parking lane on each side. The intersection of Tuaggra Street and Burns Street has a give-way control.

Burke Street is a local street that runs between Christian Street to the north-east and Avoca Crescent to the south-west. In the vicinity of the site it provides one traffic lane in each direction as well as a parallel parking lane on each side. The intersection of Tuaggra Street and Burke Street has a give-way control.

3.3 Accident History

VicRoads *CrashStats* database was used to assess the recorded (i.e. casualty) crash record of the streets bounding the subject site. This was examined for the last 5 financial years of data (i.e. 1 July 2000 to 30 June 2005) to ascertain to what extent accidents are (or might be) a problem.

During this period, one reported casualty accident occurred in January 2001 at the intersection of Tuaggra Street and Burns Street. This was a cross-traffic accident (DCA 110). No other casualty accidents were reported during the above period.

However, it should be noted that Council (during discussions with the applicant) have identified this intersection as the most dangerous intersection in Maryborough.

3.4 Existing Traffic Volumes

Andrew O'Brien & Associates Pty Ltd conducted a turning movement survey at the intersection of Tuaggra Street and Burns Street in order to collect traffic volume data. The survey was conducted on Thursday 23 February 2006 between 7:30am and 6:00pm.

Full results of the survey are presented in **Table A1** in **Appendix A**. Peak hour results are presented in **Figures 1** and **2** below.

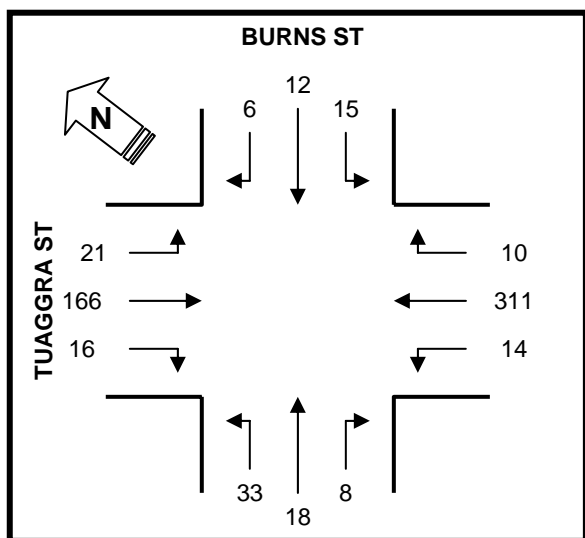


Figure 1: AM Peak Turning Movements – Intersection of Tuaggra St & Burns St (8:30am-9:30am)

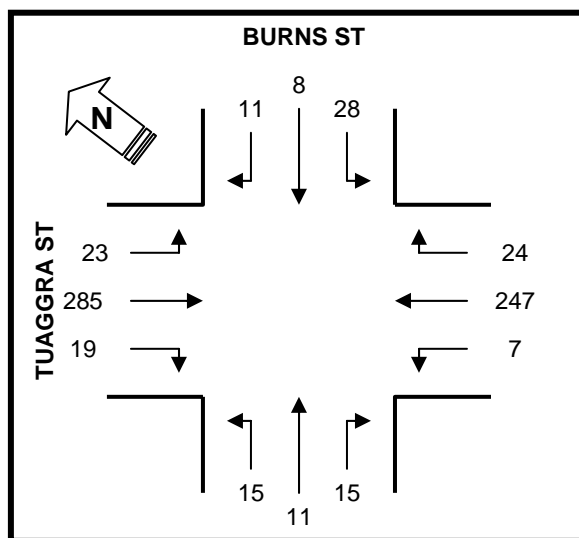


Figure 2: PM Peak Turning Movements – Intersection of Tuaggra St & Burns St (3:15pm-4:15pm)

Based on the above survey results, there is a strong north-west bound directional split during the morning peak period and a slight south-east directional split during the afternoon peak period. These patterns are typical of roads situated on the periphery of town centres.

4. THE PROPOSAL

It is proposed to rezone land at 92-96 Burke Street and 59 Burns Street, Maryborough to facilitate retail development of the site.

It is proposed to construct a retail development comprising a Coles Supermarket, K-Mart Department Store and specialty shops. The schedule of the proposed development is outlined in **Table 1**.

Use	Floor Area
Coles Supermarket	3,000m ²
K-Mart Department Store	3,175m ²
Specialty Shops	977m ²
TOTAL	7,152m²

Table 1: Schedule of Proposed Uses

It is proposed to provide a total of some 300 parking spaces for the development. This comprises 158 parking spaces on the site, 85 60-degree angled parking spaces in Burns Street and 57 45-degree angled parking spaces in Burke Street.

Two-way access points to the site are proposed on Burke Street and Burns Street. Two delivery docks are proposed for the site; one off Burke Street, and one off Burns Street.

It is understood that Council regards the subject location as a commercial zone and accordingly view the proposal as an acceptable activity for this location. It would conveniently service residential areas located to the north, south and west.

