



Metro Outer Development Assessment Panel Agenda

Meeting Date and Time: Thursday, 30 October 2025; 9:30am
Meeting Number: MODAP/111
Meeting Venue: 140 William Street, Perth

A live stream will be available at the time of the meeting, via the following link:
[MODAP/111 - 30 October 2025 - City of Kalamunda](#)

PART A – INTRODUCTION

1. Opening of Meeting, Welcome and Acknowledgement
2. Apologies
3. Noting of Minutes

PART B – CITY OF KALAMUNDA

1. Declarations of Due Consideration
2. Disclosure of Interests
3. Form 1 DAP Applications
 - 3.1 Lot 29 (No. 14) and Lot 28 (No. 16) Canning Road and Lot 3 (No. 5) Heath Road, Kalamunda - Proposed Fast Food Outlet and Motor Vehicle Wash – DAP/25/02835
4. Form 2 DAP Applications
5. Section 31 SAT Reconsiderations

PART C – OTHER BUSINESS

1. State Administrative Tribunal Applications and Supreme Court Appeals
2. Meeting Closure

Please note, presentations for each item will be invited prior to the items noted on the agenda and the presentation details will be contained within the related information documentation



DAP Members
Karen Hyde (Presiding Member)
Dale Page (Deputy Presiding Member)
Eugene Koltasz
Cr Kathy Ritchie (Part B – City of Kalamunda)
Mayor Margaret Thomas (Part B – City of Kalamunda)

DAP Secretariat
Kristen Gray
Ashlee Kelly



PART A – INTRODUCTION

- 1. Opening of Meeting, Welcome and Acknowledgement**
- 2. Apologies**
- 3. Noting of Minutes**



PART B – CITY OF KALAMUNDA

1. Declarations of Due Consideration

2. Disclosure of Interests

3. Form 1 DAP Applications

- 3.1 Lot 29 (No. 14) and Lot 28 (No. 16) Canning Road and Lot 3 (No. 5)
Heath Road, Kalamunda - Proposed Fast Food Outlet and Motor Vehicle
Wash – DAP/25/02835

4. Form 2 DAP Applications

Nil.

5. Section 31 SAT Reconsiderations

Nil.

Part B – Item 3.1 - CITY OF KALAMUNDA ADDENDUM TO RESPONSIBLE AUTHORITY REPORT –

LOT 29 (NO. 14) AND LOT 28 (NO.16) CANNING ROAD AND LOT 3 (NO. 5) HEATH ROAD, KALAMUNDA – PROPOSED FAST FOOD OUTLET AND MOTOR VEHICLE WASH

Background

The Metro Outer Development Assessment Panel (MODAP) at its meeting on 29 May 2025, deferred the decision of the development application for a proposed Fast-Food Outlet (McDonald's) and Motor Vehicle Wash at Lot 29 (No. 14) and Lot 28 (No.16) Canning Road and Lot 3 (No. 5) Heath Road, Kalamunda for a period of up to 180 days, for the following reasons:

1. *To enable the Applicant to work with the City of Kalamunda to agree the scope of a modification/upgrade to the intersection of Canning Road/Heath Road to facilitate the operation of the development.*
2. *To enable the applicant to prepare and submit and amended Transport Impact Assessment to the satisfaction of the City of Kalamunda.*
3. *To enable the City of Kalamunda to prepare additional commentary on appropriate timing for implementation of modification/upgrade to the intersection of Canning Road/Heath Road.*
4. *To enable the City of Kalamunda to provide additional commentary on the impact of the parking shortfall on this site, when considered in the context of other parking shortfalls that have been approved in the immediate vicinity of the site and any justification for those shortfalls based on parking availability on or adjacent to the subject site.*
5. *To enable the applicant to provide and the City of Kalamunda to assess additional evidence-based justification for the proposed 24/7 trading hours, particularly in the context of likely demand for extended trading hours in the Kalamunda community.*
6. *To enable the City's Design Review Panel or Panel Chair to review the amended design and to provide final comments on the proposal.*

In response to the reasons for deferral, the following additional attachments to the RAR are added for the DAP consideration:

- Addendum Attachment 1 – Interim Intersection Upgrade Concept
- Addendum Attachment 2 – Revised TIA
- Addendum Attachment 3 – Truncation Technical Note
- Addendum Attachment 4 – Design Review Panel DR3 Minutes
- Addendum Attachment 5 – Applicants' response to deferral reasons
- Addendum Attachment 6 – Applicants' response to DR3 Minutes
- Attachment 7 – Metro Outer Meeting of 29 May 2025 – Previous Responsible Authority Report and Attachments

The City's response to each deferral reason is outlined below, and a full suite of the City's recommended conditions and advice notes are available at the end of this document.

Deferral Reason 1:

To enable the Applicant to work with the City of Kalamunda to agree the scope of a modification/upgrade to the intersection of Canning Road/Heath Road to facilitate the operation of the development.

The Applicant and City have determined a scope for upgrading the intersection of Canning Road and Heath Road, Kalamunda – should the development application be approved by the Panel. The intersection design is available at Attachment 1 to this addendum.

The intersection upgrades include:

- Widening of the northern portion of the Heath Road reserve by 1.05 metres to allow for separate left and right turn lanes.
- Relocation of the existing pram ramp and on-street parking bays
- Line marking associated with the new upgrades to stagger the left out and right-out lanes to allow for sight lines to be maintained.

As noted in the City's original Responsible Authority Report (RAR), [Appendix F](#) of the Kalamunda Activity Centre Precinct Structure Plan (KACPSP) states that the future road network was determined as generally operating within capacity thresholds, except at the intersections of Canning Road/Mead Street and Canning Road/Heath Road where Degrees of Saturation (DOS) and delays exceeded acceptable limits - resulting in a logical recommendation that capacity improvements be undertaken at these intersections. The KACPSP traffic reporting assumed a 1.5% growth rate per annum within the precinct.

Although foreshadowed in the KACPSP, no works have been undertaken by the City or third parties to upgrade the Canning Road/Heath Road intersection to facilitate the implementation of the KACPSP. For this development – and any others with a similar traffic impact in the town centre - the planning options to deal with intersections are broadly to 'do nothing', 'do something', or 'do a lot'. The planning assessment has determined that the balanced 'do something' option applies to the proposed development.

As noted in the original RAR, the proposed development - being two car-oriented land uses – does further intensify the traffic impact on this intersection. Whilst Officers note the permissibility of the land uses (Fast Food Outlet and Motor Vehicle Wash) under LPS3 through the KACPSP and the broader obligations of the City to pursue a further strategic review of the traffic and intersection – the proposed development has a sufficient planning nexus to require the Heath-Canning intersection to be upgraded to meet the demands of the development – should the development application be approved by the Panel.

The measure of 'what is enough' of an upgrade in this circumstance is a complex case of finding a reasonable level of intersection service to sustain and ensure that the proposed development does not leave the users of the intersection in a worse position than they would have been if the subject site was not developed. The planning framework limits developers to deal only with the problems they create and rarely extends to deal with problems that existed prior to a development proposal.

The City is satisfied the proposed intersection upgrades will appropriately manage the traffic generated from the proposed development until such time that a broader intersection upgrade is required to be undertaken by the City after 2030.

Deferral reason 2:

To enable the applicant to prepare and submit an amended Transport Impact Assessment to the satisfaction of the City of Kalamunda.

The applicant submitted a revised TIA to support the interim intersection upgrades.

The TIA states that the upgrades will maintain the same traffic operations at the intersection in 2030 with the addition of the development traffic. The proposed upgrade will provide the City with the opportunity to undertake the necessary studies to establish the ultimate intersection design that will push the level of service beyond 2030.

The City is satisfied that the amended TIA (Attachment 2) is sufficient in confirming the proposed intersection upgrades are fit for purpose.

Deferral reason 3:

To enable the City of Kalamunda to prepare additional commentary on appropriate timing for implementation of modification/upgrade to the intersection of Canning Road/Heath Road.

The City in its original RAR recommended a condition that the intersection upgrades are completed within 12 months of occupation of the development, which was agreed with the applicant.

The original conditions were drafted in a deliberate fashion to establish thresholds at key approval milestones to ensure that the matter of the intersection was dealt with and ultimately constructed.

Now that much of that work has been settled, the timing and thus recommended conditions benefit from review – and simplification. Given the increased certainty it is appropriate for a condition require the intersection upgrades be completed prior to the occupation of the development.

Deferral reason 4:

To enable the City of Kalamunda to provide additional commentary on the impact of the parking shortfall on this site, when considered in the context of other parking shortfalls that have been approved in the immediate vicinity of the site and any justification for those shortfalls based on parking availability on or adjacent to the subject site.

The below table outlines the City's parking requirements in accordance with Table 4 of LPS3 for the applicable land uses:

Table 4 – Car Parking Requirements

Provision	Requirement	Proposal	Assessment
Car Parking – Fast Food Outlet (Table 3, LPS3)	10 bays per 100m2 of NLA. Min of 6 bays (excl. drive through). 28 Bays	23 Bays (excluding loading, queuing and vacuuming bays) 25 Bays (including loading bays)	5 bay shortfall
Car Parking – Motor Vehicle Wash (Table 3, LPS3)	At the discretion of the local government	As above.	Refer discussion below

The City's Scheme – like many Local Government planning Schemes – allows the consideration of discretion if there is reasonable prospect of proposed land uses generating a lesser need for car parking bays having regard to the scale of the proposal and the intended uses.

Part 9A Clause 77D of the Regulations, allows the Local Government to vary the number of on-site car parking bays if the applicant has addressed the certain criteria. Officers consider that the car parking shortfall is capable of approval for the following reasons:

- The subject site is located within the Kalamunda Town Centre. Typical of town centre areas, the site of the development is within proximity to high frequency public transport, specifically with two bus stops located within 50-100 metres of the subject site heading north and south along Canning Road.
- There is sufficient availability of on-street car parking, specifically along Heath Road and within walking distance from other nearby streets such as Haynes Street, Barber Street, and Mead Street.
- The higher than usual level of pedestrian access to the subject site via a drive-through crossing facilitates a walkable connection to Canning Road and Haynes Street. Officers consider that pedestrians will be able to safely and easily access the site from a walkable catchment.

The proposed variation to the number of car parking bays is minor, and in the context of a Town Centre with free on-street parking – is capable of approval. Good urban design outcomes for town centres include encouraging visitors to utilise parking in the centre – not necessarily exactly in front of the shop they are visiting – as the movement of pedestrians on the street has a positive contribution to the pedestrian experience at ground level. With Officer guidance the Applicant had previously amended the design

of the development to ensure pedestrian access and achieve a balance of providing parking on-site – but also providing opportunities to connect with the rest of the town centre.

Since the DAP deferral, the WAPC approved the KACPSP – formalising its status in the planning framework and the assessment of development applications within its boundaries. The KACPSP carries a car parking theme, noting that a reduction in on-site car parking can be supported throughout the town centre to support sustainable design principles.

Clause 2.7.3 Car Parking of the KACPSP outlines that surveys completed within the town centre indicated that whilst some parking areas were well utilised during the peak periods (i.e. 75-100% occupancy), the cumulative peak demand observed across the precinct was relatively low and did not exceed approximately 60% of available supply. There has been no substantive redevelopment in the study area since the data collection that would warrant its revision.

The KACPSP recommends a reduced parking rate of 4.5 spaces per 100m² for Shop/Retail uses. Whilst the land use is a Fast-Food Outlet – under SPP4.2, Fast Food Outlets are classified as Shop / Retail uses. Application of this rate would result in only 17 bays being required, and a surplus of 6 bays when compared to the proposed number of bays. Having regard to the approved KACPSP the Scheme car parking variation not only is capable of planning support – in many ways it is encouraged to create a vibrant town centre.

Background of Car Parking

Lot 29 (No. 14) Canning Road has historically been used as a car park associated with the nearby Shop (IGA) across the road at Lot 16 (No. 12) Canning Road, Kalamunda and has continued to be used informally as a car parking for visitors to the IGA.

Car parking for the IGA at No. 12 Canning Road was formalised through a development application, which was approved under delegation by the City in 2021. The approval was for 38 car parking bays located across both Lot 16 (No. 12 Canning Road) and Lot 15 (No. 10) Canning Road. Figure 1 below shows the car parking that was approved as part of this application and now exists across the two sites. All parking for IGA is located on No.10 and No.12 Canning Road – with no formal association with No.14.



Figure 1 – Approved car parking associated with IGA in red (Lot 15 & 16 Canning Road), and existing informal parking on Lot 29 Canning Road in yellow.

The development application (ref: DA21/1359) approved 38 bays across both Lot 15 and 16 as part of the IGA. While not part of the final approval issued by the City, the approved 38 bays were proposed based on a hypothetical future development at the Canning Road frontage of Lot 15 (10) Canning Road combined with the existing IGA. The Scheme requirement incorporating the hypothetical future development was calculated at approximately 55 bays, with 44 originally proposed, later reducing to 38 to allow for rationalisation and potential continuation of the rear car park through to Lot 13 (No.8) Canning Road.

Fast forward three years and the hypothetical development became a real proposal. In 2024, Council at its Ordinary Council Meeting (OCM) in December 2024 approved a Liquor Store - Large at Lot 15 (No. 10) Canning Road, Kalamunda.

A Liquor Store is a use not listed in LPS3, so there is no specific car parking rate stipulated – which facilitated a demand-based assessment. Based on the existing approval for the car parking, and the location of the site being within the KACPSP with sufficient availability of on-street parking available within walking distance, and public transport, the City was satisfied that the existing car parking (38 bays approved under DA21/0359) accounted for the traffic demand of both the IGA and the Liquor Store in a town centre context where free on-street parking is available in close proximity.

Under LPS3, a 'Shop' land use requires a car parking ratio of 5 bays per 100m² of NLA. The IGA has approximately 850m² of NLA which means 43 car parking bays would be required under LPS3. The site has 38, which is a shortfall of 5 bays. The

addition of the liquor store would add to the shortfall assuming the liquor store was a destination for visitors.

Much like the approach taken with the development proposal under assessment, the existing approved car parking and the availability of free on-street parking and nearby public transport was a factor in concluding that minor car parking shortfalls are unlikely to contribute to a monopolisation of car parking in the town centre – and are more likely to result in a positive contribution to a vibrant town centre environment where buildings are prioritised over car parking bays.

Deferral reason 5:

To enable the applicant to provide and the City of Kalamunda to assess additional evidence-based justification for the proposed 24/7 trading hours, particularly in the context of likely demand for extended trading hours in the Kalamunda community.

The applicant has proposed to reduce the proposed trading hours for both the Fast-Food Outlet and the Motor Vehicle Wash from the original 24/7 to 5:30am to 11:30pm, seven days a week.

The City is satisfied that the changes to the operational hours are consistent with the Noise Regulations and aligned with the community feedback. Whilst the applicant had demonstrated that the 24/7 operation would comply with the Noise Regulations, the reduced hours are therefore also supported by the City.

The reduced operational hours which range from 5:30am – 11:30pm are consistent with other uses within the town centre as per the table below.

Table 1 – Operation hours of existing businesses within the KACPSP area

Business Name	Address	Hours of Operation
Domino's Pizza	10 Barber Street, Kalamunda	Sunday – Thursday: 11:00am – 10:00pm Friday – Saturday: 11:00am – 1:00am
Kalamunda Hotel	43 Railway Road, Kalamunda	Sunday – Wednesday: 10:00am – 11:00pm Thursday – Saturday: 10:00am – 12:00am
Red Rooster	1 Canning Road, Kalamunda	9:30am – 10:00pm
Vibe Kalamunda	7 Mead Street, Kalamunda	Monday – Friday: 5:00am – 10:00pm Saturday – Sunday: 6:00am – 9:00pm
The Best Drop Tavern Kalamunda	18 Haynes Street, Kalamunda	Monday – Thursday: 11:30am – 10:00pm Friday: 11:30am – 11:00pm Saturday: 11:30am – 10:30pm Sunday: 11:30am – 9:00pm
Jack & Jill Kitchen	18 Haynes Street, Kalamunda	Monday – Friday: 6:30am – 1:30pm Saturday – Sunday: 7:00am – 1:30pm
Grounded Grinds	3 Elizabeth Street, Kalamunda	Monday – Thursday: Opens 5:30am
Muzz Buzz	Barberry Square, Canning Road, Kalamunda	Monday – Friday: 6:00am – 5:00pm Saturday – Sunday: 7:00am – 3:30pm
Dome Café	31 Canning Road, Kalamunda	Sunday – Thursday: 6:00am – 7:00pm Friday – Saturday: 6:00am – 8:00pm

Officers have not recommended a condition restricting operating hours as it considers operating hours to be a commercial consideration. There is no specific planning impediment to any of the abovementioned businesses seeking approval to operate on a 24/7 basis.

Deferral reason 6:

To enable the City's Design Review Panel or Panel Chair to review the amended design and to provide final comments on the proposal.

The proposal was referred to the City's Design Review Panel (DRP) on a third occasion to review the amended design and provide final comments on the proposal. The comments made by the panel during the third design review (DR3) are summarised in the table below. No further changes to the design were made by the Applicant after the DR3 meeting. A full copy of the DR3 Minutes are attached.

The DRP noted improvements to some design principles including Sustainability and Legibility. The City, through its original RAR noted the design proposal to be consistent with the broad intent of the design guidelines, and has incorporated the Panel's comments and recommendations from the second DRP review. The introduction of a clearly defined pedestrian access, enhanced weather protection, and improved sustainability measures are more of a departure from the typical operational needs to this type of development, leaning into the town centre context. The re-positioning of façade elements and increased landscaping around significant trees contributed to a design which emphasises the natural features of the site.

Whilst the design and site layout are departures from the planning framework, Officers have considered the design of the development to be a significant improvement and departure from the Applicant's operational needs.

Table 2 – DR3 Recommendations and City's Response

SPP 7.0 Design Principles		City's Response to DR3 Recommendations
DR2 COLOUR	DR3 COLOUR	
1. Context and Character	1. Context and Character	Comments as per previous RAR
2. Landscape Quality	2. Landscape Quality	Comments as per previous RAR
3. Built Form and Scale	3. Built Form and Scale	Comments as per previous RAR
4. Functionality and Built Quality	4. Functionality and Built Quality	Comments as per previous RAR
5. Sustainability	5. Sustainability	The applicant has provided solar panels on the drive through roof structure to increase sustainability. The DRP noted that there is a substantial solar panel installation on the drive through portico, but

		recommends the applicant explore the orientation to maximise performance.
6. Amenity	6. Amenity	Comments as per previous RAR
7. Legibility	7. Legibility	Following on from DR2, the applicant submitted revised development plans which improve the overall pedestrian connection and provides a direct walkway from Canning Road with a clear entrance. The built form along Canning Road now provides a purpose as a legible entrance way to the development located behind, whilst also providing a screen to the queuing lanes for the drive-through component. The DRP during its third review noted these improvements made by the applicant, to include a more identifiable and safe pedestrian access route to the site. The DRP note that there is still room to further improve the design and visibility to Canning Road.
8. Safety	8. Safety	Comments as per previous RAR
9. Community	9. Community	Comments as per previous RAR
10. Aesthetics	10. Aesthetics	Comments as per previous RAR

Corner Truncation

Whilst not part of the deferral directly – Officers confirm that a 3 x 3m truncation on the corner of the site is the preferred dimension and is not expected to impact the design of the development. This has resulted in an amended condition.

Amended Responsible Authority Recommendation

That the Metro Outer Development Assessment Panel resolves to:

1. **Accept** that the DAP Application reference DAP/25/02835 is appropriate for consideration as a “Fast Food Outlet” and “Motor Vehicle Wash” land use and compatible with the objectives of the zoning table in accordance with Clause 4.2.3 of the City of Kalamunda Local Planning Scheme No.3.
2. **Approve** DAP Application reference DAP/25/02835 and accompanying plans in accordance with Clause 68 of Schedule 2 (Deemed Provisions) of the *Planning and Development (Local Planning Schemes) Regulations 2015*, and the provisions of Clause 10.4 of the City of Kalamunda Local Planning Scheme No. 3, subject to the following conditions:

Conditions

1. Pursuant to clause 26 of the Metropolitan Region Scheme, this approval is deemed to be an approval under clause 24(1) of the Metropolitan Region Scheme.
2. This decision constitutes planning approval only and is valid for a period of 4 years from the date of approval. If the subject development is not substantially commenced within the specified period, the approval shall lapse and be of no further effect.
3. The development being carried out for the duration of the development in accordance with the approved plan(s)/drawing(s) and document(s) listed below.

Plan No.	Title	Rev No.	Prepared by
DA01 – DA25	Amended Development Plans	0/1	Hindley and Associates Pty Ltd
-	Arborist Impact Assessment and TPP	-	Arborite Tree Management Solutions
-	Revised Transport Impact Assessment	R01c	Transcore
T24.140.sk40a	Interim Intersection Upgrades		Transcore
24155-C8-DG-11	Amended Civil Design	A	Colliers
-	Environmental Noise Assessment & Acoustic Technical Note	0	Lloyd George Acoustics
WW01	Wastewater Management Concept Plan	0	Hindley and Associates Pty Ltd
-	Waste Management Plan	-	-
-	Lighting Assessment	V1	Rubidium Light
M000-M400	Odour Assessment	A-G	EMP Consulting

4. Prior to lodging an application for a building permit, detailed drawings for the approved upgrades to the Canning Road and Heath Road intersection must be provided to the satisfaction of the City of Kalamunda.
5. Prior to occupation of either the fast food or car wash, the approved modifications to the Canning Road and Heath Road intersection must be completed at the full cost of the landowner and/or applicant to the satisfaction of the City of Kalamunda.
6. Prior to lodging an application for a building permit, a lighting management plan must be submitted and approved by the City of Kalamunda satisfying the requirements of the Position Statement: Dark sky and Astrotourism. The approved lighting management plan must be implemented for the duration of the development.
7. Prior to lodging an application for a building permit, the applicant must submit amended plans demonstrating an 3m x 3m truncation to be provided at the junction of Heath Road and Canning Road and ensure that all development is wholly contained within the subject allotment, including the timber framed structure annotated on the approved development plans to the satisfaction of the City of Kalamunda.
8. Prior to lodging an application for a building permit, the pylon sign (Black Powder Coated Tower Structure and Illuminated Sign) must be reduced to a maximum height of 6.5m above natural ground level to the satisfaction of the City of Kalamunda.
9. The illuminated signage must be of a low-level not exceeding 300cd/m² during the hours of night, and not flash, pulsate or chase during all hours for the duration of development.
10. Prior to the commencement of any works on the subject site, a Construction Management Plan must be prepared by the landowner/applicant and approved, to the satisfaction of the City of Kalamunda. The Construction Management Plan must detail how the construction of the development will be maintained including the following:
 - i. Public safety and security;
 - ii. Hours of construction;
 - iii. Traffic management plans during construction, including any proposed road closures;
 - iv. Dust management plan;
 - v. Toilet facilities for construction workers;
 - vi. Protection of public infrastructure;
 - vii. How materials and equipment will be delivered, stored and removed from the site;
 - viii. Parking arrangements for staff, contractors and visitors;
 - ix. Construction Waste disposal strategy and location of waste disposal bins;
 - x. Dilapidation report of adjoining properties;
 - xi. Details of cranes, large trucks or similar equipment which may block public thoroughfares during construction, and how they are to be managed;

- xii. How noise, erosion, lighting and environmental hazards and will be managed during the stages of construction;
- xiii. Complaint management procedure; and
- xiv. Other matters likely to impact on surrounding property owners.

The approved Construction Management Plan must be implemented prior to the commencement of works and thereafter maintained for the duration of works, to the satisfaction of the City of Kalamunda.

11. Prior to the commencement of development works on site, the applicant must provide a detailed Tree Protection Plan to be approved by the City of Kalamunda. The Tree Protection Plan must outline management measures to ensure compliance with AS4970-2009 (Protection of Trees on Development Sites) and must include the following to the satisfaction of the City of Kalamunda:
 - i. Install protective fencing to prevent any damage to the trees in general accordance with Section 4.3 of AS4970-2009;
 - ii. Provide signage identifying the 'Tree Protection Zone' on exclusion fencing;
 - iii. Ensure trees are protected from harm during works on site; and
 - iv. Include the protection trees on adjoining properties which have the potential to be impacted by development works.
12. All tree protection and tree removal works must be undertaken on advice and supervision of a suitably qualified (Australian Qualification Framework (AQF) Level 5) arborist for the duration of works, to the satisfaction of the City of Kalamunda.
13. Prior to the occupation of the development, all landscaping noted in the approved Landscape Plan must be planted and maintained for the duration of the development to the satisfaction of the City of Kalamunda. Any species which fail to establish within the first two planting seasons following implementation must be replaced at the landowners cost to the satisfaction of the City of Kalamunda.
14. Fill brought to the site must be clean, and solid earth/sand or clean inert material that is free of contaminates, organic material, putrescible or refuse matter, or any other deleterious matter to the satisfaction of the City of Kalamunda.
15. Prior to occupation of the development, an amended Waste Management Plan must be prepared by the landowner and approved by the City of Kalamunda. The Waste Management Plan must include the following detail to the satisfaction of the City of Kalamunda:
 - i. The location of the bin storage areas and bin collection areas (all storage and loading areas must be screened from Canning Road and Heath Road).
 - ii. The number, volume and types of bins, and the type of waste to be placed in the bins.
 - iii. Management of the bins and the bin storage areas, including cleaning rotation and moving bins to and from the bin collection areas.
 - iv. Frequency of bin collections.

