



City of Cockburn
Ordinary Council Meeting
Agenda Paper

For Thursday, 11 April 2019



City of Cockburn
PO Box 1215, Bibra Lake
Western Australia 6965

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Coleville Crescent, Spearwood

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NOTICE OF MEETING

Pursuant to Clause 2.4 of Council's Standing Orders, an Ordinary Meeting of Council has been called for Thursday 11 April 2019. The meeting is to be conducted at 7:00 PM in the City of Cockburn Council Chambers, Administration Building, Coleville Crescent, Spearwood.

The Agenda will be made available on the City's website on the Friday prior to the Council Meeting.

A handwritten signature in black ink, appearing to read 'Stephen Cain', is positioned above the printed name and title.

Stephen Cain
CHIEF EXECUTIVE OFFICER

CITY OF COCKBURN

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CITY OF COCKBURN

AGENDA TO BE PRESENTED TO THE ORDINARY COUNCIL MEETING TO BE HELD ON THURSDAY, 11 APRIL 2019 AT 7:00 PM

- 1. DECLARATION OF MEETING**
- 2. APPOINTMENT OF PRESIDING MEMBER (IF REQUIRED)**
- 3. DISCLAIMER (TO BE READ ALOUD BY PRESIDING MEMBER)**

Members of the public, who attend Council Meetings, should not act immediately on anything they hear at the Meetings, without first seeking clarification of Council's position. Persons are advised to wait for written advice from the Council prior to taking action on any matter that they may have before Council.
- 4. ACKNOWLEDGEMENT OF RECEIPT OF WRITTEN
DECLARATIONS OF FINANCIAL INTERESTS AND CONFLICT
OF INTEREST (BY PRESIDING MEMBER)**
- 5. APOLOGIES & LEAVE OF ABSENCE**
- 6. WRITTEN REQUESTS FOR LEAVE OF ABSENCE**

Nil
- 7. RESPONSE TO PREVIOUS PUBLIC QUESTIONS TAKEN ON
NOTICE**

Nil
- 8. PUBLIC QUESTION TIME**

9. CONFIRMATION OF MINUTES

9.1 MINUTES OF THE ORDINARY COUNCIL MEETING - 14/3/2019

RECOMMENDATION

That Council confirms the Minutes of the Ordinary Council Meeting held on Thursday, 14 March 2019 as a true and accurate record.

9.2 MINUTES OF THE SPECIAL COUNCIL MEETING - 28/3/2019

RECOMMENDATION

That Council confirms the Minutes of the Special Council Meeting held on Thursday, 28 March 2019 as a true and accurate record.

10. DEPUTATIONS

11. BUSINESS LEFT OVER FROM PREVIOUS MEETING (IF ADJOURNED)

Nil

12. DECLARATION BY MEMBERS WHO HAVE NOT GIVEN DUE CONSIDERATION TO MATTERS CONTAINED IN THE BUSINESS PAPER PRESENTED BEFORE THE MEETING

13. COUNCIL MATTERS

Nil

14. PLANNING & DEVELOPMENT DIVISION ISSUES

14.1 RETROSPECTIVE APPROVAL - STORAGE YARD, SEA CONTAINER AND OUTBUILDING - 43 (LOT 6) ALBION AVENUE, MUNSTER

Author(s)	C Thatcher
Attachments	<ol style="list-style-type: none"> 1. Location Plan ↓ 2. Site Plan ↓ 3. Storage Yard ↓ 4. Outbuilding Perspectives ↓ 5. Sea Container Perspectives ↓
Location	43 (Lot 6) Albion Avenue Munster
Owner	SUPPRESSED
Applicant	Nikica Maric (BFC Services) & SUPPRESSED
Application Reference	DA18/0942 & DA18/0943

RECOMMENDATION

That Council:

- (1) grant temporary Planning Approval for a Storage Yard at 43 (Lot 6) Albion Avenue, Munster, in accordance with the approved plans and subject to the following conditions and footnotes:

Conditions

1. This is a temporary approval only, valid for a period of 2 years from the date of this decision. Upon expiry of this date the use shall cease unless a subsequent planning approval is issued by the City.
2. All stormwater being contained and disposed of on-site to the satisfaction of the City.
3. Within 60 days from the date of this approval, a detailed Dust Management Plan (DMP) shall be submitted to and approved by the City. The DMP shall then be implemented at all times to the satisfaction of the City.
4. If dust is detected at adjacent premises and is deemed to be a nuisance by the City, then any process, equipment and/or activities that are causing the dust nuisance shall be stopped until the process, equipment and/or activity has been altered to prevent the dust from occurring, to the satisfaction of the City.
5. The premises shall be kept in a neat and tidy condition at all times by the owner/occupier to the satisfaction of the City.

Footnotes

1. This is a Planning Approval only and does not remove the responsibility of the applicant/owner to comply with all relevant building, health and engineering requirements of the Council, or with any requirements of the City of Cockburn Local Planning Scheme No.3. Prior to the commencement of any works associated with the development, a building permit will be required.
 2. With regard to Condition 1, you are advised that if you intend to continue the use of the land beyond the expiration of the approval period, further application must be lodged with the City prior to the expiration date for determination. It should be noted that further approval may not be granted depending on circumstances pertaining to the use and or development of the land in the context of the surrounding locality.
 3. With regard to Condition No. 2, the City requires the onsite storage capacity be designed to contain a 1 in 20 year storm of 5 minute duration. This is based on the requirements to contain surface water by the National Construction Code.
 4. With regard to Condition 3, the detailed Dust Management Plan shall comply with the City's "Guidelines for the Preparation of a Dust Management Plan for Development Sites within the City of Cockburn".
 5. The development shall comply with the noise pollution provisions of the Environmental Protection Act 1986, and more particularly with the requirements of the Environmental Protection (Noise) Regulations 1997.
- (2) grant temporary Planning Approval for a Sea Container & Outbuilding at 43 (Lot 6) Albion Avenue, Munster, in accordance with the approved plans and subject to the following conditions and footnotes:

Conditions

1. This is a temporary approval only, valid for a period of 2 years from the date of this decision. Upon expiry of this date the use shall cease and all development the subject of this approval shall be removed unless a subsequent planning approval is issued by the City.
2. All stormwater being contained and disposed of on-site to the satisfaction of the City.

3. Within 60 days from the date of this approval, the sea container approved as part of this application shall be painted to match existing buildings on the subject land to the satisfaction of City.
4. Outbuilding(s) shall only be used for domestic purposes associated with the property, and shall not be used for human habitation or commercial purposes.

Footnotes

1. This is a Planning Approval only and does not remove the responsibility of the applicant/owner to comply with all relevant building, health and engineering requirements of the Council, or with any requirements of the City of Cockburn Local Planning Scheme No.3. Prior to the commencement of any works associated with the development, a building permit will be required.
 2. With regard to Condition 1, you are advised that if you intend to retain the development on the land beyond the expiration of the approval period, further application must be lodged with the City prior to the expiration date for determination. It should be noted that further approval may not be granted depending on circumstances pertaining to the use and or development of the land in the context of the surrounding locality.
 3. With regard to Condition No. 2, the City requires the onsite storage capacity be designed to contain a 1 in 20 year storm of 5 minute duration. This is based on the requirements to contain surface water by the National Construction Code.
- (3) notify the applicant and those who made a submission of Council's decision.

Background

The subject property is 1.13ha in area and abuts other similar properties to the south, east and west and Albion Avenue to the north. The lot is relatively cleared with minimal existing vegetation on-site. At present the lot contains an existing residential dwelling which is approximately 179m² in area with an adjoining carport.

Two proposals for the subject site (contained in two separate applications) are being referred to Council for determination due to the uncertainty of the future development of the area.

Submission

N/A

ReportProposal

There are two retrospective development applications for this site, as follows:

Proposal 1 (DA18/0942) – Storage Yard

- 58.5m south of Albion Avenue behind the existing dwelling;
- 300m² in area (30m x 10m);
- 2.4m high fencing enclosing the storage yard;
- Storage of scaffolding and general construction materials by a building company;
- One truck and one utility vehicle associated with the storage yard;
- Four vehicle arrivals/departures movements a week;
- No external lights; and
- No employees related to the storage yard reside at the premises.

Proposal 2 (DA18/0943) – Sea Container and Outbuildings

Sea container

- 16m south of Albion Avenue behind the existing dwelling;
- 15.6m² in area (2.4m x 6.5m and 2.9m high); and
- Enclosed by 1.7m high fencing.

Outbuilding (Garden Shed)

- 43m south of Albion Avenue behind the existing dwelling;
- 17.5m² in area (3.5m x 5m and 2.2m high); and
- Storage of residential items and tools.

Outbuilding (Bore Well Shed)

- 43m south of Albion Avenue behind the existing dwelling; and
- 24.5m² in area (3.5m x 7m and 2.7m high).

Planning Framework*Metropolitan Region Scheme (MRS)*

The subject site is zoned 'Urban Deferred' under the Metropolitan Region Scheme (MRS).

Town Planning Scheme No.3 (TPS 3)

The subject site is zoned 'Development' – Development Area 5 (Munster) under TPS 3. The objective of the Development Zone in TPS 3 is:

*'To provide for future residential, industrial or commercial development to be guided by a comprehensive **Structure Plan** prepared under the Scheme.'*

There is no adopted structure plan to guide existing or future intended development in the area; therefore an assessment will be undertaken in accordance with Clause 4.13 of TPS 3 which states that:

'4.13.1 - there shall be no change to any land use or development existing on land within the Development Zone, without the owner of the land having made an application for and received approval of the Local Government.'

Development Contribution Area 6 (DCA 6)

The subject site falls within Development Contribution Area 6 (DCA 6) of TPS 3. Clause 5.3.13 of TPS 3 states that:

'5.3.13.1 – An owner's liability to pay the owners cost contribution to the local government arises on the earlier of –

- (ii) the commencement of any development on the owner's land within the development contribution area;*
- (iv) the approval of a change of extension of use by the local government on the owners land within the development contribution area.'*

Notwithstanding the above, as the retrospective use and structures should only be considered on a temporary basis, Clause 5.3.13.3 of TPS 3 states that;

'5.3.13.2 – An owner's liability to pay the owner's cost contribution does not arise if the owner:

- (ii) commences a temporary or time limited approval.'*

Further discussion relating to the consideration of the retrospective use and structures on a temporary basis will be included in the assessment section of the report.

Local Planning Policy 2.4 – Outbuildings (LPP 2.4)

LPP 2.4 guides the development of Outbuildings to ensure uniform development requirements. Part 4 of the policy states that:

‘Subject to Clause 8 of this Policy outbuildings proposed in the Development Zone where there is no structure plan will be assessed on their merits having regard to the future intent of the area. In any case, the development standards shall not exceed those for outbuildings in rural areas.’

Local Planning Policy 5.8 - Sea Containers (LPP 5.8)

LPP 5.8 guides the placement and appearance to ensure the use of sea containers is managed effectively. Part 4 of the policy states that:

‘Development Applications for Sea Containers in a Development Zone will be assessed and determined on their merits taking into TPS 3 and the content of any Structure Plan that may apply.’

Community Consultation

The retrospective development applications were advertised to nine surrounding landowners for period of 21 days. Two submissions were received, both which supported the existing land use and structures.

Assessment

Location

The site is located within both the Kwinana Air Quality Buffer and the Woodman Point Wastewater Treatment Plant Odour Buffer. These buffers have largely stagnated development of the locality and have to date been identified as unsuitable for residential development. ‘Perth and Peel 3.5 Million’ identified the locality for Industrial investigation and it remains zoned ‘Urban Deferred’ under the MRS for this reason. Due to this, there is no existing or proposed structure plan to guide development within the locality. Therefore, any development approved in the area at this time should not detract from the amenity of existing residents and also should not prejudice the future development potential of the area. Given residential development cannot be supported under the current planning framework, approval of limited temporary commercial activities which can reasonably operate alongside residential uses may be an appropriate interim outcome.

Character

The character of the locality is mixed. To the east of the subject site along Albion Avenue (approximately 100m) outside the buffer zones, the character is clearly urban residential with detached single residential dwellings developed within the last ten years. The area within the buffer where the subject site is located has more of a rural character contained large cleared areas which is consistent with the former market garden land uses throughout the area, some of which are still in operation. Whilst the storage yard would generally not contribute to rural character, much of the land in the locality has been cleared of vegetation and contains small rural-type outbuildings. Due to its relatively small scale and screening, the existing storage yard doesn't erode the existing character of the area. It should however be noted that a larger scale storage yard that was not screened from the surrounding area could in fact negatively impact on the character of the locality and would be less appropriate.

Amenity

The retrospective storage yard and structures are positioned on the site so that they don't negatively impact on the amenity of adjoining residents and none of the neighbours lodged objections through the consultation process. This can largely be attributed to the size of the lots and the setbacks of the development creating adequate separation to neighbouring properties. The storage yard, sea container and outbuilding don't detract from the streetscape and the storage yard is screened from the side property boundaries and is located behind the dwelling, relatively concealed from Albion Avenue.

Traffic & Vehicle Movements

The applicant has stated on average that four additional vehicle movements commence per week, by the construction company using the storage yard and no vehicles are left on the property overnight. The minimal increase in vehicles coming to the property does not exceed the capacity of the road network and has a very minimal impact to adjoining neighbours considering the proximity of nearby dwellings.

Dust

There is no crossover to Albion from the subject site (including the dwelling) and no sealed driveway providing vehicle access to the Storage Yard. Should Council support the proposal, a condition should be imposed requiring the applicant to submit a dust management plan to the City for approval to ensure dust is controlled when vehicles enter and exit the property to prevent any dust impacts to adjoining and nearby properties.

Conclusion

The existing storage yard is relatively minor in scale, is located behind the existing residential dwelling and does not detract from the amenity of neighbours or the streetscape. The other outbuildings are consistent with others in the area and are also relatively minor in scale and do not detract from the amenity of neighbours or the streetscape. It is therefore recommended that both applications be approved on a temporary basis subject to conditions. A temporary approval for a two year period would provide a suitable development outcome for the landowner whilst not prejudicing the future development potential of the area which is subject to further planning investigation. Should the planning framework change in the future the development could be easily removed at minimal cost.

Strategic Plans/Policy Implications

City Growth

Ensure planning facilitates a desirable living environment and meets growth targets.

Economic, Social & Environmental Responsibility

Create opportunities for community, business and industry to establish and thrive.

Budget/Financial Implications

N/A

Legal Implications

N/A

Community Consultation

Community Consultation commenced on 03 January 2019. The consultation concluded on 24 January 2019, with 2 non-objections received.

Risk Management Implications

Should the applicant lodge a review of the decision with the State Administrative Tribunal, there may be costs involved in defending the decision, particularly if legal Counsel is engaged.

