

# Fast Food Restaurant with a Drive Through Facility, Butler

## Transport Impact Statement

**PREPARED FOR:**  
Canning Bridge Superwash Pty  
Ltd & Kylie Nominees Pty Ltd

January 2022

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# 1 Introduction

This Transport Impact Statement has been prepared by Transcore on behalf of Canning Bridge Superwash Pty Ltd & Kylie Nominees Pty Ltd with respect to the proposed fast food restaurant to be located at Lot 1 (HN. 9) Headingly Crescent in Butler in the City of Wanneroo (hereafter the subject site).

The subject site forms part of the existing commercial centre situated at the northwest corner of the existing signalised intersection of Connolly Drive and Lukin Drive, as shown in **Figure 1**. More specifically, the subject site is located between an existing service station and existing car wash between Lukin Drive and Headingly Crescent.



**Figure 1: Location of the subject site**

The development proposal contemplates construction of a fast food restaurant with a single lane drive-through facility and associated car parking at the subject site.

The Transport Impact Assessment Guidelines (WAPC, Vol 4 – Individual Developments, August 2016) states: “A Transport Impact Statement is required for those developments that would be likely to generate moderate volumes of traffic<sup>1</sup> and therefore would have a moderate overall impact on the surrounding land uses and transport networks”. Section 0 of Transcore’s report provides details of the estimated

<sup>1</sup> Between 10 and 100 vehicular trips per hour

trip generation for the proposed development and the traffic impact as a result of the proposed fast food outlet. Accordingly, as the traffic increase during peak hour periods is estimated to be less than 100 trips, a *Transport Impact Statement* is deemed appropriate for this development (refer section 6 of this report for more details).

Hence, key issues that will be addressed in this report include accessibility of the subject site by various modes of transport and the traffic generation of the proposed development including the resultant net traffic impact on the adjacent road network.

## 2 Development Proposal

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The proposed development occupies the eastern section of the vacant land comprising the front half of Lot 1.

The development proposal contemplates construction of a fast food restaurant with a single lane drive-through facility and associated car parking.

According to the concept development plan prepared by H&A the proposed restaurant comprises the following components:

- Restaurant with a seating area with overall building having an area of approximately 180m<sup>2</sup> GFA; and,
- Single lane drive-through facility.

The proposed restaurant provides a total of six car parking bays (including one ACROD bay) for customers and staff immediately adjacent to the building and additional 15 bays south of the existing access cross-easement. In addition, the drive-through facility entails a combined stacking capacity of up to six standard size vehicles.

The proposal includes a service bay which is located between the drive-through lane and the restaurant building on the northern side. As service vehicles are expected to access the site outside the peak operating times of the business, no major traffic conflicts between customers, employees and service vehicles are anticipated.

Pedestrian access to the proposed restaurant is facilitated via the existing footpath on Lukin Drive and the pavement marked pedestrian path connecting through to the future restaurant building.

Refer to **Appendix A** for existing and proposed site plans.

### 3 Vehicle Access and Parking

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The existing access system serving the commercial centre (which the subject site forms part of) is proposed to remain in its current form.

Specifically, the subject site is directly served by two crossovers on Headingly Crescent and an internal vehicular connection through the adjacent service station site (to the immediate east) connecting to a service road off Connolly Drive.

The car parking provision for the proposed restaurant includes six car parking bays (including one ACROD bay) for customers and staff immediately adjacent and to the west of the restaurant building. An additional 15 parking bays are proposed to the south of the existing front access cross-easement for the combined use of the subject restaurant and the future development on the western portion of the currently vacant land of Lot 1.

The drive-through facility, in addition to the aforementioned bays, will have a combined stacking capacity of up to six standard size vehicles.

According to the advice provided to Transcore, the proposed car parking arrangements exceed the requirement for the proposed land use in accordance with the planning scheme and other relevant parking policies.

## 4 Provision for Service Vehicles

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A loading bay is on site to the north or rear of the restaurant building and to the west of the proposed drive-through lane, for the delivery of goods and waste-collection vehicles.