5. CAR PARKING CONSIDERATIONS

5.1 Planning Scheme Parking Supply Requirements

The parking policy and requirements applicable to the development are specified in Clause 52.06 of the Planning Scheme. The purpose of Clause 52.06 is to:

- *To ensure that parking facilities are provided in accordance with:*
 - *The State Planning Policy Framework and the Local Planning Policy Framework including the Municipal Strategic Statement and local planning policies;*
 - *Any parking precinct plan.*
- *To provide the opportunity to use parking precinct plans in appropriate locations;*
- *To promote the efficient use of car spaces through the consolidation of car parking facilities;*
- *To ensure the provision of an appropriate number of car spaces having regard to the activities on the land and the nature of the locality;*
- *To ensure that the design and location of car parking areas:*
 - *Does not adversely affect the amenity of the locality, in particular the amenity of pedestrians and other road users;*
 - *Achieves a high standard of urban design;*
 - *Creates a safe environment for users, particularly at night;*
 - *Enables easy and efficient use;*
 - *Protects the role and function of nearby roads;*
 - *Facilitates the use of public transport and the movement and delivery of goods.*

The table in Clause 52.06-5 of the Scheme sets out the number of car spaces required for various uses based on specific parking rates. Based on these rates, the parking requirement of the proposed development is outlined in **Table 2**.

Use	Floor Area	Parking Rate	Parking Requirement
Coles Supermarket	3,000m ²	8 spaces per 100m ²	240 spaces
K-Mart Department Store	3,175m ²	8 spaces per 100m ²	254 spaces
Specialty Shops	977m ²	8 spaces per 100m ²	78 spaces
TOTAL			572 spaces

Table 2: Planning Scheme Parking Requirement

The Decision Guidelines at Clause 52.06-1 of the Planning Scheme allows for the reduction or waiving of the parking requirement provided the applicant can satisfy the Responsible Authority that this is justified on any of the following grounds:

- *Any relevant parking precinct plan;*
- *The availability of car parking in the locality;*
- *The availability of public transport in the locality;*
- *Any reduction in car parking demand due to the sharing of car spaces by multiple uses, either because of variation of car parking demand over time or because of efficiencies gained from the consolidation of shared car parking spaces;*
- *Any car parking deficiency or surplus associated with the existing use of the land;*
- *Any credit which should be allowed for a car parking demand deemed to have been provided in association with a use which existed before the change of parking requirement;*
- *Local traffic management;*
- *Local amenity including pedestrian amenity;*
- *An empirical assessment of car parking demand;*
- *Any other relevant consideration.*

In this case, it is submitted that a reduction in the parking requirement is justified on the grounds discussed in the following sections.

5.2 Empirical Parking Demand Assessment

5.2.1 Supermarket Component

Andrew O'Brien & Associates and others have conducted comprehensive parking demand surveys of numerous uses, including supermarket and retail developments. The peak hour parking results from surveys at supermarkets indicate a parking rate of 5.0 spaces per 100m² of floor area, although some rural cities may have lower rates.

For comparison, the parking provision rates for the existing supermarkets in Maryborough have been calculated based on information provided by the Council's Planning Officer – Jessica Hurse - and are shown in **Table 3** below.

Use	Floor Area	Parking Provision		Parking Rate Spaces/100m ² Floor Area
		On-site	On-street	
Safeway Supermarket	4,340m ²	207 (shared)	10 (shared)	5.0
Safeway plus specialty shops	4,840m ²	207	10	4.5
IGA Supermarket	1850m ²	60 (shared)	10 (shared)	3.8
IGA plus specialty shops	4245m ²	60	10	1.65

Table 3: Estimated Peak Parking Demand – Existing Maryborough Supermarkets

5.2.2 Specialty Retail Component

Surveys of specialty retail developments indicate that parking rates between 3.0 to 4.0 spaces per 100m² of floor area are appropriate.

5.2.3 Total Parking Demand

Based on the above rates, it is estimated that the proposed development will generate peak parking demand as summarised in **Table 4**.

Use	Floor Area	Parking Rate	Parking Demand
Coles Supermarket	3,000m ²	5 spaces per 100m ²	150 spaces
K-Mart Department Store	3,175m ²	4 spaces per 100m ²	127 spaces
Specialty Shops	977m ²	4 spaces per 100m ²	39 spaces
TOTAL			316 spaces

Table 4: Estimated Peak Parking Demand by Use – Proposed Development

Typically, the peak demands are not coincident, and total peak demands are typically about 10-20% less than the sum of the individual peak demands. This is likely to be the case here because Coles and K-Mart are different types of shopping facilities – supermarkets tend to attract one member from a family doing the weekly shopping (or perhaps with children in tow) and typically peak on a Thursday night or Saturday morning, whereas often part or all the family will go to shop at a department store such as K-Mart, more typically peaking on Friday night or Saturday afternoon.

Therefore, the peak parking demand of the entire development is estimated at approximately 252-284 parking spaces.

5.3 Adequacy of Parking Supply

It is expected that the proposed retail development will generate a peak parking demand of up to 252-284 parking spaces.

The provision of some 300 parking spaces will accommodate the peak parking demand of the proposed development. The proposed complex is located within the central area of Maryborough, and any overflow parking could be accommodated on-street in nearby streets.