16. Prior to occupation of the development, all hardstand areas must be paved, sealed and drained to the satisfaction of the City of Kalamunda.
17. Prior to occupation of the development, the landowner/applicant must contribute towards public art, pursuant to City of Kalamunda Local Planning Policy 26 by providing art on-site to the satisfaction of the City of Kalamunda.
18. Prior to occupation of the development, all car parking areas must meet the following requirements:
 - i. The provision and maintenance of a minimum of 23 car parking spaces for the Fast Food Outlet and the Motor Vehicle Wash which are designed, constructed, sealed, kerbed, drained and marked in accordance with Australian/New Zealand Standard AS/NZS 2890.1:2004, Parking facilities, Part 1: Off street car parking;
 - ii. The provision and maintenance car parking space(s) dedicated to people with disabilities, which are designed, constructed, sealed, kerbed, drained and marked in accordance with Australian/New Zealand Standard AS/NZS 2890.6:2009, Parking facilities, Part 6: Off street parking for people with disabilities and which are linked to the main entrance of the development by a continuous accessible path of travel designed and constructed in accordance with Australian Standard AS 1428.1 2009, Design for access and mobility, Part 1: General Requirements for access New building work;
 1. Vehicle parking, manoeuvring and circulation areas are to be suitably constructed, sealed, kerbed, line marked and drained to the specification and satisfaction of the City of Kalamunda and Australian Standard AS2890; and
 - iv. Comply with the above requirements and be maintained to the satisfaction of the City of Kalamunda for the duration of the development.
19. Prior to occupation of the development, bicycle facilities must be provided in accordance with Australian Standard AS 2890.3 to the satisfaction of the City of Kalamunda. The facilities shall thereafter be retained for the duration of the development.
20. Prior to occupation of the development, redundant vehicle crossover(s) must be removed and the kerbing, verge, and footpath (where relevant) reinstated to the specifications and satisfaction of the City of Kalamunda.
21. Prior to occupation of the development, crossovers must be designed and constructed to the specification and satisfaction of the City of Kalamunda.
22. Mechanical wash-down areas must drain to a sewer via a sediment trap and oil separator to the Water Corporation's requirements and must comply with Department of Water: Water Quality Protection Note: Mechanical Equipment Wash-down for the duration of the development, to the satisfaction of the City of Kalamunda.

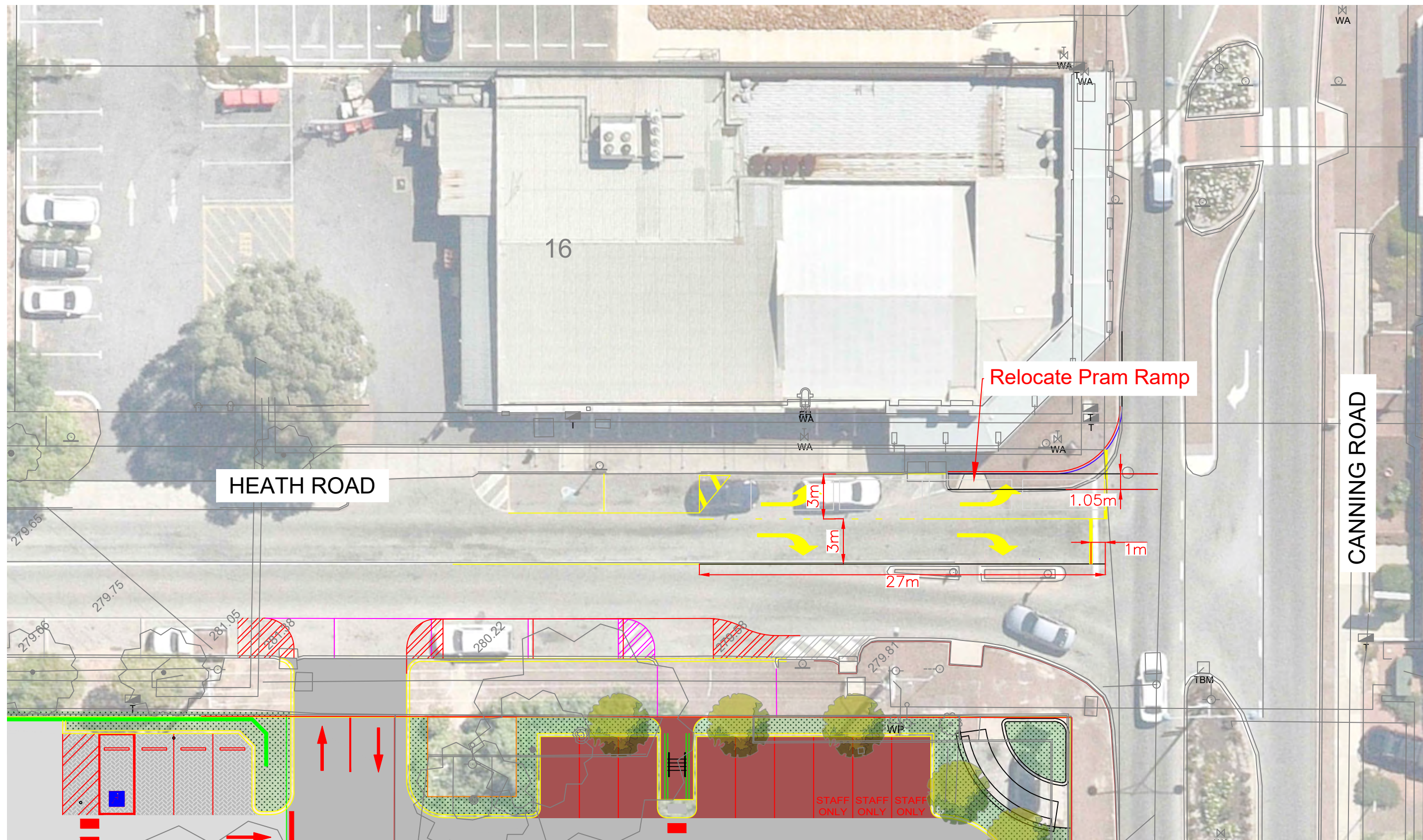
23. Prior to occupation, the development must be connected to reticulated sewer to the satisfaction of the City of Kalamunda.
24. The approved boundary wall and footings adjacent to the boundary must be constructed wholly within the subject allotment. Prior to occupation of the development, the external surface of the boundary wall must be finished to a professional standard to complement development on the adjoining lot, to the satisfaction of the City of Kalamunda.
25. All external fixtures (e.g. service equipment, mechanical ventilation, water tanks, compressors etc.) must be installed, located and screened, prior to occupation of the development and maintained for the duration of the development to the satisfaction of the City of Kalamunda, to avoid adverse effects, including noise and visual amenity of nearby properties.

Advice Notes

1. Regarding Public Art, the City of Kalamunda's Local Planning Policy 26 (Public Art Contributions) provides a concise and documented procedure for public art contributions to provide for consistent management and transparent process by the City.
2. Regarding Public Art, the landowners are advised that a public art contribution to the value of \$45,000 applies to this approval, which has been conditioned to be provided on-site.
3. Any trees requiring protection from development works should be in accordance with AS4970-2009 "Protection of Trees on Development Sites".
4. Any damage to public assets arising during the course of the development activity are to be repaired and restored in accordance with the "Local Government Guidelines for Restoration and Reinstatement in WA" and to the satisfaction of the City of Kalamunda.
5. The applicant is advised to manage and minimise dust during the works and after completion in accordance with the Department of Environment and Conservation's "Guideline for Managing the Impacts of Dust and Associated Contaminants from Land Development Sites, Contaminated Sites Remediation and Other Related Activities".
6. The applicant is advised to manage and minimise erosion and sediment loss during the works and after completion in accordance with the Eastern Metropolitan Regional Council's policy 5.1.2 "Erosion and Sediment Control".
7. The landowner is required to manage noise and vibration during the works in accordance with Australian Standard AS 2436 "Guide to Noise and Vibration Control on Construction, Demolition and Maintenance Sites".
8. A Traffic Management Plan (TMP) is required for any works in the road reserve or impacting the road reserve. Submit a TMP in accordance with Main Roads WA's Traffic Management for Works on Roads Code of Practice, to the City. For non-complex TMPs submit the TMP at least 14 calendar days before commencing work, and for complex TMPs a minimum of 21 days before

commencing work. The Traffic Management Plan must be approved before work impacting the road reserve can commence.

9. The landowner is reminded of their obligations to comply with the “Land development sites and impacts on air quality: a guideline for the prevention of dust and smoke pollution from land development sites in Western Australia”, prepared by the Department of Water and Environment Regulation.
10. This development approval does not authorise the erection of any additional signage which is not approved as a part of this development and not exempted by Schedule 5 (Exempted advertisements) of the City of Kalamunda Local Planning Scheme No. 3.
11. The landowner is required to submit an Application for Registration of a Food Business accompanied with the appropriate registration fee a minimum of two weeks prior to commencing operation.
12. The landowner must book a food premises inspection with the City’s Health Service prior to commencing operations. The premises must meet all requirements and pass the inspection without requiring any corrective actions before it will be allowed to trade.
13. The landowner is advised of their obligations to ensure that unreasonable noise and odour emissions are prevented pursuant to the *Environmental Protection (Noise) Regulations 1997* and City local laws.
14. The landowner must obtain a Crossover Permit from the City of Kalamunda. New and modified crossover design must be consistent with the City's Crossover Guidelines. [Crossover Guidelines & Application Form](#)



McDonald's Kalamunda

Proposed upgrade at the intersection of Canning Road/Heath Road

t24.140.sk40a

17/06/2025

Scale: 1:250 @ A3





Engineering a better future for over 20 years!

McDonald's & Carwash Kalamunda

Lots 28 (16) and 29 (14) Canning Road
and 3 (5) Heath Road, Kalamunda

Revised Transport Impact Assessment

PREPARED FOR:
McDonald's Australia Ltd

August 2025

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Project manager: Behnam Bordbar

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1 Introduction

This second Revised Transport Impact Assessment (RTIA) has been prepared by Transcore on behalf of McDonald's Australia Limited with respect to a proposed McDonald's restaurant and car wash facility at Lots 28 (No 16) and 29 (No 14) Canning Road and 3 (No 5) Heath Road, Kalamunda, in the City of Kalamunda.

Following the MODAP meeting on 29th May 2025, deferral of the project and further liaison with City of Kalamunda this RTIA is prepared to address the direction of the MODAP and the requirements of the City.

At the meeting with the City on 17 July 2025 and after further liaison, the City requested further traffic modelling and analysis to confirm the interim upgrade at the intersection of Canning Road and Heath Road. The interim upgrade includes providing separate left and right turn lanes on Heath Road at the approach to the intersection.

This second RTIA documents the outcome of the additional modelling and analysis undertaken and focuses on the suitability of the interim upgrade.

The subject site is located on the southwestern corner of Canning Road and Heath Road intersection, as shown in **Figure 1**.



Figure 1: Location of the subject site

2 Development Proposal

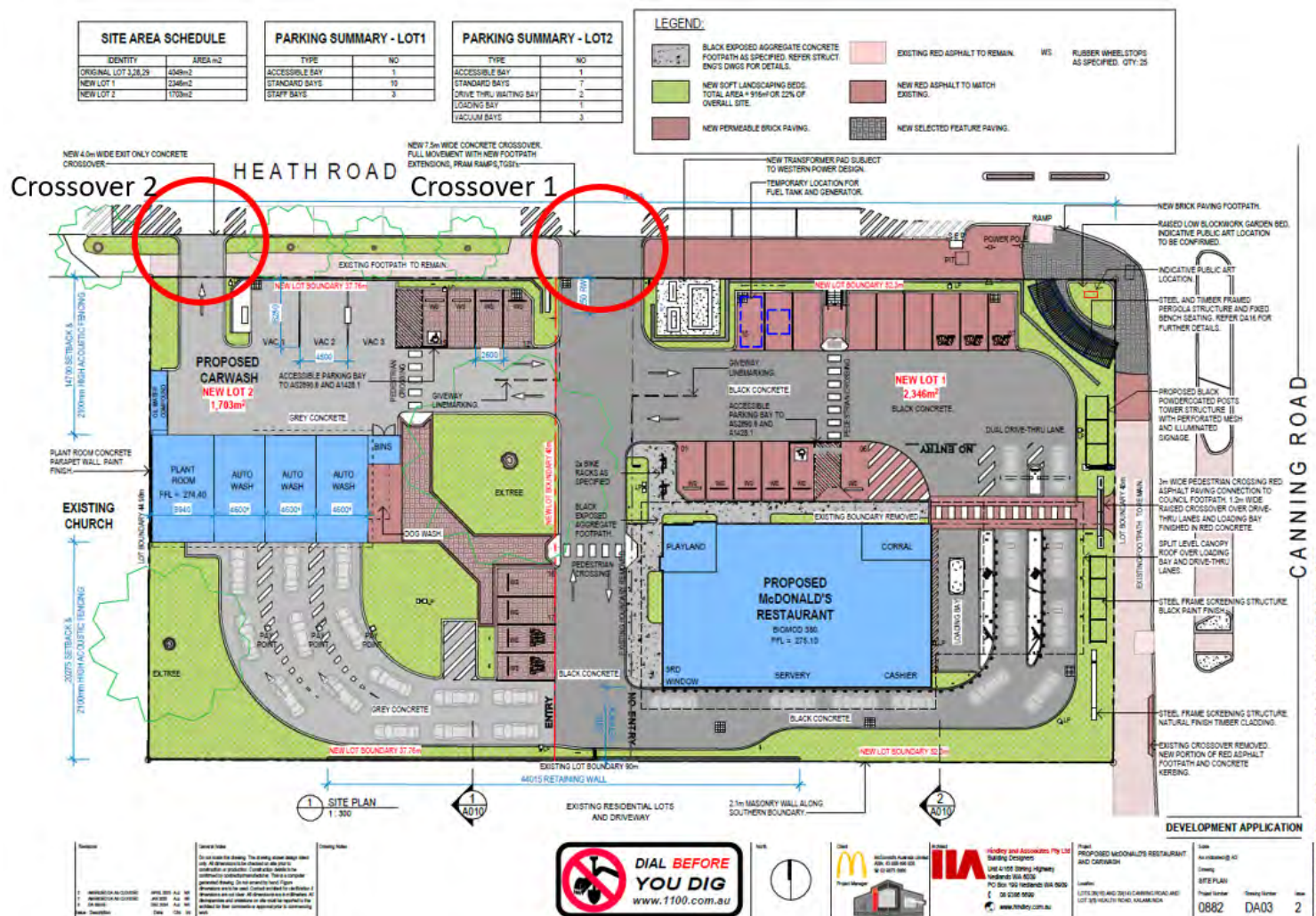
The proposed development is a McDonald's restaurant with drive through facility and an auto car wash, as shown in the site plan at **Appendix A**.

The site plan shows that the proposed development includes:

- McDonald's restaurant (380m² floor area);
- Drive through facility with two ordering lanes, cashier window, servery window and third window (servery window with separate waiting bay) and two waiting bays;
- McDonald's loading bay;
- A three-bay auto car wash with three vacuum bays; and,
- 23 parking bays including 2 ACROD bays.

Access to the revised development will be facilitated by one full movement crossover on Heath Road, positioned in the centre of the site and away from Canning Road. Additionally, there will be an exit-only crossover located at the northwest corner of the site as illustrated in **Figure 2**. The revised site plan and the access arrangements were discussed at the meeting on the 8th of April and the City expressed its satisfaction with the revised crossover system.

Transcore also prepared a concept sketch for the proposed interim upgrade at the intersection of Canning Road/ Heath Road which is provided in **Appendix B**. The proposed interim upgrades include separate left and right turn lanes on Heath Road at the approach to the intersection and sets back the right turn lane hold line to provide better sight lines for the left turning traffic onto Canning Road.



The revised development plan provides a direct pedestrian connectivity to the Canning Road footpath to maintain clear sightlines for both customers and drive-thru vehicles.

In the revised plan, a loading bay is shown at the east side of the McDonald's building so delivery and waste collection vehicles (up to 10.7m long) would access this area via the central full movement crossover, reverse into the bay and exit via the same crossover in forward gear. The loading bay servicing will be undertaken outside the peak operating times to minimise any internal conflict.

During the manoeuvring of service vehicle, the last three parking bays at the northeastern end of the site that are allocated to staff will be vacated to assist with the movements of the service vehicle. The City expressed its satisfaction to this arrangement at the meeting on the 8th of April.

Turn path plans have been prepared for entry and exit movements by a 10.7m rigid service vehicle to demonstrate that service vehicles up this size can be accommodated by the revised site layout. The turn path plans for the drive through facility and the loading bay are presented in **Appendix C**.

A bin store is also provided to the east of the auto wash bays for the proposed car wash. Waste collection and delivery trucks enter the site via central full movement crossover, reverse to the bin area and exit via the same crossover in forward gear. Turn path plans for the 8.8m rigid service vehicle is provided in **Appendix C**.

3 Existing Situation

3.1 Existing Land Use

The subject site is currently occupied by one building (southeast corner of the site) with a crossover on Heath Road.

There is existing residential development to the south, Kalamunda Uniting Church to the west and Kalamunda town centre commercial/retail land uses on the eastern side of Canning Road opposite the subject site.

3.2 Existing Road Network

The subject site is located on the southwestern corner of Canning Road and Heath Road intersection, as shown in **Figure 3**.

Canning Road is classified as a District Distributor A in the Main Roads WA functional road hierarchy and is covered by an Other Regional Roads Reservation in the Metropolitan Region Scheme (MRS).

Canning Road is constructed as a two-lane divided road, with one lane each way and 5m wide painted median with raised traffic islands at various locations, as can be seen in **Figure 3**. There is a short right turn lane on Canning Road at its intersection with Heath Road.

The default built up area speed limit of 50km/h applies on both Canning Road and Heath Road.

Heath Road is classified as a Local Distributor in the Main Roads WA functional road hierarchy. It is constructed as a two-lane, single carriageway urban road with 3.5m traffic lanes and on-street parking on the southern side adjacent to the subject site.

The Canning Road / Heath Road intersection operates as a priority-controlled T-intersection with Stop sign control on the Heath Road approach.

Approximately 160m north of the subject site, the Canning Road / Kalamunda Road intersection is constructed as a roundabout.



Figure 3: Existing road network

3.3 Existing Traffic Volumes

Existing traffic flows at Canning Road / Heath Road intersection are sourced from Main Roads WA website dated April 2024. Daily traffic flows for Thursday 18 April and Saturday 20 April 2024 are presented in **Figure 4**.

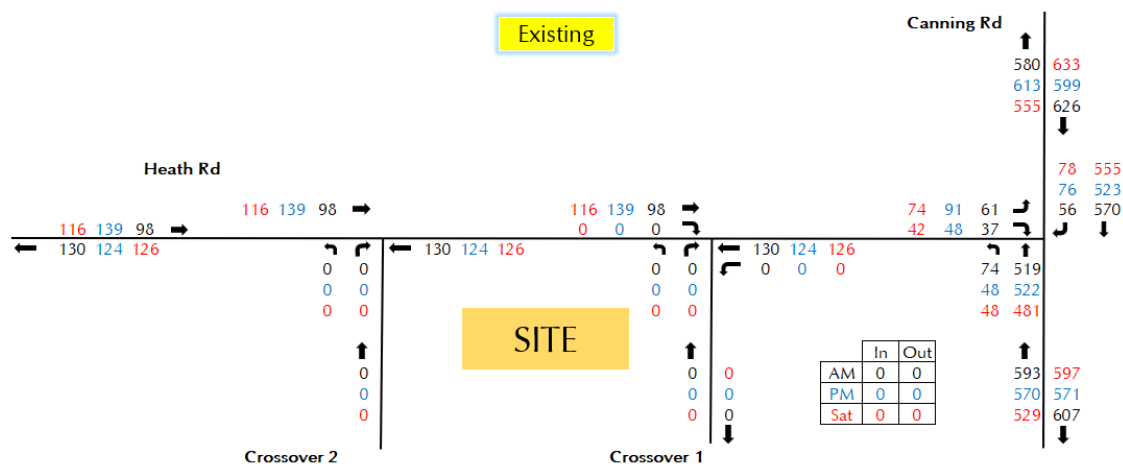


Figure 4: Existing traffic – AM/ PM/Saturday peak hours

3.4 Public Transport Access

The closest existing bus route to the subject site is Transperth Route 275, which has bus stops on Canning Road north and south of Heath Road. In addition, a number of other bus routes stop at Kalamunda Bus Station on Mead Street, as shown in **Figure 5**. The bus stops on Mead Street are approximately 350m to 400m walking distance (approximately 5 minutes walk) from the subject site.

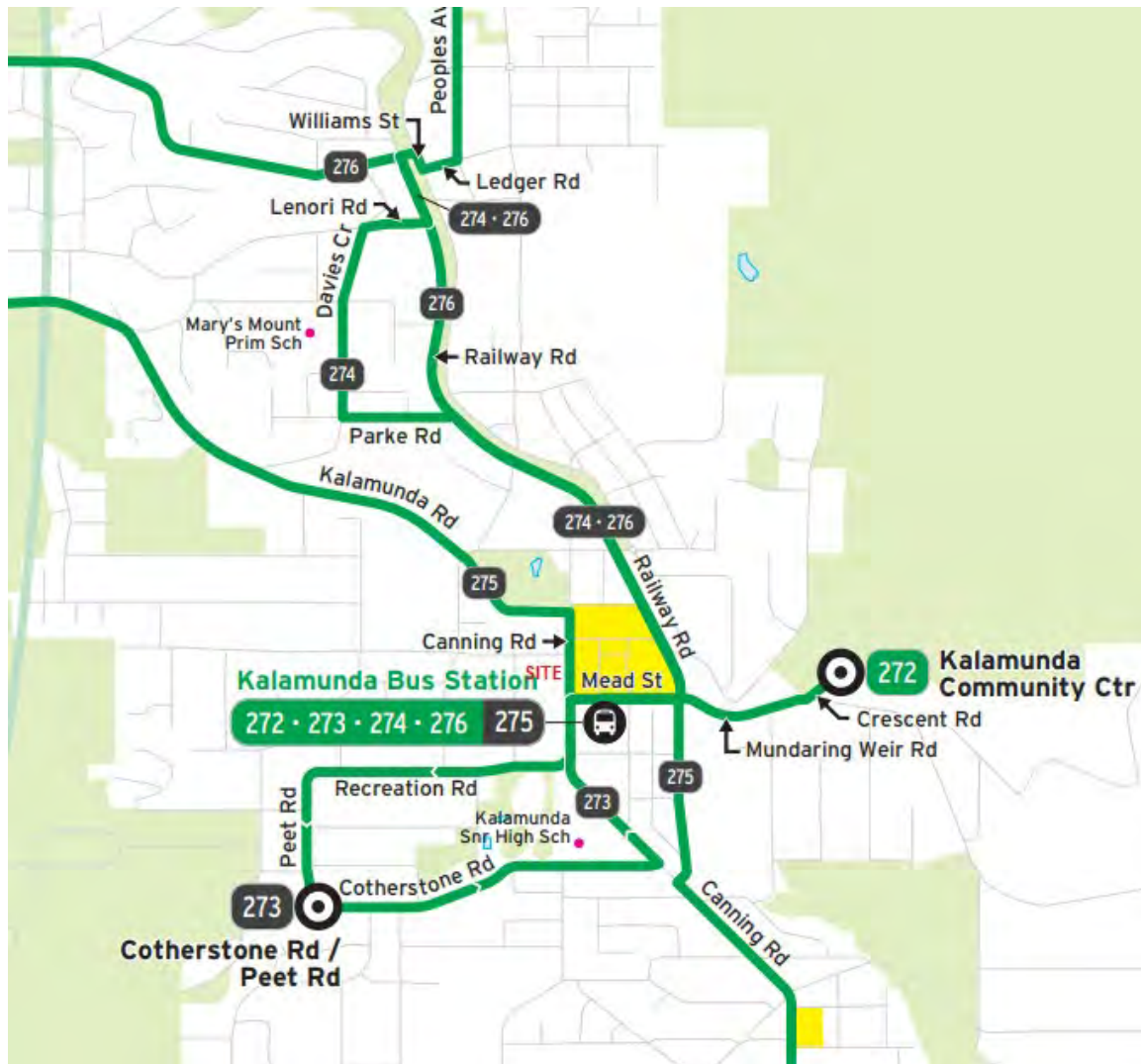


Figure 5: Existing Bus Routes

3.5 Pedestrian and Cyclist Facilities

Canning Road has paved verges on both sides in the vicinity of the subject site. Heath Road has a paved verge on the southern side adjacent to the subject site and a 1.8m footpath on the northern verge.

The traffic islands on Canning Road and on Heath Road in the immediate vicinity of the subject site provide pedestrian facilities in the form of pram ramps and dropped kerbs, as shown in **Figure 3**. There is also a marked pedestrian crossing (zebra crossing) on Canning Road approximately 20m north of Heath Road.

High-level future planning for cycling facilities is now set out in Western Australia's Long Term Cycle Network (LTCN), which identifies an aspirational blueprint to ensure State and local governments continue to work together towards the delivery of a continuous cycling network providing additional transport options, recreational opportunities and support for tourism and commercial activity. The LTCN identifies the function of a route - primary, secondary or local - rather than the form it should

take. Function considers the type of activities that take place along a route, and the level of demand (existing and potential). A route's built form is based on the characteristics of the environment, including space availability, topography, traffic conditions (speed, volumes), primary users, and so on.

The LTCN in this area is illustrated in **Figure 6**, which shows the secondary routes (blue) along Canning Road – Kalamunda Road and Railway Road in this area and a number of local routes (green) further to the north and south.