It is anticipated that the delivery of supplies for the restaurant would be undertaken using small-size commercial vehicles up to 8.8m long and not larger vehicles as the operator of the business is locally based and not a national chain.

## 5 Hours of Operation

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The proposed fast food restaurant is intended to operate 6:00AM – 10:00PM, seven days a week.

## 6 Daily Traffic Volumes and Vehicle Types

### 6.1 Trip Generation

In order to assess the future traffic impact from the proposed fast food restaurant, a traffic generation and distribution exercise was undertaken. The aim of this exercise was to establish the additional traffic that would be generated on the surrounding road network as a result of the proposed development.

The traffic volumes likely to be generated by the proposed restaurant has been estimated using trip rates for “Fast-Food Restaurant with Drive-Through Window (934)” land use, sourced from the *Institute of Transportation Engineers Trip Generation 10th Edition* publication.

Accordingly, it is estimated that the proposed development would generate a total of approximately **912** daily vehicle trips with about **78** and **64** trips during the AM and PM peak hour periods.

Trips associated with the proposed development also comprise a significant portion of passing-trade trips (and diverted trips) which are trips already present on the road network. A passing trade factor of 50% is generally applicable in line with the *ITE Trip Generation Handbook*. Hence the actual traffic increase on the adjacent road network is lower than that estimated in this report.

The traffic split detailed in **Table 1** was based on the following directional split assumptions for peak hour periods:

- Morning (AM) peak split assumed as 51%/49% for inbound/outbound trips, respectively; and,
- Afternoon (PM) peak split assumed as 52%/48% for inbound/outbound trips, respectively.

**Table 1: Peak hour trips for the development**

Peak Period	Direction	Traffic Split	Peak Hour Trips
AM Peak	Inbound	39	78 cars
	Outbound	39	
PM Peak	Inbound	34	64 cars
	Outbound	30	

## 6.2 Trip Distribution

Considering the location of the proposed development and the available access and egress routes to and from the development the anticipated directional trip distribution of the development-generated traffic is assumed to be as follows:

- 50% of trips to/from the areas to the east of the site; and,
- 50% of trips to/from areas to the west of the site.

The directional morning and afternoon trip distribution of the development-generated traffic is illustrated in **Figure 2**.



**Figure 2. Estimated traffic movements for the subject development – morning and afternoon peak hour trips**

## 6.3 Impact on Surrounding Roads

The WAPC *Transport Impact Assessment Guidelines* (2016) provides guidance on the assessment of traffic impacts:

*“As a general guide, an increase in traffic of less than 10 percent of capacity would not normally be likely to have a material impact on any particular section of road, but increases over 10 percent may. All sections of road with an increase greater than 10 percent of capacity should therefore be included in the analysis. For ease of assessment,*

*an increase of 100 vehicles per hour for any lane can be considered as equating to around 10 percent of capacity. Therefore, any section of road where the development traffic would increase flows by more than 100 vehicles per hour for any lane should be included in the analysis."*

From **Figure 2** it can be seen that the estimated traffic impact from the proposed development would be much less than the critical thresholds with the most pronounced traffic increases of 38vph and 40vph during AM peak hour along Lukin Drive west and east of the site.

As previously discussed, it is estimated that approximately 50% of this traffic would be passing trade, which is traffic already present on the road network. Hence, the impact on the surrounding road network will not be significant.

It is considered that the surrounding roads and intersections are of adequate standard and have the capacity to accommodate the estimated additional traffic from the proposed development.

## 7 Traffic Management on Frontage Streets

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### 7.1 Context

The subject site forms part of the existing commercial centre at the north-western corner of the Lukin Drive/Connolly Drive signalised intersection.

### 7.2 Existing Road Network

**Connolly Drive** is a dual-carriageway, four-lane road with a wide landscaped median and on-road cycle lanes. It entails shared paths along both sides of the road in this vicinity. Connolly Drive operates under a 70km/h speed limit south of Lukin Drive reducing to 60km/h to the north of Lukin Drive. A 40km/h speed school zone is in place immediately north of Lukin Drive.