It is noted that the provision of parking for the Coles supermarket and specialty shops is similar to the provision of parking that exists for Safeway and the nearby specialty shops. (Assuming 126 spaces are attributed to K-Mart, the remaining 174 spaces could be attributed to Coles and the specialty shops – this is at a rate of 4.4 spaces per 100m² compared to a rate of 4.5 spaces per 100m² that currently exists for Safeway and nearby specialty shops).

5.4 Use of On-street Parking

Just less than half of the parking supply is proposed to be provided on-street. While this may seem to be high, it needs to be considered in the context of the site's location (on the periphery of the central area), and the fact that, for most of a typical week, most of the parking demand can still be contained on-site.

While the use of on-street parking may seem to advantage the developer and be against the community interest, the "trade-off" of the other benefits of the development need to be considered. The development is to construct a roundabout at the Burns Street/Tuaggra Street intersection which will endow a considerable local benefit, and that there will be less "escape expenditure" from Maryborough – which has significant regional economic and greenhouse benefits due to reduced regional travel. The use of on-street parking is not inconsistent with typical objectives for Central Activity Districts. There is little, if any, downside, and the overall benefit is considerable.

6. PEDESTRIAN AND BICYCLE CONSIDERATIONS

6.1 Pedestrian Facilities

Pedestrian crossings are proposed across Burns Street southwest of the vehicle entry crossover to the car park, across Burke Street southwest of the vehicle entry crossover to the car park, and a crossing of Tuaggra Street southeast of Burke Street has been shown on various plans. The proposed roundabout at Burns Street shows zebra crossings across each leg of the intersection. The provision of zebra crossings is consistent with the large number of such crossings in the centre of town.

It is recommended that kerb outstands and possibly a central refuge island be provided at Tuaggra Street pedestrian crossing to reduce the width of the carriageway pedestrians are required to cross, and to enable the crossing to be staged.

6.2 Planning Scheme Bicycle Requirements

Bicycle parking access, location and provision is covered in Clause 52.34 of the Planning Scheme. The key objectives of this clause are:

- *To encourage cycling as a mode of transport.*
- *To provide secure, accessible and convenient bicycle parking spaces and associated shower and change facilities.*

Table 1 at Clause 52.34-3 of the Planning Scheme sets out the following bicycle parking requirement rates for shop uses:

- **Employee Parking:** 1 space to each 600m² of leasable floor area if the leasable floor area exceeds 1,000m²;
- **Visitor Parking:** 1 space to each 500m² of leasable floor area if the leasable floor area exceeds 1,000m².

Based on the above rates, **Table 5** summarises the bicycle parking requirement for the proposed development.

Use	Floor Area	Employee Bicycle Parking Requirement	Visitor Bicycle Parking Requirement	Total Bicycle Parking Requirement
Coles Supermarket	3,000m ²	5 spaces	6 spaces	11 spaces
K-Mart Department Store	3,155m ²	5 spaces	6 spaces	11 spaces
Specialty Shops	977m ²	n/a	n/a	n/a
	TOTAL	10 spaces	12 spaces	22 spaces

Table 5: Planning Scheme Bicycle Parking Requirement

6.3 Adequacy of Bicycle Parking Provision

It is noted that 25 bicycle rails are proposed within the on-site car park and will more than adequately meet the needs of visitors to the proposed development.

Bicycle storage facilities for staff should be provided within a secure compound to accommodate the employee bicycle parking requirement.

6.4 Change Rooms & Showers

Clause 52.34 sets out the requirements for providing employee change rooms and showers. If 5 or more employee bicycle spaces are required, 1 shower for the first 5 employee bicycle spaces, plus 1 to each 10 employee bicycle spaces thereafter should be provided. A change room is also required if a shower is required under the Planning Scheme.

As the supermarket and department store components of the development each require 5 employee bicycle parking spaces, the provision of a change room and shower are required by each. However, this is considered to be excessive and it is recommended that the supermarket and department store provide a common shower and change room facility to be shared between the two.

7. TRAFFIC GENERATION & DISTRIBUTION

7.1 Traffic Generation

Andrew O'Brien & Associates Pty Ltd and other traffic consultants have conducted numerous surveys and traffic generation studies for supermarket and retail developments. These surveys and studies indicated that these uses typically generate peak traffic demand rates as shown in **Table 6**.

Use	Floor Area	Traffic Generation Rate	Estimated Traffic Generation
Coles Supermarket	3,000m ²	18 trips/hr per 100m ²	540 trips
K-Mart Department Store	3,155m ²	12 trips/hr per 100m ²	379 trips
Specialty Shops	977m ²	12 trips/hr per 100m ²	117 trips
TOTAL			1,036 trips/hr

Table 6: Estimated Peak Hour Traffic Generation

However, these rates need to be discounted for the fact that a proportion of patrons of a mixed use development would be making multiple purpose trips. These multi-purpose trips will act to reduce the traffic generation rates for the supermarket and retail uses by about 10-20%.

Based on these rates, the estimated traffic generated by the proposed development would be 830-930 trips/h during the peak period (415-465 trips/h in and 415-465 trips/h out).

7.2 Net Increase in Traffic Generation

There is no available data for the existing peak traffic generation of the existing use of the site, but it is expected to be of the order of 50-80 trips per hour. Therefore, it is estimated that the proposed development will generate an additional 800-900 vehicle trips during peak hours.