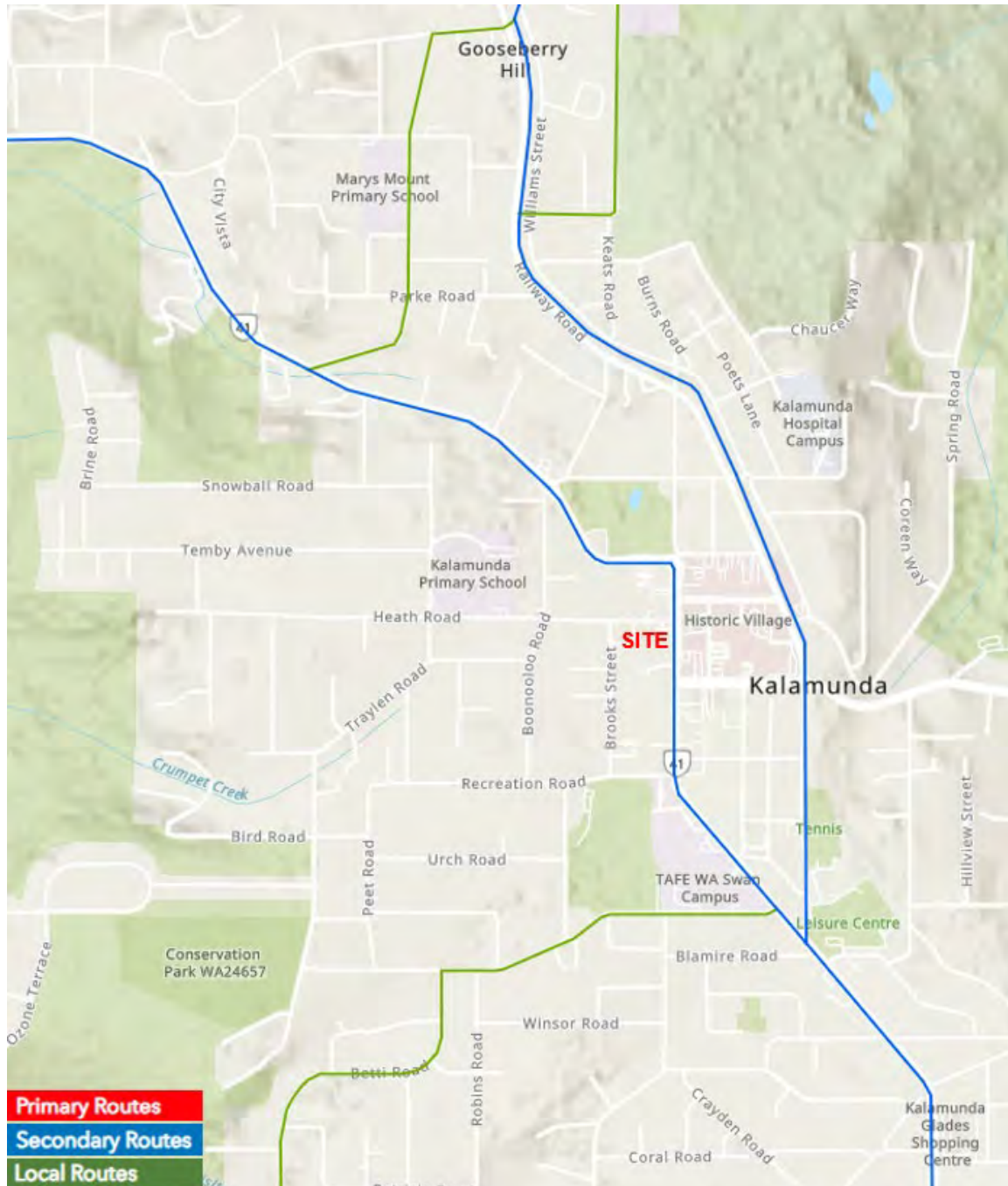


Figure 6: Long Term Cycle Network

3.6 Crash Data

The Main Roads WA website provides crash data for the 5-year period 2019 to 2023.

- No intersection crashes were recorded at the Canning Road / Heath Road intersection during this period.
- 3 rear end crashes occurred at the zebra crossing on Canning Road north of Heath Road, two resulting in PDO major (property damage only) and one requiring medical treatment (not a pedestrian).
- No midblock crashes were recorded on Canning Road adjacent to the subject site during this period.
- 2 midblock crashes were recorded on Heath Road adjacent to the subject site:
- One crash involved a vehicle making an unparking manoeuvre and colliding with another vehicle parked on street resulting in PDO major; and
- One crash involved a car colliding with a non-fixed object on the road resulting in PDO major.

4 Integration with Surrounding Area

The proposed development is consistent with other commercial / retail type developments along Canning Road in the Kalamunda town centre vicinity.

5 Traffic Assessment

5.1 Assessment Period

The peak period for the proposed McDonald's restaurant and car wash is anticipated to be the Saturday lunchtime peak period.

Accordingly, traffic analysis in this report assesses weekday AM and PM peak hours and the Saturday peak hour for the years 2026 (post development) and 2036 (ten years post development). A sensitivity analysis was also undertaken for year 2030 as requested by the City for the following scenarios:

- To confirm operational status for year 2030; and,
- To compare operational status for year 2030 with development and interim upgrade scenario with no development and no upgrade scenario.

The 2026 and 2036 assessments will include the development traffic and the proposed interim upgrade at the intersection.

5.2 Trip Generation and Distribution

5.2.1 *Proposed McDonald's restaurant*

The traffic volumes anticipated to be generated by the proposed development have been estimated using trip generation rates derived from the ITE *Trip Generation Manual* (11th Edition). The applicable trip rates which were used to estimate the proposed land uses are:

Fast-Food Restaurant with Drive-Through Window (#934)

- Weekday road network AM peak hour: 48.0 vph per 100m² GFA;
- Weekday road network PM peak hour: 35.6 vph per 100m² GFA;
- Saturday peak hour of development: 59.5 vph per 100m² GFA.

Accordingly, it is estimated that the proposed McDonald's restaurant would generate the following total traffic flows:

- Weekday road network AM peak hour: 182 vph;
- Weekday road network PM peak hour: 135 vph;
- Saturday peak hour of development: 226 vph.

5.2.2 *Proposed car wash*

The traffic volumes likely to be generated by the automated car wash have been estimated based on Transcore's experience, information available to Transcore and observations of similar businesses within the Perth Metro area.

The peak patronage of carwashes occur during the weekends which doesn't coincide with the peak hour of the road network. However, for a robust assessment, it is assumed that the road network peak trip generation for the proposed car wash would be 50% of the peak hour trip generation during a weekend.

Accordingly, the trip rate of the proposed auto car wash is reported as below:

Auto Car Wash – per wash bay

- Weekday road network AM peak hour: 6 trips per hour per bay;
- Weekday road network PM peak hour: 6 trips per hour per bay; and,
- Saturday peak hour of development: 12 trips per hour per bay.

Accordingly, the trip generation of the proposed auto car wash are estimated as below:

Auto Car Wash

- Weekday AM peak hour: $6 \times 3 = 18$ trips;
- Weekday PM peak hour: $6 \times 3 = 18$ trips; and,
- Saturday peak hour: $12 \times 3 = 36$ trips.

5.2.3 Total trips

Trips associated with the proposed development may be internal trips, passing-trade trips (trips already on the road network and not specifically generated by the proposed development), or primary trips (new trips only visiting the proposed development).

The ITE *Trip Generation Handbook (3rd Edition)* provides additional information on internal trips within development and on pass-by and primary trips for various types of land use.

Based on the information in ITE it is estimated that approximately 10% of the trips visiting the development would be cross trade/internal, approximately 50% of the trips would be pass-by trips and the balance 40% would be primary trips.

Accordingly, it is estimated that the proposed development would generate about 2,321 daily trips with about 182 AM peak hour trips, 140 PM peak hour trips and 239 Saturday mid-day peak hour trips (refer **Table 1**).

Table 2 summarises the passing trade and primary trips component of the total generated trips.

The distribution of traffic to and from the proposed development was evaluated by considering the catchment area of the proposed development as well as the available access and egress routes to and from the site. Consequently, the directional distribution of traffic to and from the site is assumed to be as follows:

- 34% Heath Road West;
- 33% Canning Road north; and,
- 33% Canning Road south.

Pass-by trips are assigned 50% from Heath Road and 50% from Canning Road.

Table 1: Trip generation of the proposed development

Land use	Quantity	Daily Rate	AM peak	Sat-PM peak	PM peak	Cross Trade	Daily Trips	AM Trips	Sat-PM Trips	PM Trips	AM		Sat-PM		PM	
											IN	OUT	IN	OUT	IN	OUT
Fast food outlet with drive through	380	5.032	0.480	0.595	0.356	0.10	1721	164	203	122	82	82	102	101	61	61
Car wash	3	72	6	12	6		600	18	36	18	9	9	18	18	9	9
TOTAL TRAFFIC							2,321	182	239	140	91	91	120	119	70	70

Table 2: Passing trade and primary trips component

Passing Trade							Primary Trips							
50% 0%	AM		Sat-PM		PM		AM		Sat-PM		PM			
	Daily Trips	IN	OUT	IN	OUT	IN	OUT	Daily Trips	IN	OUT	IN	OUT	IN	OUT
	860	41	41	51	51	31	30	861	41	41	51	50	30	31
	0	0	0	0	0	0	0	600	9	9	18	18	9	9
	860	41	41	51	51	31	30	1461	50	50	69	68	39	40

5.3 Future Traffic Flows

The peak period traffic flows expected to be generated by the proposed development have been manually assigned on the adjacent road network in line with the directional distribution assumptions outlined in the previous section. Separate traffic distribution was assumed for primary trips (refer **Figure 7**) and pass by trips (refer **Figure 8**).

An equal distribution of primary trips associated with the proposed development was assumed across three directions: Heath Road west, Canning Road north, and Canning Road south.

Passing trade relies heavily on the convenience of access and the availability of competing developments in the area. Southbound traffic on Canning Road is unlikely to turn right onto Heath Road to access the development during peak period, as returning to Canning Road via a right turn from Heath Road is challenging during these periods. In contrast, northbound traffic on Canning Road as well as traffic on Heath Road (both eastbound and westbound), would have convenient access to the development. However, in order to provide a robust assessment, some movements were allocated to the right turn from Canning Road onto Heath Road during both the morning and evening peak hours to reach the site. This allocation was increased during Saturday peak hours.

Traffic flows to and from this proposed development for weekday AM and PM and Saturday peak hours are shown in **Figure 9** which is the addition of the primary trips and pass by trips. The negative numbers in this figure reflects the impact of the pass by trips on background traffic.

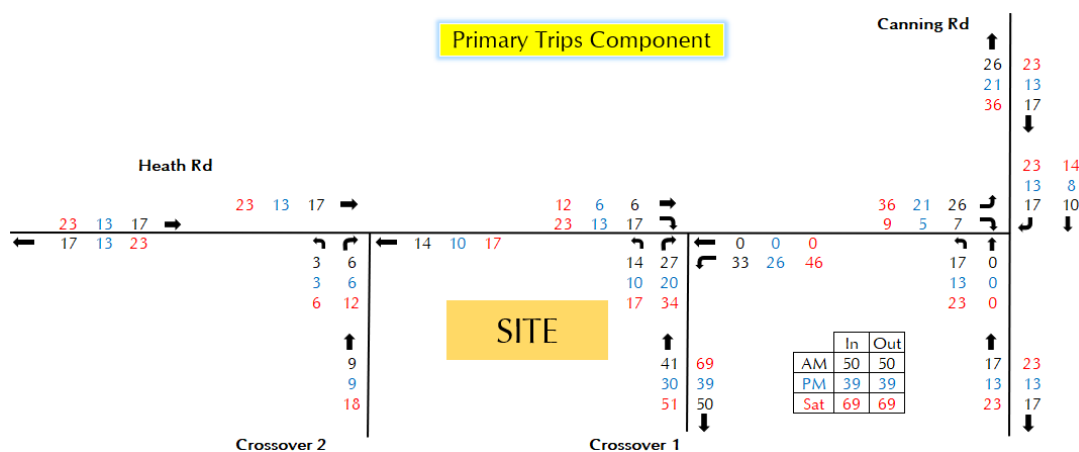


Figure 7: Primary trip component of the development, AM/ PM/Saturday peak hours

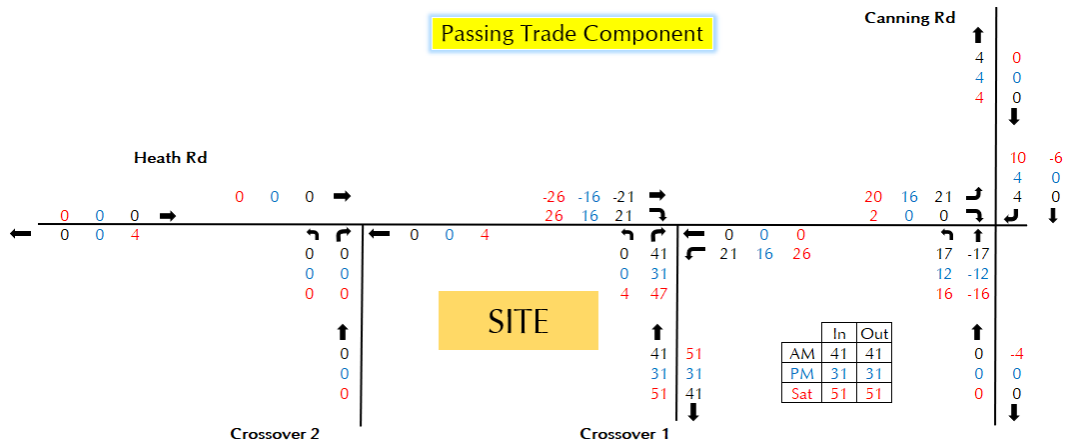


Figure 8: Pass by trip component of the development, AM/ PM/Saturday peak hours

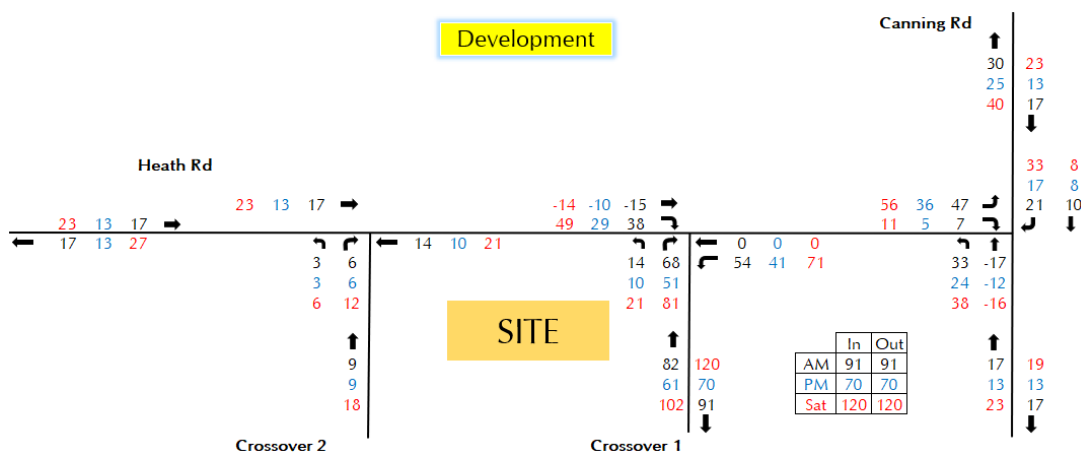


Figure 9: Peak hour traffic flows generated by proposed development, AM/ PM/Saturday peak hours

Future 2026 total traffic flows with the addition of the proposed development traffic are shown in **Figure 10**. For future years a 2% annual traffic growth was applied to the background traffic.

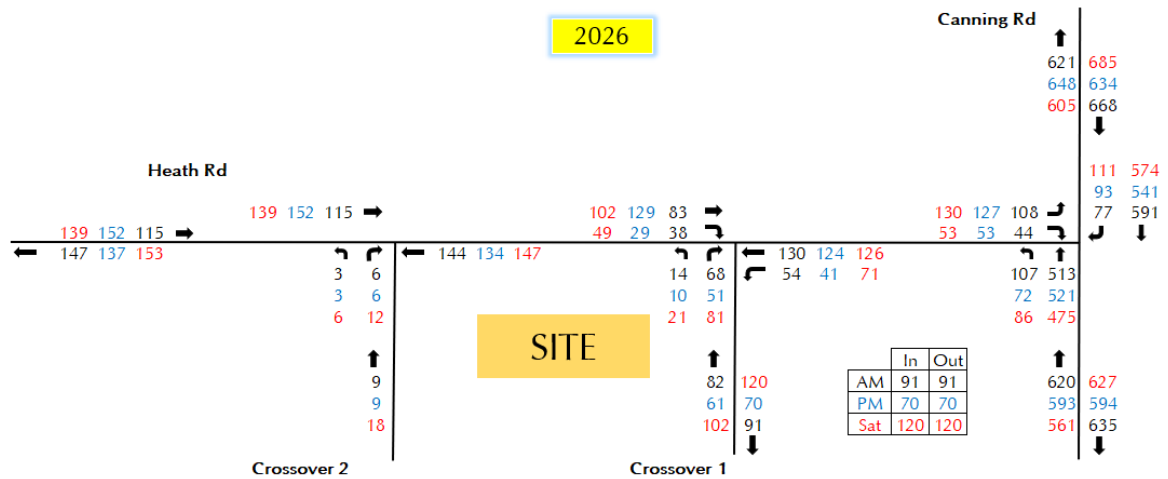


Figure 10: 2026 Future traffic flows including proposed development, AM/PM/Saturday peak hours

Separate traffic distribution diagrams were prepared for 2030 traffic projections as requested by the City. **Figure 11** and **Figure 12** show the projected 2030 total traffic flows, with and without the proposed development traffic, respectively.

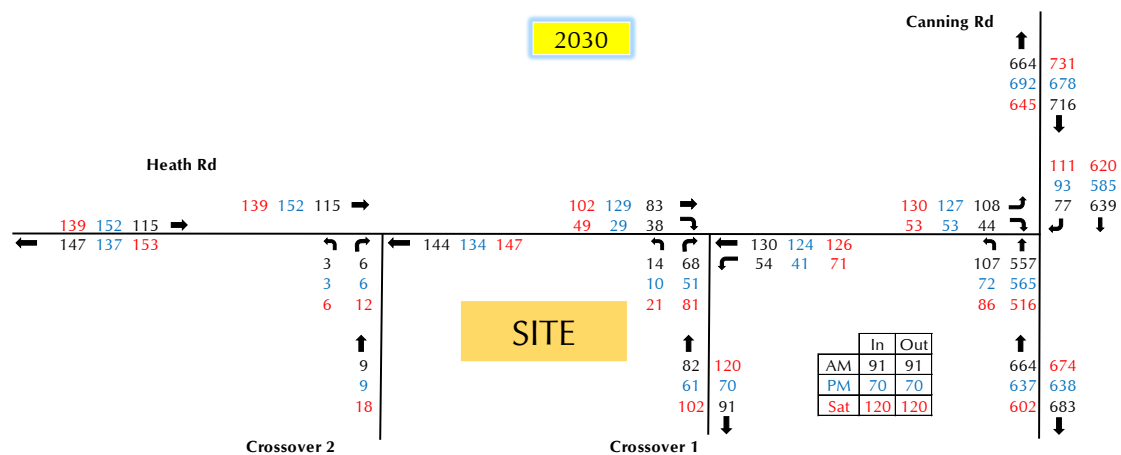


Figure 11: 2030 Future traffic flows including proposed development, AM/PM/Saturday peak hours

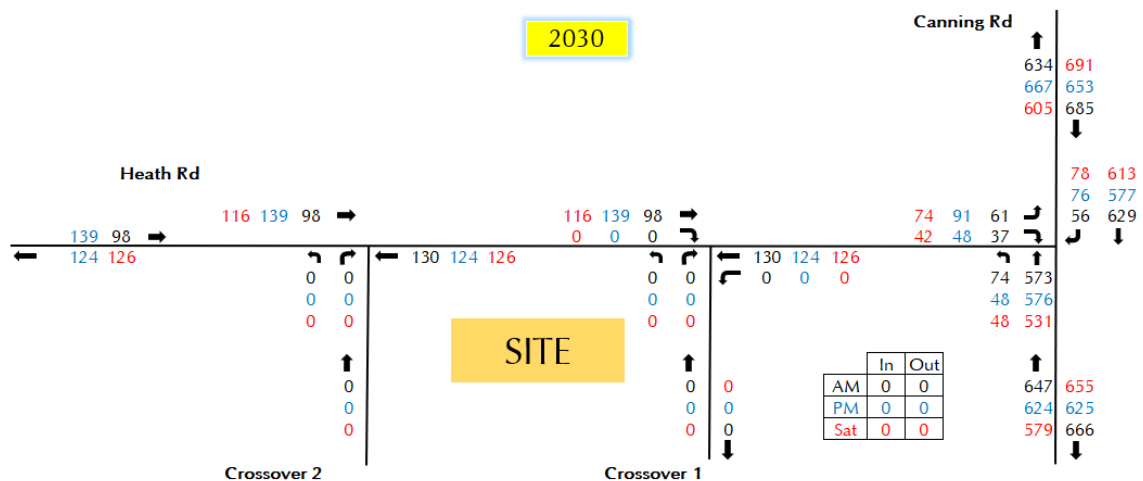


Figure 12: 2030 Future traffic flows without development, AM/ PM/Saturday peak hours

Future 2036 total traffic flows with the addition of the proposed development traffic are shown in **Figure 13**.

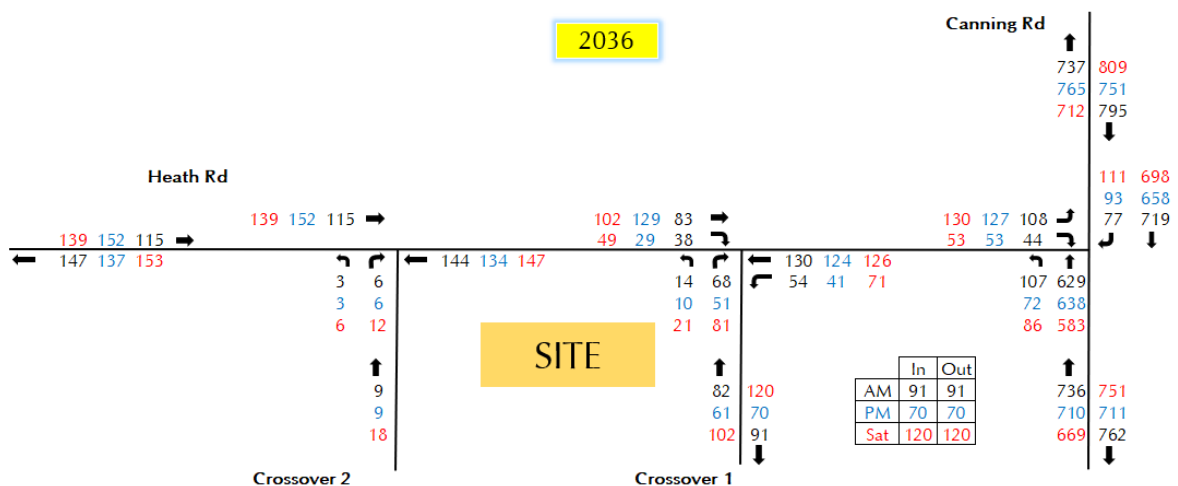


Figure 13: 2036 Future traffic flows including proposed development, AM/ PM/Saturday peak hours

5.4 Intersection Analysis

Intersection capacity analysis has been undertaken for the intersection of Canning Road/ Heath Road and the development crossovers during the AM, PM and Saturday peak hours for existing, post development and 10 years post development scenarios. Separate intersection analysis was also undertaken for the intersection of Canning Road/ Heath Road for year 2030 for with and without development scenarios as requested by the City.

Capacity analysis was undertaken using the SIDRA computer software package. SIDRA is an intersection modelling tool commonly used by traffic engineers for all types of intersections. SIDRA outputs are presented in the form of Degree of Saturation, Level of Service, Average Delay and 95% Queue. These characteristics are defined as follows:

- **Degree of Saturation** is the ratio of the arrival traffic flow to the capacity of the approach during the same period. The Degree of Saturation ranges from close to zero for infrequent traffic flow up to one for saturated flow or capacity.
- **Level of Service** is the qualitative measure describing operational conditions within a traffic stream and the perception by motorists and/or passengers. In general, there are 6 levels of service, designated from A to F, with Level of Service A representing the best operating condition (i.e. free flow) and Level of Service F the worst (i.e. forced or breakdown flow).
- **Average Delay** is the average of all travel time delays for vehicles through the intersection.
- **95% Queue** is the queue length below which 95% of all observed queue lengths fall.

The results of the SIDRA analysis are summarised in **Appendix C**.

The revised SIDRA assessments have addressed the following comments from the City and DVC:

- The speed limit on Canning Road; and
- The pedestrian crossings at the intersection.

The outcome of the assessments are discussed below:

5.4.1 Intersection of Canning Road/ Heath Road (Existing, 2026 and 2036 Scenarios)

The SIDRA results in **Appendix D** indicate that the existing Canning Road / Heath Road intersection is currently operating at degree of saturation ranging from 0.384 to 0.482 in the weekday and Saturday peak periods. The right turn out from Heath Road experiences average delays of 38.4 to 40.9 seconds and operates at level of service E.

In 2026 the SIDRA results (with the proposed development, upgrade on Heath Road and background traffic growth) indicates that the degree of saturation would not change significantly and will be in the range of 0.398 – 0.442 for the weekday and Saturday peak periods. The critical right turn movement from Heath Road to Canning Road is reported as level of service E with average delays of about 43 – 46.1 seconds for weekday and Saturday peak hours.

In 2036 the SIDRA results (with the proposed development and 10 years growth of background traffic post development) indicates that the degree of saturation increases to 0.759 – 0.806. The critical right turn movement from Heath Road to Canning Road

is reported as level of service F with average delays of about 113.4 – 127.4 seconds during the weekday and Saturday peak hours.

This SIDRA results indicate the existing Canning Road / Heath Road intersection has sufficient capacity to accommodate the additional traffic flows generated by the proposed development but the modelled growth of existing through traffic on Canning Road over the next decade would be reported to cause increase delays for the right turn out from Heath Road to Canning Road.

It should be noted that the left turn out from Heath Road to Canning Road will experience much lower delays (level of service B in 2036 peak periods) than the right turn out movement. Therefore, when right turn delays and queues increase in future, it is anticipated that a proportion of those right turners would turn left onto Canning Road, travel north and then make a U-turn at the Canning Road / Kalamunda Road roundabout to travel south.