In the Main Roads WA *Perth Metropolitan Area – Functional Road Hierarchy* document, Connolly Drive is classified as a *Distributor A* road. According to the *Metropolitan Region Scheme (MRS)* at this location Connolly Drive is covered by *Other Regional Road (ORR)* reservation.

Based on the latest available traffic counts sourced from Main Roads WA, Connolly Drive (north of Lukin Drive) carried approximately 22,750vpd during a typical weekday in 2021/22.

**Lukin Drive** comprises a two-lane, dual divided carriageway cross-section with a 16m wide landscaped median and on-road cycling lanes. In this vicinity, Lukin Drive incorporates a shared path along the northern side of the road. At this location Lukin Drive operates under a 60km/h speed limit regime and to the west of Connolly Drive Lukin Drive entails a 40km/h speed school zone.

In the Main Roads WA *Perth Metropolitan Area – Functional Road Hierarchy* document, Lukin Drive is classified as a *Local Distributor* road. According to the *Metropolitan Region Scheme (MRS)* at this location Lukin Drive is covered by *Other Regional Road (ORR)* reservation.

Based on the latest available traffic signal counts (SCATS) sourced from Main Roads WA, Lukin Drive (west of Connolly Drive) carried approximately 11,180vpd during a typical weekday in November 2021.

**Headingly Crescent**, is an L-shaped, 7.0m wide single-carriageway two-way road with wide path on one side of the road. It connects to Lukin Drive at the southern end and the service road off Connolly Drive at the eastern end. Headingly Crescent provides access to the commercial centre on the north-western corner of Lukin Drive/Connolly

Drive intersection. It operates under a default built-up area speed limit of 50km/h with a 40km/h speed school zone applied.

In the Main Roads WA *Perth Metropolitan Area – Functional Road Hierarchy* document, Headingly Crescent is classified as an *Access Road*.

Headingly Crescent forms a full-movement T-intersection with Lukin Drive and a left-in/left-out T-intersection with Connolly Drive Service Road.

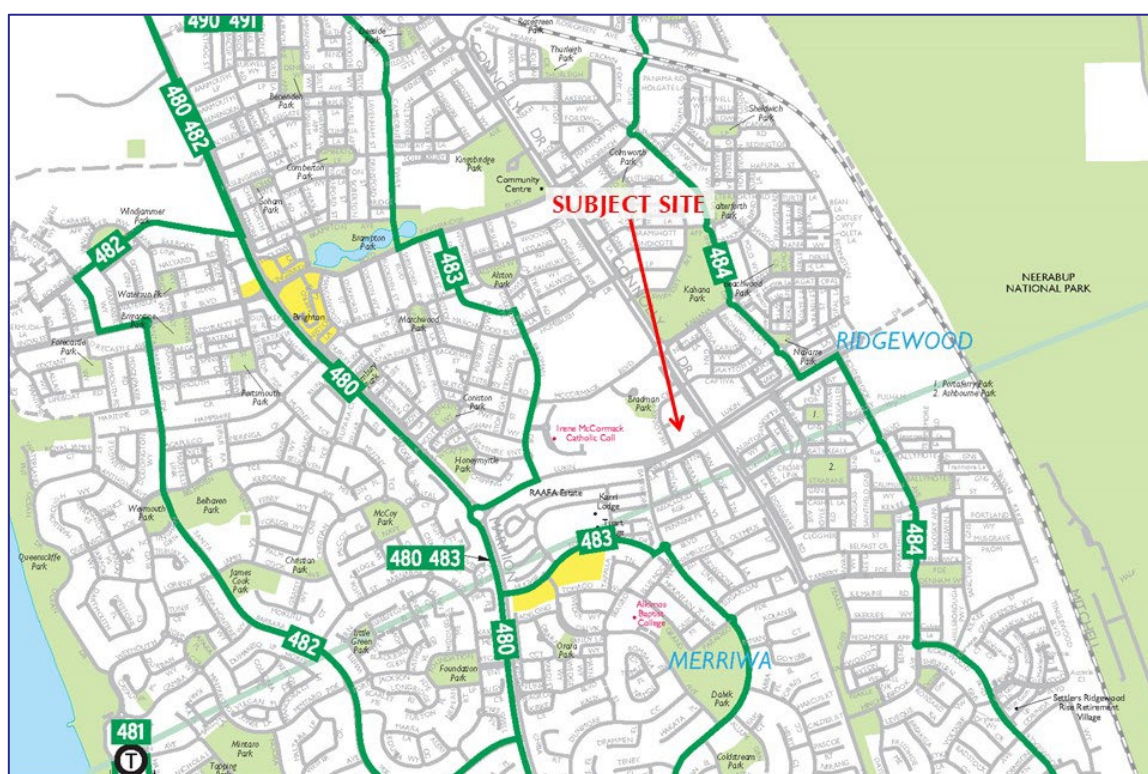
Information available on the Main Roads WA website indicates that intersections of Headingly Crescent/Lukin Drive and Headingly Crescent/Connolly Drive Service Road did not record any crashes over the five-year period ending 31 December 2020.