7.3 Traffic Distribution

Considering the layout of Maryborough, it is likely that patrons will access the supermarket development from both north-west and south-east, and in fairly equal proportions by direction. It is assumed that traffic generated by the site is likely to be split evenly to the north-west and south-east along Tuaggra Street as illustrated in **Figure 3**.

As shown in **Figure 3**, it is estimated that the vast majority of traffic generated by the proposed development will be via Tuaggra Street. Very small proportions of traffic

are expected to access the site to/from the south-western areas via local streets. The impacts are not particularly sensitive to these assumptions.

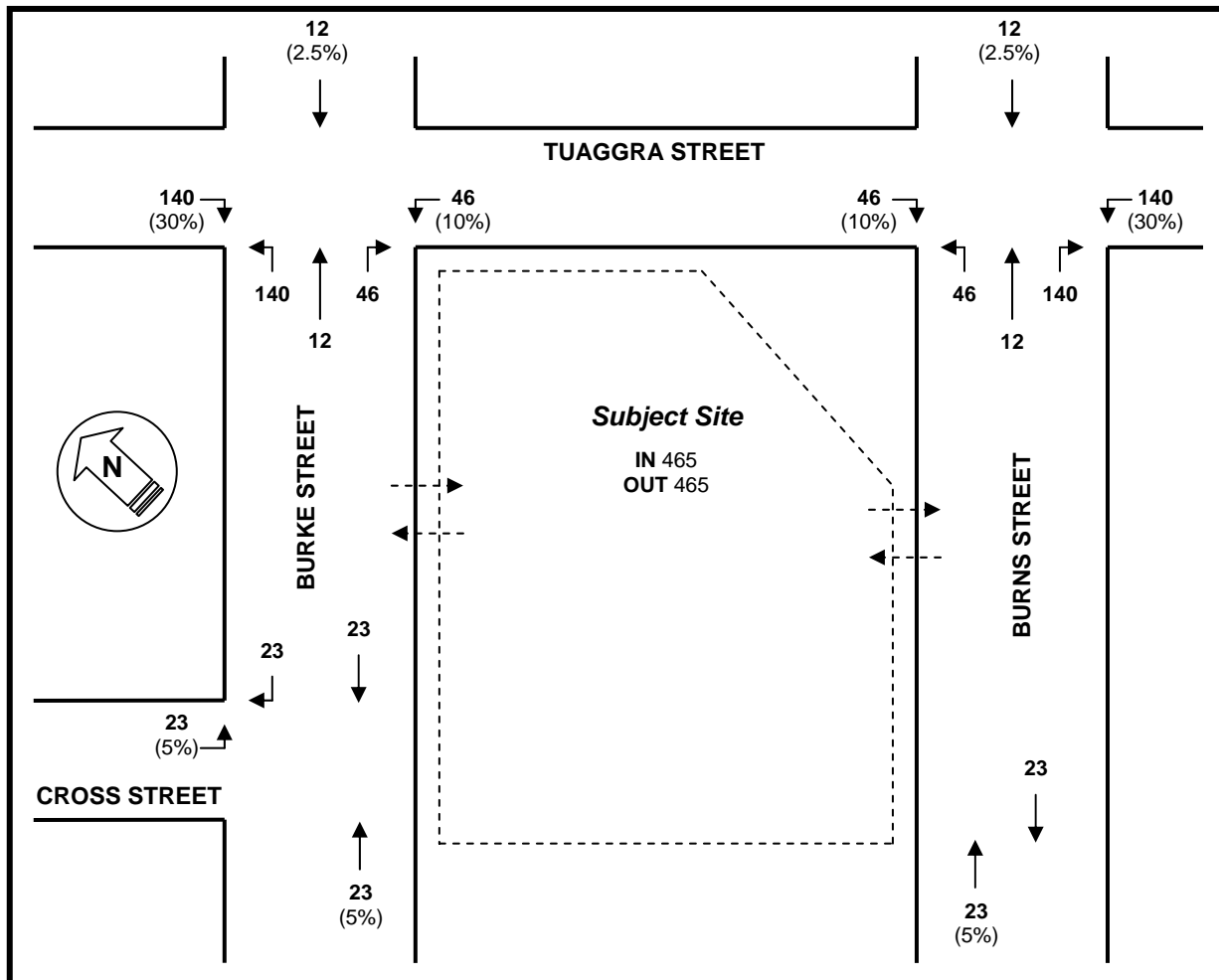


Figure 3: Estimated Peak Hour Traffic Generation and Distribution

8. CAR PARK LAYOUT & ACCESS

8.1 Car Park Layout

All on-site parking bays are 4.9 metres long and 2.6 metres wide with minimum aisle widths of 6.4 metres in accordance with the Planning Scheme. Also, dimensions of all on-street parking spaces proposed adjacent to the site (i.e. within Burns Street and Burke Street) are in accordance with the Planning Scheme.

Two disabled parking spaces are proposed near the main pedestrian entrance to the development. The disabled parking spaces are 4.9 metres long and 3.2 metres wide, which will ensure adequate access for disabled drivers. However, it is recommended that associated facilities including ramps (for wheelchair access), kerb ramps and tactile ground surface indicators (TGSIs) be provided in accordance with the requirements of *Australian Standard 1428*.