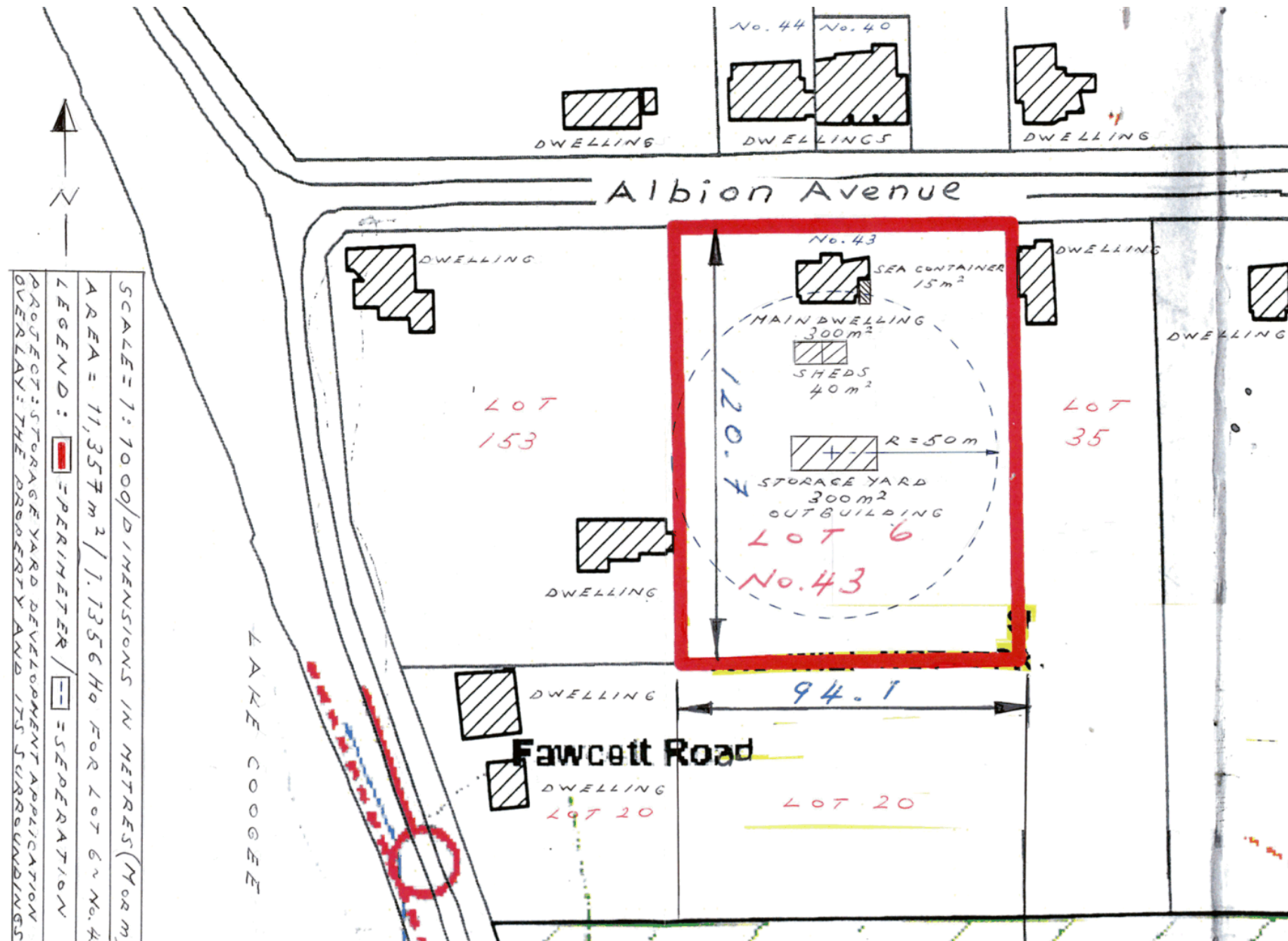
Advice to Proponent(s)/Submitters

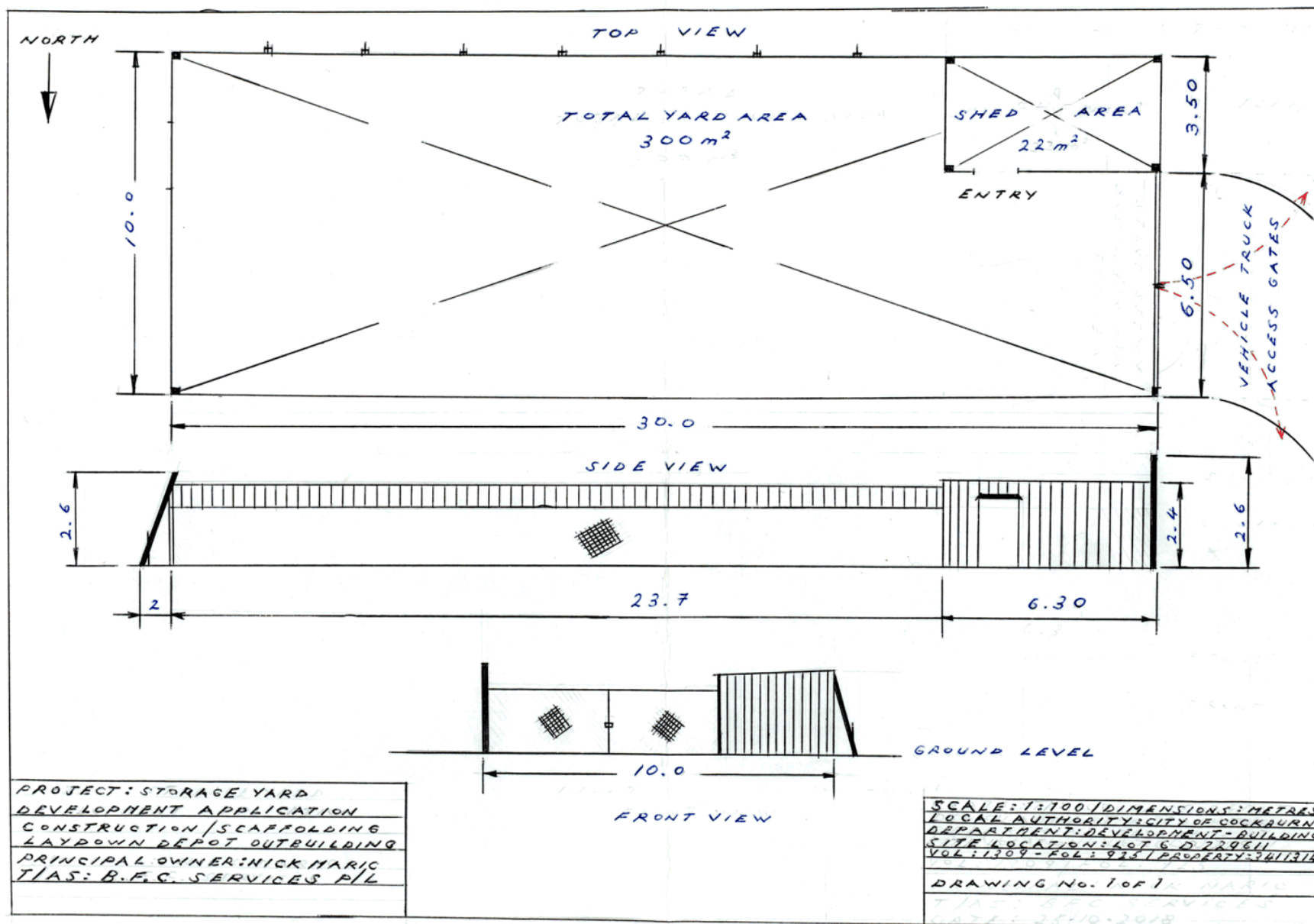
The Proponent(s) and those who lodged a submission on the proposal have been advised that this matter is to be considered at the 11 April 2019 Ordinary Council Meeting.

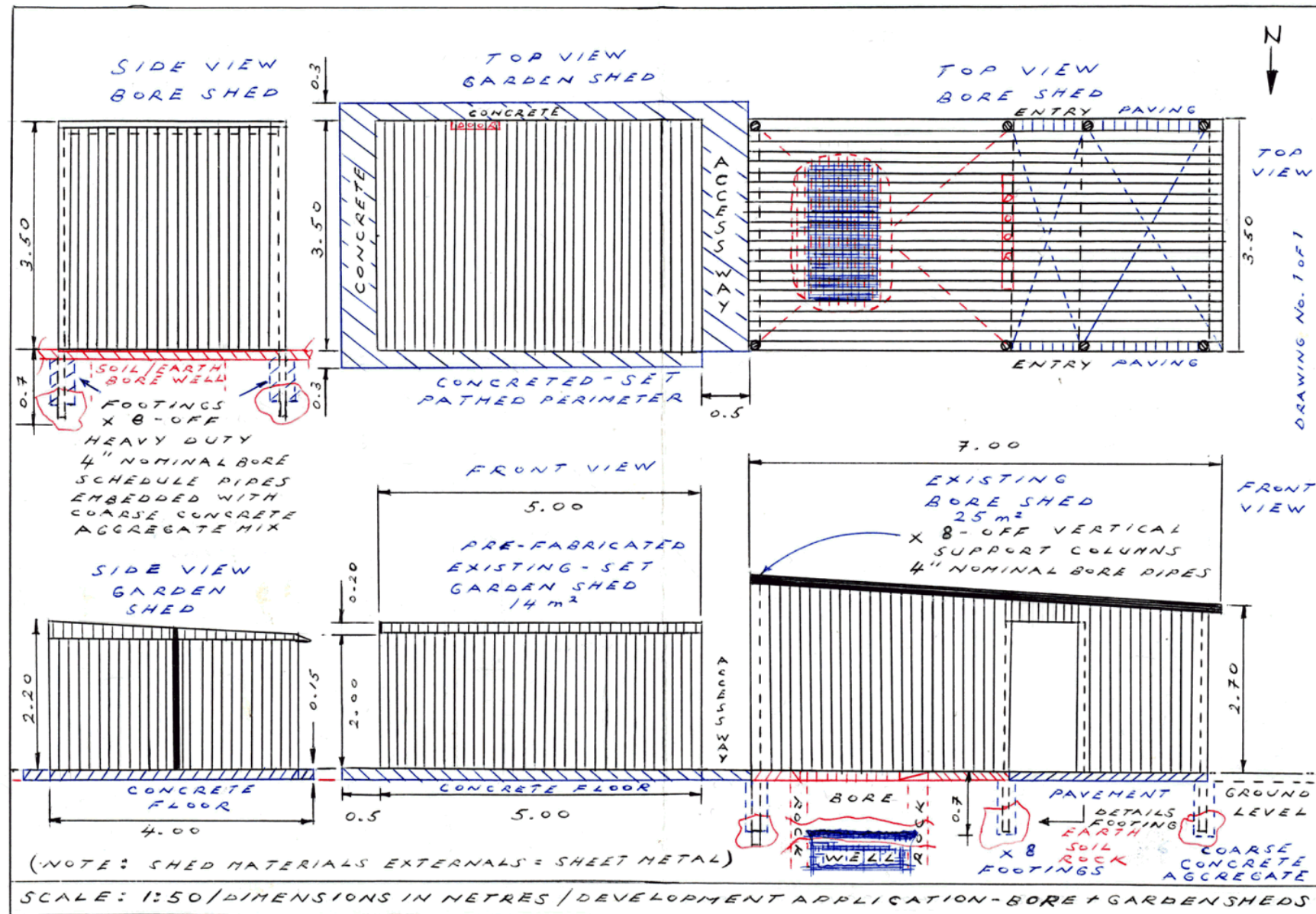
Implications of Section 3.18(3) *Local Government Act, 1995*

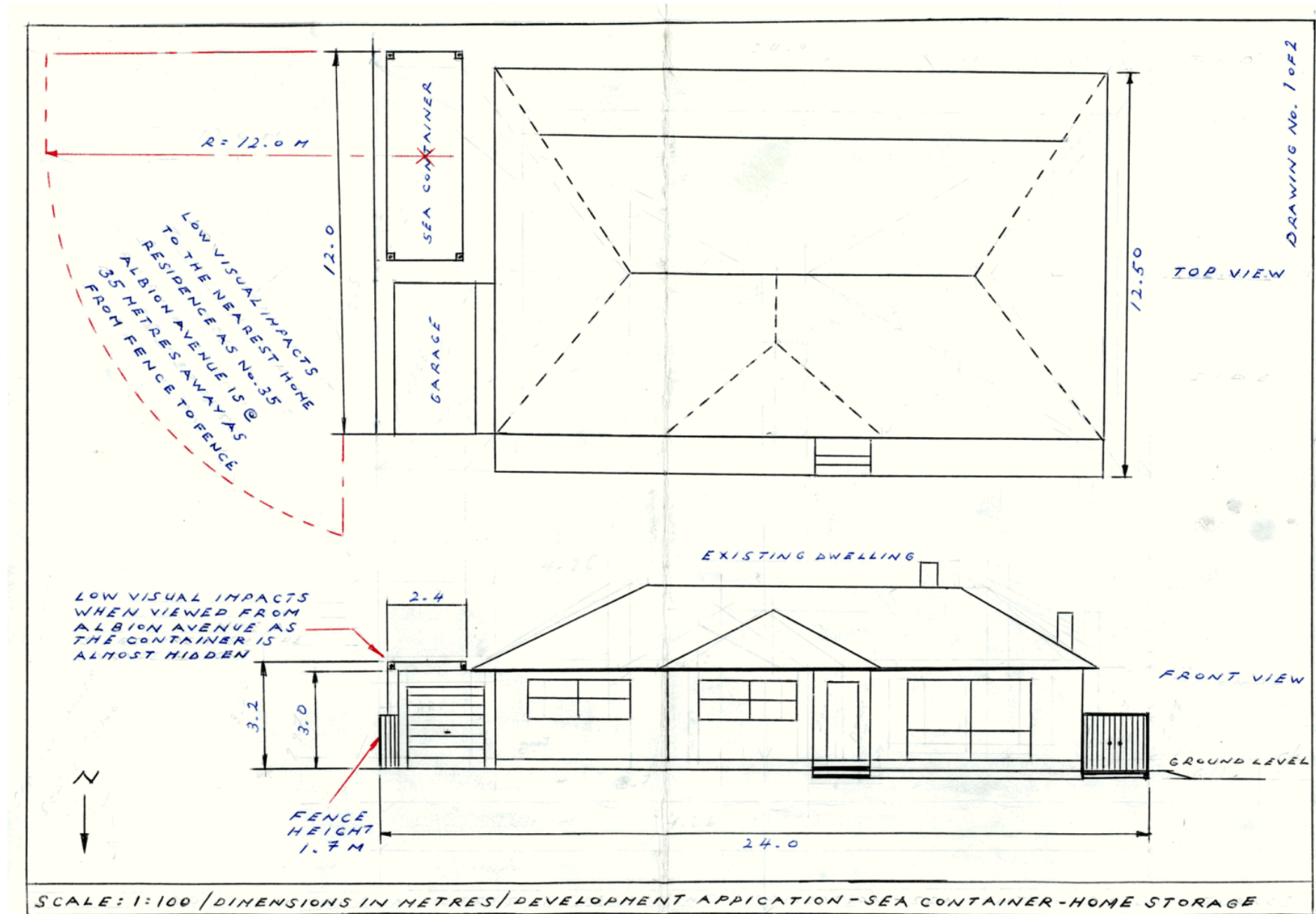
Nil.











14.2 DEVELOPMENT APPLICATION - RETROSPECTIVE COMMERCIAL VEHICLE PARKING, SEA CONTAINER & CARPORT - 35 (LOT 1) ALBION AVENUE, MUNSTER

Author(s)	C Thatcher
Attachments	1. Location Plan ↓ 2. Site Plan ↓ 3. Elevation ↓
Location	35 (Lot 1) Albion Avenue Munster
Owner	Kreppold Investments Pty Ltd
Applicant	Paul Kreppold
Application Reference	DA18/0978

RECOMMENDATION

That Council:

- (1) grant temporary retrospective Planning Approval for a commercial vehicle, sea container and carport located at 35 (Lot 1) Albion Avenue, Munster in accordance with the approved plans and subject to the following conditions and footnotes:

Conditions

1. This is a temporary approval only, valid for a period of 2 years from the date of this decision. Upon expiry of this date the commercial vehicle parking use shall cease and the sea container and carport shall be removed unless a subsequent planning approval is issued by the City.
2. Movement of the commercial vehicle at 35 (Lot 1) Albion Avenue Munster is limited to 7am – 5pm Monday to Friday.
3. All stormwater being contained and disposed of on-site to the satisfaction of the City.
4. Within 60 days from the date of this approval, a detailed Dust Management Plan (DMP) shall be submitted to and approved by the City. The approved DMP shall be implemented at all times to the satisfaction of the City.
5. Within 60 days from the date of this approval, a crossover application shall be submitted to and approved by the City, to formalise vehicle access. The crossover shall then be constructed in a timeframe to the satisfaction of the City.
6. Within 60 days from the date of this approval, the sea container approved as part of this application shall be painted to match the existing building on the subject land to the satisfaction of City.

7. If dust is detected at adjacent premises and is deemed to be a nuisance by the City, then any process, equipment and/or activities that are causing the dust nuisance shall be stopped until the process, equipment and/or activity has been altered to prevent the dust from occurring, to the satisfaction of the City.
8. The premises shall be kept in a neat and tidy condition at all times by the owner/occupier to the satisfaction of the City.
9. The commercial vehicle shall be parked in the allocated area, as shown in red on the approved plans, outside of the hours of operation illustrated in condition 2.

Footnotes

1. This is a Planning Approval only and does not remove the responsibility of the applicant/owner to comply with all relevant building, health and engineering requirements of the Council, or with any requirements of the City of Cockburn Local Planning Scheme No.3. Prior to the commencement of any works associated with the development, a building permit will be required.
 2. With regard to Condition 1, you are advised that if you intend to continue the use of the land beyond the expiration of the approval period, further application must be lodged with the City prior to the expiration date for determination. It should be noted that further approval may not be granted depending on circumstances pertaining to the use and or development of the land in the context of the surrounding locality.
 3. With regard to Condition No. 3, the City requires the onsite storage capacity be designed to contain a 1 in 20 year storm of 5 minute duration. This is based on the requirements to contain surface water by the National Construction Code.
 4. With regard to Condition No. 4, the detailed Dust Management Plan shall comply with the City's "Guidelines for the Preparation of a Dust Management Plan for Development Sites within the City of Cockburn".
 5. The development is to comply with the noise pollution provisions of the Environmental Protection Act 1986, and more particularly with the requirements of the Environmental Protection (Noise) Regulations 1997.
- (2) notify the applicant and those who made a submission of Council's decision.

Background

The subject property is 7,740m² in area and abuts other properties alike to the south, east and west and Albion Avenue to the north. The lot is relatively cleared with some vegetation surrounding the existing residence and along the western lot boundary. At present the lot contains an existing residential building approximately 224m² in area and 175m² outbuilding.

The proposal is being referred to Council for determination due to the uncertainty of the future development of the area and objections were received during consultation.

Submission

N/A

ReportProposal

The application is seeks retrospective approval for a carport, commercial vehicle parking and a sea container and is summarised as follows:

- Carport has been constructed alongside the existing dwelling, approximately setback 7.5m from the lot boundary, south of Albion Avenue, and directly abuts the western side boundary (No. 43 Albion Avenue).
- Sea container proposed is to be located directly behind the existing outbuilding. The sea container is approximately 6m x 2.45m, and is proposed to be setback approximately 3.5m from the western lot boundary, aligned with the existing outbuilding. The sea container will be used for security of personal storage items.
- One commercial vehicle is currently being parked on the property. The commercial vehicle is a truck associated with the landowner's business.
- Vehicle movements are contained to 7am-8am Monday to Friday while returning 3pm-5pm.

Planning Framework*Metropolitan Region Scheme (MRS)*

The subject site is zoned 'Urban Deferred' under the Metropolitan Region Scheme (MRS).

Town Planning Scheme No.3 (TPS 3)

The subject site is zoned 'Development' – Development Area 5 under TPS 3.

The objective of the Development zone in TPS 3 is:

'To provide for future residential, industrial or commercial development to be guided by a comprehensive Structure Plan prepared under the Scheme.'