5.4.2 Development crossovers on Heath Road

The SIDRA results in **Appendix D** indicate that the proposed driveway crossovers on Heath Road would both operate satisfactorily with all movements at level of service A in all peak periods in 2026 and 2036.

5.4.3 Sensitivity analysis for 2030

A sensitivity analysis was undertaken for the 2030 assessment year as requested by the City to establish traffic operations of the intersection with and without the development and with and without the interim upgrade. The SIDRA analysis was undertaken for the following scenarios:

- With development and proposed upgrade on Heath Road; and,
- Without development and existing Heath Road Standard (without upgrade).

The layout of the intersections modelled in SIDRA for with and without upgrade scenarios are shown in **Figure 14**.

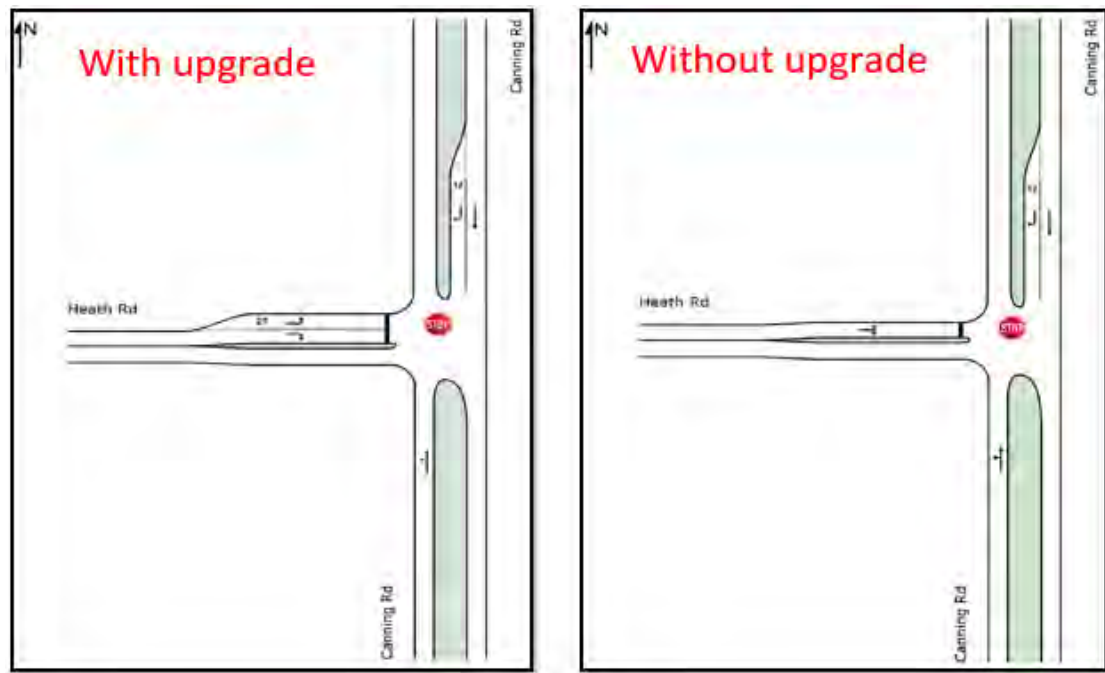


Figure 14: Intersection layouts modelled in SIDRA

The result of the SIDRA analysis for the critical right turn movement from Heath Road onto Canning Road is summarised in **Table 3**. As evident the level of service is reported as F for both scenarios and the reported parameters such as Degree of Saturation, Average Delay and 95% Back of Queue are very similar. Any differences are marginal and will not make any difference in real life.

Therefore, it is concluded that the proposed interim upgrade will maintain the same traffic operations at the intersection in 2030 with the addition of the development traffic. The proposed interim upgrade will provide the City with the opportunity to undertake the necessary studies to establish the ultimate and optimum upgrade at the intersection.

Table 3: Critical right turn-out performance, Existing and 2030 Scenarios

Right turn out	With development and with upgrade					Without development and without upgrade			
	DoS	Average Delay (s)		LoS	95% Back of Queue (m)	DoS	Average Delay (s)	LoS	95% Back of Queue (m)
Existing	AM	NA				0.38	41	E	12
	PM					0.48	41	E	17
	SAT					0.40	38	E	13
2030	AM	0.50	63	F	13	0.49	55	F	15
	PM	0.53	58	F	15	0.60	55	F	22
	SAT	0.55	61	F	15	0.50	51	F	17

5.5 Impact on Surrounding Roads and Neighbouring Areas

The WAPC *Transport Impact Assessment Guidelines* (2016) provides the following 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 development traffic would increase flows by more than 100 vehicles per hour for any lane should be included in the analysis.”

As can be seen in **Figure 9**, the proposed development will not increase traffic on any lanes on the surrounding road network by more than 100vph. Therefore, the proposed development will not increase traffic flows at or above the quoted WAPC threshold on the surrounding roads to warrant any further detailed analysis.

5.6 Traffic Noise and Vibration

It generally requires a doubling of traffic volumes on a road to produce a perceptible 3dB(A) increase in road noise. The proposed development traffic will be very much less than half of the future total traffic on adjacent roads so it will not represent a sufficient proportion of total traffic volumes to account for a perceptible increase in noise on the surrounding roads.

5.7 Road Safety

No particular road safety issues have been identified in relation to the proposed development.

6 Parking Assessment

A parking assessment was undertaken in Section 4.4.2 of the Development Application Report. The proposed parking was assessed against the provisions of the City's Local Planning Scheme No. 3 and the Kalamunda ACP. Refer to **Table 4** below for the revised parking assessment under LPS3.

Table 4: LPS3 Parking Assessment

Land use	Parking standard	Proposed	Required car bays
Fast Food Outlet	10 bays per 100m ² NLA. Minimum of 6 bays (excluding the drive-through)	280m ² NLA	28 bays
Motor Vehicle Wash	At discretion of the City	3 auto wash bays 3 vacuum bays 1 loading bay / staff parking	-
Total Provided			23 bays (excl. queuing bays and vacuum bays)
Bays Required			28 bays

As outlined in the Development Application Report, the Kalamunda ACP recommends a reduced parking rate of 4.5 spaces per 100m² for Shop / Retail uses. Under SPP4.2, fast food outlets are classified as Shop / Retail (PLUC 5).

Applying this rate to the McDonald's development (380m² GFA), only 17 bays would be required. If the parking rate applies to NLA (280m²), 13 parking bays would be required. The proposal proposes 23 car parking bays (excluding queuing bays and vacuums) and therefore complies with the car parking requirements under the Kalamunda ACP.

It is noted that 8 of the overall proposed parking bays are located on the future car wash lot. A subdivision application is being progressed concurrently with the development application which proposes a reciprocal parking easement across the 8 parking bays for use by McDonald's customers and staff. Accordingly, sufficient parking is provided on site to accommodate both developments.

7 Drive-Through Queue Analysis

NSW Guidelines:

Section 5.8.1 of the New South Wales *Guide to Traffic Generating Developments* deals with the parking requirements for drive-in, take-away food outlets. This clause states that:

“An exclusive area for queuing of cars for a drive through is required (queue length of 5 to 12 cars measured from pick up point). There should also be a minimum of four car spaces for cars queued from the ordering point.”

The proposed McDonald's restaurant proposes a two-lane drive through facility with two Customer Order Booths (COB). This facility merges into a single lane for payment and pickup. The proposed drive through facility entails provision of at least 14 car queuing capacity within the drive through facility including a combined queuing space for at least six cars at the COBs, plus one space at the third window (second server) and two waiting bays in front of the drive-through exit lane.

Accordingly, the proposed drive through facility meets the NSW guide's recommended drive through queuing area provisions.

Drive-through queue length analysis model

Based on the peak hour trip generation, the proposed McDonald's restaurant is estimated to generate a total of 226vph (113vph inbound and 113vph outbound) during the critical Saturday peak hour. It is further estimated that, allowing for 10% walk-in trade and a 60/40 drive-through/park'n'sit ratio typical for such restaurants, it is estimated that there could be around 61 drive-through transactions/customers/cars during the Saturday peak period.

According to the advice provided, the average order-taking cycle is estimated at approximately 45 seconds, translating into a service rate of 80 vehicles per hour (maximum capacity of the single COB drive through system). However, in order to provide for a robust assessment, it is assumed that the order-taking cycle would average 1 minute equating to 60 vehicles per hour service rate capacity. It is further assumed that two COBs will be in operation during the peak periods, giving a theoretical order taking service rate of 120 vehicles per hour. The analysis model assumes that cars would enter the COB with the shortest queue, therefore over the peak hour the transactions at each COB would be more or less evenly split.

A queue length analysis was undertaken to assess the provision of storage for vehicles within the drive through lanes. For this purpose, an M/M/1 queuing model was adopted for each COB. The M/M/1 is a single-server queue model that can be used to approximate simple systems.

The queuing model adopts the following assumptions:

- Vehicles arrive randomly following Poisson's probability distribution;
- Service time is exponentially distributed;
- There is one server per queue, i.e., there are two queues, one for each COB, instead of a single queue being served by two COBs;
- The capacity of the queue in which arriving users wait before being served is infinite (for the purposes of identifying queue space requirements);
- The population of users (i.e., the pool of users) available to join the system is infinite; and,
- The queue is serviced on a first come, first served basis.

The results of the queuing analysis are detailed in **Figure 15**.

M/M/s - Drive Through Queuing Analysis (Poisson Arrival and Service Rates)

	vph	vps
M/M/s		
Arrival rate	61	0.016944
Service rate	60	0.016667
Number of servers	2	2
Utilization	50.83%	50.83%
P(0), probability that the system is empty	0.3260	0.3260
Lq, expected queue length	0.3542 (cars)	6.0000 (metres)
L, expected number in system	1.3709 (cars)	12.0000 (metres)
Wq, expected time in queue	0.0058 (hours)	20.9065 (seconds)
W, expected total time in system	0.0225 (hours)	80.9065 (seconds)
Probability that a customer waits	0.3426	0.3426
95% Queue	4.0000 (cars)	24.0000 (metres)

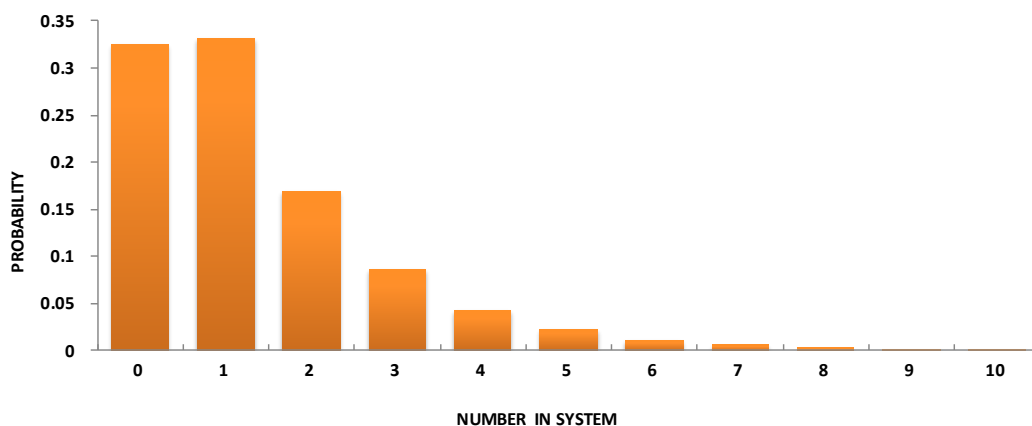


Figure 15: Saturday peak drive-through queuing analysis

In summary, critical peak hour queuing analysis of the drive through system established the following for each COB:

- ✚ There is zero queuing 32% of the time;
- ✚ The expected (average) number of vehicles in the system is two;
- ✚ The expected (average) total time in the system is 81 seconds; and,
- ✚ The 95th percentile queue is four vehicles at each COB.

The queue length usually adopted for robust analysis is the 95th percentile queue. This queue length reported would not be exceeded 95% of the time.

Based on the queue estimation model, it is concluded that under typical peak conditions the queue backing from each COB will be accommodated within the site with no impact on other internal driveways and surrounding road network.

8 Public Transport Access

Details of the available public transport services in this locality are provided in Section 3.4 of this report.

The subject site is considered to have good public transport access due to proximity to the Kalamunda Bus Station approximately 5 minutes' walk from the site.

9 Pedestrian and Cyclist Access

Details of the pedestrian and cyclist facilities in this locality are provided in Section 3.5 of this report.

The existing facilities in this locality will provide satisfactory pedestrian and cyclist access for the proposed development.

10 Conclusions

This Revised Transport Impact Assessment relates to a proposed McDonald's restaurant and car wash facility at Lots 28 (No 16) and 29 (No 14) Canning Road and 3 (No 5) Heath Road, Kalamunda, in the City of Kalamunda.

Following the MODAP meeting on 29th May 2025, deferral of the project and further liaison with City of Kalamunda this RTIA is prepared to address the directions set by the MODAP and the requirements of the City.

At the meeting with the City on 17 July 2025 and after further liaison, the City requested further traffic modelling and analysis to confirm the interim upgrade at the intersection of Canning Road and Heath Road. The interim upgrade includes providing separate left and right turn lanes on Heath Road at the approach to the intersection.

Pedestrian and cyclist access to the proposed development will be accommodated by the existing path network and crossing facilities on the adjacent road network. The revised development plan provides a direct pedestrian access connecting to Canning Road footpath to maintain clear sightlines for both customers and drive-thru vehicles.

The traffic analysis in this TIA assesses weekday AM and PM peak hours and the Saturday peak hour for the years 2026 (post development) and 2036 (ten years post development). Also as requested by City, sensitivity analysis was also undertaken the intersection for year 2030 for the following scenarios:

- To confirm operational status for year 2030; and,
- To compare operational status for year 2030 with development and interim upgrade scenario with no development and no upgrade scenario.

The sensitivity analysis confirmed that with the proposed upgrade and the development traffic by year 2030 the intersection of Canning Road and Head Road will perform similar to the intersection without any upgrade and without the development traffic. This situation will provide the City the opportunity to undertake the necessary studies to confirm the ultimate and interim intersection upgrade to be implemented by year 2030.

Intersection analysis for 2026 and 2036 with the interim upgrade indicates that the intersection of Canning Road / Heath Road would have sufficient capacity to accommodate the additional traffic flows generated by the proposed development. However, the assumed growth of existing through traffic on Canning Road over the next decade would be anticipated to cause additional delays to the right turns from Heath Road to Canning Road. The left turns out movements from Heath Road to Canning Road will experience much lower delays. It is anticipated that the ultimate intersection upgrade will improve traffic operations at the intersection in the future.

Appendix A

PROPOSED DEVELOPMENT PLANS



Engineering a better future for over 20 years!

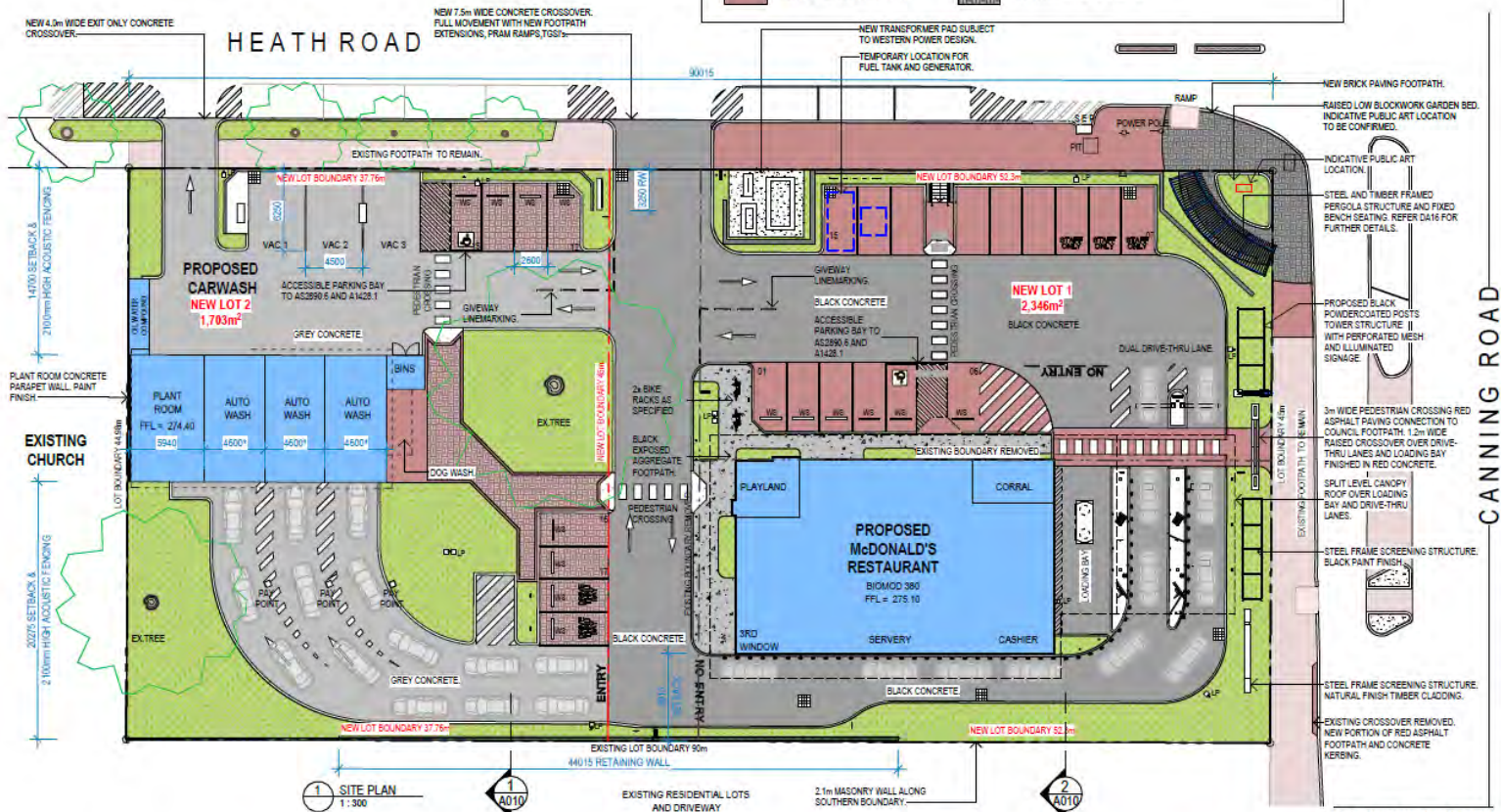
SITE AREA SCHEDULE	
IDENTITY	AREA m ²
ORIGINAL LOT 3,28.29	4049m ²
NEW LOT 1	3346m ²
NEW LOT 2	1793m ²

PARKING SUMMARY - LOT1	
TYPE	NO
ACCESSIBLE BAY	1
STANDARD BAYS	10
STAFF BAYS	3

PARKING SUMMARY - LOT2	
TYPE	NO
ACCESSIBLE BAY	1
STANDARD BAYS	7
DRIVE THRU WAITING BAY	2
LOADING BAY	1
VACUUM BAYS	3

LEGEND:

	BLACK EXPOSED AGGREGATE CONCRETE FOOTPATH AS SPECIFIED. REFER STRUCT. ENG'S DWGS FOR DETAILS.		EXISTING RED ASPHALT TO REMAIN.		RUBBER WHEELSTOPS AS SPECIFIED. QTY: 25
	NEW SOFT LANDSCAPING BEDS. TOTAL AREA = 916m ² OR 22% OF OVERALL SITE.		NEW RED ASPHALT TO MATCH EXISTING.		
	NEW PERMEABLE BRICK PAVING.		NEW SELECTED FEATURE PAVING.		



Revisions	Revised Date	Revised By
1. APPROVED FOR CONSTRUCTION	04/01/2024	ALM
2. APPROVED FOR CONSTRUCTION	04/01/2024	ALM
3. APPROVED FOR CONSTRUCTION	04/01/2024	ALM



McDonald's Australia (Franchise)
Attn: 01 435 44 444
44 435 44 444

Hindley and Associates Pty Ltd
Building Designers
Unit 4/100 Stirling Highway
Hindley WA 6000
PO Box 100 Hindley WA 6000
T 08 9386 0650
www.hindley.com.au

Project	PROPOSED McDONALD'S RESTAURANT AND CARWASH
Location	LOTS 2818 AND 2819 CANNING ROAD AND LOT 301 (LOCALITY KALAMUNDA)
Scale	As indicated @ A3
Drawing	SITE PLAN
Project Number	0882
Drawing Number	DA03
Issue	2

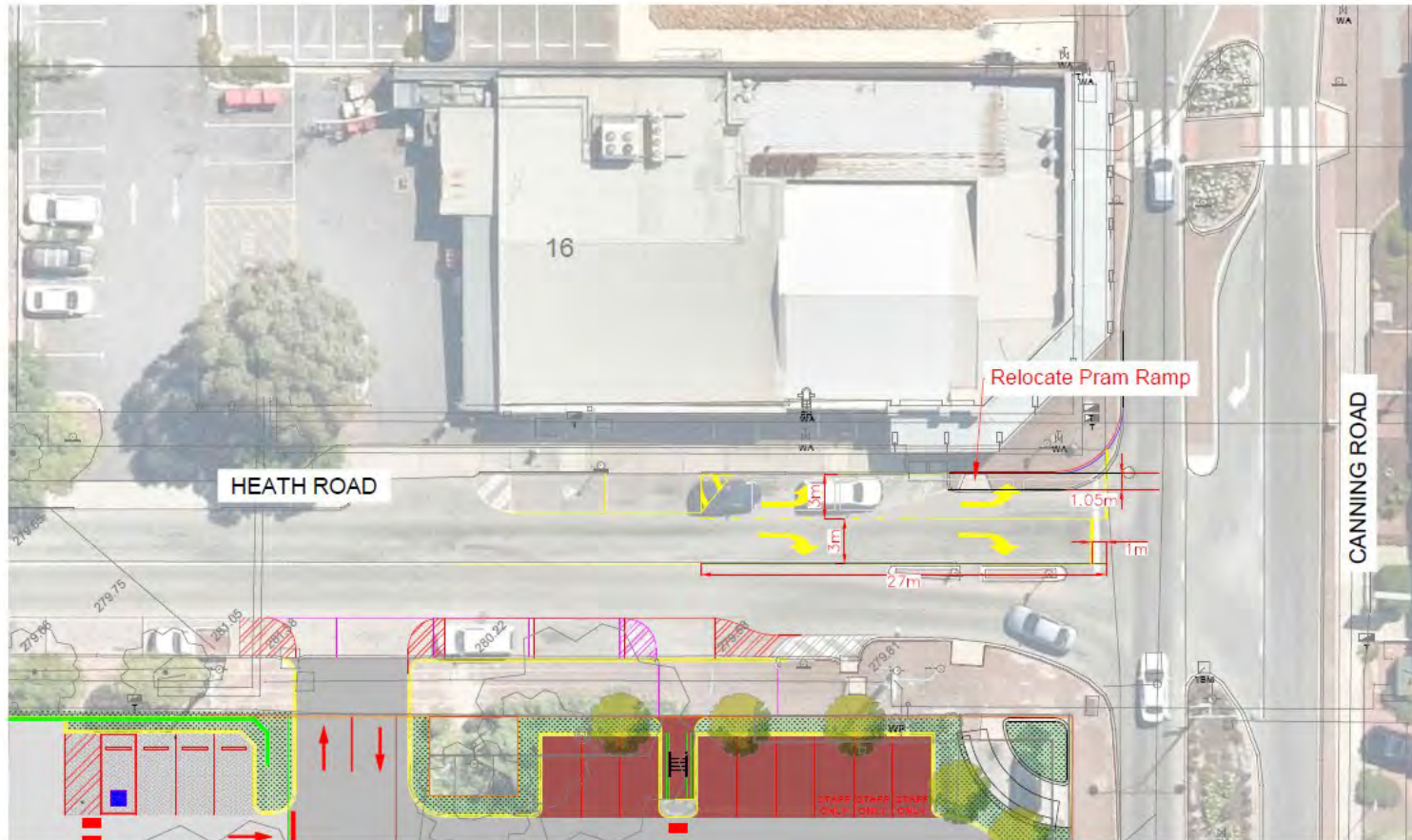
Appendix B

PROPOSED CONCEPT SKETCH

(INTERIM UPGRADE)



Engineering a better future for over 20 years!