## 8 Public Transport Access

The closest bus routes to the subject site are bus services No. 483 and 484 operating approximately 450m and 300m west and east of the site, along the Bradman Drive and Shepperton Drive corridor with bus stops at walking distance from the subject site. Bus stops are accessible directly via the existing path system at this locality. These bus services link Clarkson Station with Butler Station providing opportunities to transfer to the Joondalup train line.

The Transperth map of existing public transport services available in the vicinity of the subject site is provided on the route map shown in **Figure 3**.



**Figure 3: Public transport services (Transperth Map)**

## 9 Pedestrian Access

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The subject locality enjoys a well developed and interconnected network of pedestrian and shared paths with shared paths provided in the immediate vicinity of the site, along Headingly Crescent, Lukin Drive and Connolly Drive.

As part of the development proposal a new pedestrian link will be constructed to connect the existing shared path on Lukin Drive directly to the restaurant through the new car park area. The path will be appropriately marked to ensure safe use by pedestrians with priority given to pedestrians (zebra markings).

## 10 Cyclist Access

The subject site enjoys a very good level of access for cyclists with a comprehensive network of on-road cycle lanes, shared paths and roads defined as a “good road riding environment” which provide links to major local attractors. The Department of Transport’s *Perth Bike Map* series shows a good cyclist connectivity for the subject site as shown in **Figure 4**.



**Figure 4: Extract from Perth Bicycle Network (Department of Transport)**

## 11 Site Specific Issues

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No site-specific issues have been identified for the proposed development.

## 12 Safety Issues

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No specific safety issue has been identified for the proposed development.

## 13 Conclusions

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This Transport Impact Statement has been prepared by Transcore on behalf of Canning Bridge Superwash Pty Ltd & Kylie Nominees Pty Ltd with respect to the proposed fast food restaurant to be located at Lot 1 (HN. 9) Headingly Crescent in Butler in the City of Wanneroo.

The development proposal contemplates construction of a fast food restaurant with a single lane drive-through facility and associated car parking at the subject site.

The traffic analysis undertaken in this report shows that the traffic impact resulting from the proposed fast food restaurant with drive-through facility would be not be significant and will not result in an adverse impact on the surrounding road network.

The subject site is accessible by the existing pedestrian and cyclist path networks and has an acceptable level of public transport coverage through existing bus services operating within the proximity of the site.

# Appendix A

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## PROPOSED SITE PLANS



Date	08/12/20
Design	000
Drawn	000
Checked	000
Scale	1/2"=1'-0"
Job No.	000
Drawn -	<b>DAO</b>
Check -	

**OVERALL SITE PLAN**  
SCALE 1:600

**PROPOSED FAST FOOD DRIVE THROUGH  
LOT 1, No. 9 HEADINGLY CRESCENT  
BUTLER  
CANNING BRIDGE SUPER WASH Pty Ltd**