8.2 Access

Both access points to the car park are proposed at a width of 6.4 metres, which will ensure adequate two-way vehicle access.

8.3 Loading/Unloading

Loading/unloading for the Coles and K-Mart components of the development is to be facilitated on-site from the rear of the building via two separate loading docks.

Truck turning templates have been checked using the AUTOTurn vehicle path computer program, and they indicate that a 19 metre semi-trailer can manoeuvre into and out of the site, and to and from the loading dock clear of parked vehicles as shown in **Figures 4, 5, and 6**. However, minor modifications to adjacent kerb extensions would be required as indicated in these sketches.

Trucks accessing the Coles loading dock will be required to enter the site via Burke Street (directly from Cross Street located opposite) and exit the site via Burns Street. Conversely, trucks accessing the K-Mart loading dock will be required to enter the site via Burns Street and exit the site via Burke Street.

Council has indicated that it would be preferable for all truck traffic to access the site via Tuaggra Street (i.e. not via the south-west).

Loading/unloading activities associated with the site will have no impact to traffic and parking conditions in Burns Street and Burke Street given that all loading/unloading will occur from within the site (unlike at the nearby IGA supermarket, which has been observed to undertake loading/unloading activities within Napier Street).

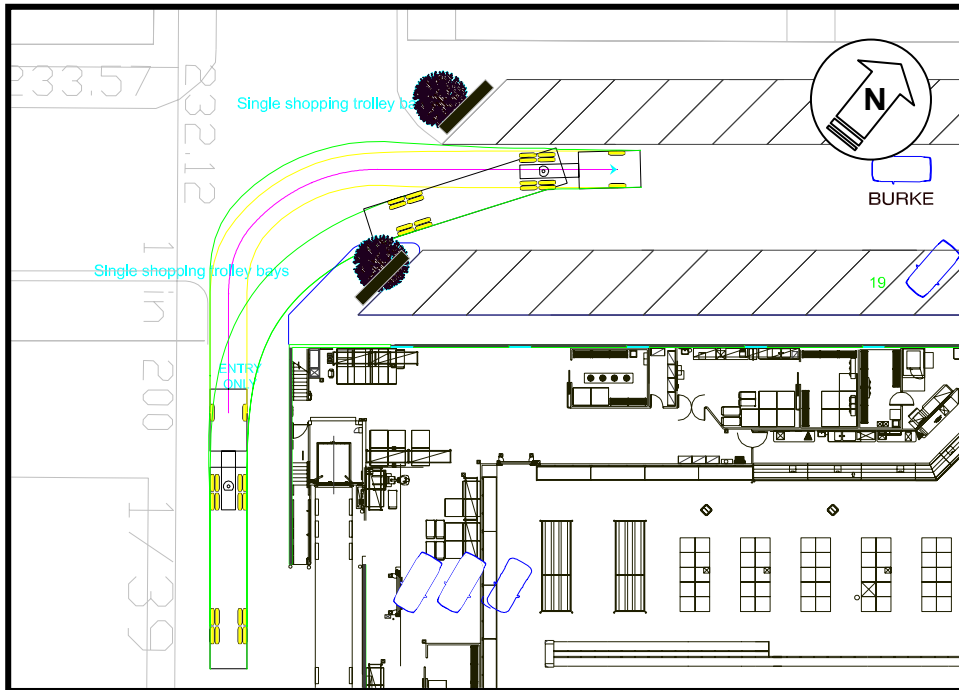


Figure 4: Swept Path for Semi-Trailer exiting via Burke Street

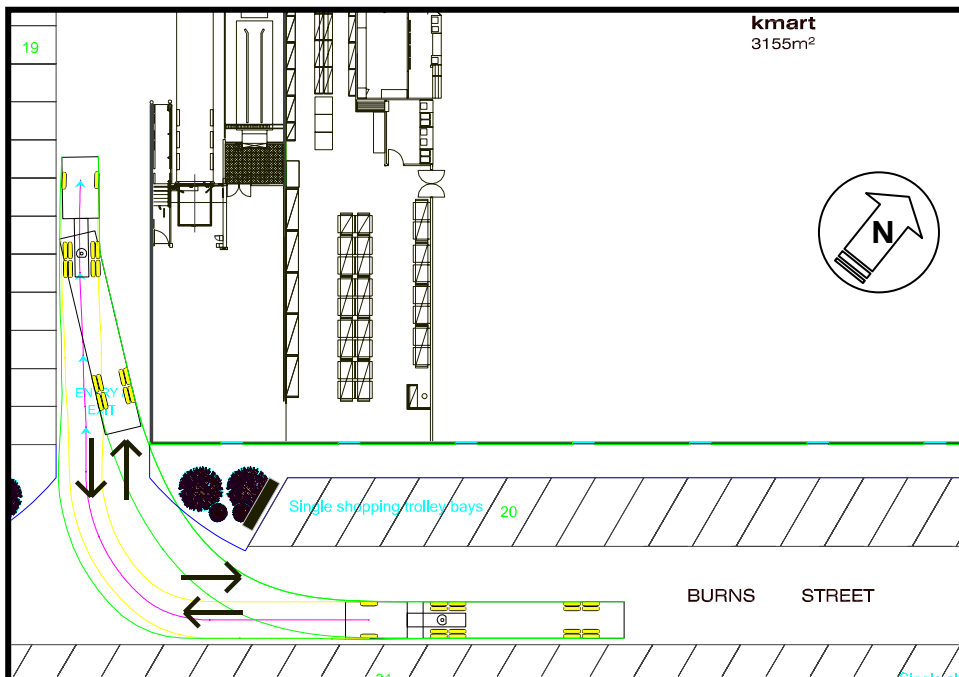


Figure 5: Swept Path for Semi-Trailer entering via Burns Street

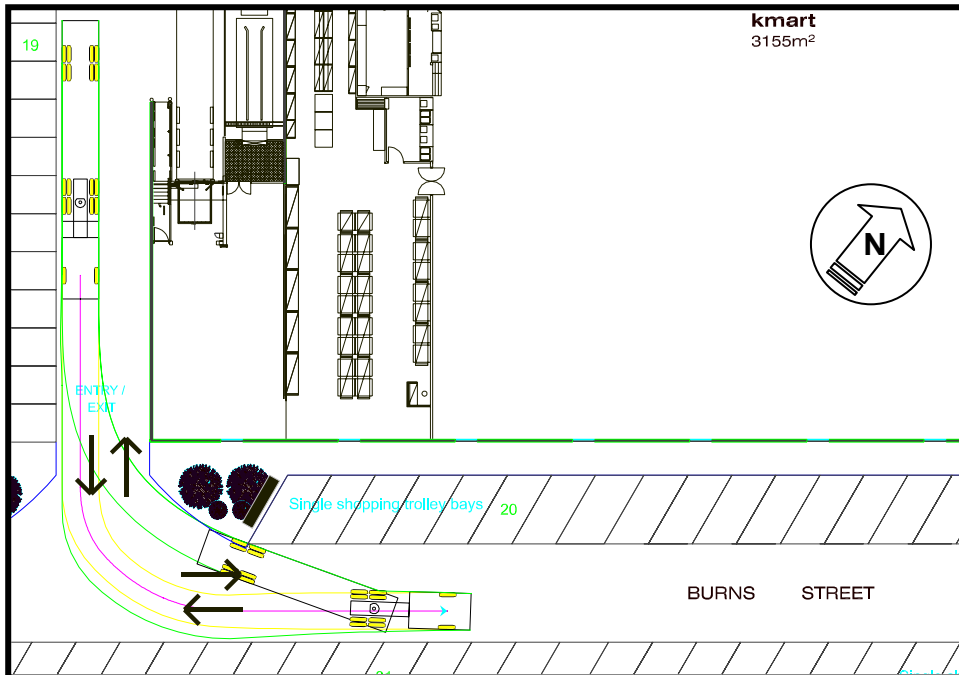


Figure 6: Swept Path for Semi-Trailer exiting via Burns Street