McDonald's Kalamunda
Proposed upgrade at the intersection of Canning Road/Heath Road

t24.140.sk40a
17/06/2025
Scale: 1:250 @ A3

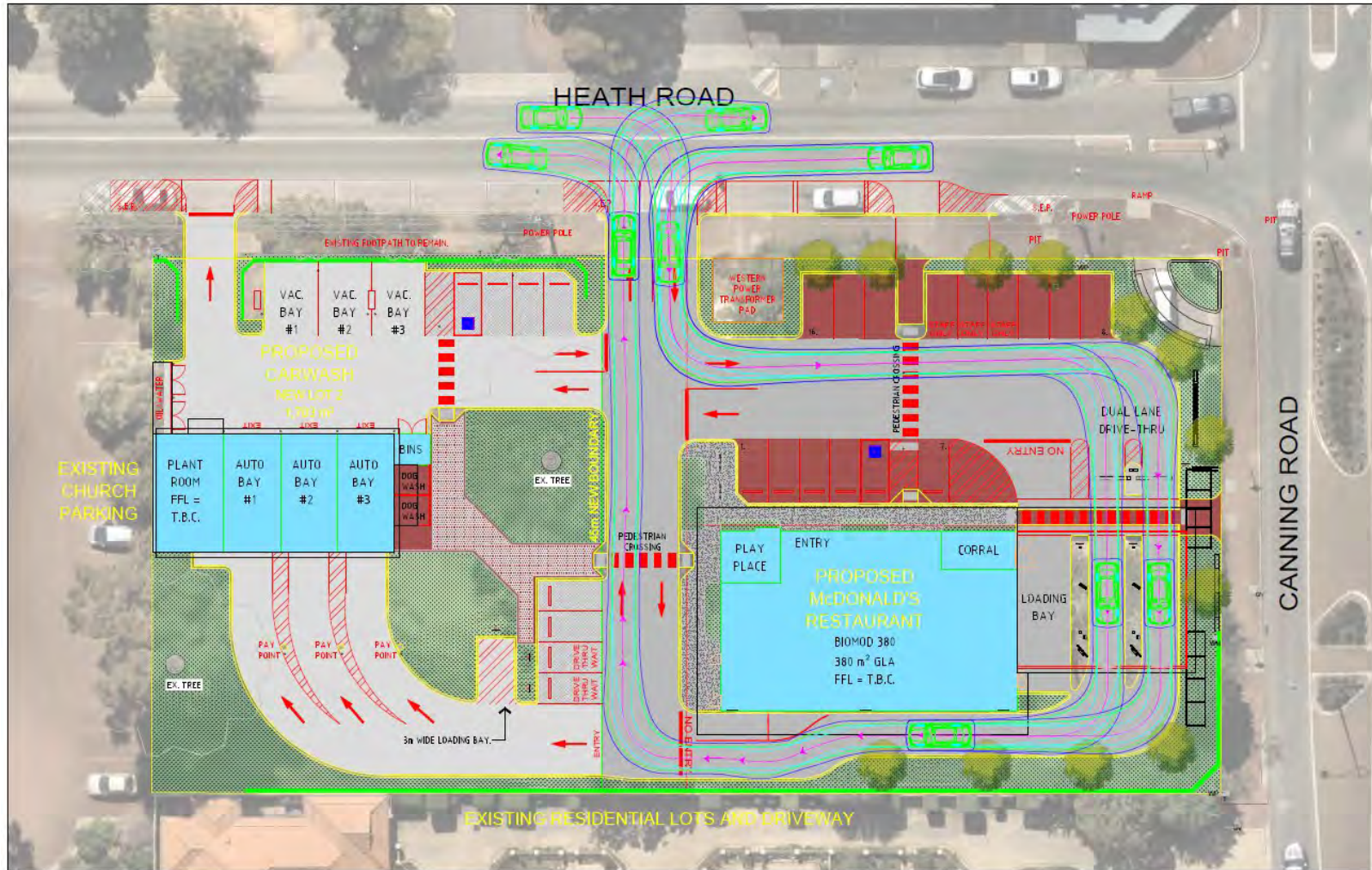


Appendix C

TURN PATH ANALYSIS



Engineering a better future for over 20 years!

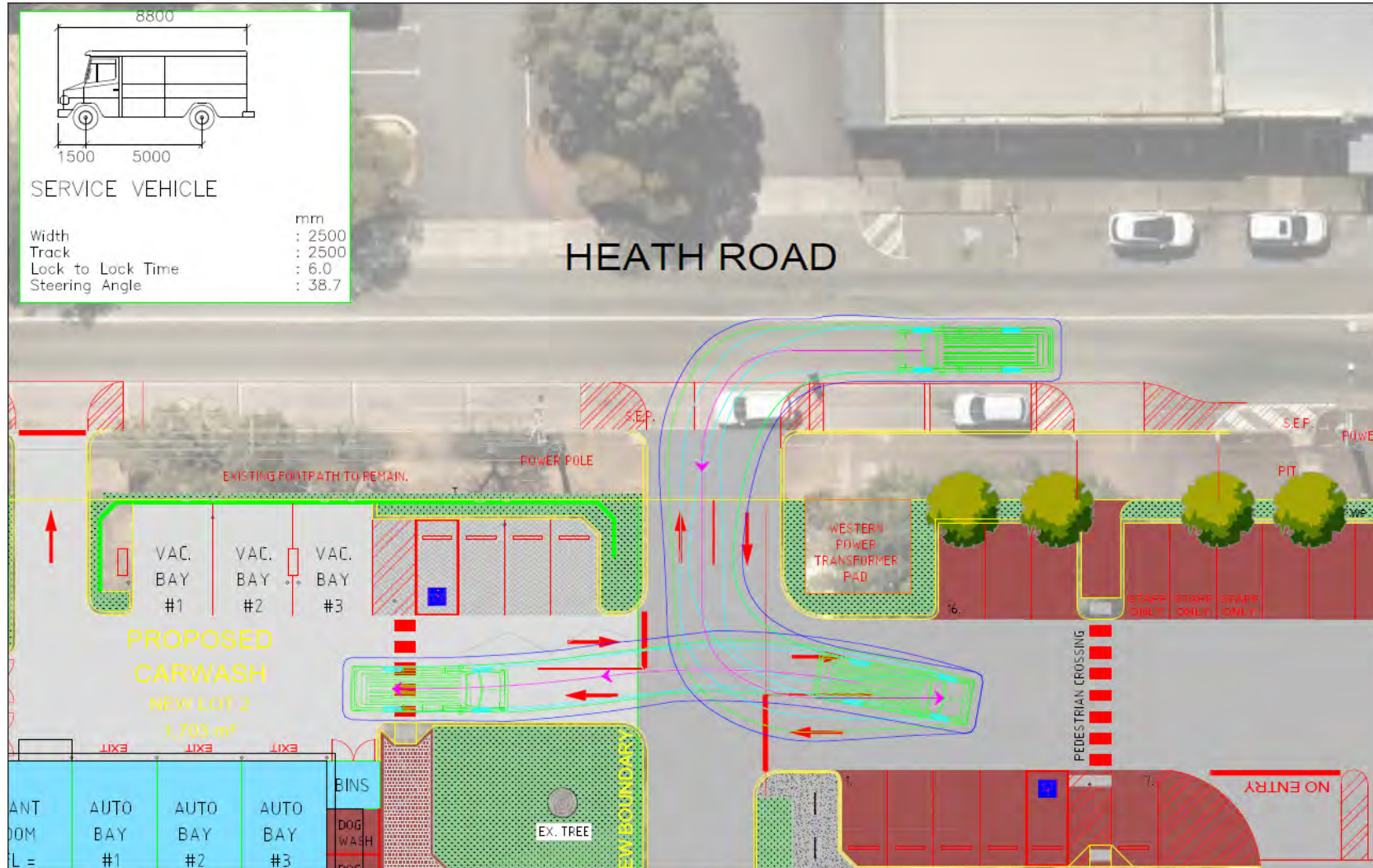


McDonald's Kalamunda
 Austroads 2023: B99 Passenger Car
 Proposed McDonald's Drive-Through Circulation

LEGEND
 Vehicle Body
 Wheel Path
 300mm Clearance

t24.140.sk21
 28/03/2025
 Scale: 1:300 @ A3





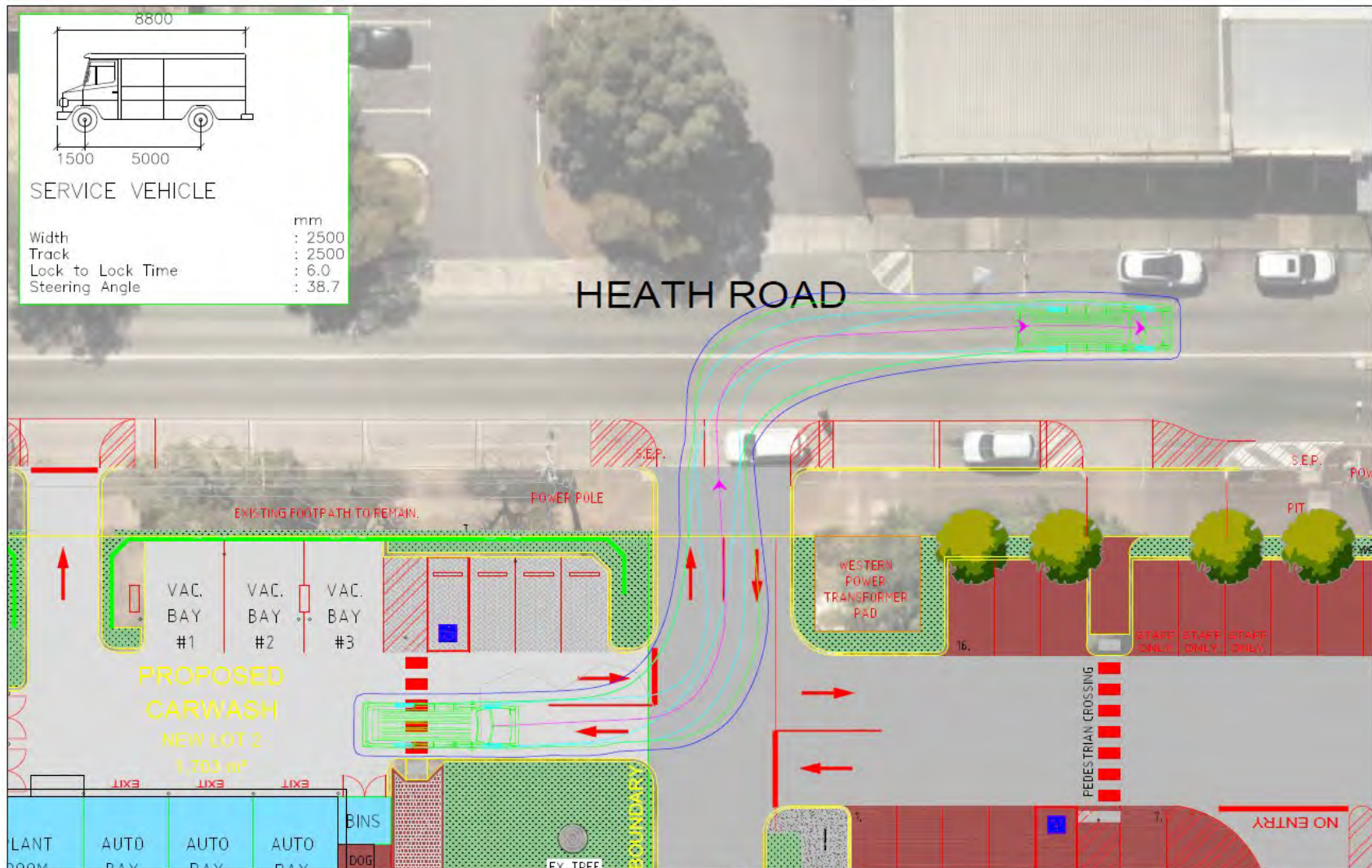
McDonald's Kalamunda
 Austroads 2023: 8.8m Service Vehicle
 Proposed Carwash Bin Area Access

LEGEND
 Vehicle Body
 Wheel Path
 500mm Clearance



t24.140.sk28
 28/03/2025
 Scale: 1:200 @ A3



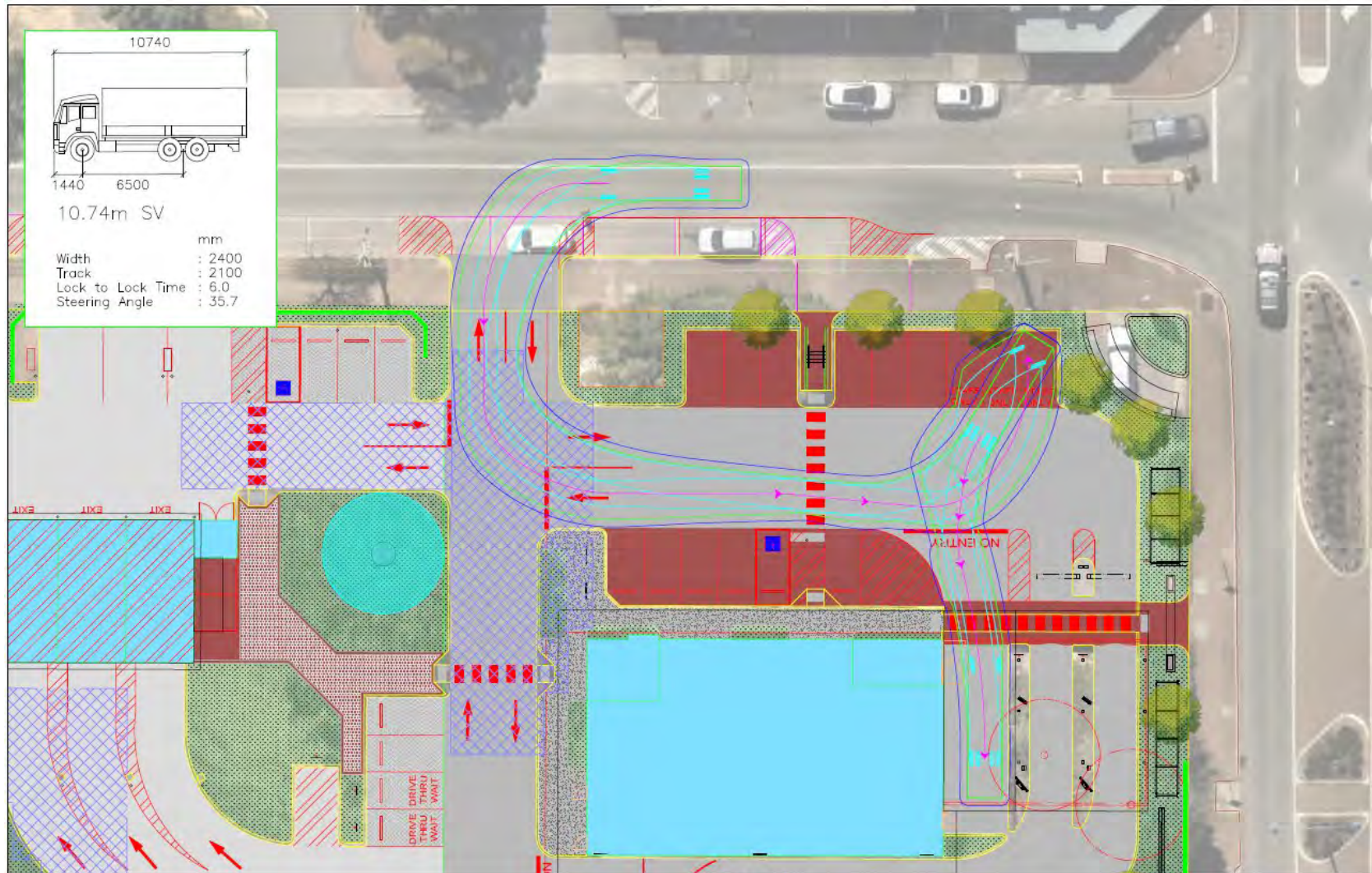


McDonald's Kalamunda
 Austroads 2023: 8.8m Service Vehicle
 Proposed Carwash Bin Area Egress

LEGEND
 Vehicle Body
 Wheel Path
 500mm Clearance

t24.140.sk29
 28/03/2025
 Scale: 1:200 @ A3

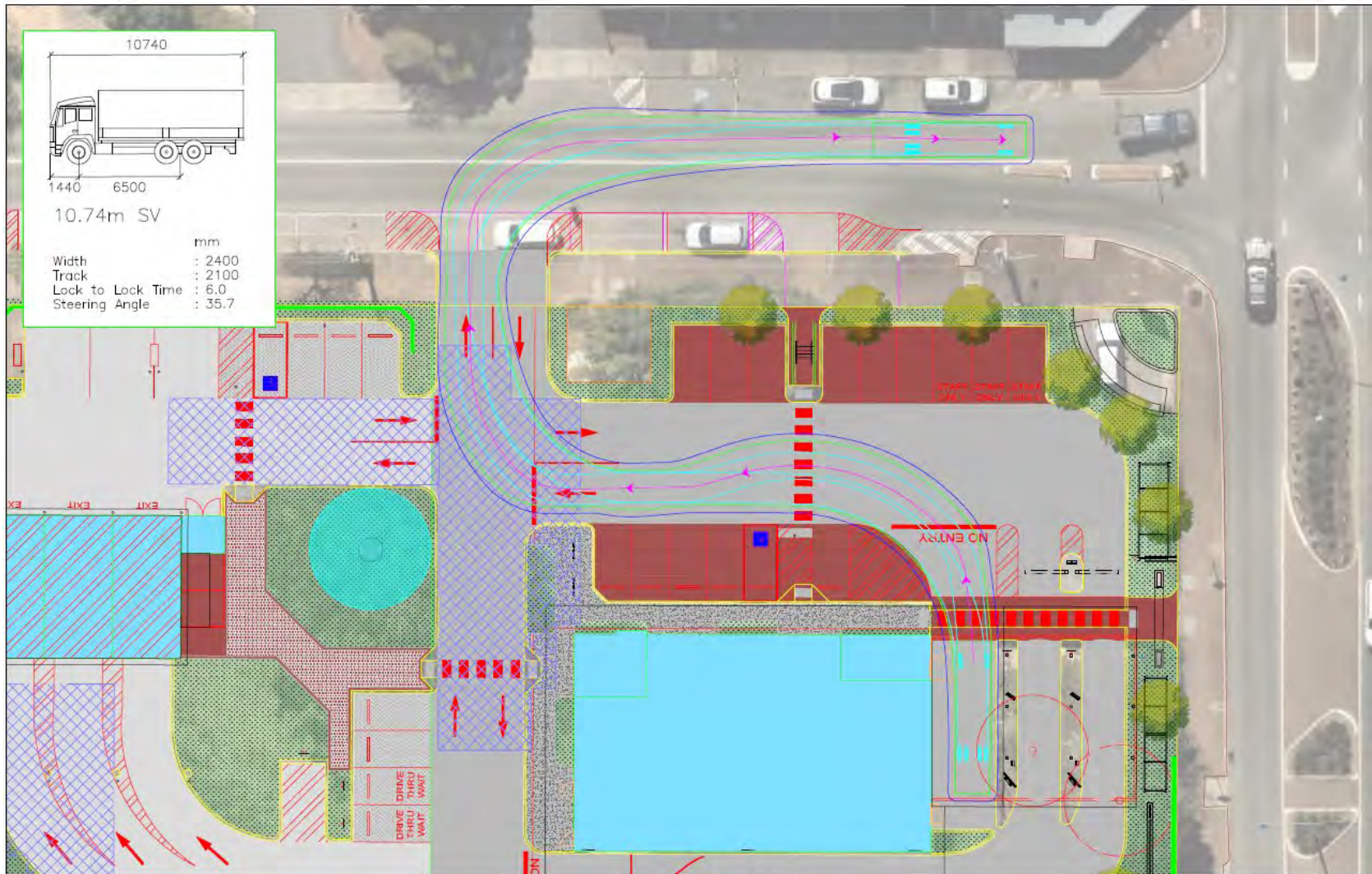




McDonald's Kalamunda
 10.74m Service Vehicle
 Proposed McDonald's Loading Bay Access

t24.140.sk32
 03/04/2025
 Scale: 1:250 @ A3





McDonald's Kalamunda
 10.74m Service Vehicle
 Proposed McDonald's Loading Bay Egress

t24.140.sk33
 03/04/2025
 Scale: 1:250 @ A3



Appendix D

SIDRA INTERSECTION ANALYSIS RESULTS



Engineering a better future for over 20 years!

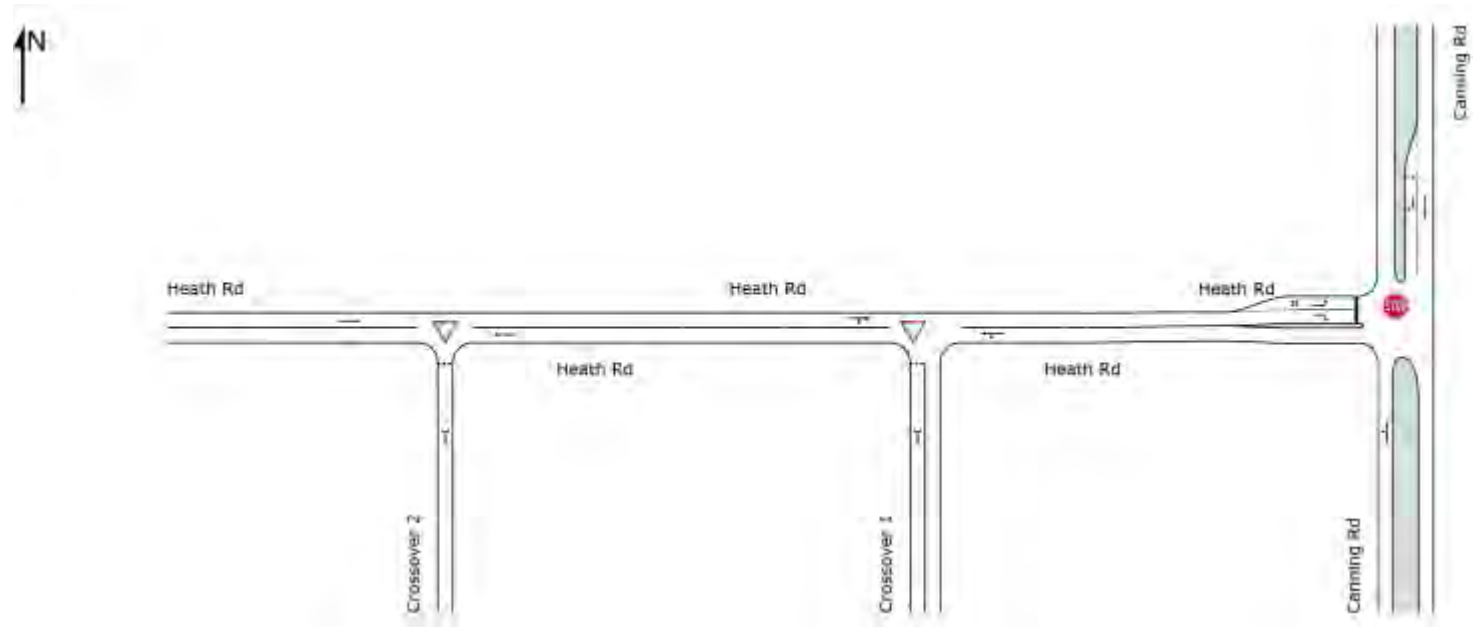


Figure C1: Road network layout modelled in SIDRA Network



Existing



MOVEMENT SUMMARY

 Site: [Canning Rd & Heath Rd - Existing - AM (Site Folder: Existing)]

Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Canning Rd														
7	L2	74	1.4	78	1.4	0.340	4.6	LOS A	0.0	0.0	0.00	0.07	0.00	47.0
8	T1	519	5.4	546	5.4	0.340	0.0	LOS A	0.0	0.0	0.00	0.07	0.00	48.6
Approach		593	4.9	624	4.9	0.340	0.6	NA	0.0	0.0	0.00	0.07	0.00	48.4
North: Canning Rd														
2	T1	570	4.7	600	4.7	0.322	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.8
3	R2	56	8.9	59	8.9	0.071	7.9	LOS A	0.3	2.3	0.58	0.74	0.58	33.8
Approach		626	5.1	659	5.1	0.322	0.7	NA	0.3	2.3	0.05	0.07	0.05	48.0
West: Heath Rd														
4	L2	61	1.6	64	1.6	0.384	14.2	LOS B	1.6	11.8	0.79	1.09	1.04	23.9
6	R2	37	5.4	39	5.4	0.384	40.9	LOS E	1.6	11.8	0.79	1.09	1.04	24.9
Approach		98	3.1	103	3.1	0.384	24.3	LOS C	1.6	11.8	0.79	1.09	1.04	24.3
All Vehicles		1317	4.9	1386	4.9	0.384	2.4	NA	1.6	11.8	0.08	0.14	0.10	45.0

MOVEMENT SUMMARY

 Site: [Canning Rd & Heath Rd - Existing - PM (Site Folder: Existing)]

Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Canning Rd														
7	L2	48	1.4	51	1.4	0.327	4.6	LOS A	0.0	0.0	0.00	0.05	0.00	47.4
8	T1	522	5.4	549	5.4	0.327	0.0	LOS A	0.0	0.0	0.00	0.05	0.00	49.0
Approach		570	5.1	600	5.1	0.327	0.4	NA	0.0	0.0	0.00	0.05	0.00	48.9
North: Canning Rd														
2	T1	523	4.7	551	4.7	0.296	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
3	R2	76	8.9	80	8.9	0.093	7.7	LOS A	0.4	3.0	0.57	0.75	0.57	33.9
Approach		599	5.3	631	5.3	0.296	1.0	NA	0.4	3.0	0.07	0.09	0.07	47.3
West: Heath Rd														
4	L2	91	1.6	96	1.6	0.482	15.7	LOS C	2.2	17.0	0.79	1.15	1.19	23.9
6	R2	48	5.4	51	5.4	0.482	40.8	LOS E	2.2	17.0	0.79	1.15	1.19	24.9
Approach		139	2.9	146	2.9	0.482	24.4	LOS C	2.2	17.0	0.79	1.15	1.19	24.3
All Vehicles		1308	4.9	1377	4.9	0.482	3.2	NA	2.2	17.0	0.12	0.19	0.16	43.6

MOVEMENT SUMMARY

 Site: [Canning Rd & Heath Rd - Existing - Sat (Site Folder: Existing)]

Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Canning Rd														
7	L2	48	1.4	51	1.4	0.303	4.6	LOS A	0.0	0.0	0.00	0.05	0.00	47.3
8	T1	481	5.4	506	5.4	0.303	0.0	LOS A	0.0	0.0	0.00	0.05	0.00	49.0
Approach		529	5.0	557	5.0	0.303	0.5	NA	0.0	0.0	0.00	0.05	0.00	48.8
North: Canning Rd														
2	T1	555	4.7	584	4.7	0.314	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.8
3	R2	78	8.9	82	8.9	0.090	7.4	LOS A	0.4	3.0	0.55	0.72	0.55	34.3
Approach		633	5.3	666	5.3	0.314	0.9	NA	0.4	3.0	0.07	0.09	0.07	47.4
West: Heath Rd														
4	L2	74	1.6	78	1.6	0.404	13.8	LOS B	1.7	13.1	0.76	1.11	1.04	24.8
6	R2	42	5.4	44	5.4	0.404	38.4	LOS E	1.7	13.1	0.76	1.11	1.04	25.7
Approach		116	3.0	122	3.0	0.404	22.7	LOS C	1.7	13.1	0.76	1.11	1.04	25.2
All Vehicles		1278	5.0	1345	5.0	0.404	2.7	NA	1.7	13.1	0.10	0.17	0.13	44.5