There is no adopted structure plan to guide existing or future intended land uses, therefore an assessment will be undertaken in accordance with Clause 4.13 of TPS 3 which states that:

'4.13.1 - there shall be no change to any land use or development existing on land within the Development Zone, without the owner of the land having made an application for and received approval of the Local Government.'

Development Contribution Area 6 (DCA 6)

The subject site falls within Development Contribution Area 6 (DCA 6) of TPS 3. Clause 5.3.13 of TPS 3 states that;

'5.3.13.1 – An owner's liability to pay the owners cost contribution to the local government arises on the earlier of –

- (ii) the commencement of any development on the owner's land within the development contribution area;*
- (iv) the approval of a change or extension of use by the local government on the owners land within the development contribution area.'*

Notwithstanding the above, as the retrospective commercial vehicle and structures should only be considered on a temporary basis, Clause 5.3.13.3 of TPS 3 states that;

'5.3.13.2 – An owner's liability to pay the owner's cost contribution does not arise if the owner:

- (ii) commences a temporary or time limited approval.'*

Further discussion relating to the consideration of the retrospective commercial vehicle and structures on a temporary basis will be included in the assessment section of the report.

Local Planning Policy 5.8 - Sea Containers (LPP 5.8)

LPP 5.8 guides the placement and appearance to ensure the use of sea containers is managed effectively. Part 4 of the policy states that:

'Development Applications for Sea Containers in a Development Zone will be assessed and determined on their merits taking into TPS 3 and the content of any Structure Plan that may apply.'

Community Consultation

The retrospective development application was advertised to eight nearby landowners for a period of 21 days. Two submissions were received, both submissions were objecting to the parking of commercial vehicles. The concerns/issues raised are summarised as follows:

- Concerns with dust, noise, odour and general loss of rural amenity produced from the activity of the commercial vehicles on the premises;
- Undue impact such as noise caused by the 'ancillary' machines being loaded and unloaded on trailers i.e. (Bobcats, excavators, and front end loaders);
- Damage to council verge, kerbing and drainage via the applicant using 'ad-hoc' vehicle access to the rear of the property (no formalised crossover); and
- Privacy concerns due to the height of the cabs overlooking into adjoining properties.

Assessment*Location*

The site is located within both the Kwinana Air Quality Buffer and the Woodman Point Wastewater Treatment Plant Odour Buffer. These buffers have largely stagnated development of the locality and have to date been identified as unsuitable for residential development. 'Perth and Peel 3.5 Million' identified the locality as an 'Industrial Investigation Area' and it remains zoned 'Urban Deferred' under the Metropolitan Region Scheme (MRS). Due to these factors there is no existing or proposed structure plan to guide development within the locality. As such any development approved in the area at this time should not detract from the amenity of existing residents and also not prejudice future development of the area. Given residential development cannot be supported under the current planning framework, approval of limited temporary commercial activities which can operate alongside residential uses may be an appropriate interim outcome.

The character of the locality is mixed. To the east of the subject site along Albion Avenue (approximately 60m) outside the buffer zones, the character is clearly urban residential with detached single residential dwellings developed within the last ten years. The area within the buffer where the subject site is located has more of a rural character which is consistent with the former market garden land uses throughout the area, some of which are still in operation. Whilst the parking of a large commercial vehicle may be considered inconsistent with the rural character, much of the land in the locality has been cleared of vegetation and contains small rural-type outbuildings. It should however be noted that if the property was still zoned 'Rural' in TPS 3 then the parking of two commercial vehicles would be exempt from requiring planning approval. Additionally if the property was zoned 'Rural Living' then the parking of one commercial vehicle would be exempt from requiring planning approval.

Amenity

The impact of the parked commercial vehicle is causing the greatest concerns to the neighbours who objected to the application specifically in relation to impact on their visual amenity and the general management of how the vehicle is stored. There is however significant separation distances that exists between dwellings that limits the impact of the vehicle being contained on-site. Furthermore, the commercial vehicle if approved would need to be contained within an allocated area that conceals the vehicle from the public realm and prevents detrimental visual impacts to the existing amenity enjoyed by neighbours. Should Council support the proposal, appropriate conditions could be imposed on any approval to ensure 'best management practices' are exhibited to regulate the outcome. The conditions could address the following:

- Formalising the location of where the commercial vehicle is parked and restricting the times that the vehicle can enter and exit the property; and
- Dust management control, and the formalisation of vehicle access points.

It shall be noted that the ancillary machines stored on the property (bobcat & mini-excavator) are both less than 3.5 tonnes and therefore are exempt from requiring planning approval under Clause 4.10.8 of TPS 3.

The retrospective structures (carport and sea container) are minor additions to the site and don't have a negative impact on neighbours or the locality. Notwithstanding this, both structures should only be considered on a temporary basis, so as not to prejudice future development of the locality.

Noise

Concerns were raised by neighbours regarding the operation of machines on-site, particularly in relation to the loading and unloading of the machines onto the trailer attached to the commercial vehicle. Both ancillary machines do not constitute commercial vehicles as both are less than 3.5 tonnes and are exempt from requiring planning approval. However, the movement of vehicles will still be required to achieve compliance with the Environmental Protection (Noise) Regulations 1997, which limits noisy activities to a maximum of two hours a day 7am-7pm Monday to Saturday.

Dust

There are no formally constructed crossovers to Albion Avenue from the subject site where the commercial vehicle currently enters and exits the property and no sealed driveway or hardstand area where the commercial vehicle is parking. Should Council support the proposal, a condition should be imposed requiring the applicant to submit a dust management plan to the City for approval to ensure dust is controlled when the commercial vehicle enters and exits the property to prevent any impacts to abutting properties. In addition a crossover is required to be constructed between the property and the road reserve.

Conclusion

The proposal for retrospective commercial vehicle, sea container and carport at 35 Albion Avenue, Munster is supported for the following reasons:

- The parking of one commercial vehicle on the site is considered appropriate given the size of the lot subject to the parking of the vehicle being managed appropriately so as to not detract from the amenity of neighbours.
- The temporary use is considered an appropriate form of development in relation to the uncertainty of the future development potential of the area.
- The retrospective structures are of a minor nature and do not negatively impact on the amenity of neighbours of the locality.

It is therefore recommended that the proposal be approved on a temporary basis subject to conditions contained in the recommendation.

Strategic Plans/Policy ImplicationsCity Growth

Ensure planning facilitates a desirable living environment and meets growth targets.

Economic, Social & Environmental Responsibility

Create opportunities for community, business and industry to establish and thrive.

Budget/Financial Implications

N/A

Legal Implications

N/A

Community Consultation

Community Consultation commenced on 11 January 2019. The consultation concluded on 1 February 2019, with 2 objections received.

Risk Management Implications

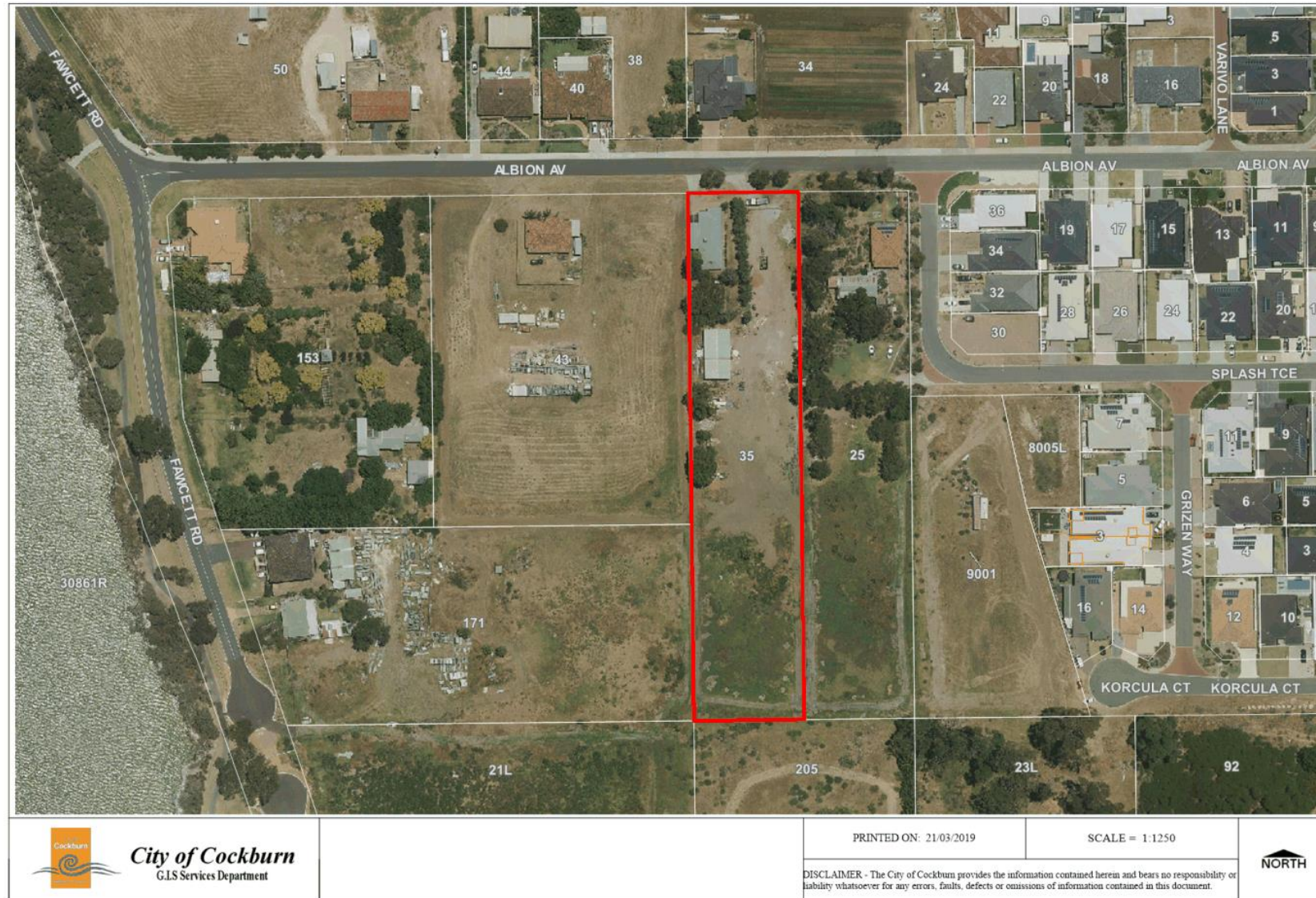
Should the applicant lodge a review of the decision with the State Administrative Tribunal, there may be costs involved in defending the decision, particularly if legal Counsel is engaged.

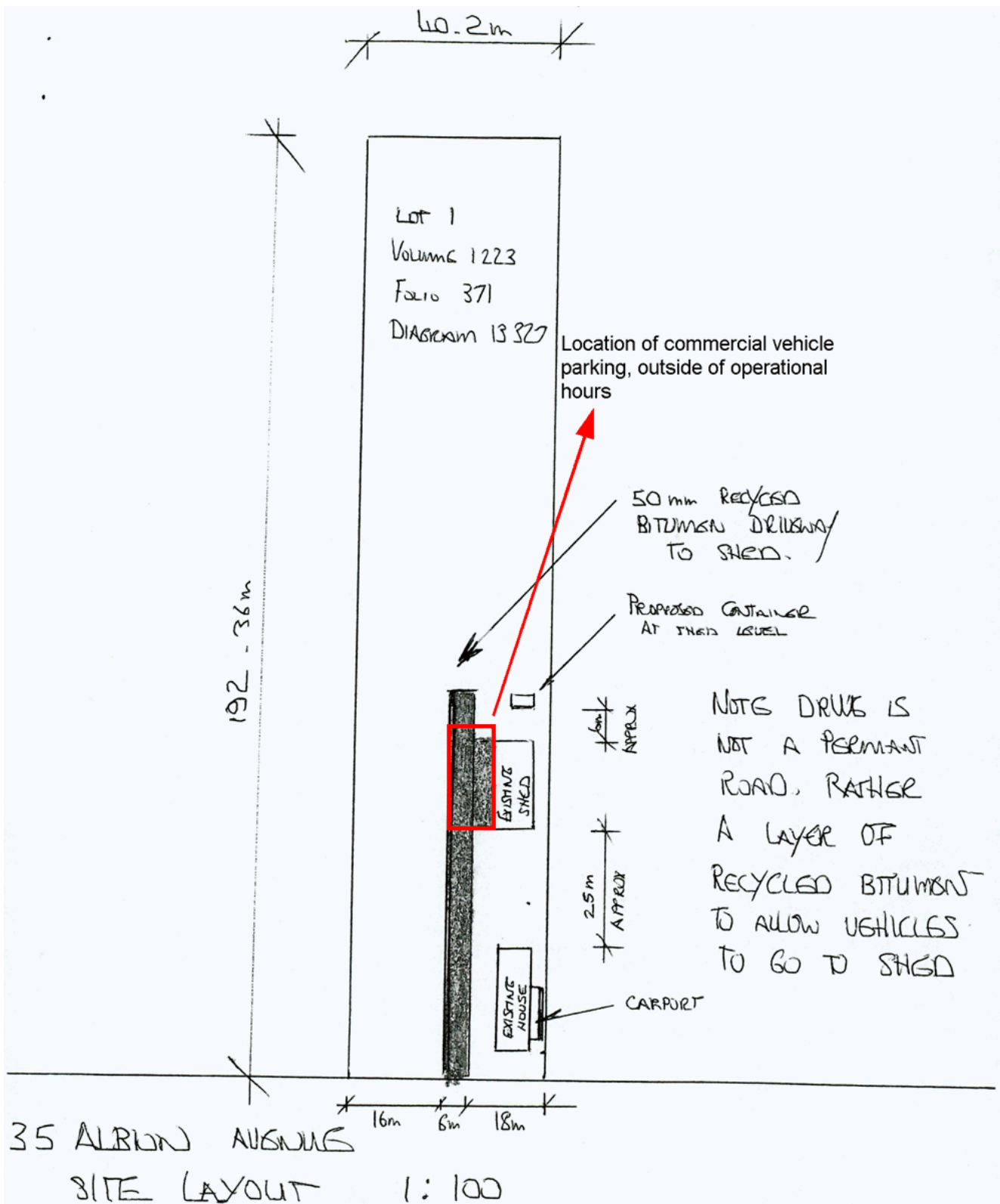
Advice to Proponent(s)/Submitters

The Proponent(s) and those who lodged a submission on the proposal have been advised that this matter is to be considered at the 11 April 2019 Ordinary Council Meeting.

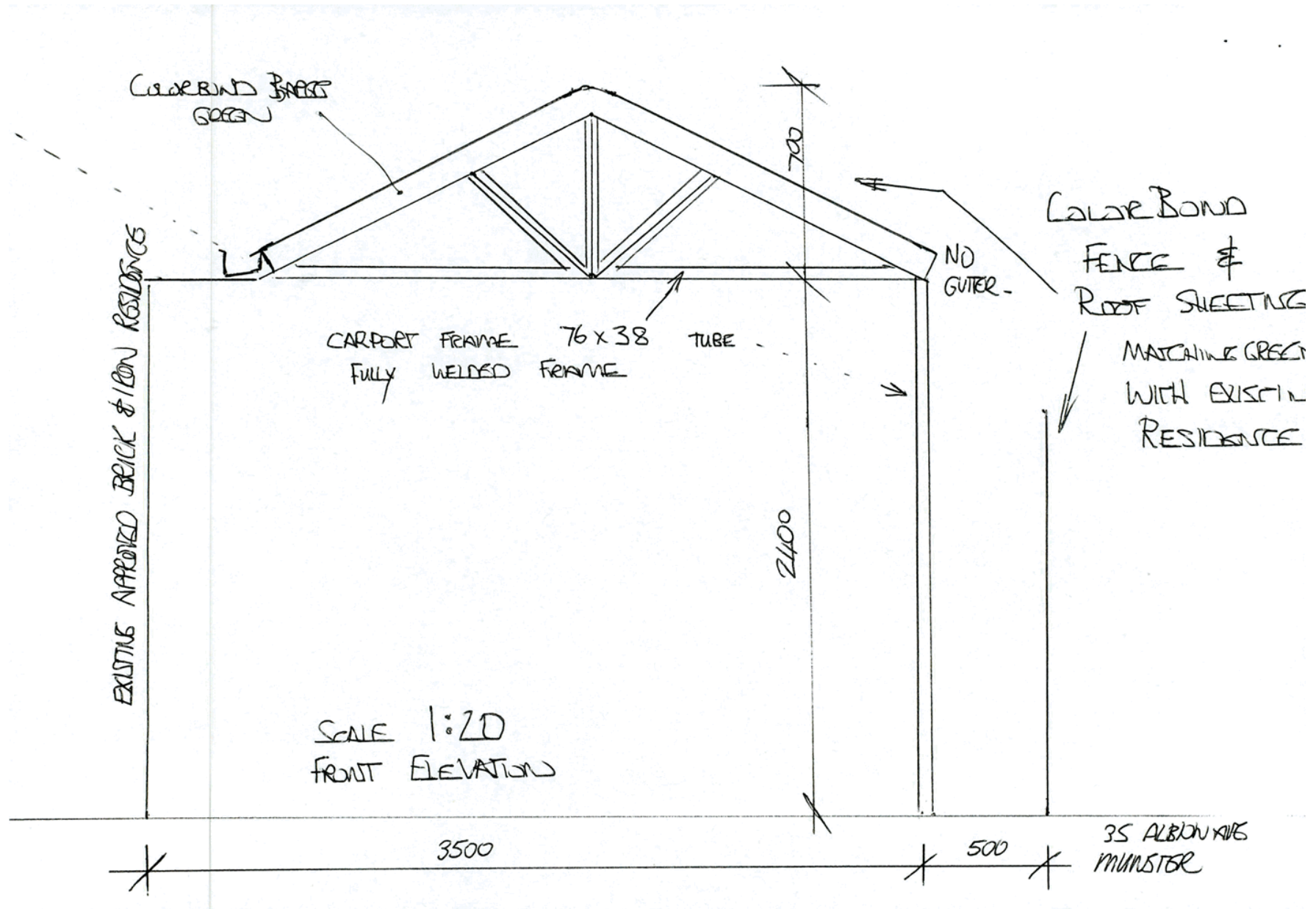
Implications of Section 3.18(3) *Local Government Act, 1995*