9. INTERSECTION OF TUAGGRA STREET & BURNS STREET

It is understood that safety concerns have been expressed in relation to the intersection of Tuaggra Street and Burns Street.

Upon inspection of the site, it is considered that the untreated cross-intersection is a significant current potential hazard – even though only one casualty crash has been recorded in the past 5 years. The intersection occurs on a crest where the highway rises out of the cutting associated with the rail underpass, which provides poor driver sight lines as shown in **Photo 1**.



Photo 1: Tuaggra Street - facing east from Burns Street

It is proposed to install a roundabout at this intersection. A roundabout would be an appropriate treatment for the intersection to improve safety and would be consistent with existing traffic management in the town centre – where roundabouts are located at the Tuaggra Street/Napier Street intersection and at other key intersections on Napier Street and High Street. The proposed roundabout treatment is presented in **Figure 6**. This design provides one-lane approaches, a single circulating lane and provision for access from the existing service lane on the southern side of Tuaggra Street south of Burns Street.

Also, it may be appropriate to close the northern end of the Tuaggra Street service road (i.e. at Burns Street shown on the right in **Photo 1**). However, its closure would be required to go through the local government process for a road closure.

Due to the existing hazardous state of the intersection, and its function as an “entry treatment” to the town centre, it is my opinion that the funding of any roundabout be shared between the developer and government.

The proposed roundabout adds significantly to the safety and amenity of the town centre area.