2026



MOVEMENT SUMMARY

Site: [Canning Rd & Heath Rd - 2026 - AM (Site Folder: 2026 - With dev & With upgrade)]

Network: N101 [AM
(Network Folder: 2026 - with
development & with upgrade)]

Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total HV veh/h	%				[Veh. veh	Dist] m				
South: Canning Rd														
7	L2	113	1.4	113	1.4	0.356	4.6	LOS A	0.0	0.0	0.00	0.09	0.00	47.1
8	T1	540	5.4	540	5.4	0.356	0.1	LOS A	0.0	0.0	0.00	0.09	0.00	48.2
Approach		653	4.7	653	4.7	0.356	0.8	NA	0.0	0.0	0.00	0.09	0.00	48.0
North: Canning Rd														
2	T1	622	4.7	622	4.7	0.335	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.8
3	R2	81	8.9	81	8.9	0.102	8.2	LOS A	0.4	3.3	0.60	0.77	0.60	28.5
Approach		703	5.2	703	5.2	0.335	1.0	NA	0.4	3.3	0.07	0.09	0.07	47.8
West: Heath Rd														
4	L2	114	1.6	114	1.6	0.152	9.8	LOS A	0.6	4.3	0.55	0.98	0.55	29.9
6	R2	46	5.4	46	5.4	0.398	46.1	LOS E	1.4	10.7	0.93	1.06	1.14	13.4
Approach		160	2.7	160	2.7	0.398	20.3	LOS C	1.4	10.7	0.66	1.00	0.72	21.2
All Vehicles		1516	4.7	1516	4.7	0.398	3.0	NA	1.4	10.7	0.10	0.19	0.11	43.8

MOVEMENT SUMMARY

Site: [Heath Rd & Crossover 1 - 2026 - AM (Site Folder: 2026 - With dev & With upgrade)]

Network: N101 [AM
(Network Folder: 2026 - with
development & with upgrade)]

Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total HV veh/h	%				[Veh. veh	Dist m				
South: Crossover 1														
1	L2	15	2.0	15	2.0	0.084	0.4	LOS A	0.3	2.2	0.30	0.29	0.30	17.4
3	R2	72	2.0	72	2.0	0.084	1.8	LOS A	0.3	2.2	0.30	0.29	0.30	17.4
Approach		86	2.0	86	2.0	0.084	1.6	LOS A	0.3	2.2	0.30	0.29	0.30	17.4
East: Heath Rd														
4	L2	57	2.0	57	2.0	0.104	3.7	LOS A	0.0	0.0	0.00	0.16	0.00	36.1
5	T1	137	2.0	137	2.0	0.104	0.0	LOS A	0.0	0.0	0.00	0.16	0.00	39.5
Approach		194	2.0	194	2.0	0.104	1.1	NA	0.0	0.0	0.00	0.16	0.00	37.9
West: Heath Rd														
11	T1	87	2.0	87	2.0	0.074	0.3	LOS A	0.3	1.9	0.20	0.17	0.20	33.8
12	R2	40	2.0	40	2.0	0.074	3.5	LOS A	0.3	1.9	0.20	0.17	0.20	28.3
Approach		127	2.0	127	2.0	0.074	1.3	NA	0.3	1.9	0.20	0.17	0.20	30.8
All Vehicles		407	2.0	407	2.0	0.104	1.3	NA	0.3	2.2	0.13	0.19	0.13	29.2

MOVEMENT SUMMARY

Site: [Heath Rd & Crossover 2 - 2026 - AM (Site Folder: 2026 - With dev & With upgrade)]

Network: N101 [AM (Network Folder: 2026 - with development & with upgrade)]

Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	HV %	[Total HV] veh/h	%	v/c	sec		[Veh. veh]	Dist m				km/h
South: Crossover 2														
1	L2	3	2.0	3	2.0	0.009	0.4	LOS A	0.0	0.2	0.27	0.25	0.27	35.2
3	R2	6	2.0	6	2.0	0.009	2.0	LOS A	0.0	0.2	0.27	0.25	0.27	17.4
Approach		9	2.0	9	2.0	0.009	1.5	LOS A	0.0	0.2	0.27	0.25	0.27	27.3
East: Heath Rd														
5	T1	152	2.0	152	2.0	0.080	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		152	2.0	152	2.0	0.080	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
West: Heath Rd														
11	T1	121	2.0	121	2.0	0.064	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		121	2.0	121	2.0	0.064	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
All Vehicles		282	2.0	282	2.0	0.080	0.1	NA	0.0	0.2	0.01	0.01	0.01	49.2

MOVEMENT SUMMARY

Site: [Canning Rd & Heath Rd - 2026 - PM (Site Folder: 2026 - With dev & With upgrade)]

Network: N101 [PM (Network Folder: 2026 - with development & with upgrade)]

Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	HV %	[Total HV] veh/h	%	v/c	sec		[Veh. veh]	Dist m				km/h
South: Canning Rd														
7	L2	76	1.4	76	1.4	0.340	4.6	LOS A	0.0	0.0	0.00	0.07	0.00	47.9
8	T1	548	5.4	548	5.4	0.340	0.0	LOS A	0.0	0.0	0.00	0.07	0.00	48.6
Approach		624	4.9	624	4.9	0.340	0.6	NA	0.0	0.0	0.00	0.07	0.00	48.6
North: Canning Rd														
2	T1	569	4.7	569	4.7	0.307	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.8
3	R2	98	8.9	98	8.9	0.118	8.0	LOS A	0.5	3.9	0.59	0.77	0.59	28.8
Approach		667	5.4	667	5.4	0.307	1.2	NA	0.5	3.9	0.09	0.11	0.09	47.3
West: Heath Rd														
4	L2	134	1.6	134	1.6	0.181	10.0	LOS A	0.7	5.2	0.56	0.99	0.56	29.7
6	R2	56	5.4	56	5.4	0.428	43.0	LOS E	1.5	12.0	0.93	1.07	1.17	14.0
Approach		189	2.7	189	2.7	0.428	19.7	LOS C	1.5	12.0	0.67	1.01	0.74	21.6
All Vehicles		1481	4.8	1481	4.8	0.428	3.3	NA	1.5	12.0	0.12	0.21	0.13	43.2

MOVEMENT SUMMARY

▼ Site: [Heath Rd & Crossover 1 - 2026 - PM (Site Folder: 2026 - With dev & With upgrade)] ■ Network: N101 [PM (Network Folder: 2026 - with development & with upgrade)]

Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	HV %	[Total HV] veh/h	%	v/c	sec		[Veh. veh]	[Dist] m				km/h
South: Crossover 1														
1	L2	11	2.0	11	2.0	0.064	0.4	LOS A	0.2	1.6	0.31	0.29	0.31	17.4
3	R2	54	2.0	54	2.0	0.064	1.9	LOS A	0.2	1.6	0.31	0.29	0.31	17.4
Approach		64	2.0	64	2.0	0.064	1.6	LOS A	0.2	1.6	0.31	0.29	0.31	17.4
East: Heath Rd														
4	L2	43	2.0	43	2.0	0.093	3.7	LOS A	0.0	0.0	0.00	0.13	0.00	36.6
5	T1	131	2.0	131	2.0	0.093	0.0	LOS A	0.0	0.0	0.00	0.13	0.00	40.8
Approach		174	2.0	174	2.0	0.093	0.9	NA	0.0	0.0	0.00	0.13	0.00	39.1
West: Heath Rd														
11	T1	136	2.0	136	2.0	0.093	0.2	LOS A	0.2	1.6	0.12	0.10	0.12	39.0
12	R2	31	2.0	31	2.0	0.093	3.5	LOS A	0.2	1.6	0.12	0.10	0.12	29.8
Approach		166	2.0	166	2.0	0.093	0.8	NA	0.2	1.6	0.12	0.10	0.12	35.3
All Vehicles		404	2.0	404	2.0	0.093	1.0	NA	0.2	1.6	0.10	0.14	0.10	31.5

MOVEMENT SUMMARY

▼ Site: [Heath Rd & Crossover 2 - 2026 - PM (Site Folder: 2026 - With dev & With upgrade)] ■ Network: N101 [PM (Network Folder: 2026 - with development & with upgrade)]

Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	HV %	[Total veh/h]	HV %	v/c	sec		[Veh. veh]	[Dist] m				km/h
South: Crossover 2														
1	L2	3	2.0	3	2.0	0.009	0.4	LOS A	0.0	0.2	0.27	0.25	0.27	35.2
3	R2	6	2.0	6	2.0	0.009	2.1	LOS A	0.0	0.2	0.27	0.25	0.27	17.4
Approach		9	2.0	9	2.0	0.009	1.5	LOS A	0.0	0.2	0.27	0.25	0.27	27.3
East: Heath Rd														
5	T1	141	2.0	141	2.0	0.075	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		141	2.0	141	2.0	0.075	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
West: Heath Rd														
11	T1	160	2.0	160	2.0	0.085	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		160	2.0	160	2.0	0.085	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
All Vehicles		311	2.0	311	2.0	0.085	0.1	NA	0.0	0.2	0.01	0.01	0.01	49.3

MOVEMENT SUMMARY

 Site: [Canning Rd & Heath Rd - 2026 - Sat (Site Folder: 2026 - With dev & With upgrade)]

 Network: N101 [Sat (Network Folder: 2026 - with development & with upgrade)]

Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total HV veh/h	%	v/c	sec		[Veh. veh	Dist m				km/h
South: Canning Rd														
7	L2	91	1.4	91	1.4	0.322	4.6	LOS A	0.0	0.0	0.00	0.08	0.00	47.4
8	T1	500	5.4	500	5.4	0.322	0.0	LOS A	0.0	0.0	0.00	0.08	0.00	48.4
Approach		591	4.8	591	4.8	0.322	0.7	NA	0.0	0.0	0.00	0.08	0.00	48.3
North: Canning Rd														
2	T1	604	4.7	604	4.7	0.326	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.8
3	R2	117	8.9	117	8.9	0.134	7.8	LOS A	0.6	4.5	0.58	0.76	0.58	29.2
Approach		721	5.4	721	5.4	0.326	1.3	NA	0.6	4.5	0.09	0.12	0.09	47.1
West: Heath Rd														
4	L2	137	1.6	137	1.6	0.172	9.5	LOS A	0.7	5.0	0.54	0.97	0.54	30.3
6	R2	56	5.4	56	5.4	0.442	44.8	LOS E	1.6	12.4	0.93	1.08	1.19	13.6
Approach		193	2.7	193	2.7	0.442	19.7	LOS C	1.6	12.4	0.65	1.00	0.73	21.6
All Vehicles		1504	4.8	1504	4.8	0.442	3.4	NA	1.6	12.4	0.13	0.22	0.14	42.9

MOVEMENT SUMMARY

 Site: [Heath Rd & Crossover 1 - 2026 - Sat (Site Folder: 2026 - With dev & With upgrade)]

 Network: N101 [Sat (Network Folder: 2026 - with development & with upgrade)]

Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total HV veh/h	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: Crossover 1														
1	L2	22	2.0	22	2.0	0.106	0.4	LOS A	0.4	2.8	0.31	0.30	0.31	17.3
3	R2	85	2.0	85	2.0	0.106	2.0	LOS A	0.4	2.8	0.31	0.30	0.31	17.3
Approach		107	2.0	107	2.0	0.106	1.7	LOS A	0.4	2.8	0.31	0.30	0.31	17.3
East: Heath Rd														
4	L2	75	2.0	75	2.0	0.112	3.7	LOS A	0.0	0.0	0.00	0.19	0.00	35.3
5	T1	133	2.0	133	2.0	0.112	0.0	LOS A	0.0	0.0	0.00	0.19	0.00	37.8
Approach		207	2.0	207	2.0	0.112	1.3	NA	0.0	0.0	0.00	0.19	0.00	36.5
West: Heath Rd														
11	T1	107	2.0	107	2.0	0.093	0.4	LOS A	0.3	2.5	0.22	0.18	0.22	33.3
12	R2	52	2.0	52	2.0	0.093	3.6	LOS A	0.3	2.5	0.22	0.18	0.22	28.2
Approach		159	2.0	159	2.0	0.093	1.4	NA	0.3	2.5	0.22	0.18	0.22	30.4
All Vehicles		474	2.0	474	2.0	0.112	1.4	NA	0.4	2.8	0.14	0.21	0.14	28.2

MOVEMENT SUMMARY

Site: [Heath Rd & Crossover 2 - 2026 - Sat (Site Folder: 2026 - With dev & With upgrade)]

Network: N101 [Sat (Network Folder: 2026 - with development & with upgrade)]

Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total HV] veh/h	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: Crossover 2														
1	L2	6	2.0	6	2.0	0.018	0.5	LOS A	0.1	0.4	0.28	0.27	0.28	35.1
3	R2	13	2.0	13	2.0	0.018	2.1	LOS A	0.1	0.4	0.28	0.27	0.28	17.4
Approach		19	2.0	19	2.0	0.018	1.6	LOS A	0.1	0.4	0.28	0.27	0.28	27.2
East: Heath Rd														
5	T1	155	2.0	155	2.0	0.082	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		155	2.0	155	2.0	0.082	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
West: Heath Rd														
11	T1	146	2.0	146	2.0	0.077	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		146	2.0	146	2.0	0.077	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
All Vehicles		320	2.0	320	2.0	0.082	0.1	NA	0.1	0.4	0.02	0.02	0.02	48.7

2030

**(Sensitivity analysis requested by the
City)**

With development and with upgrade



MOVEMENT SUMMARY

Site: [Canning Rd & Heath Rd - 2030 - AM (Site Folder: 2030 - With dev & With upgrade)]

Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Canning Rd														
7	L2	107	1.4	113	1.4	0.381	4.6	LOS A	0.0	0.0	0.00	0.09	0.00	46.7
8	T1	557	5.4	586	5.4	0.381	0.1	LOS A	0.0	0.0	0.00	0.09	0.00	48.2
Approach		664	4.7	699	4.7	0.381	0.8	NA	0.0	0.0	0.00	0.09	0.00	48.0
North: Canning Rd														
2	T1	639	4.7	673	4.7	0.362	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.8
3	R2	77	8.9	81	8.9	0.110	8.7	LOS A	0.4	3.5	0.62	0.80	0.62	33.4
Approach		716	5.2	754	5.2	0.362	1.0	NA	0.4	3.5	0.07	0.09	0.07	47.5
West: Heath Rd														
4	L2	108	1.6	114	1.6	0.163	11.4	LOS B	0.6	4.6	0.58	1.00	0.58	33.2
6	R2	44	5.4	46	5.4	0.502	63.5	LOS F	1.7	13.5	0.95	1.08	1.24	13.9
Approach		152	2.7	160	2.7	0.502	26.5	LOS D	1.7	13.5	0.69	1.02	0.77	23.1
All Vehicles		1532	4.8	1613	4.8	0.502	3.4	NA	1.7	13.5	0.10	0.18	0.11	43.3

MOVEMENT SUMMARY

Site: [Canning Rd & Heath Rd - 2030 - PM (Site Folder: 2030 - With dev & With upgrade)]

Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %	v/c	sec		[Veh. veh	Dist] m				km/h
South: Canning Rd														
7	L2	72	1.4	76	1.4	0.365	4.6	LOS A	0.0	0.0	0.00	0.06	0.00	47.1
8	T1	565	5.4	595	5.4	0.365	0.1	LOS A	0.0	0.0	0.00	0.06	0.00	48.7
Approach		637	4.9	671	4.9	0.365	0.6	NA	0.0	0.0	0.00	0.06	0.00	48.5
North: Canning Rd														
2	T1	585	4.7	616	4.7	0.332	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.8
3	R2	93	8.9	98	8.9	0.127	8.5	LOS A	0.5	4.1	0.61	0.80	0.61	33.6
Approach		678	5.3	714	5.3	0.332	1.2	NA	0.5	4.1	0.08	0.11	0.08	47.0
West: Heath Rd														
4	L2	127	1.6	134	1.6	0.195	11.6	LOS B	0.7	5.6	0.59	1.00	0.59	33.0
6	R2	53	5.4	56	5.4	0.531	58.4	LOS F	1.9	14.9	0.95	1.10	1.28	14.7
Approach		180	2.7	189	2.7	0.531	25.3	LOS D	1.9	14.9	0.69	1.03	0.79	23.6
All Vehicles		1495	4.8	1574	4.8	0.531	3.8	NA	1.9	14.9	0.12	0.20	0.13	42.7

MOVEMENT SUMMARY

 Site: [Canning Rd & Heath Rd - 2030 - Sat (Site Folder: 2030 - With dev & With upgrade)]

Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Canning Rd														
7	L2	86	1.4	91	1.4	0.345	4.6	LOS A	0.0	0.0	0.00	0.08	0.00	46.9
8	T1	516	5.4	543	5.4	0.345	0.1	LOS A	0.0	0.0	0.00	0.08	0.00	48.4
Approach		602	4.8	634	4.8	0.345	0.7	NA	0.0	0.0	0.00	0.08	0.00	48.2
North: Canning Rd														
2	T1	620	4.7	653	4.7	0.352	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.8
3	R2	111	8.9	117	8.9	0.143	8.1	LOS A	0.6	4.7	0.60	0.78	0.60	33.9
Approach		731	5.4	769	5.4	0.352	1.3	NA	0.6	4.7	0.09	0.12	0.09	46.7
West: Heath Rd														
4	L2	130	1.6	137	1.6	0.184	11.0	LOS B	0.7	5.3	0.56	0.99	0.56	33.6
6	R2	53	5.4	56	5.4	0.549	61.2	LOS F	2.0	15.5	0.95	1.10	1.30	14.3
Approach		183	2.7	193	2.7	0.549	25.5	LOS D	2.0	15.5	0.68	1.02	0.78	23.5
All Vehicles		1516	4.8	1596	4.8	0.549	4.0	NA	2.0	15.5	0.13	0.21	0.14	42.4

Without development and without upgrade

MOVEMENT SUMMARY

Site: [Canning Rd & Heath Rd - 2030 - AM (Site Folder: 2030 - Without dev & Without upgrade)]

Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Canning Rd														
7	L2	74	1.4	78	1.4	0.371	4.6	LOS A	0.0	0.0	0.00	0.06	0.00	47.1
8	T1	573	5.4	603	5.4	0.371	0.1	LOS A	0.0	0.0	0.00	0.06	0.00	48.7
Approach		647	4.9	681	4.9	0.371	0.6	NA	0.0	0.0	0.00	0.06	0.00	48.5
North: Canning Rd														
2	T1	629	4.7	662	4.7	0.356	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.8
3	R2	56	8.9	59	8.9	0.078	8.4	LOS A	0.3	2.5	0.60	0.77	0.60	33.2
Approach		685	5.1	721	5.1	0.356	0.7	NA	0.3	2.5	0.05	0.06	0.05	48.0
West: Heath Rd														
4	L2	61	1.6	64	1.6	0.488	18.7	LOS C	2.0	15.4	0.85	1.14	1.24	20.3
6	R2	37	5.4	39	5.4	0.488	54.9	LOS F	2.0	15.4	0.85	1.14	1.24	21.5
Approach		98	3.1	103	3.1	0.488	32.4	LOS D	2.0	15.4	0.85	1.14	1.24	20.8
All Vehicles		1430	4.9	1505	4.9	0.488	2.8	NA	2.0	15.4	0.08	0.14	0.11	44.3

MOVEMENT SUMMARY

Site: [Canning Rd & Heath Rd - 2030 - PM (Site Folder: 2030 - Without dev & Without upgrade)]

Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Canning Rd														
7	L2	48	1.4	51	1.4	0.358	4.6	LOS A	0.0	0.0	0.00	0.04	0.00	47.4
8	T1	576	5.4	606	5.4	0.358	0.1	LOS A	0.0	0.0	0.00	0.04	0.00	49.1
Approach		624	5.1	657	5.1	0.358	0.4	NA	0.0	0.0	0.00	0.04	0.00	48.9
North: Canning Rd														
2	T1	577	4.7	607	4.7	0.327	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.8
3	R2	76	8.9	80	8.9	0.102	8.3	LOS A	0.4	3.3	0.60	0.78	0.60	33.4
Approach		653	5.2	687	5.2	0.327	1.0	NA	0.4	3.3	0.07	0.09	0.07	47.3
West: Heath Rd														
4	L2	91	1.6	96	1.6	0.598	21.3	LOS C	2.9	22.3	0.85	1.22	1.48	20.2
6	R2	48	5.4	51	5.4	0.598	54.6	LOS F	2.9	22.3	0.85	1.22	1.48	21.4
Approach		139	2.9	146	2.9	0.598	32.8	LOS D	2.9	22.3	0.85	1.22	1.48	20.6
All Vehicles		1416	4.9	1491	4.9	0.598	3.9	NA	2.9	22.3	0.12	0.18	0.18	42.7

MOVEMENT SUMMARY

 Site: [Canning Rd & Heath Rd - 2030 - Sat (Site Folder: 2030 - Without dev & Without upgrade)]

Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Canning Rd														
7	L2	48	1.4	51	1.4	0.332	4.6	LOS A	0.0	0.0	0.00	0.05	0.00	47.4
8	T1	531	5.4	559	5.4	0.332	0.0	LOS A	0.0	0.0	0.00	0.05	0.00	49.0
Approach		579	5.1	609	5.1	0.332	0.4	NA	0.0	0.0	0.00	0.05	0.00	48.9
North: Canning Rd														
2	T1	613	4.7	645	4.7	0.347	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.8
3	R2	78	8.9	82	8.9	0.097	7.8	LOS A	0.4	3.2	0.58	0.75	0.58	33.8
Approach		691	5.2	727	5.2	0.347	0.9	NA	0.4	3.2	0.07	0.08	0.07	47.5
West: Heath Rd														
4	L2	74	1.6	78	1.6	0.503	17.8	LOS C	2.2	16.9	0.83	1.16	1.26	21.4
6	R2	42	5.4	44	5.4	0.503	50.6	LOS F	2.2	16.9	0.83	1.16	1.26	22.5
Approach		116	3.0	122	3.0	0.503	29.7	LOS D	2.2	16.9	0.83	1.16	1.26	21.8
All Vehicles		1386	5.0	1459	5.0	0.503	3.1	NA	2.2	16.9	0.10	0.16	0.14	43.8

2036



MOVEMENT SUMMARY

 Site: [Canning Rd & Heath Rd - 2036 - AM (Site Folder: 2036 - With dev & With upgrade)]

 Network: N101 [AM (Network Folder: 2036 - with development & with upgrade)]

Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Sat'n	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total HV veh/h	%	v/c	sec		[Veh. veh	Dist m				km/h
South: Canning Rd														
7	L2	113	1.4	113	1.4	0.422	4.6	LOS A	0.0	0.0	0.00	0.08	0.00	47.4
8	T1	662	5.4	662	5.4	0.422	0.1	LOS A	0.0	0.0	0.00	0.08	0.00	48.4
Approach		775	4.8	775	4.8	0.422	0.7	NA	0.0	0.0	0.00	0.08	0.00	48.3
North: Canning Rd														
2	T1	757	4.7	757	4.7	0.408	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	49.8
3	R2	81	8.9	81	8.9	0.126	9.6	LOS A	0.5	3.9	0.66	0.84	0.66	26.5
Approach		838	5.1	838	5.1	0.408	1.0	NA	0.5	3.9	0.06	0.08	0.06	47.8
West: Heath Rd														
4	L2	114	1.6	114	1.6	0.186	11.2	LOS B	0.7	5.1	0.62	1.00	0.62	28.4
6	R2	46	5.4	46	5.4	0.759	127.4	LOS F	2.8	22.1	0.99	1.16	1.58	5.9
Approach		160	2.7	160	2.7	0.759	44.9	LOS E	2.8	22.1	0.73	1.05	0.90	12.5
All Vehicles		1773	4.8	1773	4.8	0.759	4.8	NA	2.8	22.1	0.10	0.17	0.11	40.8

MOVEMENT SUMMARY

 Site: [Heath Rd & Crossover 1 - 2036 - AM (Site Folder: 2036 - With dev & With upgrade)]

 Network: N101 [AM (Network Folder: 2036 - with development & with upgrade)]

Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total HV veh/h	%	v/c	sec		[Veh. veh	Dist m				km/h
South: Crossover 1														
1	L2	15	2.0	15	2.0	0.084	0.4	LOS A	0.3	2.2	0.30	0.29	0.30	17.4
3	R2	72	2.0	72	2.0	0.084	1.8	LOS A	0.3	2.2	0.30	0.29	0.30	17.4
Approach		86	2.0	86	2.0	0.084	1.6	LOS A	0.3	2.2	0.30	0.29	0.30	17.4
East: Heath Rd														
4	L2	57	2.0	57	2.0	0.104	3.7	LOS A	0.0	0.0	0.00	0.16	0.00	36.1
5	T1	137	2.0	137	2.0	0.104	0.0	LOS A	0.0	0.0	0.00	0.16	0.00	39.5
Approach		194	2.0	194	2.0	0.104	1.1	NA	0.0	0.0	0.00	0.16	0.00	37.9
West: Heath Rd														
11	T1	87	2.0	87	2.0	0.074	0.3	LOS A	0.3	1.9	0.20	0.17	0.20	33.8
12	R2	40	2.0	40	2.0	0.074	3.5	LOS A	0.3	1.9	0.20	0.17	0.20	28.3
Approach		127	2.0	127	2.0	0.074	1.3	NA	0.3	1.9	0.20	0.17	0.20	30.8
All Vehicles		407	2.0	407	2.0	0.104	1.3	NA	0.3	2.2	0.13	0.19	0.13	29.2

MOVEMENT SUMMARY

Site: [Heath Rd & Crossover 2 - 2036 - AM (Site Folder: 2036 - With dev & With upgrade)]

Network: N101 [AM (Network Folder: 2036 - with development & with upgrade)]

Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Crossover 2														
1	L2	3	2.0	3	2.0	0.009	0.4	LOS A	0.0	0.2	0.27	0.25	0.27	35.2
3	R2	6	2.0	6	2.0	0.009	2.0	LOS A	0.0	0.2	0.27	0.25	0.27	17.4
Approach		9	2.0	9	2.0	0.009	1.5	LOS A	0.0	0.2	0.27	0.25	0.27	27.3
East: Heath Rd														
5	T1	152	2.0	152	2.0	0.080	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		152	2.0	152	2.0	0.080	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
West: Heath Rd														
11	T1	121	2.0	121	2.0	0.064	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		121	2.0	121	2.0	0.064	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
All Vehicles		282	2.0	282	2.0	0.080	0.1	NA	0.0	0.2	0.01	0.01	0.01	49.2

MOVEMENT SUMMARY

Site: [Canning Rd & Heath Rd - 2036 - PM (Site Folder: 2036 - With dev & With upgrade)]

Network: N101 [PM (Network Folder: 2036 - with development & with upgrade)]

Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
South: Canning Rd														
7	L2	76	1.4	76	1.4	0.407	4.6	LOS A	0.0	0.0	0.00	0.06	0.00	48.1
8	T1	672	5.4	672	5.4	0.407	0.1	LOS A	0.0	0.0	0.00	0.06	0.00	48.8
Approach		747	5.0	747	5.0	0.407	0.5	NA	0.0	0.0	0.00	0.06	0.00	48.7
North: Canning Rd														
2	T1	693	4.7	693	4.7	0.374	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.8
3	R2	98	8.9	98	8.9	0.145	9.3	LOS A	0.6	4.6	0.65	0.84	0.65	26.9
Approach		791	5.3	791	5.3	0.374	1.2	NA	0.6	4.6	0.08	0.10	0.08	47.4
West: Heath Rd														
4	L2	134	1.6	134	1.6	0.222	11.6	LOS B	0.9	6.4	0.64	1.01	0.66	28.0
6	R2	56	5.4	56	5.4	0.775	113.4	LOS F	3.1	24.0	0.98	1.19	1.68	6.5
Approach		189	2.7	189	2.7	0.775	41.6	LOS E	3.1	24.0	0.74	1.07	0.96	13.3
All Vehicles		1727	4.9	1727	4.9	0.775	5.3	NA	3.1	24.0	0.12	0.19	0.14	40.0

MOVEMENT SUMMARY

▼ Site: [Heath Rd & Crossover 1 - 2036 - PM (Site Folder: 2036 - With dev & With upgrade)] ■ Network: N101 [PM (Network Folder: 2036 - with development & with upgrade)]

Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total HV veh/h	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: Crossover 1														
1	L2	11	2.0	11	2.0	0.064	0.4	LOS A	0.2	1.6	0.31	0.29	0.31	17.4
3	R2	54	2.0	54	2.0	0.064	1.9	LOS A	0.2	1.6	0.31	0.29	0.31	17.4
Approach		64	2.0	64	2.0	0.064	1.6	LOS A	0.2	1.6	0.31	0.29	0.31	17.4
East: Heath Rd														
4	L2	43	2.0	43	2.0	0.093	3.7	LOS A	0.0	0.0	0.00	0.13	0.00	36.6
5	T1	131	2.0	131	2.0	0.093	0.0	LOS A	0.0	0.0	0.00	0.13	0.00	40.8
Approach		174	2.0	174	2.0	0.093	0.9	NA	0.0	0.0	0.00	0.13	0.00	39.1
West: Heath Rd														
11	T1	136	2.0	136	2.0	0.093	0.2	LOS A	0.2	1.6	0.12	0.10	0.12	39.0
12	R2	31	2.0	31	2.0	0.093	3.5	LOS A	0.2	1.6	0.12	0.10	0.12	29.8
Approach		166	2.0	166	2.0	0.093	0.8	NA	0.2	1.6	0.12	0.10	0.12	35.3
All Vehicles		404	2.0	404	2.0	0.093	1.0	NA	0.2	1.6	0.10	0.14	0.10	31.5

MOVEMENT SUMMARY

▼ Site: [Heath Rd & Crossover 2 - 2036 - PM (Site Folder: 2036 - With dev & With upgrade)] ■ Network: N101 [PM (Network Folder: 2036 - with development & with upgrade)]

Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total HV veh/h	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: Crossover 2														
1	L2	3	2.0	3	2.0	0.009	0.4	LOS A	0.0	0.2	0.27	0.25	0.27	35.2
3	R2	6	2.0	6	2.0	0.009	2.1	LOS A	0.0	0.2	0.27	0.25	0.27	17.4
Approach		9	2.0	9	2.0	0.009	1.5	LOS A	0.0	0.2	0.27	0.25	0.27	27.3
East: Heath Rd														
5	T1	141	2.0	141	2.0	0.075	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		141	2.0	141	2.0	0.075	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
West: Heath Rd														
11	T1	160	2.0	160	2.0	0.085	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		160	2.0	160	2.0	0.085	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
All Vehicles		311	2.0	311	2.0	0.085	0.1	NA	0.0	0.2	0.01	0.01	0.01	49.3

MOVEMENT SUMMARY

 Site: [Canning Rd & Heath Rd - 2036 - Sat (Site Folder: 2036 - With dev & With upgrade)]

 Network: N101 [Sat (Network Folder: 2036 - with development & with upgrade)]

Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	HV %	[Total HV] veh/h	%				[Veh. veh]	Dist m				
South: Canning Rd														
7	L2	91	1.4	91	1.4	0.384	4.6	LOS A	0.0	0.0	0.00	0.07	0.00	47.7
8	T1	614	5.4	614	5.4	0.384	0.1	LOS A	0.0	0.0	0.00	0.07	0.00	48.5
Approach		704	4.9	704	4.9	0.384	0.6	NA	0.0	0.0	0.00	0.07	0.00	48.5
North: Canning Rd														
2	T1	735	4.7	735	4.7	0.396	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.8
3	R2	117	8.9	117	8.9	0.161	8.9	LOS A	0.6	5.2	0.63	0.83	0.63	27.5
Approach		852	5.3	852	5.3	0.396	1.3	NA	0.6	5.2	0.09	0.11	0.09	47.2
West: Heath Rd														
4	L2	137	1.6	137	1.6	0.206	10.7	LOS B	0.8	5.9	0.60	1.00	0.60	28.9
6	R2	56	5.4	56	5.4	0.806	124.5	LOS F	3.3	25.7	0.99	1.21	1.76	6.0
Approach		193	2.7	193	2.7	0.806	43.7	LOS E	3.3	25.7	0.71	1.07	0.93	12.8
All Vehicles		1748	4.9	1748	4.9	0.806	5.7	NA	3.3	25.7	0.12	0.20	0.15	39.4

MOVEMENT SUMMARY

 Site: [Heath Rd & Crossover 1 - 2036 - Sat (Site Folder: 2036 - With dev & With upgrade)]

 Network: N101 [Sat (Network Folder: 2036 - with development & with upgrade)]

Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	HV %	[Total HV] veh/h	%				[Veh. veh]	Dist m				
South: Crossover 1														
1	L2	22	2.0	22	2.0	0.106	0.4	LOS A	0.4	2.8	0.31	0.30	0.31	17.3
3	R2	85	2.0	85	2.0	0.106	2.0	LOS A	0.4	2.8	0.31	0.30	0.31	17.3
Approach		107	2.0	107	2.0	0.106	1.7	LOS A	0.4	2.8	0.31	0.30	0.31	17.3
East: Heath Rd														
4	L2	75	2.0	75	2.0	0.112	3.7	LOS A	0.0	0.0	0.00	0.19	0.00	35.3
5	T1	133	2.0	133	2.0	0.112	0.0	LOS A	0.0	0.0	0.00	0.19	0.00	37.8
Approach		207	2.0	207	2.0	0.112	1.3	NA	0.0	0.0	0.00	0.19	0.00	36.5
West: Heath Rd														
11	T1	107	2.0	107	2.0	0.093	0.4	LOS A	0.3	2.5	0.22	0.18	0.22	33.3
12	R2	52	2.0	52	2.0	0.093	3.6	LOS A	0.3	2.5	0.22	0.18	0.22	28.2
Approach		159	2.0	159	2.0	0.093	1.4	NA	0.3	2.5	0.22	0.18	0.22	30.4
All Vehicles		474	2.0	474	2.0	0.112	1.4	NA	0.4	2.8	0.14	0.21	0.14	28.2

MOVEMENT SUMMARY

Site: [Heath Rd & Crossover 2 - 2036 - Sat (Site Folder: 2036 - With dev & With upgrade)]

Network: N101 [Sat (Network Folder: 2036 - with development & with upgrade)]

Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total HV] veh/h	%				[Veh. veh	Dist] m				
South: Crossover 2														
1	L2	6	2.0	6	2.0	0.018	0.5	LOS A	0.1	0.4	0.28	0.27	0.28	35.1
3	R2	13	2.0	13	2.0	0.018	2.1	LOS A	0.1	0.4	0.28	0.27	0.28	17.4
Approach		19	2.0	19	2.0	0.018	1.6	LOS A	0.1	0.4	0.28	0.27	0.28	27.2
East: Heath Rd														
5	T1	155	2.0	155	2.0	0.082	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		155	2.0	155	2.0	0.082	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
West: Heath Rd														
11	T1	146	2.0	146	2.0	0.077	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		146	2.0	146	2.0	0.077	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
All Vehicles		320	2.0	320	2.0	0.082	0.1	NA	0.1	0.4	0.02	0.02	0.02	48.7

Technical Note: No 1a
Project No: t24.140
Project: McDonalds Kalamunda
Subject: Corner truncation requirements

Date: 28/03/2025

1 Introduction

This Technical Note has been prepared by Transcore in relation to subdivision at Lots 29 (14) and 28 (16) Canning Road, and Lot 3 (5) Heath Road, Kalamunda, which are the subject site for a proposed McDonald's restaurant and a car wash development.

The subject site is located at the southwest corner of Canning Road and Heath Road, as shown in **Figure 1**.



Figure 1: Subject Site

This Technical Note addresses WAPC draft condition 11, which states, "An 8.5 metre truncation is to be provided at the junction of Heath Road and Canning Road. (City of Kalamunda)"

It is understood that this draft condition is based on advice from the City of Kalamunda recommending an 8.5 metre truncation at the intersection for sightline purposes.

2 Standard truncation requirements

There is currently no truncation of the property boundary at the northeast corner of the subject site.

Prior to the adoption of the WAPC *Liveable Neighbourhoods* policy it was common practice to require a 6m x 6m corner truncation at many intersections, which is approximately 8.5m diagonal length at a 90-degree corner.

However, *Liveable Neighbourhoods* (Element 3 – Lot layout) recognised this as excessive.

“In Western Australia, corner blocks have traditionally been splayed or truncated typically 6 m x 6 m, to provide for sightlines. Sightlines are rarely needed to provide adequate safety at stop signs or other slow point controlled junctions.” ...

“As a result, Liveable Neighbourhoods provides for corner truncations of 3 m x 3 m as a default in the local street network. Specific situations may require an increase in the default requirement (eg for road geometry where there is an acute angle of intersection between two streets), or a decrease in the default requirement, or no provision (eg in a location of proposed narrow frontage lots where services can still be accommodated).”

It should be noted that the Other Regional Roads (ORR) Reservation for Canning Road in the Metropolitan Region Scheme (MRS) does not include any requirement for a future corner truncation at this intersection.

3 Safe Intersection Sight Distance

Austrroads *Guide to Road Design Part 4A: Unsignalised and Signalised Intersections* provides guidance on Safe Intersection Sight Distance (SISD) requirements at intersections. SISD is measured as shown in **Figure 2**.

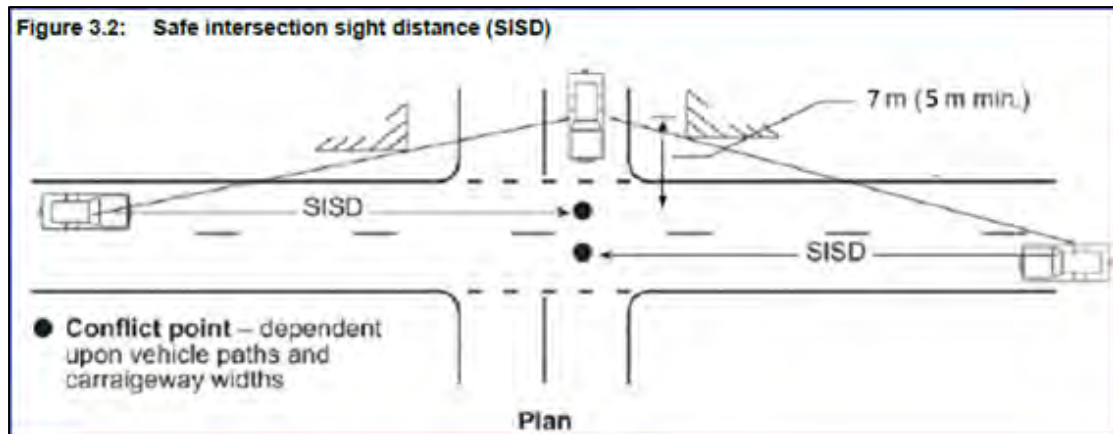


Figure 2: Safe Intersection Sight Distance (SISD)

The minimum setback distance of 5 metres from the conflict point is typically applied in an existing, constrained situation. As can be seen in **Figure 3** there is approximately 5.68m separation available from the conflict point to the edge of the road reserve on Canning Road, so the minimum 5m setback requirement for SISD is already satisfied without any requirement for a corner truncation on the subject site.



Figure 3: Minimum available sightline setback at intersection

For a speed limit of 50km/h the required SISD is 97m. The diagrams below indicate that the sightline for this SISD (with full setback of 7m from the conflict point) only encroaches marginally across the property boundary at the corner.



Figure 4: SISD at Canning Road / Heath Road Intersection (with 7m setback)

A 3m x 3m truncation would be more than sufficient to achieve the required SISD for the full 7m setback, and if the permissible minimum setback of 5m was deemed acceptable in this instance then no corner truncation would be required at all, based on sight distances.

Note that there is only a narrow sliver of land at the corner that actually needs to be kept clear of obstructions to achieve SISD for full 7m setback, so it may be considered that requiring any corner truncation just for that purpose is excessive.

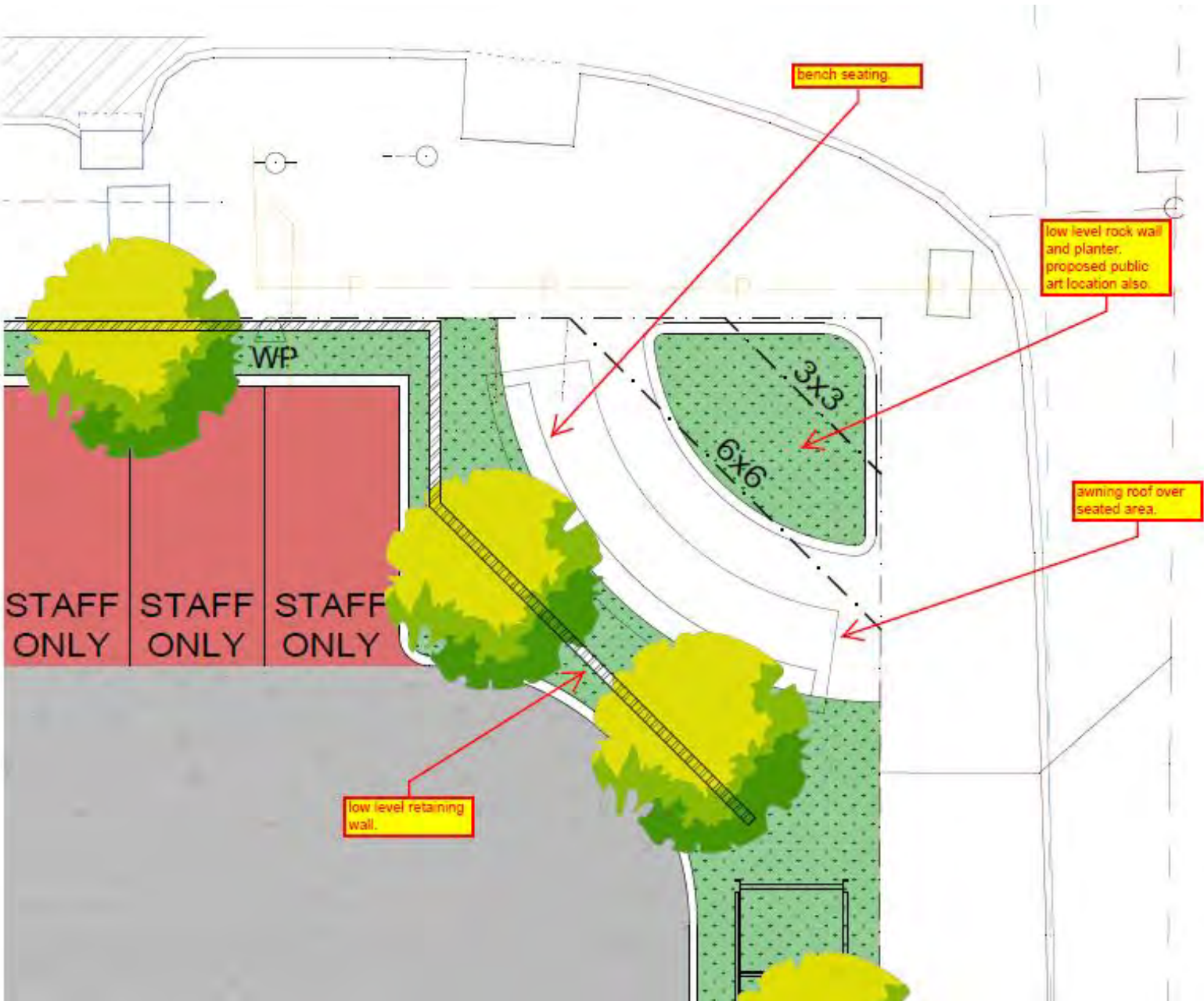
4 Conclusions

This Technical Note relates to a proposed subdivision at Lots 29 (14) and 28 (16) Canning Road, and Lot 3 (5) Heath Road, Kalamunda, which are the subject site for a proposed McDonald's restaurant and a car wash development.

Draft Condition 11 for the subdivision approval requires an 8.5 metre truncation (i.e. approx. 6m x 6m) to be provided at the junction of Heath Road and Canning Road, based on sightline requirements.

However, it has been demonstrated in this Technical Note that the minimum permissible 5m setback for Safe Intersection Sight Distance (SISD) would not require any corner truncation at all.

Even if the full 7m setback for SISD was deemed necessary, a much smaller 3m x 3m truncation would be more than sufficient to satisfy SISD at this location.



City of Kalamunda Design Review Panel

Minutes

ITEM 1 – PROPOSED FAST FOOD OUTLET AND MOTOR VEHICLE WASH

JULY 2025

Meeting Date and Time:	Out of Chair Review	
Meeting Number:	DRP2025/4	
Meeting Venue:	N/A	
Meeting Items:	Item 1	LOT 29 (NO. 14) AND LOT 28 (NO.16) CANNING ROAD AND LOT 3 (NO. 5) HEATH ROAD, KALAMUNDA – PROPOSED FAST FOOD OUTLET AND MOTOR VEHICLE WASH
<u>Attendance</u>		
DRP Members:	David Barr	Design Advisory Committee Member (Chair)
	Jurg Hunziker	Design Advisory Committee Member
	Walter van der Loo	Design Advisory Committee Member
	Ross Montgomery	Design Advisory Committee Member
Officers in attendance:		
Apologies		
Declarations of Interest		
Applicants:	Planning Solutions	

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Item 5.1 –

General Comments	As previously stated the proposal should align with Activity Centre objectives by addressing the urban edge to ensure town centre success. Whilst incremental changes are made to improve upon some areas noted by the design review panel the placement of the building does not present an active edge to either Canning or Heath Road. Noting that the proposal brings two car centric uses together, strong consideration has been suggest to sleeve the parking and drive through behind the building therefore providing an active street front to Canning Road.
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ASSESSMENT MATRIX		Supported
		Pending further attention
		Not supported
		Not considered / discussed
		Not addressed as further information required

DESIGN PRINCIPLE	EVALUATION	DRP COMMENT
CONTEXT & CHARACTER		Strengths - The proposal provides direct pedestrian access from both Canning Road and Heath Road. Weaknesses - Car centric typologies and a design proposal located in the town centre that does not engage or contribute to the streetscape or community. - The pedestrian access paths are still primarily required to engage with vehicle traffic in queue formation that often leads to pedestrian paths being blocked pending on traffic flows and driver courtesy.

		- The prevailing streetscape brings the built form to the streets edge providing pedestrian activation. The proposal offsets the built form and wraps three lanes of bitumen between the street edge and the building that hosts all the activation. - The “M” signage incorporated into the ‘mesh screen wall’ is considered excessive in height and physical dimensions and should be reduced. - The current proposal has provided a new ‘arborculturist’ report, however the report only addresses 2 off trees on the site. The report has ignored at a minimum 3 off existing trees that are denoted as being removed. These trees are the ficus located on Heath Road and the 2 off deciduous trees located at the SE corner of the site – indicated as the vehicle drive through stack zone. A full review and report on those 3 off trees <u>is recommended to be provided</u>. - The Canning Road elevation maintains a screening device that masks the food outlet generic planning model and does not try and integrate the planning into a town centre response. - The success of the landscape ‘creeper’ wall will be highly dependent upon the maintenance initiatives and protocols that are put in place. Recommendations - The edge to Canning and Heath Roads needs to be functionally safe, enjoyable and contributory to the streetscape.. Transition from centre of town to residential neighbourhood in terms of character and scale.
LANDSCAPE QUALITY		Strengths - Retention of two significant mature native trees and augmentation with ornamental species – reflecting the diverse landscape character of the town centre. - Provision of a qualified arborist report assessing the trees and proposal, with recommendations for the design and management to ensure successful retention. Weaknesses - Other significant trees are being removed - Lack of new tree planting and use of small canopy species unlikely to offset the loss of existing canopy or achieve will not achieve 20% canopy cover at maturity as per the City’s Urban Forest Strategy

		• The proposal to use climbing trellises to infill the Canning Road screening façade is likely to fail pending on the maintenance regime applied and the selection of the appropriate climbing plant that will endure the exposed conditions. • Landscape areas are incohesive and constrained in size, creating a poor landscape setting for the development. • An updated landscape plan was not provided to reflect the revised development proposal. • The removal of the established Ficus tree on Heath Road and the subsequent location of the Western Power transformer shows little consideration has been provided for tree retention when modest replanning of the site would allow the western power transformer to be relocated and the tree retained. Recommendations • Prepare an updated landscape plan addressing the revised proposal. • Consolidate planting and overall landscape concept to create a more cohesive landscape setting • Provide space for and utilise large tree canopy species, predominantly native, to reflect Kalamunda bushland setting. • The developer should provide a commitment to undertake the construction and tree health improvement methodologies outlined in the arborist report to minimise impact to the trees.
BUILT FORM & SCALE		Strengths • The scale of the development is supported, however the opportunity of engaging with the streetscape is not present and should be engaging with the street edge. Weaknesses • Street edges need to be reflective of a Kalamunda character, and this might involve less grand structures and more references to the town, scale, character and history. • Large building setbacks, lack of awnings over street footpaths and parking in front of buildings not consistent with the Town Centre built form. • Screening structures in gardens along Canning Rd boundary contrary to establishing a cohesive streetscape presence of the building

		Recommendations • Bring the restaurant building to the street/s and shift vehicle uses behind the building. • If corner landscape treatment retained, consider the corner treatment in a way that makes the most use of the space, and presents it as a place of repose, rather than a static display of gardening and structures. • The materiality of the built form be reviewed to provide a more unique and locality responsive outcome
FUNCTIONALITY & BUILD QUALITY		Strengths • Awning provided to restaurant building and covered walkway provided from Canning Road to the restaurant. Ideally the awning and building engage with the streets edge and provide a canopy that can be utilised by the general public. Weaknesses • The service areas for the restaurant face the primary frontage of Canning Road. • Conversely, the dining space and play zone are set back and have no street frontage relationship. • No outdoor dining opportunities are provided. • The use of a street screen along Canning Road does not promote an active street front that is considered a key design outcome for the town centre Recommendations • Reconfigure restaurant building to ensure activate functions have a better relationship to the street. • Canopy to building to provide protection to the footpath and be part of a the urban streetscape.
SUSTAINABILITY		Strengths • Social Sustainability - Employment opportunities was presented in DRP 1 encouraging programmes to employ locals. • Although no specific sustainability submission has been provided it is noted that a more substantial solar panel installation has been indicated on the drive through portico albeit the orientation would need to be reviewed to optimise performance. Weaknesses • Large extents of hardstand surrounding the buildings and minimal soft landscape create a heat island effect.

		Recommendations - Consider the provision of EV charging stations to staff parking bays. - Provide a document that clearly outlines the how the design responds to the sustainability principle SPP 7.0.
AMENITY		Strengths - A more detailed waste and odour management plan has been provided. Weaknesses - The site is an outlier to the surrounding character and function. - Concerns by residents regarding impacts of 24-hour use noted. - Inadequate shade and cover provided to street footpaths. - Acoustic concerns to nearby residential buildings and local church. Cars sitting idle whilst waiting for food at all hours of the day and night. Recommendations - Awnings to be provided to street footpaths. If this is not possible, at least provide continuous large tree canopy to street boundaries to improve amenity for pedestrians. - The proponent be requested to address the deficiencies in the Waste Management Plan, Odour Management Plan and the Traffic Impact Report.
LEGIBILITY		Strengths - Seeks to address the streets and intersection, albeit with landscape treatments and structural features - Clear pedestrian connection provided from the street footpaths to the two buildings - Reduction in two way entry cross-overs to one has improved vehicular legibility. - The creation of a more identifiable pedestrian access route to the site is an improvement Weaknesses - Pedestrian access and links between the City Centre and the site need to be more direct and line-of-sight. - Unable to see the restaurant entry from Canning Road when looking through the brick archway structure. - Dog wash hidden by bin store.