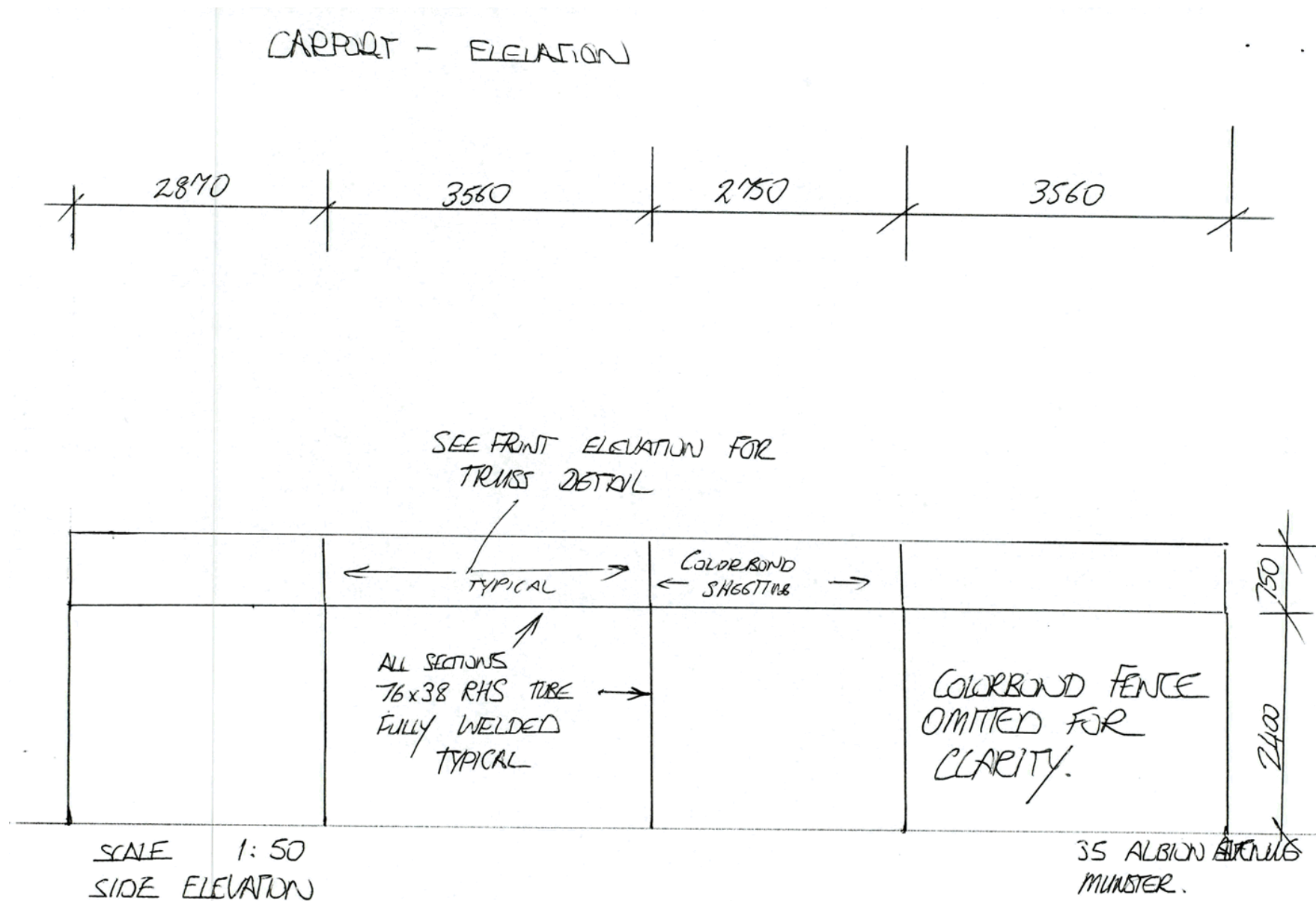
Nil.





UNDER KESFOOD INVESTMENTS PTY LTD





14.3 PROPOSED AMENDMENT 138 TO TOWN PLANNING SCHEME NO. 3 - DELETION OF DEVELOPMENT CONTRIBUTION AREA 2 'SUCCESS LAKES'

Author(s)	C Catherwood
Attachments	N/A
Location	Development Contribution Plan Area 2 'Success Lakes'
Owner	N/A
Applicant	N/A
Application Reference	109/138

RECOMMENDATION

That Council

- (1) adopt Scheme Amendment No. 138 for final approval for the purposes of:
 1. Deleting Development Contribution Plan 2 'Success Lakes' from Table 10 Development Contribution Plans of the Scheme.
 2. Deleting the annotation of Development Contribution Area 2 from the Scheme map.
- (2) note the amendment referred to in resolution (1) above is a 'complex amendment' as it satisfies the following criteria of Regulation 34 of the Planning and Development (Local Planning Schemes) Regulations 2015:

"an amendment to identify or amend a development contribution area or to prepare or amend a development contribution plan";
- (3) ensure the amendment documentation, be signed and sealed and then submitted to the Western Australian Planning Commission along with a request for the endorsement of final approval by the Hon. Minister for Planning.

Background

The City of Cockburn Town Planning Scheme No. 3 ("the Scheme") contains a number of smaller, area specific development contribution plans. Many have been in place for a number of years, and the land parcels which were in place when the contribution plans were set up, have now been fully subdivided.

This means there are no further 'triggers' under the Scheme to require a development contribution payment from this land towards the infrastructure items the contribution plan was set up for. The infrastructure has also been constructed. This means the development contribution plan is effectively redundant.

There is also the overarching development contribution plan for community infrastructure ("DCA13") which will continue to apply as any properties are redeveloped.

Submission

N/A

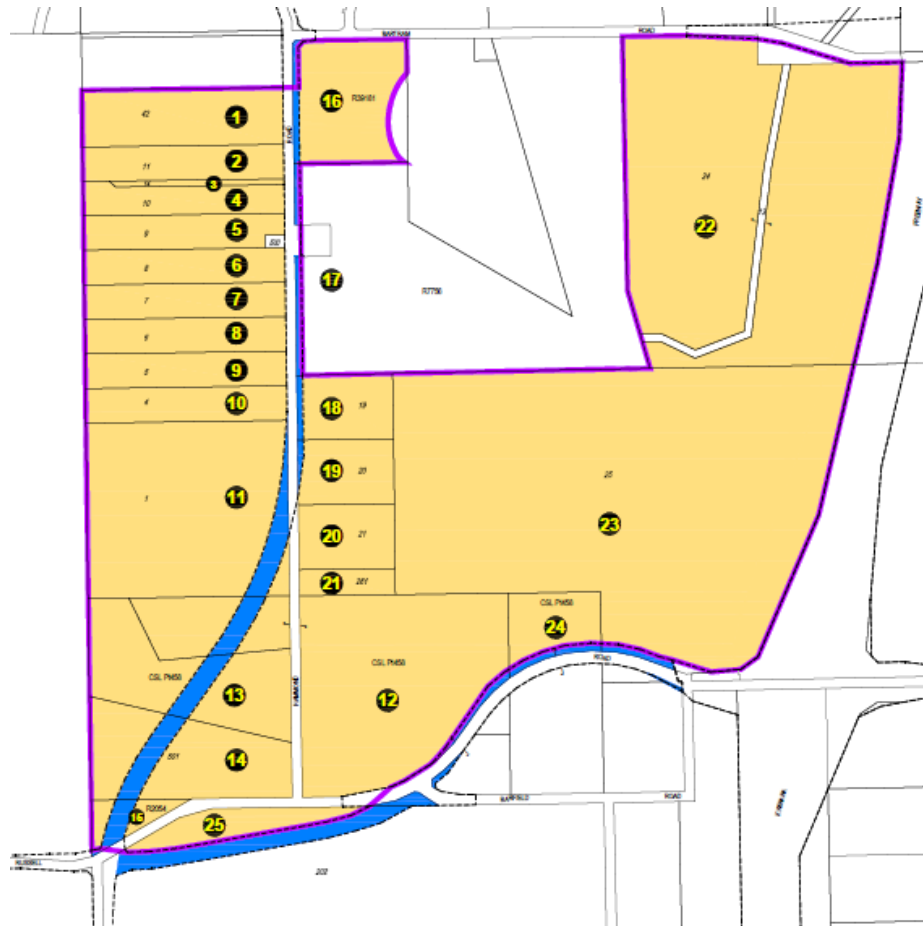
Report

Development Contribution Plan 2 relates to the area known as 'Success Lakes' and the content of this plan is detailed in Table 10 of the Scheme as shown below:

Ref No:	DCA 2
Area:	Success Lakes
Provisions:	<p>All landowners within DCA 2 with the exception of Lot 500 Hammond Road shall make a proportional contribution to the cost of common infrastructure.</p> <p>The proportional contribution is to be determined in accordance with the provisions of <i>clause 5.3</i> and contained on the Development Contribution Plan.</p> <p>Contributions shall be made towards the following items:-</p> <ol style="list-style-type: none"> Land and works for Hammond Road between Bartram Road and Russell Roads; and <p>50% of Russell Road between Hammond Road/ Frankland Avenue and Kwinana Freeway.</p> <p>This comprises the following:</p> <ul style="list-style-type: none"> Land reserved for Hammond and Russell Roads under the Metropolitan Region Scheme; Full earthworks; Construction of a two-lane road and where the reserve width is less than 40 metres wide, kerbing to the verge side of the carriageway should be provided; Dual use path (one side only); Pedestrian crossings (where appropriate at the discretion of the local government); Drainage; Costs to administer cost sharing arrangements - preliminary engineering design and costings, valuations, annual reviews and audits and administration costs; Servicing infrastructure relocation where necessary.
Participants and Contributions:	In accordance with the Cost Contribution Schedule adopted by the local government for DCA 2.

It is designated on the Scheme map as Development Contribution Area 2 ("DCA2"). A representation of that area is shown in the map below (note this is not the Scheme map). This shows:

- the segment of Hammond Road between Bartram Rd and Russell Rd
- the segment of Russell Rd between Hammond Rd and the Kwinana Freeway



The subdivision of the area is now complete (as shaded in the above map) and there are no further contributions to be collected. The infrastructure related to the plan has now been delivered.

The final audit of all transactions and the reserve account has been finalised.

Removing this redundant development contribution plan will alleviate confusion for purchasers in the area who may note the DCA2 annotation on the Scheme map. It will also assist in 'cleaning up' the Scheme in preparation for the new local planning scheme which is soon to enter the drafting phase.

As there were no submissions that were received during the advertising period it is recommended the amendment be adopted for final approval by Council and forwarded to the Western Australian Planning Commission along with a request for the endorsement of final approval by the Minister for Planning

Strategic Plans/Policy Implications

Leading & Listening

Provide for community and civic infrastructure in a planned and sustainable manner, including administration, operations and waste management.

Deliver sustainable governance through transparent and robust policy and processes.

Budget/Financial Implications

The final audit of this plan has been undertaken and the reserve account has been finalised.

Legal Implications

N/A

Community Consultation

As per Part 5 of the Planning and Development (Local Planning Schemes) Regulations, there are several amendment types: basic, standard and complex. These are defined in Part 5, Division 1, Regulation 34.

A complex amendment (such as this) requires 60 days consultation in recognition that such proposals have a greater impact on the community.

This amendment has been advertised for the period 4 December 2018 – 4 February 2019. No submissions were received. In any case, this particular proposal has minimal impact on the community as it proposes to delete a developer contribution plan.

Risk Management Implications

There is a slight risk that leaving the plan within the Scheme will add unnecessary complications to the creation of a new local planning scheme.

There is a medium risk of confusion to ratepayers or prospective purchasers in DCA2 by the designation remaining on the Scheme map. Particularly where those customers view information on the website and mapping system and do not discuss with City staff, who are able to clarify there are no further contributions for DCA2 to be levied.

Advice to Proponent(s)/Submitters

N/A

Implications of Section 3.18(3) *Local Government Act, 1995*

Nil.

14.4 PROPOSED AMENDMENT 139 TO TOWN PLANNING SCHEME NO. 3 - DELETION OF DEVELOPMENT CONTRIBUTION PLAN 3 GAEBLER ROAD'

Author(s)	C Catherwood
Attachments	N/A
Location	Development Contribution Area 3 'Gaebler Road'
Owner	N/A
Applicant	N/A
Application Reference	109/139

RECOMMENDATION

That Council

- (1) adopt Scheme Amendment No. 139 for final approval for the purposes of:
 1. Delete Development Contribution Plan 3 'Gaebler Road' from Table 10 Development Contribution Plans of the Scheme.
 2. Delete the annotation of Development Contribution Area 3 from the Scheme map.
- (2) note the amendment referred to in resolution (1) above is a 'complex amendment' as it satisfies the following criteria of Regulation 34 of the Planning and Development (Local Planning Schemes) Regulations 2015:

"an amendment to identify or amend a development contribution area or to prepare or amend a development contribution plan";
- (3) ensure the amendment documentation, be signed and sealed and then submitted to the Western Australian Planning Commission along with a request for the endorsement of final approval by the Hon. Minister for Planning.

Background

The City of Cockburn Town Planning Scheme No. 3 ("the Scheme") contains a number of smaller, area specific development contribution plans. Many have been in place for a number of years, and the land parcels which were in place when the contribution plans were set up, has now been fully subdivided.

This means there are no further 'triggers' under the Scheme to require a development contribution payment from this land towards the infrastructure items the contribution plan was set up for. The

infrastructure has also been constructed. This means the development contribution plan is effectively redundant.

There is also the overarching development contribution plan ("DCP") for community infrastructure ("DCA13") which will continue to apply as any properties are redeveloped.

Submission

N/A

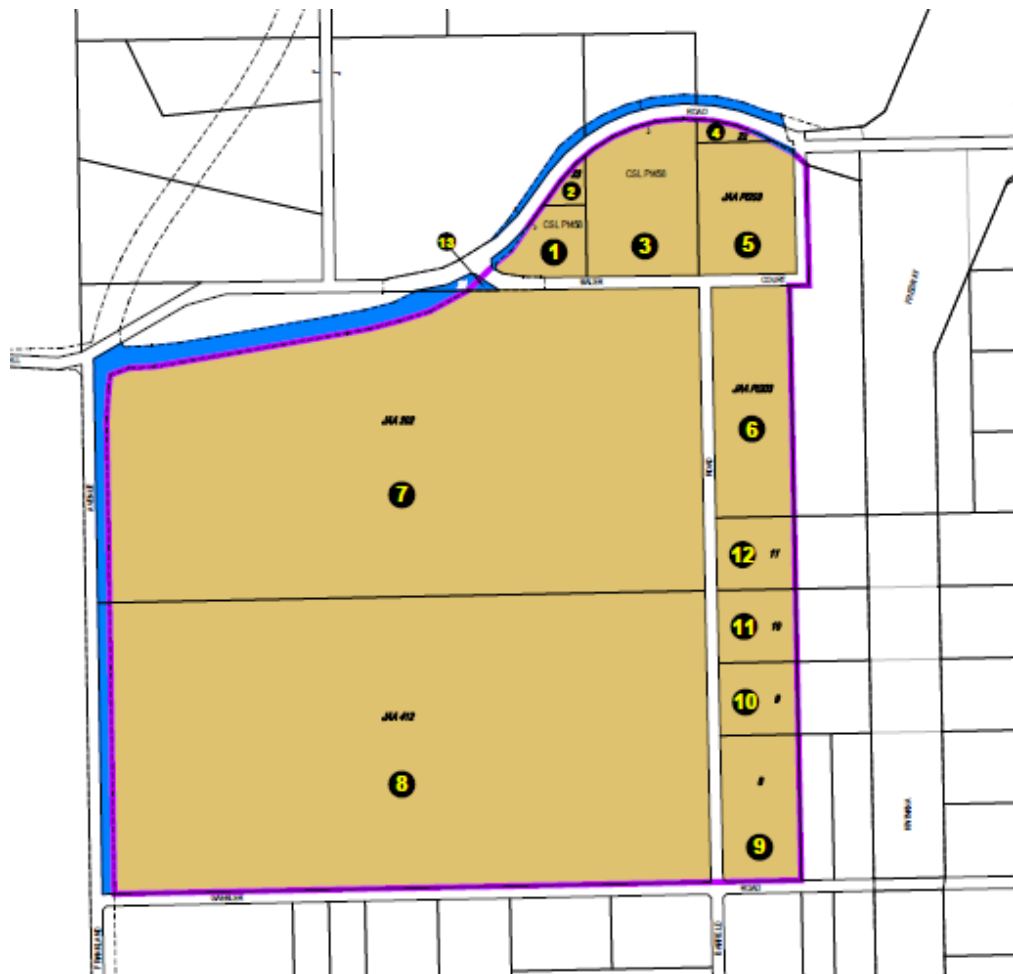
Report

Development Contribution Plan 3 relates to the area known as 'Gaebler Road' and the content of this plan is detailed in Table 10 of the Scheme as shown below:

Ref No:	DCA 3
Area:	Gaebler Road
Provisions:	<p>All landowners within DCA 3 shall make a proportional contribution to the cost of common infrastructure.</p> <p>The proportional contribution is to be determined in accordance with the provisions of <i>clause 5.3</i> and contained on the Development Contribution Plan.</p> <p>Contributions shall be made towards the following items:</p> <ol style="list-style-type: none"> Land and works for Hammond Road/ Frankland Avenue between Russell Road and Gaebler Road; and 50% of Russell Road between Hammond Road/ Frankland Avenue and Kwinana Freeway. This comprises the following: <ul style="list-style-type: none"> Land reserved for Hammond Road/Frankland Avenue and Russell Road under the Metropolitan Region Scheme; Full earthworks; Construction of a two-lane road and where the reserve width is less than 40 metres wide, kerbing to the verge side of the carriageway shall be provided; Dual use path (one side only); Pedestrian crossings (where appropriate at the discretion of the local government); Drainage; Costs to administer cost sharing arrangements - preliminary engineering design and costings, valuations, annual reviews and audits and administrative costs; Servicing infrastructure relocation where necessary; The cost of a set of traffic signals at the intersection of Russell and existing Hammond Road. In the event that a high school site is included on the Southern Suburbs District Structure Plan within the area south of Gibbs Road and east of the Kwinana Freeway, a proportional contribution shall be made to the provision of a pedestrian / cyclist bridge across the Freeway in the vicinity of Gaebler Road.
Participants and Contributions:	In accordance with the Cost Contribution Schedule adopted by the local government for DCA 3.