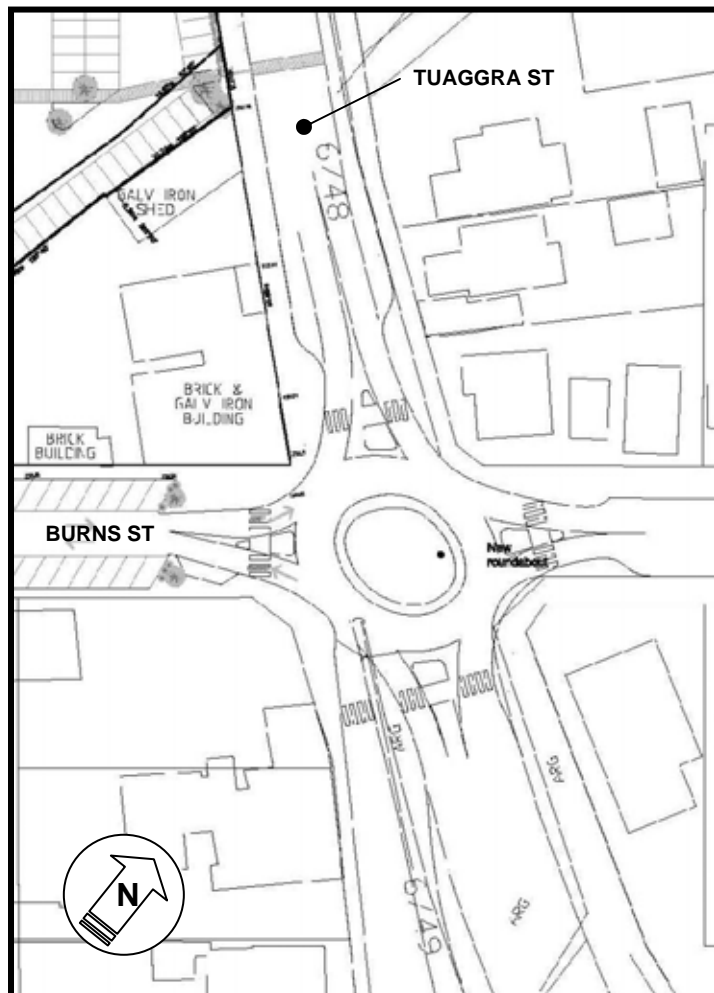


Figure 6: Proposed Roundabout Treatment – Intersection of Tuaggra St & Burns St

10. TRAFFIC IMPACT OF THE PROPOSAL

10.1 Direct Impacts

The existing site generates a minimal amount of traffic at peak times. This will increase significantly with this development.

However, considering the central location of the proposed development with respect to the location of residential areas to the north, south and west, and that the site is well served by three wide streets, there are several access routes to/from the site that will contribute to minimising the impact on traffic conditions in any one street in the locality.

The additional traffic generated by the proposed development will be absorbed into the road network. At the highest peak times, as with the rest of the central business area in Maryborough there may be some congestion along Tuaggra Street, and some delays in accessing and leaving the site (via Burns Street or Burke Street). The proposed roundabout treatment at the intersection of Tuaggra Street and Burns Street will assist to improve safety and traffic management, and define the “entrance” into the commercial district of Maryborough.

10.2 Station Street

Access to Station Street via Burns Street should be retained given that it provides convenient access to Maryborough Railway Station, which is an attractive tourist destination (for which about a \$1m redevelopment/restoration is understood to have just been completed).

10.3 Regional Impact

To the degree that, as a consequence of this development, current “escape expenditure” is retained in Maryborough, and other regional retail activity is attracted to Maryborough, there will be a net decrease in regional travel, with its consequent economic savings and environmental benefits.

11. DRAFT PERMIT CONDITIONS

Draft Permit Conditions have been issued by the Council for this proposed development. Conditions 5 to 9 deal with parking supply.

Condition 5 deals with proposed Stage 1 – to comprise 304 spaces as per the submitted plan, at a rate of about 4.2 spaces/100m² of retail floor space. This is in accordance with the development proposal.

Condition 6 deals with Council's proposed Stage 2 parking supply – to comprise an additional 130 spaces to bring the overall parking supply rate to 6 spaces/100m² of retail floor space.

Condition 7 deals with Council's proposed Stage 3 parking supply – to comprise a further additional 140 spaces to bring the overall parking supply rate to 8 spaces/100m² of retail floor space (the maximum requirement under the planning scheme).

Condition 8 deals with the timing of implementation of proposed Stages 2 and 3 – to be determined by the Responsible Authority based on demand.

Condition 9 states that the Stage 3 requirement will lapse after 15 years if not deemed it necessary prior to that time

In my view Conditions 6 to 9 are unnecessary and cannot be justified. If there is to be any condition relating to additional parking being supplied in the future, then the amount of such parking should be limited to a maximum overall rate of 5 spaces/100m² of retail floor space – a total of 356 spaces (and an increase of 52 spaces). My reasons for this view are that:

- there has been a general acceptance by VCAT and Planning Panels Victoria that such a rate is the maximum likely at major retail developments;
- supermarkets are recognised to be the highest parking generator of retail uses, and are typically unlikely to exceed a rate of 5 spaces/100m²;
- there are numerous data sources to support the previous points.

12. CONCLUSIONS

Based on the information provided in this report, it is concluded that:

- The provision of 304 on-site car parking spaces is adequate to provide for the majority of the parking demand for the proposed development operating at capacity.
- The on-site car parking areas have been designed in such a manner that they will operate effectively, enabling all vehicles to enter and leave the property in a forwards direction.
- The proposed loading arrangements are adequate and will have minimal impact on traffic in Burns Street, Burke Street or Cross Street.
- It is considered that the introduction of a roundabout at the intersection of Tuaggra Street and Burns Street will address safety concerns at this intersection.
- The existing road network can accommodate the traffic generated by the development.

I therefore conclude that there are no parking, traffic or pedestrian safety related reasons to inhibit the granting of a permit for this development.