		- The internal road and vehicle movement at the junction between fast food outlet / pick up exit and the car wash entry will likely create confusion and potential safety issues. Recommendations - Create a pronounced entry structure to the restaurant to improve visibility from Canning Road. - Switch the bin store and dog was area.
SAFETY		Strengths - The introduction of the dedicated pedestrian thoroughfares is an improvement of the previous DRP presentation. - The reduction of the two main entry and exit cross-overs has improved pedestrian movement and legibility. Weaknesses - Crossovers are in different materiality to the footpath, giving a sense of priority to vehicles. Recommendations - Ensure all pedestrian crossing utilise the same change in materiality and raised treatments to slow cars down. - Ensure crossovers are the same visual quality as the footpaths.
COMMUNITY		Strengths - McDonald employment opportunities is encouraging for the community, however the built form should respond to the requirements of the activity centre strategy. - The comments from the previous review remain unchanged. The parklet at the busy intersection would provide very little community benefit. Weaknesses - Pylon sign on Canning Road frontage is not consistent with a traditional Town Centre setting Recommendations - All signage should be restricted to the building proper or possibly on low walls along the boundary. Consider signage location and scale to the prevailing streetscape and context of a community town.
AESTHETICS		Strengths

		- High quality materiality, context attempts to mesh with surroundings with use of brickwork and tones suited to the Kalamunda region with the exception of the signage. Weaknesses - Built form does not address the streets edge with a dedicated screen acting as the main elevation. - Push the built form to be unique to Kalamunda, not just the perimeter wall and screening treatments. - Large areas of paving and therefore risk of heat reflection and radiation. Recommendations - Bring the built form to the streets edge, provide a canopy for shelter and provide an active shop front arrangement. - Seek to protect and add shade trees to shade hard surfaces, consider replacing impermeable with permeable paving for standing and low-speed areas.
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Chair
Approval: **DAVID BARR**

Chair
Signature: 

City of
Kalamunda
Contact: Cardia Mariani
Cardia.mariani@kalamunda.wa.gov.au
08 9257 9875

PS ref: 8816
City ref: DA24/0569, DAP/25/02835

8 August 2025

City of Kalamunda
Via electronic correspondence: Cardia.Mariani@kalamunda.wa.gov.au

Attention: Cardia Mariani, Principal Statutory Planner

Dear Cardia,

**APPLICATION FOR DEVELOPMENT APPROVAL – MCDONALD'S KALAMUNDA AND CAR WASH
LOTS 29 (14) AND 28 (16) CANNING ROAD, AND LOT 3 (5) HEATH ROAD, KALAMUNDA
RESPONSE TO METRO OUTER DAP DEFERRAL**

Planning Solutions acts on behalf of McDonald's Australia Ltd and Pinecoast Pty Ltd, the proponents of the development application for the proposed fast food outlet and car wash on Lots 29 (14) and 28 (16) Canning Road, and Lot 3 (5) Heath Road, Kalamunda (**subject site**).

The application was presented to the Metro Outer Development Assessment Panel (**DAP**) meeting on 29 May 2025. The application was deferred by the Metro Outer DAP for a period of 180 days for the following reasons:

1. *To enable the Applicant to work with the City of Kalamunda to agree the scope of a modification/upgrade to the intersection of Canning Road/Heath Road to facilitate the operation of the development.*
2. *To enable the applicant to prepare and submit an amended Transport Impact Assessment to the satisfaction of the City of Kalamunda.*
3. *To enable the City of Kalamunda to prepare additional commentary on appropriate timing for implementation of modification/upgrade to the intersection of Canning Road/Heath Road.*
4. *To enable the City of Kalamunda to provide additional commentary on the impact of the parking shortfall on this site, when considered in the context of other parking shortfalls that have been approved in the immediate vicinity of the site and any justification for those shortfalls based on parking availability on or adjacent to the subject site.*
5. *To enable the applicant to provide and the City of Kalamunda to assess additional evidence-based justification for the proposed 24/7 trading hours, particularly in the context of likely demand for extended trading hours in the Kalamunda community.*
6. *To enable the City's Design Review Panel or Panel Chair to review the amended design and to provide final comments on the proposal.*

In response to the DAP deferral reasons, we provide the following additional information in support of the application:

1. Interim intersection upgrade concept prepared by Transcore (refer **Attachment 1**).
2. Revised Transport Impact Assessment prepared by Transcore (refer **Attachment 2**).
3. Written responses to the DRP minutes dated July 2025 (refer **Attachment 3**).
4. Truncation Technical Note (**Attachment 4**).

Deferral Reason 1, 2 and 3 - Traffic

Following the DAP's deferral of the application, the applicant and its consultant team met with the City on two occasions - 19 June 2025 and 16 July 2025 - to discuss the scope of the proposed interim intersection upgrade and the associated traffic modelling in the Revised Transport Impact Assessment (RTIA).

An interim intersection upgrade concept has been prepared by Transcore in response to the concerns raised by the DAP and the City. The proposed interim upgrade concept includes separate left and right turn lanes on Heath Road at the approach to the intersection, and sets back the right turn lane hold line to provide better sight lines for the left turning traffic onto Canning Road. The design intent of the interim intersection upgrade concept is to improve capacity at the intersection. Refer to **Attachment 1** for the interim intersection upgrade concept.

A RTIA has been prepared to model the interim intersection upgrade concept and its associated effect on the intersection. The RTIA includes a sensitivity analysis which confirmed that, with the proposed upgrade and the development traffic by year 2030, the intersection of Canning Road and Head Road will perform similar to the intersection, without any upgrade and without the development traffic. Refer to **Attachment 2** for the RTIA.

It is expected that the implementation of the interim intersection upgrade will provide the City with the opportunity to undertake the necessary studies to confirm the ultimate intersection upgrade, recommended to be implemented after 2030.

Deferral Reason 4 – Parking

We understand that, at the direction of the DAP, the City will be providing further comments in relation to the impact of the parking shortfall on this site, when considered in the context of approved parking shortfalls in the vicinity of the site.

To assist in the City's consideration, we offer the following additional parking justification:

- A 5 bay parking shortfall is proposed for the subject site when assessed against the car parking requirements of Table 3 of LPS3. The parking requirement for a Fast Food Outlet excludes the drive through. In reality, the drive through component will soften the actual demand for on-site parking, as the drive through services customers without generating any actual demand for customer parking.

By comparison, the parking requirement for a Restaurant under Table 3 of LPS3 is *1 bay for every 4 persons to be accommodated*. This requirement caters for actual demand, having regard to the number of customers expected to park on site and dine within the restaurant. Under the restaurant parking requirement, 20 bays would be required (based on 60 seats and 20 staff on the premises) and the proposed development would comply.
- The LPS3 car parking requirement for a Fast Food Outlet is a scheme provision designed to apply to the entire local government area. In the context of the Kalamunda town centre, it is appropriate to apply the recommended parking rate of 4.5 spaces per 100m², as outlined in Table 4 of the Kalamunda ACP. Under the Kalamunda ACP parking requirement, 13 bays would be required and the proposed development is compliant.
- As outlined in section 4.5.3 of the Kalamunda ACP, the parking rate of 4.5 spaces per 100m² has been recommended based on the level of current parking oversupply in the town centre. This recommendation is the result of various surveys and assessments in the Kalamunda town centre, and is important context in considering any on paper parking shortfall under LPS3.

Deferral Reason 5 – Trading Hours

In response to the DAP referral reasons and concerns raised by the adjoining owners and community, the trading hours are proposed to be reduced, for the both the McDonald's restaurant and car wash, from 24/7 to 5:30am to 11:30pm, seven days a week.

Evidence-based justification including an Environmental Noise Assessment, Transport Impact Assessment, Odour Assessment and Lighting Assessment, prepared by suitably qualified consultants, were submitted with the application. These technical assessments demonstrate compliance with the relevant requirements and legislation for 24/7 and night time trading hours. Accordingly, they remain applicable evidence-based justification for the proposed reduced trading hours.

Deferral Reason 6 - DRP Feedback

At the request of the DAP, the proposal was referred to the City's Design Review Panel (**DRP**) in July 2025 for final comments on the proposal. The DRP comments and the applicant's responses are provided in **Attachment 3**.

The applicant maintains the view that proposed development is an appropriate design response for the subject site, and strikes an appropriate balance between the operational requirements of a permitted land use, retention of significant trees and design aspirations under the City's planning framework.

Other – Truncation Requirement

Condition 7 of the City's original RAR requires the applicant to submit amended plans demonstrating an 8.5 metre (6m x 6m) truncation at the junction of Heath Road and Canning Road. We previously submitted a Technical Note, prepared by Transcore, which assesses the safe intersection sight distances under the Austroads Guide to Road Design Part 4A: Unsignalised and Signalised Intersections. Refer to **Attachment 4**.

Based on this assessment, it's our view that an 8.5 metre truncation is excessive and is contrary to the design aspirations of the Kalamunda ACP. An alternative 3m x 3m truncation would provide appropriate sight lines and not materially affect the proposed landscape feature at the corner of the subject site. It is requested condition 7 is amended as follows:

*Prior to lodging an application for a building permit, the applicant must submit amended plans demonstrating an ~~8.5 metre (6m x 6m)~~ **3m X 3m** truncation to be provided at the junction of Heath Road and Canning Road and ensure that all development is wholly contained within the subject allotment, including the timber framed structure annotated on the approved development plans to the satisfaction of the City of Kalamunda.*

CONCLUSION

We trust the information provided assists the City's response to the Metro Outer DAP and preparation of a revised Responsible Authority Report.

Should you have any queries or require further clarification in regard to the above matter, please do not hesitate to contact the writer.

Yours faithfully,

Marc Re

MARC RE
PRINCIPAL

ATTACHMENT 1
Interim Intersection Upgrade Concept

ATTACHMENT 2
Revised Transport Impact Assessment

ATTACHMENT 3
DRP Responses

ATTACHMENT 4
Truncation Technical Note

Applicant Responses to DRP comments dated July 2025

Principle	Evaluation	DRP Comment	Applicant Response
Context and Character		Strengths - The proposal provides direct pedestrian access from both Canning Road and Heath Road. Weaknesses - Car centric typologies and a design proposal located in the town centre that does not engage or contribute to the streetscape or community. - The pedestrian access paths are still primarily required to engage with vehicle traffic in queue formation that often leads to pedestrian paths being blocked pending on traffic flows and driver courtesy. - The prevailing streetscape brings the built form to the streets edge providing pedestrian activation. The proposal offsets the built form and wraps three lanes of bitumen between the street edge and the building that hosts all the activation. - The “M” signage incorporated into the ‘mesh screen wall’ is considered excessive in height and physical dimensions and should be reduced. - The current proposal has provided a new ‘arborculturist’ report, however the report only addresses 2 off trees on the site. The report has ignored at a minimum 3 off existing trees that are denoted as being removed. These trees are the ficus located on Heath Road and the 2 off deciduous trees located at the SE corner of the site –indicated as the vehicle drive through stack zone. A full review and report on those 3 off trees is recommended to be provided. - The Canning Road elevation maintains a screening device that masks the food outlet generic planning model and does not try and integrate the planning into a town centre response. - The success of the landscape ‘creeper’ wall will be highly dependent upon the maintenance initiatives and protocols that are put in place. Recommendations - The edge to Canning and Heath Roads needs to be functionally safe, enjoyable and contributory to the streetscape. Transition from centre of town to residential neighbourhood in terms of character and scale.	- Significant effort has been made by the design team, and the design has evolved through the application process, to engage and contribute to the streetscape through the proposed building ‘edge’ and street facing facades, pedestrian gateway and external public seating area. These elements are well beyond a standard McDonald’s development or food operator, and have been introduced to the elevate the design in the context of the Kalamunda town centre, whilst having regard to other important design considerations including tree retention and the operational requirements of the permitted land use. - The pedestrian crossing from Canning Road to the McDonald’s restaurant has been designed to create pedestrian priority. This is achieved through a raised crossing, zebra line markings and red asphalt materiality. - Condition 8 of the City’s original RAR proposes to reduce the height of the pylon signage to 6.5 metre. The applicant does not object to this condition and an amended signage proposal will be implemented prior to lodgement of a building permit application. - An Arboriculture Assessment Report was submitted with the original development application submission. This report provides an overview of the health and condition of the existing trees on the subject site. The Impact Assessment and Tree Protection Plan submitted to the City as part of the RFI response provides specific measures and recommendations to protect the two existing Marri trees. - The focus for tree retention has been around the two existing, native Marri trees. It is not possible or practical to retain additional trees on the subject site, particularly in the context of the development aspirations of the Kalamunda ACP and design guidelines. Other more intensive forms of development or other land uses, with less open areas and accessways, would likely result in the removal of more trees. - The proposed building ‘edge’, street facing facades, pedestrian gateway and outdoor seating area are all non-standard McDonald’s design elements

Principle	Evaluation	DRP Comment	Applicant Response
			that have been introduced to elevate the design outcome in the response to the Kalamunda town centre context. The proposed development is an appropriate design transition from commercial to residential along the western side of Canning Road and south of Heath Road. As the adjoining land to the south is residential, it disconnects the subject site from the main street commercial frontage on Canning Road. Any retail shop building frontage will terminate at the southern boundary of the site and not provide a continuous main street frontage, compared to other areas in the town centre where a continuous retail frontage is achievable.
Landscape Quality		Strengths - Retention of two significant mature native trees and augmentation with ornamental species – reflecting the diverse landscape character of the town centre. - Provision of a qualified arborist report assessing the trees and proposal, with recommendations for the design and management to ensure successful retention. Weaknesses - Other significant trees are being removed. - Lack of new tree planting and use of small canopy species unlikely to offset the loss of existing canopy or achieve will not achieve 20% canopy cover at maturity as per the City's Urban Forest Strategy. - The proposal to use climbing trellises to infill the Canning Road screening façade is likely to fail pending on the maintenance regime applied and the selection of the appropriate climbing plant that will endure the exposed conditions. - Landscape areas are incohesive and constrained in size, creating a poor landscape setting for the development. - An updated landscape plan was not provided to reflect the revised development proposal. - The removal of the established Ficus tree on Heath Road and the subsequent location of the Western Power transformer shows little consideration has been provided for tree retention when modest replanning of the site would allow the western	- The focus for tree retention has been around the two existing, mature Marri trees. It is not possible or practical to retain additional trees on the subject site, particularly in the context of the development aspirations of the Kalamunda ACP and design guidelines. Other more intensive forms of development or other land uses, with less open areas and accessways, would likely result in the removal of more trees. - The Landscape Concept proposes up to 10 new trees along the Heath Road and Canning Road frontages, as well as various shrub planting along the boundaries and throughout the site. The selected tree species are Jacaranda and Crepe Myrtle trees – these trees are specifically recommended for the town centre in the City's Kalamunda Activity Centre – Landscape Master Plan. - The combination of the two existing Marri trees and significant new tree planting will provide a high quality landscaping outcome for the site. The proposed landscaping plan will be updated prior to the submission of the building permit application. - To suggest that the applicant has provided "little consideration" for tree retention is incorrect. The applicant has made genuine and significant efforts to retain the two Marri trees – which have significant history, environmental and social value. The project arborist and civil engineer have worked closely to find practical and reasonable solutions to protect the Marri trees.

Principle	Evaluation	DRP Comment	Applicant Response
		power transformer to be relocated and the tree retained. Recommendations • Prepare an updated landscape plan addressing the revised proposal. • Consolidate planting and overall landscape concept to create a more cohesive landscape setting. • Provide space for and utilise large tree canopy species, predominantly native, to reflect Kalamunda bushland setting. • The developer should provide a commitment to undertake the construction and tree health improvement methodologies outlined in the arborist report to minimise impact to the trees.	• The applicant has agreed to implement the recommendations of the Impact Assessment and Tree Protection Plan through condition 11 of the City's original RAR.
Built Form and Scale		Strengths • The scale of the development is supported, however the opportunity of engaging with the streetscape is not present and should be engaging with the street edge. Weaknesses • Street edges need to be reflective of a Kalamunda character, and this might involve less grand structures and more references to the town, scale, character and history. • Large building setbacks, lack of awnings over street footpaths and parking in front of buildings not consistent with the Town Centre built form. • Screening structures in gardens along Canning Rd boundary contrary to establishing a cohesive streetscape presence of the building. Recommendations • Bring the restaurant building to the street/s and shift vehicle uses behind the building. • If corner landscape treatment retained, consider the corner treatment in a way that makes the most use of the space, and presents it as a place of repose, rather than a static display of gardening and structures. • The materiality of the built form be reviewed to provide a more unique and locality responsive outcome	• The Design Masterplan submitted with the development application provides references and precedents from the Kalamunda town centre in terms of scale, character, history, materiality and textures. These themes have been considered and implemented into the design of the building 'edge', street facing facades and public realm areas, and building materiality. • Creating a cohesive streetscape and continuous retail building frontage along Canning Road, as suggested, is not practical on the western side of Canning Road, south of Heath Road, as any building frontage will terminate at the southern boundary due to the existing low density residential development. The opportunity for a continuous retail building frontage exists along the eastern side of Canning Road and north of Heath Road. • Due to the operational requirements of the McDonald's restaurant, which is a permitted land use, the drive through needs to wrap around the building. Several design layouts have been tested, which are not workable having regard to the retention of the two large trees and other practical aspects. • The outdoor seating area at the corner has been designed as a place of repose – it includes bench seating, a shade structure and high quality landscaping. • As demonstrated through the Design Masterplan and development application report, materiality has been a key focus and integrated into the design to align with the Kalamunda context. This includes the use of brickwork, timber, laterite stone, earthy

Principle	Evaluation	DRP Comment	Applicant Response
			colour tones, pitched roof elements, tree preservation and high quality, recommended landscaping species.
Functionality and Build Quality		Strengths • Awning provided to restaurant building and covered walkway provided from Canning Road to the restaurant. • Ideally the awning and building engage with the streets edge and provide a canopy that can be utilised by the general public. Weaknesses • The service areas for the restaurant face the primary frontage of Canning Road. • Conversely, the dining space and play zone are set back and have no street frontage relationship. • No outdoor dining opportunities are provided. • The use of a street screen along Canning Road does not promote an active street front that is considered a key design outcome for the town centre Recommendations • Reconfigure restaurant building to ensure activate functions have a better relationship to the street. • Canopy to building to provide protection to the footpath and be part of the urban streetscape.	• The service areas are sleeved by the street facing facades. The proposal is a functional and responsive layout for the site, having regard to the tree retention measures and operational requirements and characteristics of the permitted land use. • The combination of the building 'edge' and street facing facades, pedestrian gateway and outdoor seating area create an interesting and attractive presentation to Canning Road. These elements elevate the overall design outcome, whilst maintaining the operational characteristics of the permitted land use.
Sustainability		Strengths • Social Sustainability - Employment opportunities was presented in DRP 1 encouraging programmes to employ locals. • Although no specific sustainability submission has been provided it is noted that a more substantial solar panel installation has been indicated on the drive through portico albeit the orientation would need to be reviewed to optimise performance. Weaknesses • Large extents of hardstand surrounding the buildings and minimal soft landscape create a heat island effect. Recommendations • Consider the provision of EV charging stations to staff parking bays. • Provide a document that clearly outlines the how the design responds to the sustainability principle SPP 7.0.	• The proposal includes 880m² of soft landscaping, which equates to 21.7% of the site. This is well beyond the soft landscaping provided for other commercial or town centre developments. This, in combination with the retention of two existing, large Marri trees, the use of permeable paving and red asphalt, will assist in managing the urban heat island effect. • The applicant, on several occasions, has outlined the sustainability measures proposed as part of this proposal. These include: • Zero gas usage • Roof top solar panels • High efficiency HVAC system • LED signage and lighting • Heat recovery hot water system • Weatherex external cladding system – natural material comprising 97% hardwood and 3% paraffin wax • Recycled wheelstops • 80% recycled playland & recycled soft fall

Principle	Evaluation	DRP Comment	Applicant Response
Amenity		Strengths - A more detailed waste and odour management plan has been provided. Weaknesses - The site is an outlier to the surrounding character and function. - Concerns by residents regarding impacts of 24-hour use noted. - Inadequate shade and cover provided to street footpaths. - Acoustic concerns to nearby residential buildings and local church. Cars sitting idle whilst waiting for food at all hours of the day and night. Recommendations - Awnings to be provided to street footpaths. If this is not possible, at least provide continuous large tree canopy to street boundaries to improve amenity for pedestrians. - The proponent be requested to address the deficiencies in the Waste Management Plan, Odour Management Plan and the Traffic Impact Report.	- The Waste Management Plan, Odour Management Plan, Transport Impact Assessment, Acoustic Assessment and Lighting Assessment have all been prepared by suitably qualified and experienced consultants, and demonstrate compliance with the relevant standards. It is unclear what deficiencies are requested to be addressed. - An Acoustic Assessment submitted with the Development Application demonstrates compliance with relevant noise standards. At the request of the City, a masonry wall has been proposed along the southern boundary. - In response to community feedback, the trading hours are proposed to be reduced, for the both the McDonald's restaurant and car wash, from 24/7 to 5:30am to 11:30pm, seven days a week.
Legibility		Strengths - Seeks to address the streets and intersection, albeit with landscape treatments and structural features - Clear pedestrian connection provided from the street footpaths to the two buildings - Reduction in two way entry cross-overs to one has improved vehicular legibility. - The creation of a more identifiable pedestrian access route to the site is an improvement Weaknesses - Pedestrian access and links between the City Centre and the site need to be more direct and line-of-sight. - Unable to see the restaurant entry from Canning Road when looking through the brick archway structure. - Dog wash hidden by bin store. - The internal road and vehicle movement at the junction between fast food outlet / pick up exit and the car wash entry will likely create confusion and potential safety issues. Recommendations - Create a pronounced entry structure to the restaurant to improve visibility from Canning Road.	- The outdoor seating area has been planned and designed to create a clear pedestrian connection between the site and the town centre. Low scale building elements have used to provide clear sight lines to the restaurant, whilst creating interest and pedestrian amenity at the corner. - Clearly defined and visible pedestrian pathways from both Canning Road and Heath Road are provided to the McDonald's restaurant. - The inclusion of the pedestrian accessway and gateway façade element on Canning Road substantially improves the primary pedestrian access for the development. - The Transport Impact Assessment, prepared by a suitably qualified and experienced consultant, has not identified any safety issues within the site, nor have the City's engineers or peer view traffic consultant.

Principle	Evaluation	DRP Comment	Applicant Response
		Switch the bin store and dog was area.	
Safety		Strengths - The introduction of the dedicated pedestrian thoroughfares is an improvement of the previous DRP presentation. - The reduction of the two main entry and exit cross-overs has improved pedestrian movement and legibility. Weaknesses - Crossovers are in different materiality to the footpath, giving a sense of priority to vehicles. Recommendations - Ensure all pedestrian crossing utilise the same change in materiality and raised treatments to slow cars down. - Ensure crossovers are the same visual quality as the footpaths.	- The pedestrian crossing from Canning Road to the McDonald's restaurant has been designed to create pedestrian priority. This is achieved through a raised crossing, zebra line markings and red asphalt materiality. - Raised treatments at the proposed crossovers can be reviewed and considered prior to the lodgement of the building permit application, subject to compliance with the relevant engineering standards.
Community		Strengths - McDonald employment opportunities is encouraging for the community, however the built form should respond to the requirements of the activity centre strategy. - The comments from the previous review remain unchanged. The parklet at the busy intersection would provide very little community benefit. Weaknesses - Pylon sign on Canning Road frontage is not consistent with a traditional Town Centre setting Recommendations - All signage should be restricted to the building proper or possibly on low walls along the boundary. Consider signage location and scale to the prevailing streetscape and context of a community town.	- The McDonald's development responds to the activity centre – it is a permitted land use and integrates design elements and materiality that align with the context and character of Kalamunda. - The outdoor seating area is appropriately located at the juncture of the existing verge footpaths on Heath Road and Canning Road, connecting the west and south respectively. This location provides a strong connection to the pedestrian network and town centre. - Signage has been significantly toned down through the design review and application process – the original proposal presented to DRP1 had a freestanding pylon sign at the corner. The proposed signage is well integrated into the development design. It is not uncommon to have pylon signs within district centres.
Aesthetics		Strengths - High quality materiality, context attempts to mesh with surroundings with use of brickwork and tones suited to the Kalamunda region with the exception of the signage. Weaknesses - Built form does not address the streets edge with a dedicated screen acting as the main elevation. - Push the built form to be unique to Kalamunda, not just the perimeter wall and screening treatments.	- The McDonald's restaurant building and car wash building implement built form and materiality elements that are unique to Kalamunda including brickwork, timber and pitched roof elements (car wash). A significant effort has been made by the design team to make this development unique to Kalamunda. - The combination of the building 'edge' and street facing facades, pedestrian gateway and outdoor seating area create an interesting and attractive presentation to Canning Road. These

Principle	Evaluation	DRP Comment	Applicant Response
		- Large areas of paving and therefore risk of heat reflection and radiation. Recommendations - Bring the built form to the streets edge, provide a canopy for shelter and provide an active shop front arrangement. - Seek to protect and add shade trees to shade hard surfaces, consider replacing impermeable with permeable paving for standing and low-speed areas.	elements elevate the overall design outcome, whilst maintaining the operational characteristics of the permitted land use. The proposal includes 880m² of soft landscaping, which equates to 21.7% of the site. This, in combination with the retention of two existing, large Marri trees, the use of permeable paving and red asphalt, will assist in managing the urban heat island effect.

Attachment 7

Metro Outer Meeting of 29 May 2025 –
Previous Responsible Authority Report and
Attachments

[29 May 2025 - Agenda-No 81 - City of
Kalamunda](#)



PART C – OTHER BUSINESS

- 1. State Administrative Tribunal Applications and Supreme Court Appeals**
- 2. Meeting Closure**