It is designated on the Scheme map as Development Contribution Area 3 ("DCA3"). A representation of that area is shown in the map below (note this is not the Scheme map). This shows:

- the segment of Hammond Road between Russell Road and Gaebler Road
- the segment of Russell Rd between Hammond Road and the Kwinana Freeway



The subdivision of the area is now complete (as shaded in the above map) and there are no further contributions to be collected.

The infrastructure related to the plan has now been delivered. The final audit of all the transactions and the reserve account has been finalised.

Removing this now redundant plan will alleviate confusion for purchasers in the area who may note the DCA3 annotation on the Scheme map. It will also assist in 'cleaning up' the Scheme in preparation for the new local planning scheme which is soon to enter the drafting phase

As no submissions were received during the advertising of the amendment it is recommended the amendment be adopted for final approval by Council and forwarded to the Western Australian Planning Commission along with a request for the endorsement of final approval by the Minister for Planning.

Strategic Plans/Policy Implications

Leading & Listening

Provide for community and civic infrastructure in a planned and sustainable manner, including administration, operations and waste management.

Deliver sustainable governance through transparent and robust policy and processes.

Budget/Financial Implications

The final audit of this plan has been undertaken and the reserve account has been finalised.

Legal Implications

N/A

Community Consultation

As per Part 5 of the Planning and Development (Local Planning Schemes) Regulations, there are several amendment types: basic, standard and complex. These are defined in Part 5, Division 1, Regulation 34.

A complex amendment (such as this) requires 60 days consultation in recognition that such proposals have a greater impact on the community. This amendment has been advertised for the period 4 December 2018 – 4 February 2019. No submissions were received. In any case, this particular proposal has minimal impact on the community as it proposes to delete a DCP.

Risk Management Implications

There is a slight risk that leaving the plan within the Scheme will add unnecessary complications to the creation of a new local planning scheme.

There is a medium risk of confusion to ratepayers or prospective purchasers in DCA3 by the designation remaining on the Scheme map. Particularly where those customers view information on the website and

mapping system and do not discuss with City staff, who are able to clarify there are no further contributions for DCA3 to be levied.

Advice to Proponent(s)/Submitters

N/A

Implications of Section 3.18(3) *Local Government Act, 1995*

Nil.

14.5 PROPOSED AMENDMENT 140 TO TOWN PLANNING SCHEME NO. 3 - DELETION OF DEVELOPMENT CONTRIBUTION PLAN 7 'AUBIN GROVE'

Author(s)	C Catherwood
Attachments	N/A
Location	Development Contribution Area 7 'Aubin Grove'
Owner	N/A
Applicant	N/A
Application Reference	109/140

RECOMMENDATION

That Council

- (1) adopt Scheme Amendment No. 140 for final approval for the purposes of:
 1. Delete Development Contribution Plan 7 'Aubin Grove' from Table 10 Development Contribution Plans of the Scheme.
 2. Delete the annotation of Development Contribution Area 7 from the Scheme map.
- (2) note the amendment referred to in resolution (1) above is a 'complex amendment' as it satisfies the following criteria of Regulation 34 of the Planning and Development (Local Planning Schemes) Regulations 2015:

"an amendment to identify or amend a development contribution area or to prepare or amend a development contribution plan";
- (3) ensure the amendment documentation, be signed and sealed and then submitted to the Western Australian Planning Commission along with a request for the endorsement of final approval by the Hon. Minister for Planning.

Background

The City of Cockburn Town Planning Scheme No. 3 ("the Scheme") contains a number of smaller, area specific development contribution plans ("DCP"). Many have been in place for a number of years, and the land parcels which were in place when the DCPs were set up, has now been fully subdivided.

This means there are no further 'triggers' under the Scheme to require a development contribution payment from this land towards the infrastructure items the contribution plan was set up for. The

infrastructure has also been constructed. This means the DCP is effectively redundant.

There is also the overarching development contribution plan for community infrastructure ("DCA13") which will continue to apply as any properties are redeveloped.

Submission

N/A

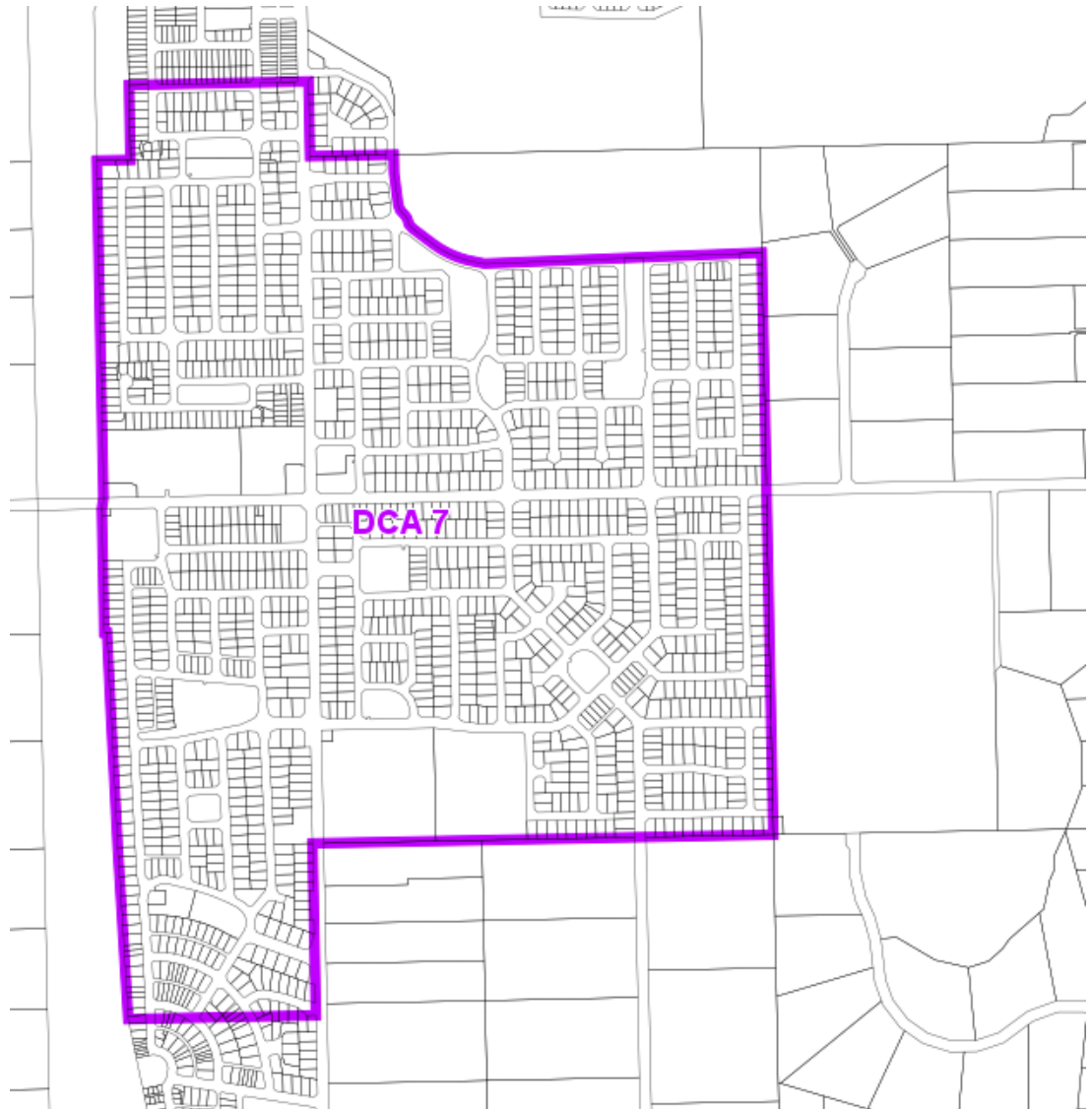
Report

Development Contribution Plan 7 ("DCP7") relates to the area known as 'Aubin Grove' and the content of this plan is detailed in Table 10 of the Scheme as shown below:

Ref No: AMD 17 GG 15/205	DCA 7
Area:	Aubin Grove
Provisions:	<p>All landowners within DCA 7 with the exception of Part of Lot 199 Gaebler Road identified as Bush Forever Site No. 492 and the Water Corporation bore sites shall make a proportional contribution to the cost of regional drainage infrastructure in accordance with the Russell Road Arterial Drainage Scheme.</p> <p>In relation to Lot 448 Lyon Road, Aubin Grove which has been identified for a primary school, if this site is not developed for a primary school in the future a proportional contribution to the cost of regional drainage infrastructure will be required.</p> <p>There may be such other land owners as agreed to, in Development Contribution Area No. 3 (DCA 3) located between Barfield Road and Kwinana Freeway that shall also make proportional contributions towards the regional drainage infrastructure.</p> <p>The proportional contribution is to be determined in accordance with the provisions of clause 5.3 and contained on the Development Contribution Plan.</p> <p>Contributions shall be made towards the following items:</p> <ul style="list-style-type: none"> • Costs associated with the provision of regional drainage infrastructure including the cost of the Freeway Swale area and connection to Lake Kopulup; • Costs associated with boring under the Kwinana Freeway to provide the pipe channel to the Freeway swale outlet; • Costs associated with the relocation of servicing infrastructure resulting from the implementation of this scheme, where appropriate; • Costs associated with the landscaping of the linear swale; • Costs to administer cost sharing arrangements including preliminary engineering design and costings, valuations, annual reviews and audits and administration costs.
Participants and Contributions:	In accordance with the cost Contribution Schedule adopted by the local government for DCA 7.

It is designated on the Scheme map as Development Contribution Area 7 ("DCA7"). A representation of that area is shown in the map below (note this is an extract only of the Scheme map only showing DCA7). This shows:

- The land in Aubin Grove which benefited from the Russell Road Arterial Drainage Scheme on the eastern side of the Kwinana Freeway.



The subdivision of the area is now complete and there are no further contributions to be collected. The larger sites shown above are strata developments, a school and the City's clubroom/playing field.

The infrastructure related to the plan has now been delivered. The final audit of all the transactions and the reserve account has been finalised.

Removing this now redundant plan will alleviate confusion for purchasers in the area who may note the DCA7 annotation on the

Scheme map. It will also assist in 'cleaning up' the Scheme in preparation for the new local planning scheme which is soon to enter the drafting phase.

As there were no submissions received during the advertising of the scheme amendment it is recommended the amendment be adopted for final approval by Council and forwarded to the Western Australian Planning Commission along with a request for the endorsement of final approval by the Minister for Planning

Strategic Plans/Policy Implications

Leading & Listening

Provide for community and civic infrastructure in a planned and sustainable manner, including administration, operations and waste management.

Deliver sustainable governance through transparent and robust policy and processes.

Budget/Financial Implications

The final audit of this plan has been undertaken and the reserve account has been finalised.

Legal Implications

N/A

Community Consultation

As per Part 5 of the Planning and Development (Local Planning Schemes) Regulations, there are several amendment types: basic, standard and complex. These are defined in Part 5, Division 1, Regulation 34.

A complex amendment (such as this) requires 60 days consultation in recognition that such proposals have a greater impact on the community. This amendment has been advertised for the period 4 December 2018 – 4 February 2019. No submissions were received. In any case, this particular proposal has minimal impact on the community as it proposes to delete a DCP.

Risk Management Implications

There is a slight risk that leaving the plan within the Scheme will add unnecessary complications to the creation of a new local planning scheme.

There is a medium risk of confusion to ratepayers or prospective purchasers in DCA7 by the designation remaining on the Scheme map. Particularly where those customers view information on the website and mapping system and do not discuss with City staff, who are able to clarify there are no further contributions for DCA7 to be levied.

Advice to Proponent(s)/Submitters

N/A

Implications of Section 3.18(3) *Local Government Act, 1995*

Nil.

14.6 PROPOSED TOWN PLANNING SCHEME 3 AMENDMENT 141 - INTRODUCTION OF A NEW DEVELOPMENT CONTRIBUTION PLAN 15 (TREEBY-JANDAKOT)

Author(s)	C Catherwood
Attachments	1. Draft Cost Contribution Schedule - DCA15 ↓
Location	Treeby and Jandakot
Owner	various
Applicant	N/A
Application Reference	109/141

RECOMMENDATION

That Council:

- (1) in pursuance of Clause 75 of the Planning and Development Act 2005 ('the Act') initiate the amendment, to the City of Cockburn Town Planning Scheme No. 3 ("Scheme") for the following:
- Amending Table 10 of the Scheme text by including DCA15 – Treeby/Jandakot as follows:

Ref. No.	DCA15
Area:	Treeby/Jandakot
Relationship to other planning instruments	<p>The development contribution plan generally conforms to the following plans:</p> <ul style="list-style-type: none"> City of Cockburn Community Sport and Recreation Facilities Plan (2018-2033) Treeby District Structure Plan (December 2017)
Infrastructure and administrative items to be funded	<p>Treeby East playing field specifically:</p> <ul style="list-style-type: none"> The cost of land for the oval site is not included in the development contribution plan and will form part of the subdivider's minimum 10% public open space The proportional cost of works to construct a multiple use playing field space capable of accommodating either: <ul style="list-style-type: none"> 1 x senior size football oval; or 2 x rectangular fields.

		The cost of works is the cost over and above that of providing a neighbourhood park, proportioned as set out below.		
		Playing field element	Subdivider obligation	To be shared through DCP15
		Landscape Preliminaries	100%	-
		Site establishment and preliminaries	100%	-
		Clearing and earthworks	66.66%	33.33%
		Fine grading to all soft and hard works areas	-	100%
		Soil treatments and grading	66.66%	33.33%
		External drainage to oval	100%	-
		Paving and hardscape	66.66%	33.33%
		Turf	100%	-
		Trees and shrub plantings	100%	
		Lighting (paths and oval and amenity lighting)	-	100%
		Sports goals	-	100%
		Playground equipment	100%	
		Picnic furniture	100%	
		BBQs (2)	1 BBQ unit	1 BBQ

			unit
		Drinking fountain (1)	1 -
		Bins (5)	2 bins 3 bins
		Wooden bollards	100% -
		Reticulation	100%
		Mature tree transplants	- 100%
		Irrigation bore and pump	100%
		Iron filtration unit (1)	100%
		Power connection	100%
		Water supply	100%
		Consolidation (12 weeks) plus 2 years maintenance period	100%
		<ul style="list-style-type: none"> The oval is to be located generally in accordance with the Treeby District Structure Plan (adjacent to a primary school site) and structure plan for Lot 705 Armadale Road which will confirm the location. 	
		<p>Treeby East Clubrooms</p> <p>100% of the cost of works to construct 1 x single storey clubroom building of 590m² to be located on the same land as the playing field, comprising:</p> <ul style="list-style-type: none"> Flexible spaces to accommodate a range of potential clubs/sports Standard level of finishes and amenities for a public building Associated car parking bays and access for 40 cars. 	