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



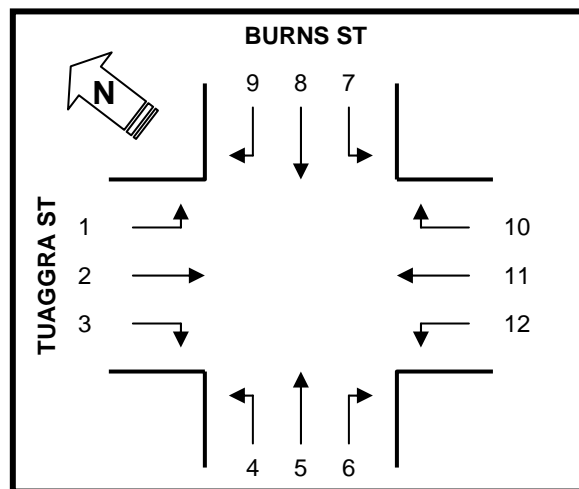
Andrew O'Brien P.T.O.E.,
B.E., B.A., C.T.P.&C.
F.I.T.E., F.A.I.T.P.M., A.R.A.P.I

Appendix A

Turning Movement Survey
February 2006

Location: Intersection of Tuaggra Street & Burns Street, Maryborough

Date: Thursday 23 February 2006



Time	Turning Movement												TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	
7:30 – 7:45am	3	16	1	0	0	0	1	1	1	0	30	0	53
7:45 – 8:00am	1	36	3	0	0	1	2	3	0	1	34	1	82
8:00 – 8:15am	2	21	3	1	2	3	3	1	0	2	39	3	80
8:15 – 8:30am	7	25	4	2	3	1	3	5	1	6	61	11	129
AM Peak													
8:30 – 8:45am	9	44	3	13	7	4	3	4	2	2	82	5	178
8:45 – 9:00am	3	38	8	12	4	1	4	2	2	2	110	5	191
9:00 – 9:15am	7	40	5	4	0	1	3	3	2	3	60	1	129
9:15 – 9:30am	2	44	0	4	7	2	5	3	0	3	59	3	132
9:30 – 9:45am	8	33	6	9	2	1	7	10	6	1	51	0	134
9:45 – 10:00am	18	50	3	7	1	1	6	1	9	3	66	4	169
10:00 – 10:15am	13	45	9	2	2	1	5	1	4	2	50	0	134
10:15 – 10:30am	5	38	5	6	4	2	8	6	5	4	56	1	140
10:30 – 10:45am	7	38	5	1	1	1	6	3	2	1	54	2	121
10:45 – 11:00am	5	47	8	9	4	2	8	5	3	6	51	1	149
11:00 – 11:15am	3	36	6	0	0	0	5	1	2	2	43	2	100
11:15 – 11:30am	9	63	13	4	2	1	6	3	4	3	55	4	167
11:30 – 11:45am	7	58	2	4	1	1	5	2	1	7	41	4	133
11:45 – 12:00pm	10	56	8	7	5	2	4	4	0	2	55	4	157
12:00 – 12:15pm	7	72	11	7	4	1	4	4	6	2	42	1	161
12:15 – 12:30pm	5	53	9	5	2	3	2	1	6	4	51	1	142
12:30 – 12:45pm	8	39	9	6	3	2	3	2	4	7	63	1	147
12:45 – 1:00pm	8	48	6	5	4	0	7	5	6	2	61	2	154
1:00 – 1:15pm	11	62	8	6	1	2	6	3	1	4	36	0	140
1:15 – 1:30pm	3	56	8	5	3	2	6	4	3	6	55	0	151
1:30 – 1:45pm	4	66	5	6	5	3	1	2	4	4	39	3	142
1:45 – 2:00pm	4	43	5	9	0	0	4	4	4	4	50	1	128
2:30 – 2:45pm	5	57	2	5	2	1	4	1	7	4	55	2	145
2:45 – 3:00pm	3	55	7	6	3	3	0	4	3	1	51	3	139
3:00 – 3:15pm	4	63	9	2	0	1	5	2	2	2	66	4	160
PM Peak													
3:15 – 3:30pm	5	86	6	4	3	8	5	5	3	5	43	2	175
3:30 – 3:45pm	2	72	4	1	3	4	6	0	3	2	70	1	168
3:45 – 4:00pm	8	64	5	3	1	0	2	1	2	7	62	2	157
4:00 – 4:15pm	8	63	4	7	4	3	15	2	3	10	72	2	193
4:15 – 4:30pm	4	55	7	4	1	3	5	2	5	1	60	8	155
4:30 – 4:45pm	7	73	3	4	3	4	2	3	4	5	56	3	167
4:45 – 5:00pm	3	62	10	4	3	2	4	4	1	3	48	5	149
5:00 – 5:15pm	5	67	8	5	1	2	3	3	2	2	39	1	138
5:15 – 5:30pm	2	56	6	7	0	1	3	4	1	4	42	3	129
5:30 – 5:45pm	7	64	6	3	1	2	5	2	2	2	48	1	143
5:45 – 6:00pm	5	45	6	4	3	2	3	5	1	3	54	3	134

Table A1: Turning Movement Survey Results