	Method for calculating contributions	<p>The City's Community Sport and Recreation Facilities Plan (2018 -2033) identifies the needs that impact on the Development Contribution Plan. The contributions outlined in this plan have been derived based on the need for the facilities generated by the additional development in the Development Contribution Plan. This calculation excludes:</p> <ul style="list-style-type: none"> • the demand for a facility that is generated by the current population in existing dwellings; and • the proportion of costs the subdivider of the land upon which the infrastructure will be located would ordinarily be obliged to cover through subdivision conditions. <p>Contributions shall be calculated on the basis of the number of new lots and/or dwellings created. Existing dwellings on a lot or lots to be subdivided or developed will be exempt from the contribution. Land required for public roads, public open space, drainage and other uses not including residential development will not be assessable. Where a lot may have further subdivision potential, for example as a grouped dwelling site, contributions will be sought at the next development approval stage where additional dwellings or lots are created.</p> <p>Contributions applying to development of aged or dependant person's dwellings or single bedroom dwellings shall be calculated on the number of dwelling units permitted prior to the application of the variations permissible under clause 5.1.3.A3.i of State Planning Policy - Residential Design Codes.</p> <p>Notwithstanding the definitions of 'lot' as may be defined elsewhere in this Scheme, for the purposes of calculating cost contribution liability within DCA15, the term lot will be inclusive of green title, survey</p>
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	strata and built strata subdivisions.
Administration of funds	<p>In relation to the proportion of costs the subdivider of the land upon which the infrastructure will be located and which they would ordinarily be obliged to meet through subdivision conditions:</p> <ul style="list-style-type: none"> • These costs will also held in the reserve account for DCA15 as maintained in accordance with 5.3.16 of the Scheme, unless the landowner seeks to satisfy that obligation by provision of the physical infrastructure. • Should provision of the physical infrastructure be considered, it must be in accordance with 5.3.14 of the Scheme.
Period of operation	Until 30 June 2036. However the DCP may also be extended for further periods with or without modification by subsequent Scheme Amendments.
Priority and Timing	In accordance with the City of Cockburn Capital Expenditure Plan.
Review Process	<p>The plan will be reviewed when considered appropriate, though not exceeding a period of five years duration, having regard to the rate of subsequent development in the catchment areas since the last review and the degree of development potential still existing.</p> <p>The estimated infrastructure costs contained in the Community Infrastructure Cost Contribution Schedule will be reviewed at least annually to reflect changes in funding and revenue sources and indexed based on the Building Cost Index or other appropriate index as approved by an appropriately qualified independent person.</p>
Participants and contributions	In accordance with the Cost Contribution Schedule adopted by the local government for DCA15.

2. Amending the Scheme map to include the boundaries of proposed Development Contribution Area No. 15 (Treeby/Jandakot)
- (2) note the amendment referred to in resolution (1) above is a 'complex amendment' as it satisfies the following criteria of Regulation 34 of the Planning and Development (Local Planning Schemes) Regulations 2015:
- an amendment to identify or amend a development contribution area or to prepare or amend a development contribution plan;*
- (3) pursuant to Clause 81 of the Act, refer the scheme amendment to the EPA by giving to the EPA written notice of this resolution and such written information about the amendment as is sufficient to enable the EPA to comply with section 48A of the EP Act in relation to the proposed scheme amendment;
- (4) pursuant to Regulation 37 (2) of the Regulations, submit two copies of the proposed Scheme amendment to the Commission to obtain consent to advertise the Scheme amendment; and
- (5) subject to Clause 81 and 82 of the Act, if the Commission advises the City of Cockburn that it is satisfied that the complex amendment is suitable to be advertised, advertise the proposed amendment pursuant to the details prescribed within Regulation 38. Regulation 38 specifies advertising must not be less than a period of 60 days.

Background

This amendment seeks to introduce a new Development Contribution Plan 15 ('DCP15') to the scheme's Table 10 and a new Development Contribution Area 15 ('DCA15') to the scheme map.

This relates to new residential development within the suburbs of Treeby and Jandakot.

Current development contribution plans

The City has a number of existing DCA plans, with most smaller areas covering 'hard infrastructure' such as major roads.

There is a larger DCA (DCA13) which applies across most of the City and relates to 'community infrastructure'.

Development Contribution Plan 13 – Community Infrastructure

DCP13 was formulated approximately a decade ago via Amendment No. 81 and was gazetted on 30 August 2011.

There have since been two local planning scheme amendments to DCP13 to accommodate new growth areas:

- Amendment No. 98: to add items located in the Banjup Quarry (Calleya) development; and
- Amendment No. 103: to add items located in the Cockburn Coast development area.

Both these amendments were initiated by the City of Cockburn within a couple of years of DCP13's gazettal. Given DCP13 has now been operative for over 7 years, it would no longer be appropriate to add further items, especially the existing and future dwelling ratio would not capture areas developed since 2011, such as Calleya estate in Treeby.

With the upcoming rezoning of areas of Treeby (east of Calleya estate) it is appropriate to consider a new DCP to share costs for the Treeby East oval and clubrooms. This is proposed to be known as DCP15.

This would mean for the suburbs of Treeby and Jandakot, two DCPs would apply for community infrastructure; DCP13 and DCP15. This is not dissimilar to other suburbs in Cockburn where two DCPs apply as they cover different items, such as Munster, and parts of Beeliar and Yangebup.

Submission

N/A

Report

Purpose

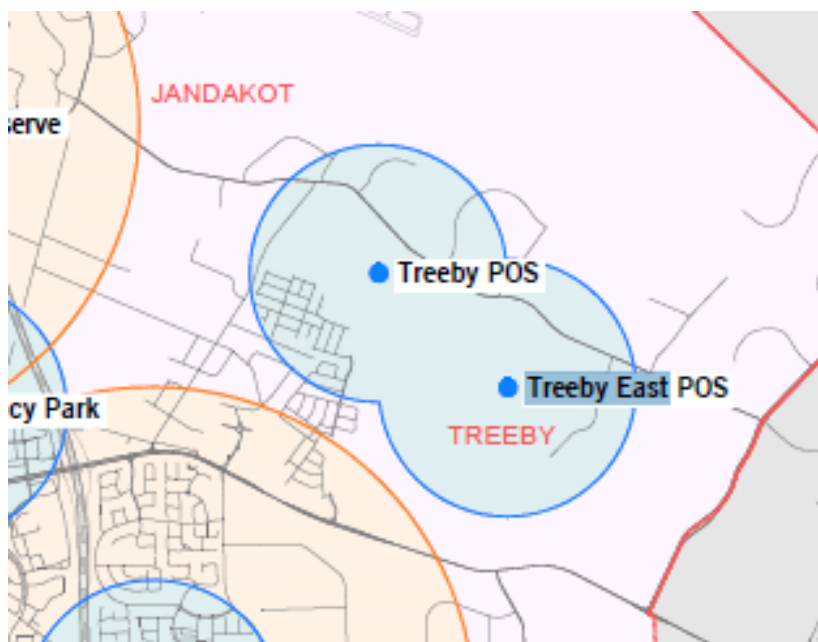
The purpose of the development contribution plan is to;

- enable the application of development contributions to develop new infrastructure which is required as a result of increased demand generated by subdivision/development in the development contribution area;
- provide for the equitable sharing of the costs of infrastructure and administrative items between owners;
- ensure that cost contributions are reasonably required as a result of the subdivision and development of land in the development contribution area.

Informing documents: proposed infrastructure items

The City of Cockburn Strategic Community Plan, Community Sport and Recreation Facilities Plan ('CSRFP') and the Treeby District Structure Plan are the relevant documents which coordinate the timely provision of the infrastructure items.

The CSRFP designates a clubroom and oval in the eastern sector of the suburb of Treeby, as shown below:

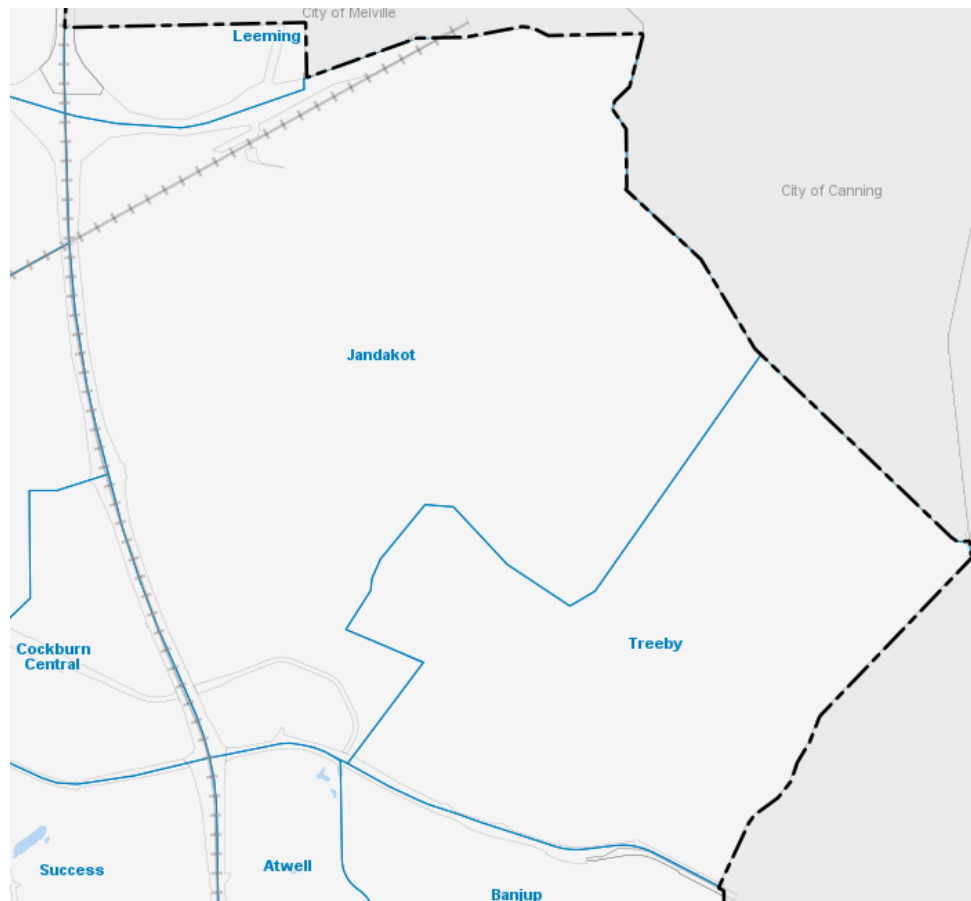


The 'Treeby East' facility has the same catchment as the oval and facility in Treeby; neighbourhood. These are described in the CSRFP as:

Facility	Current provision	Design Criteria	Guidelines
Neighbourhood Sports Space	Neighbourhood sports spaces are the basic unit of the park system and serve as the recreational and social focus of the neighbourhood. Focus is on providing informal, sports and reflective recreational options for all ages. Unique site character helps create a sense of place for the neighbourhood. Generally utilised as overflow sporting grounds.	<ul style="list-style-type: none"> • 3ha – 4ha sporting fields • Street frontage on all sides • Combined Clubroom/Change-rooms • Sports Lighting • Can be collocated with Neighbourhood Community Centre 	1:7,500 1-5ha for population within 800m or 10 mins walk away

Catchment and sizing: proposed infrastructure items

The catchment of the proposed facility would include the localities of Treeby and Jandakot (as shown below). These suburbs are effectively dovetailed with the Kwinana Freeway, Armadale Road and public purpose land to the north (including Jandakot Airport) and Cockburn's local government boundary indicating a logical catchment.



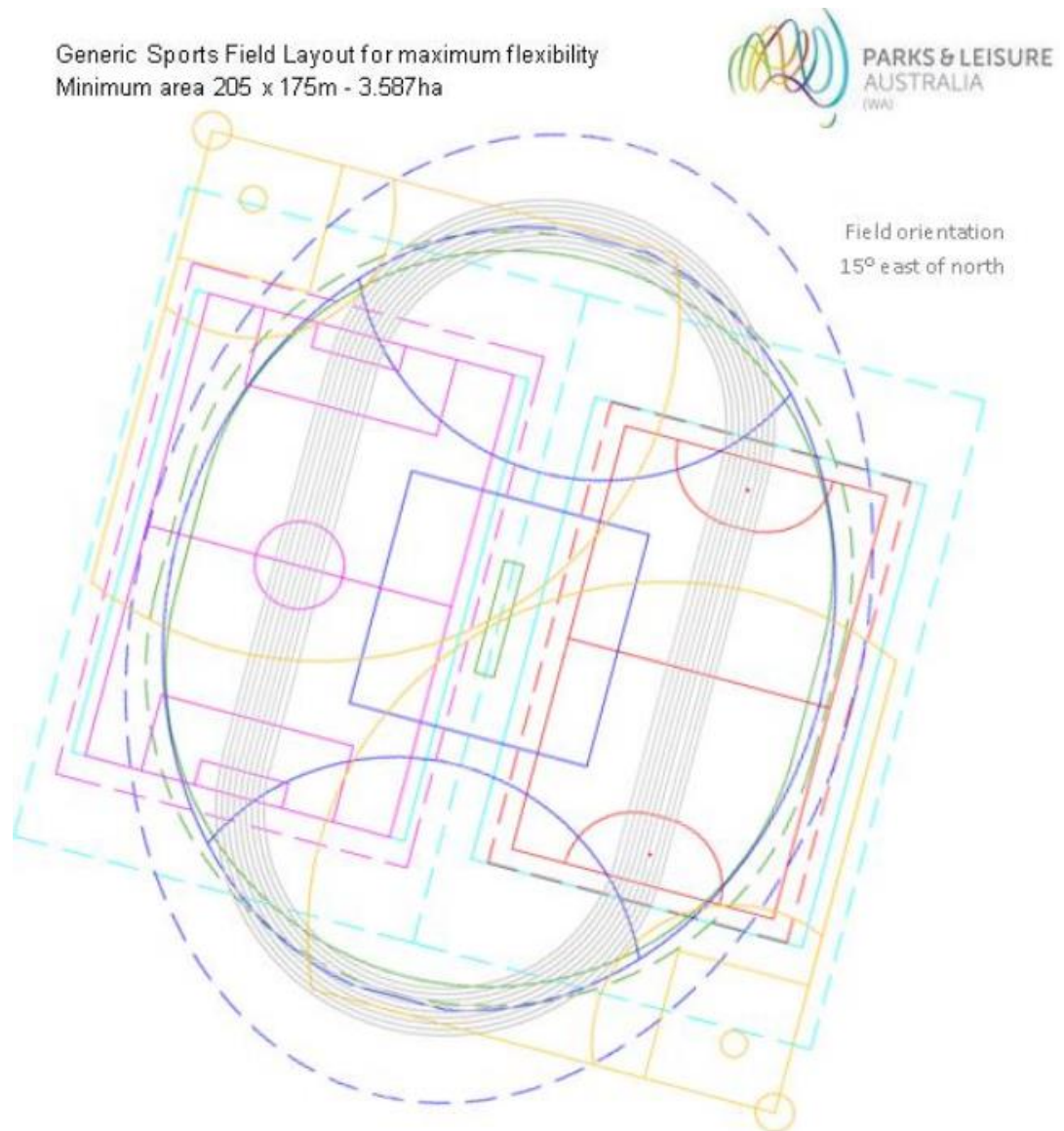
The forecast population (as shown in forecast id: <https://forecast.id.com.au/cockburn/home>) for these two localities is projected to total 10,561 by 2036. Based on the CSRFP, this would indicate the area should be serviced by 3-4ha of sporting fields. It is noted the walkable catchment indicated is ambitious given some of the catchment (in Jandakot) is developed primarily as 1-2ha sized lots.

With approximately 2ha of playing field already completed with the Calleya estate to the west, the Treeby East field would round out the provision in line with the CSRFP servicing expectations.

The CSRFP does not prescribe a specific size for a neighbourhood oval; however, it should be appropriately sized to accommodate a multiple use playing field space capable of accommodating either:

- 1 x senior size football oval; or
- 2 x rectangular fields

Given the functionality of the playing field is imperative, the expectation above should be clearly set out in the DCP text so that it is clear for all parties. An oval template is shown below which demonstrates how a multiple use playing field can accommodate different sports.



Matter of land for infrastructure items: to be excluded from DCP costs

Another matter which is important to recognise is the land upon which the oval would be located is intended to form part of the applicant's minimum 10% public open space contribution. It is not expected to be in addition to the 10%; in fact the playing fields in a shared arrangement with a school site generally overlap partially into the school site. This has been the same case with the existing oval at Calleya estate in Treeby. This will need to be discussed through the structure planning process with the Department of Education to ensure any partial overlap into the school site respects other matters, such as building and car park locations and light pole locations, should the City choose to floodlight the fields.

Breakdown of subdivider obligation (to recognise ordinary POS costs incurred)

With the inclusion of the land as part of the minimum 10% public open space, comes the ordinary subdivider obligation to provide a level of embellishment to each open space planned, to the level acceptable to the City of Cockburn. In this case, given the size of the open space, it would be considered as a neighbourhood park. It is considered fair that the subdivider would still be expected to cover embellishment costs equivalent to a neighbourhood park (i.e. if it were not a sporting field) and the 'over and above' cost to elevate that embellishment to be a sporting field should be the portion DCP15 relates to. This 'over and above' cost would then need to be apportioned between the catchment (Treeby and Jandakot) with the City absorbing the cost for the existing dwellings and/or lots in those areas, and the costs of the future dwellings and/or lots to be what the DCP would collect for. This same breakdown was applied to the Calleya estate development, and it would be fair to apply the same in this case:

Playing field element	Subdivider obligation	To be shared through DCP15
Landscape Preliminaries	100%	-
Site establishment and preliminaries	100%	-
Clearing and earthworks	66.66%	33.33%
Fine grading to all soft and hard works areas	-	100%
Soil treatments and grading	66.66%	33.33%
External drainage to oval	100%	-
Paving and hardscape	66.66%	33.33%
Turf	100%	-
Trees and shrub plantings	100%	
Lighting (paths and oval and amenity lighting)	-	100%
Sports goals	-	100%
Playground equipment	100%	
Picnic furniture	100%	
BBQs (2)	1 BBQ unit	1 BBQ unit
Drinking fountain (1)	1	-
Bins (5)	2 bins	3 bins

Playing field element	Subdivider obligation	To be shared through DCP15
Wooden bollards	100%	-
Reticulation	100%	
Mature tree transplants	-	100%
Irrigation bore and pump	100%	
Iron filtration unit (1)	100%	
Power connection	100%	
Water supply	100%	
Consolidation (12 weeks) plus 2 years maintenance period	100%	

Basis for clubroom size proposed (for the purposes of DCP15)

The CSRFP does not prescribe a specific size for a neighbourhood clubroom and the City has no adopted policy designating expected clubroom sizes. The building at Calleya will exceed 1000m² when completed and will provide for clubroom and community use. The Treeby East facility is different as it is a stand-alone clubroom, not a community centre. It should be kept in mind that the scope of the Calleya building has changed since it was included in DCP13 (community infrastructure). So while the actual build will exceed 1000m², for the purposes of the DCP estimates, the building is considered to be 885m². Looking at the indicative building breakdown in the adopted structure plan for Calleya, approximately 590m² was for the clubroom. Given this facility has the same catchment, it would seem inequitable to propose this new DCP15 collects for a facility any larger than this, particularly with it so close to the local government boundary. It is proposed that the size of the building be specified as 590m² for DCP15. This will be the basis of estimates and collection of DCP funds but does not prevent the City from choosing to deliver a larger facility should it feel the size to be below the future community's expectation.

Proposed methodology to calculate contributions

Given the range of densities across the catchment area, and the need for the facilities being a direct nexus to the future dwelling occupants, it is considered a 'per new dwelling and/or lot' means of sharing the infrastructure costs be adopted.

The other methodology prevalent through Cockburn DCPs is the 'per hectare' means. This would not be equitable due to the variations in lot sizes across the area. Whereas the household sizes (approximately 2.9 persons per household) are quite consistent.

The proportion of existing versus future dwellings in Treeby and Jandakot (as forecast till 2036) is shown below:

Suburb	2019	2036	Increase	% of Total Inc
Jandakot	957	1,163	206	12.907
Treeby	1,071	2,461	1,390	87.093
Total	2028	3624	1596	
Percent	55.960		44.040	

This would mean 55.96% of the cost of the clubrooms and the 'over and above' cost for the playing field would be absorbed by the City of Cockburn in recognition that more than half the forecast dwellings and/or lots are already created.

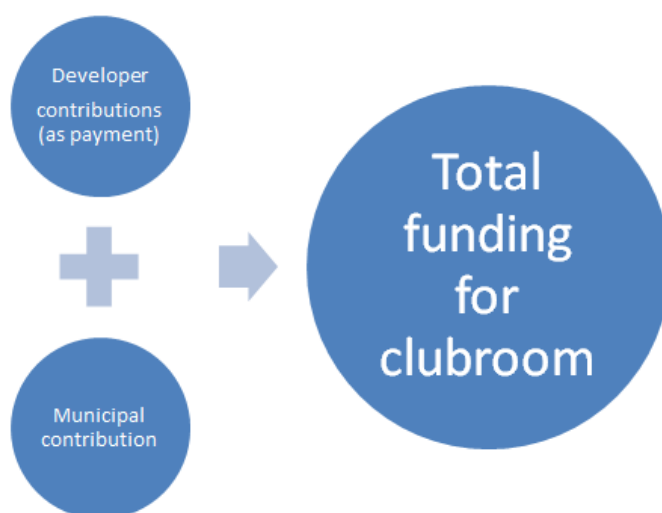
Then 44.04% of those costs would be split through the DCP between the future developments in Treeby (87.093% of the 44.04%) and Jandakot (12.907% of the 44.04%).

It is upon this basis the costs would be shared in the draft Cost Contribution Schedule (see Attachment 1).

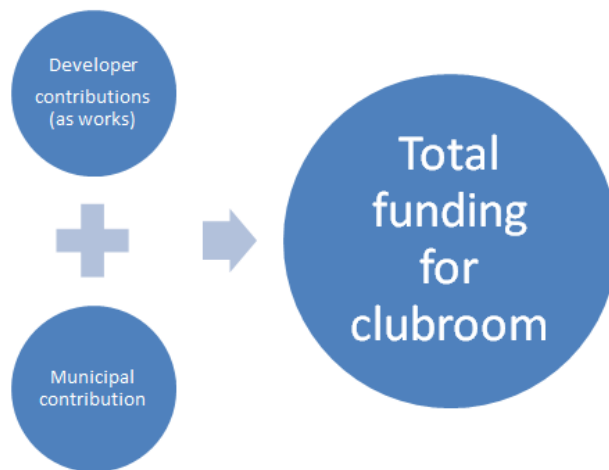
Administration of funds

Another aspect which should be specified in the DCP is how collected funds are to be managed. In a simple situation, DCP funds are collected and put into a reserve account until the City builds the facility.

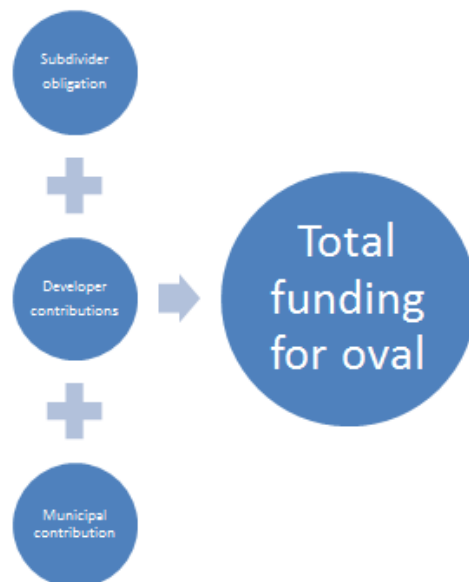
This is how the clubroom would be funded:



The scheme covers that situation already, and also allows a developer to deliver a facility (with the City's agreement) instead of paying funds into the DCP.



For the subdivider of the oval land, there is a further situation which the scheme does not sufficiently deal with:



There is currently no instruction in the Scheme to ensure that should the subdivider of the oval land look to meet their subdivider obligation through payment of funds, rather than as physical works, those funds are also held in reserve. This is an important point to specify to protect the interests of both parties (subdivider and the City) and ensure those funds are only used for those purposes.

Costs of proposed infrastructure items

A draft Cost Contribution Schedule must accompany a scheme amendment for a development contribution plan. The SPP and TPS3 currently indicate the local government should use the 'best and latest' cost estimates available.

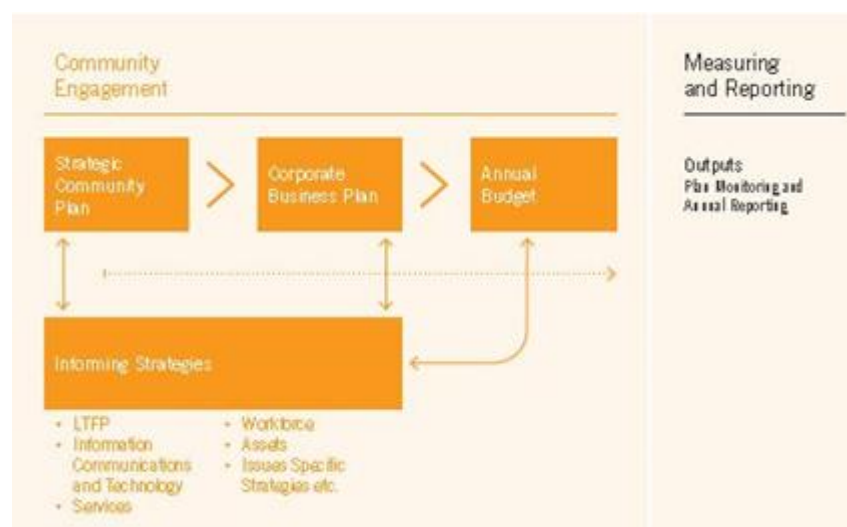
Once a DCP is operational, following gazettal, the City would procure a cost estimate to be used as an input to the Cost Contribution Schedule. For the purposes of consultation, the City proposes to utilise the recently tendered and completed costs from the Treeby (Calleya) oval, which would be of similar dimensions and likely to have the same geographic conditions (both former sand quarries, both in new urban estates, both in the eastern area of the City).

To cost the clubroom, the rate per square metre used for the proposed Calleya clubroom/community facility has been applied. As this rate has been provided by a quantity surveyor, it is considered more than appropriate for the purposes of consultation.

Need for a Capital Works Plan

The City has adopted the Community Sport and Recreation Facilities Plan as well as the Treeby District Structure Plan which indicates the need for the infrastructure items

In addition, the City uses an Integrated Planning Framework developed by the Department of Local Government. The following diagram illustrates the model.



A Long Term Financial Plan is a ten year plan developed alongside the Strategic Community Plan that identifies the resources required to deliver long term objectives. It includes long term financial projections based on our Asset Management Plans; Workforce Plan; Major Project Plans; our Revenue Strategy; and specific, subsidiary strategies.

The Corporate Business Plan is developed on a four yearly cycle and reviewed annually to prioritise or re- prioritise projects and services. It links annual operations to the Strategic Community Plan and informs the annual budget process. The annual budget details the revenue and expenditure estimates for activity scheduled for the relevant financial year. The annual perspective is summarised in an Annual Business

Plan which provides a broad operational plan on which the City's Business Units base their detailed operational plans.

As the infrastructure items are to be provided within the next 10 years (2028/29 is mentioned in the Community Sport and Recreation Facilities Plan), the above satisfies the requirement for a Capital Expenditure Plan.

State Planning Policy compliance

At the time of formulating this report for Council's consideration, it is understood there is soon to be a revised draft State Planning Policy 3.6 considered for consultation. City officers have no detail on the content of the draft SPP3.6, however are somewhat hamstrung with the timing of the development process. As a complex amendment, there will need to be consent to advertise any local planning scheme amendment and this allows the WA Planning Commission the opportunity to require any modifications prior to consenting to advertise DCP15. An initial draft of the proposed DCP15 text was sent to the Department of Planning, Lands and Heritage for informal comment; however, no response or acknowledgement of the proposal has been received.

In any case, the proposal is consistent with the current SPP3.6 and in some instances has provided additional detail to cover some of the current policy gaps.

There is scope to consider changes to the proposal through the amendment process. This provides a level of responsiveness to any changes to the SPP3.6 should they occur:

- Prior to consent to advertise being granted
- As a result of consultation/prior to Council considering the proposal for adoption
- The Department of Planning, Lands and Heritage office recommendation
- Minister's direction and decision

Any significant changes would require readvertising.

Conclusion

The draft DCP15 provides a sound and fair basis upon which to consider the sharing of infrastructure items. It is recommended the amendment be initiated and consent to advertise be requested.

Strategic Plans/Policy ImplicationsCity Growth

Ensure planning facilitates a desirable living environment and meets growth targets.

Community, Lifestyle & Security

Provide for community facilities and infrastructure in a planned and sustainable manner.

Create and maintain recreational, social and sports facilities and regional open space.

Leading & Listening

Provide for community and civic infrastructure in a planned and sustainable manner, including administration, operations and waste management.

Budget/Financial Implications

Should a DCP not be created to share the contribution requirement for these infrastructure items, both the DCP and municipal proportion would need to be borne by the City (assuming the infrastructure was still proposed to be built).

The subdivider would still be obliged to pay for the cost equivalent to a neighbourhood park embellishment.

Legal Implications

Planning and Development Act 2005

City of Cockburn Town Planning Scheme No. 3

State Planning Policy 3.6 Development Contributions for Infrastructure

Community Consultation

As per Part 5 of the Planning and Development (Local Planning Schemes) Regulations, there several amendment types: basic, standard and complex. These are defined in Part 5, Division 1, Regulation 34.

A complex amendment (such as this) requires 60 days consultation in recognition that such proposals have a greater impact on the community. Whereas a basic amendment requires no consultation and a standard amendment is 42 days consultation.

Additionally, before undertaking advertising, the WA Planning Commission needs to give consent to the advertising process. In considering whether to grant this consent, they are provided with copies of the scheme amendment documents, which in this case will include a draft Cost Contribution Schedule.

Risk Management Implications

There is a risk to Council should an amendment not be initiated soon that the other aspects of the planning process (MRS rezoning, local planning scheme rezoning and structure planning) will carry on regardless of the infrastructure needs and the sharing mechanism for the costs will not be considered.

There is already often a 'lag' in time for the Commission to deal with DCP amendments, which are complex in nature. The result of these delays is the cost burden falls back to the local government for any lots developed in the intervening period of time.

Advice to Proponent(s)/Submitters

The proposal has been drafted by City officers, however the major developers in Treeby/Jandakot (of urban cells identified in Perth and Peel @3.5 million) have been advised that this matter is to be considered at the 11 April 2019 Ordinary Council Meeting.

Implications of Section 3.18(3) *Local Government Act, 1995*

The proposal is consistent with Section 3.18(3) which states:

'3.18. Performing executive functions

- (3) *A local government is to satisfy itself that services and facilities that it provides —*
- a) integrate and coordinate, so far as practicable, with any provided by the Commonwealth, the State or any public body; and*
 - b) do not duplicate, to an extent that the local government considers inappropriate, services or facilities provided by the Commonwealth, the State or any other body or person, whether public or private; and*
 - c) are managed efficiently and effectively'.*

The proposed infrastructure will be planned to integrate and coordinate with the Department of Education primary school site. The proposed size of the infrastructure is modest and recognises the locations of the facility near the local government boundary and that there will be a second facility (at Calleya) within the same catchment.

DCA15 Cost Apportionment Schedule Treeby East Playing Field & Clubrooms									
Description	Est Total Cost to apportion excl. GST	Du's Existing	Muni share	Du's DCA	DCP Funding	Treeby		Jandakot	
	\$	%	\$	%	\$	%	\$	%	\$
Playing Field	\$306,554	55.960	171,549	44.040	135,006	87.093	117,580.21	12.907	17,425.56
Clubrooms	\$2,427,500	55.960	1,358,435	44.040	1,069,065	87.093	931,077.54	12.907	137,987.03
Administration	\$0	0.00	0.00	100.00	0	87.093	0.00	12.907	0.00
Total costs	2,734,054		1,529,984		1,204,070		1,048,657.75		155,412.59
Less funds received							0.00		0.00
Balance							1,048,657.75		155,412.59
Future dwellings (as estimated 2019-2036)	1,596						1,390		206
Dwellings created	0						0		0
Remaining future dwellings	1,596						1,390		206
Cost per Dwelling							754.43		754.43

[illegible]

Dwelling Forecasts - id Consulting				
Suburb	2019	2036	Increase	% of Total Inc
Jandakot	957	1,163	206	12.907
Treeby	1,071	2,461	1,390	87.093
Total	2028	3624	1596	
Percent	55.960		44.040	

Notes for updating Cost Contribution Schedule (as a minimum at the 5 year review - should also do each time the id data figures are updated relative to new census)

Grey cells are used to update the municipal v future dwelling units splits in Cost Contribution Schedule

Blue cells are used to update the proportion of each suburbs 'share'

Schedule of Rates

Project: Treeby East Oval & Clubrooms

Created: 21/03/2019

Version: 4

Description Playing Field	Unit				Developer		CoC / DCP		Playing Field
Preliminaries				\$39,077.83		\$ 39,077.83		\$ -	
Landscape preliminaries	item	1	\$19,970.97	\$19,970.97	100%	\$ 19,970.97	0%	\$ -	Landscape Preliminaries
Site establishment and preliminaries	item	1	\$19,106.86	\$19,106.86	100%	\$ 19,106.86	0%	\$ -	Site Establishment and Preliminaries
Earthworks				\$345,326.91		\$ 227,453.11		\$ 117,873.80	
Clearing and Earthworks - associated with construction + refinement of engineer's bulk earthworks	item	1	\$275,860.76	\$275,860.76	66%	\$ 183,907.17	33%	\$ 91,953.59	Clearing and Earthworks
Fine grading to all soft and hardworks area	item	1	\$17,897.25	\$17,897.25	0%	\$ -	100%	\$ 17,897.25	Fine Grading to all Soft and Hardworks Areas
Soil treatments	item	1	\$24,068.90	\$24,068.90	66%	\$ 16,045.93	33%	\$ 8,022.97	Soil Treatments and Grading
External drainage	item	1	\$27,500.00	\$27,500.00	100%	\$ 27,500.00		\$ -	
Paving and Hardscape				\$158,362.80		\$ 110,799.84		\$ 47,562.96	
Mowing kerb	Lm	192	\$32.34	\$6,209.28	66%	\$ 4,139.52	33%	\$ 2,069.76	Paving and Hardscape
Exposed agg. conc. platform	m ²	130	\$149.55	\$19,441.50	66%	\$ 12,961.00	33%	\$ 6,480.50	Paving and Hardscape
Exposed agg. conc. path	m ²	140	\$149.55	\$20,937.00	66%	\$ 13,958.00	33%	\$ 6,979.00	Paving and Hardscape
Tactile indicators - unit pavers	m ²	6	\$684.60	\$4,107.60	66%	\$ 2,738.40	33%	\$ 1,369.20	Paving and Hardscape
Softfall - rubber (blue)	m ²	52	\$186.21	\$9,682.92	100%	\$ 9,682.92	0%	\$ -	Playground Equipment
Pine bark Mulch	m ²	150	\$39.94	\$5,991.00	100%	\$ 5,991.00	0%	\$ -	Playground Equipment
Limestone rocks	m ²	150	\$108.99	\$16,348.50	66%	\$ 10,899.00	33%	\$ 5,449.50	Paving and Hardscape
Limestone rocks - Edge	Lm	29	\$84.36	\$2,446.44	66%	\$ 1,630.96	33%	\$ 815.48	Paving and Hardscape
Red brick planter box with RHS steel edge	Lm	22	\$969.91	\$21,338.02	66%	\$ 14,225.35	33%	\$ 7,112.67	Paving and Hardscape
Limestone block work - 3c 350 x 350 x 500mm	Lm	22	\$921.66	\$20,276.52	66%	\$ 13,517.68	33%	\$ 6,758.84	Paving and Hardscape
Red face brick cavity wall with opening (For Shelter)	Lm	4	\$1,556.63	\$6,226.52	66%	\$ 4,151.01	33%	\$ 2,075.51	Paving and Hardscape
Brick Masonry Skateable wall element	item	1	\$3,360.00	\$3,360.00	66%	\$ 2,240.00	33%	\$ 1,120.00	Paving and Hardscape
Concrete In-situ Wall	item	1	\$4,672.50	\$4,672.50	66%	\$ 3,115.00	33%	\$ 1,557.50	Paving and Hardscape
Coloured concrete berm	item	1	\$17,325.00	\$17,325.00	66%	\$ 11,550.00	33%	\$ 5,775.00	Paving and Hardscape
Softworks				\$220,855.13		\$ 220,855.13		\$ -	
Turf - roll-on	m ²	26645	\$5.97	\$159,070.65	100%	\$ 159,070.65	0%	\$ -	Turf
Tree - 45L	No	48	\$110.64	\$5,310.72	100%	\$ 5,310.72	0%	\$ -	Trees and Shrub Plantings
Planted organic mulch area - Planters (Plant size 140mm @4/m2)	m ²	13	\$101.32	\$1,317.16	100%	\$ 1,317.16	0%	\$ -	Trees and Shrub Plantings
Planted organic mulch area - General (Plant size 140mm @4/m2)	m ²	1240	\$40.77	\$50,554.80	100%	\$ 50,554.80	0%	\$ -	Trees and Shrub Plantings
Planted gravel mulch - drainage basin (Plant size 140mm @4/m2)	m ²	190	\$24.22	\$4,601.80	100%	\$ 4,601.80	0%	\$ -	Trees and Shrub Plantings
140mm plants (plants separate to above)	no				100%		0%	\$ -	Trees and Shrub Plantings
Lighting (Paths, Oval and Amenity Lighting)				\$65,950.05		\$ -		\$ 65,950.05	
Lighting - Paths, Oval and Amenity lighting	item	1	\$65,950.05	\$65,950.05	0%	\$ -	100%	\$ 65,950.05	Lighting
Sports Goals				\$15,000.00		\$ -		\$ 15,000.00	
Sport Goals	Set	1	\$15,000.00	\$15,000.00	0%	\$ -	100%	\$ 15,000.00	
Playground				\$131,402.25		\$ 131,402.25		\$ -	
Play equip. - Birds Nest Swing	item	1	\$10,164.00	\$10,164.00	100%	\$ 10,164.00	0%	\$ -	Playground Equipment
Play equip. - Balance beam	item	1	\$1,706.25	\$1,706.25	100%	\$ 1,706.25	0%	\$ -	Playground Equipment
Play equip. - Timber steppers	item	1	\$5,187.00	\$5,187.00	100%	\$ 5,187.00	0%	\$ -	Playground Equipment
Play equip. - Timber stills	item	1	\$5,040.00	\$5,040.00	100%	\$ 5,040.00	0%	\$ -	Playground Equipment
Play equip. - Net Play - GS805S	item	1	\$72,135.00	\$72,135.00	100%	\$ 72,135.00	0%	\$ -	Playground Equipment
Shade Sails	item	1	\$37,170.00	\$37,170.00	100%	\$ 37,170.00	0%	\$ -	Playground Equipment
Picnic Furniture				\$121,199.68		\$ 96,837.06		\$ 24,362.63	
Electric BBQ - double/steel (inc. Electrical and associated Connections)	item	1	\$11,870.25	\$11,870.25	50%	\$ 5,935.13	50%	\$ 5,935.13	BBQs (2, 1:1 contribution)
Drinking fountain (inc. Connection)	item	1	\$17,409.00	\$17,409.00	100%	\$ 17,409.00	0%	\$ -	Drinking Fountain (1)
Rubbish bin - double/steel	item	1	\$30,712.50	\$30,712.50	40%	\$ 12,285.00	60%	\$ 18,427.50	Bins (5, 2:3 contribution)
Table setting - accessible 6 seater	item	1	\$11,102.75	\$11,102.75	100%	\$ 11,102.75	0%	\$ -	Picnic Furniture
Bench Seats	item	1	\$5,569.20	\$5,569.20	100%	\$ 5,569.20	0%	\$ -	Picnic Furniture
Bollard - Recycled plastic	item	1	\$10,410.98	\$10,410.98	100%	\$ 10,410.98	0%	\$ -	Picnic Furniture
Shade Structure above BBQ Area (include Electrical Luminaires / connections as per City's Requirements)	item	1	\$34,125.00	\$34,125.00	100%	\$ 34,125.00	0%	\$ -	Picnic Furniture
Reticulation - Landscape Irrigation				\$104,447.20		\$ 104,447.20		\$ -	
Landscape irrigation	item	1	\$104,447.20	\$104,447.20	100%	\$ 104,447.20	0%	\$ -	Reticulation
Mature Transplants				\$35,805.00		\$ -		\$ 35,805.00	
Tree - Mature Transplants	No		\$35,805.00	\$35,805.00	0%	\$ -	100%	\$ 35,805.00	Mature Tree Transplants
Miscellaneous				\$197,649.94		\$ 197,649.94		\$ -	
Irrigation Bore & pump(if needed)	item	1	\$100,000.00	\$100,000.00	100%	\$ 100,000.00	0%	\$ -	Irrigation Bore and Pump

Iron filtration unit	Item	1	\$60,900.00	\$60,900.00	100%	\$ 60,900.00	0%	\$ -	Iron Filtration Unit
Power Connection (if needed)	Item	1	\$13,500.00	\$13,500.00	100%	\$ 13,500.00	0%	\$ -	Power Connection
Water Supply (if needed)	Item	1	\$10,000.00	\$10,000.00	100%	\$ 10,000.00	0%	\$ -	Water Supply
Landscape Consolidation (only softworks)	Vks	13	\$615.38	\$7,999.94	100%	\$ 7,999.94	0%	\$ -	Consolidation (12 weeks) Plus 2 Years Maintenance Period
Building Construction Industry Training Fund (BCITF)	Item	1	\$5,250.00	\$5,250.00	100%	\$ 5,250.00	0%	\$ -	
Practical Completion Site Inspection and Defects Report	Item		\$0.00	\$0.00		\$ -		\$ -	
Subtotal Excl. GST - Playing Field				\$1,435,076.79	79%	\$ 1,128,522.35	21%	\$ 306,554.44	
Total Incl. GST (10%)				\$1,578,584.47		\$ 1,241,374.59		\$ 337,209.88	
Description Clubroom	Unit				Developer		CoC / DCP		Clubroom
Preliminaries				\$80,000.00	\$ -		\$80,000.00		
Site strip, clearance, tree removal and ground preparation	Item	10	\$5,000.00	\$50,000.00	0%	\$ -	100%	\$50,000.00	
Earthworks allowance	Item	30	\$1,000.00	\$30,000.00	0%	\$ -	100%	\$30,000.00	
Building Works				\$2,017,500.00	\$ -		\$2,017,500.00		
Building Area	m ²	590	\$3,250.00	\$1,917,500.00	0%	\$ -	100%		
Verandah Area	m ²	200	\$500.00	\$100,000.00	0%	\$ -	100%		
Male and Female external toilets	m ²		\$0.00	\$0.00	0%	\$ -	100%		
Umpires room	m ²		\$0.00	\$0.00	0%	\$ -	100%		
First aid room	m ²		\$0.00	\$0.00	0%	\$ -	100%		
Stores	m ²		\$0.00	\$0.00	0%	\$ -	100%		
Change rooms	m ²		\$0.00	\$0.00	0%	\$ -	100%		
Change room showers	m ²		\$0.00	\$0.00	0%	\$ -	100%		
Kitchen	m ²		\$0.00	\$0.00	0%	\$ -	100%		
Kitchen Stores	m ²		\$0.00	\$0.00	0%	\$ -	100%		
Male and female internal toilets	m ²		\$0.00	\$0.00	0%	\$ -	100%		
Cleaner	m ²		\$0.00	\$0.00	0%	\$ -	100%		
Lobby	m ²		\$0.00	\$0.00	0%	\$ -	100%		
External Works				\$70,000.00	\$ -		\$70,000.00		
New carpark, lighting and drainage (assuming reciprocal with the school)	Item	40	\$1,750.00	\$70,000.00	0%	\$ -	100%		
New crossovers	Item	0	\$0.00	\$0.00	0%	\$ -	100%		
External Services				\$260,000.00	\$ -		\$260,000.00		
External water services	Item	1	\$25,000.00	\$25,000.00	0%	\$ -	100%		
External sewer	Item	1	\$30,000.00	\$30,000.00	0%	\$ -	100%		
External stormwater	Item	1	\$40,000.00	\$40,000.00	0%	\$ -	100%		
Industrial waste point	Item	1	\$15,000.00	\$15,000.00	0%	\$ -	100%		
External gas services	Item	1	\$25,000.00	\$25,000.00	0%	\$ -	100%		
External electrical services	Item	1	\$50,000.00	\$50,000.00	0%	\$ -	100%		
Allow for headworks fees and charges	Item	1	\$75,000.00	\$75,000.00	0%	\$ -	100%		
Subtotal Excl. Gst - Clubroom				\$2,427,500.00	\$ -		\$2,427,500.00		
Total Incl. Gst - Clubroom				\$2,670,250.00					
Estimate Total Project Cost (Excl. Gst)			\$3,862,576.79			\$ 1,128,522.35		\$ 2,734,054.44	\$ 3,862,576.79
Estimate Total Project Cost (Incl. Gst)			\$4,248,834.47						
Exclusions:									
Planning Contingency (10%)									
Design Contingency (10%)									
Construction Contingency (5%)									
Project Management Fees (2%)									
Design Contingency (10%)									

14.7 PROPOSED STRUCTURE PLAN - LOT 176 (NO. 119) HAMMOND ROAD, SUCCESS

Author(s)	A Trosic
Attachments	<ol style="list-style-type: none"> 1. Location Plan ↓ 2. Structure Plan Map ↓ 3. Schedule of Submissions ↓
Location	Lot 176 (No. 119) Hammond Road, Success
Owner	Dorothy Mary Guerini and Irene Anne Fruzynski
Applicant	Planning Solutions
Application Reference	110/193

RECOMMENDATION

That Council, in pursuance of Clause 20(2)(e) of the Deemed Provisions (Schedule 2 Part 4), recommends to the Western Australian Planning Commission the approval of the proposed Structure Plan for Lot 176 (No. 119) Hammond Road, Success subject to the following modifications:

(1) Part 1 to be modified as follows:

1. Section 3: the text within this section should be replaced with the text under section 4.6 and section 4.6 should then be deleted.
2. Section 4: under subdivision – include; *“a further more detailed noise management plan will be required at subdivision stage to confirm mitigation requirements once ground levels are confirmed”*.
3. Section 4: under subdivision – include; *“a Fauna Relocation Management Plan is to be prepared as a condition of subdivision approval”*.
4. Section 4: under subdivision – include; *“intact remnant vegetation [trees] are to be retained in the nominated POS area where possible, to the satisfaction of the Local Government”*.
5. Section 4: under subdivision – include; *“The proposal should be discussed with the Federal Department of Sustainability, Environment, Water, Population and Communities in terms of ensuring compliance with the EPBC Act.”*
6. Section 4.1: reference to R-Codes should be amended to reference the “R-MD” codes. For example R30 should be ‘R-MD-R30’, R40 should be ‘R-MD-R40’ and R60 should be ‘R-MD-R60’.

7. Structure Plan Map: reference to R-Codes should be amended to reference the “R-MD” codes. For example R30 should be ‘R-MD-R30’, R40 should be ‘R-MD-R40’ and R60 should be ‘R-MD-R60’.
- (2) Part 2 to be amended as follows:
 1. Section 1.1: refer to the R-MD-R codes in this section.
 2. Section 3.3: refer to the R-MD-R codes in this section.
 - (3) endorse the Schedule of Submissions prepared in respect of the proposed Structure Plan (Attachment 3);
 - (4) advise the proponent and those persons who made a submission of Council’s recommendation; and
 - (5) pursuant to Clause 22(7) of the Deemed Provisions request the Commission provides written notice of its decision on the Proposed Structure Plan.

Background

The Lakeside Success Structure Plan was originally adopted by Council in July 2012 and endorsed by the WAPC in March 2013, and the land is now largely built out. This subject land was not included in the original structure plan, by choice of the landowner. They have now prepared their own proposed structure plan, which seeks to essentially urbanise the land and connect it in with the remaining structural elements of the Lakeside Success Structure Plan.

Submission

N/A

Report

The subject site is approximately 2.0823 ha in area. The subject site is bound by Hammond Road to the west, Beeliar Drive to the north and Delaronde Drive to the south. Langano Chase abuts the south west corner of the subject site. The Armadale Road / Beeliar Drive interchange to the Kwinana Freeway is located approximately 1.5km east of the subject site providing connectivity to the wider metropolitan area.

Abutting the subject site to the south is the Lakeside Success Structure Plan area, comprising a mix of (existing) residential zoned land and public open space.

Planning Background

The proposed Structure Plan was lodged with the City on 11 January 2019. Following subsequent discussions with the applicant, the proposal was later advertised for 28 days, from 29 January 2019 to 26 February 2019.

Council received a total of twelve submissions in response to the proposal during the advertising period of which ten were either in 'support', 'recommended referral', 'statements of no-objection', 'no comment' or 'support subject to technical advice' and two submissions were objecting to the proposal.

The submissions are identified in the Schedule of Submissions (refer Attachment 3). Each of these submissions are responded to in detail in the schedule and summarised (in part) within the report, for ease of reference.

The subject site is zoned 'Urban' under the Metropolitan Region Scheme ("MRS") and 'Development' under City of Cockburn Town Planning Scheme No. 3 ("Scheme"). The subject site is also located within Development Area No 13 ("DA 13"), Development Contribution Area No. 1 ("DCA 1") and Development Contribution Area No. 13 ("DCA 13") under the Scheme.

Pursuant to Clause 5.2.3.1 of the Scheme; *"The development of land within a Development Area is to comply with Table 9 [of the Scheme]"*. Clause 5.2.1 of the Scheme specifies; *"Table 9 describes the Development Areas in detail and sets out the specific purposes and requirements that apply to the Development Areas"*. Under Clause 5.2.3.2 of the Scheme; *"The subdivision and development of land within a Development Area is to generally be in accordance with any structure plan that applies to the land."*

On the above basis the specific provisions within Table 9 DA 13 of the Scheme are provided as follows:

1. *"An approved Structure Plan together with all approved amendments shall be given due regard in the assessment of applications for subdivision, land use and development in accordance with clause 27(1) of the Deemed Provisions."*
2. *"To provide for Residential development"*.

Pursuant to the above Scheme provisions, the applicant has submitted a Structure Plan for assessment. This report aims to summarise the outcome of that assessment pursuant to the planning framework, the legislative requirements of the Regulations and that of the Scheme.

Onsite vegetation

The application as submitted for advertising included an Environmental Assessment Report (EAR) dated 11 January 2019. The EAR indicates;

“The [on site] vegetation is not considered to represent any state or federally listed Threatened or Priority Ecological Communities.”

The subject site is zoned “Development” meaning;

“To provide for future residential, industrial or commercial development to be guided by a comprehensive Structure Plan prepared under the Scheme.”

The subject area is identified for residential under the State Governments Perth and Peel @ 3.5 Million documentation. The “comprehensive Structure Plan” proposal identifies the subject site as providing residential zoned land in line with State Government prescribed housing targets.

The future residential land is proposed to be serviced by future local roads (as per Attachment 2) which form part of the Structure Plan proposal. Under Liveable Neighbourhoods (State Government operational policy) a Structure Plan area is required to give up 10% of the site area as public open space/ Parks and Recreation reserve.

What this means is that the subject lot is required to provide 10% of its area for future ‘Parks and Recreation’ with the remaining 90% of the site area to be cleared for future ‘Residential’ zoned land and ‘Local Road’ reserves to service the residential lots.

As extracted above, the EAR indicates the onsite vegetation is not considered to represent any state or federally listed; ‘Threatened or Priority Ecological Communities’.

Based on the information available, there are no known significant environmental factors which would impede development potential of the site. The (future) development of the site will be managed through the following:

- * *Construction Environmental Management Plan (CEMP), written prior to commencement of the development site;*
- * *Installation of wind fencing around the perimeter of the proposed clearing area to minimise impacts on adjacent vegetation;*
- * *POS area and road reserves may retain significant trees where possible, subject to engineering and design considerations; and*

* *Implementation of the prepared Bushfire Management Plan.*

In addition to the above it is recommended that Part 1 of the Structure Plan Section 4: under “subdivision”, be amended to include that; *“a Fauna Relocation Management Plan is to be prepared as a condition of subdivision”*. This is recommended to protect any fauna that may be present on site at the time of (future) clearing.

It is mentioned within the EAR; *“intact remnant vegetation [trees] are to be retained in the nominated POS area where possible”*. This is proposed to be conditioned under the Structure Plan subdivision conditions requirements as listed within the Council recommendation.

The ‘Parks and Wildlife Service’ (under submission 4 of Attachment 3 – Schedule of Submissions) provided comment during the advertising period as follows:

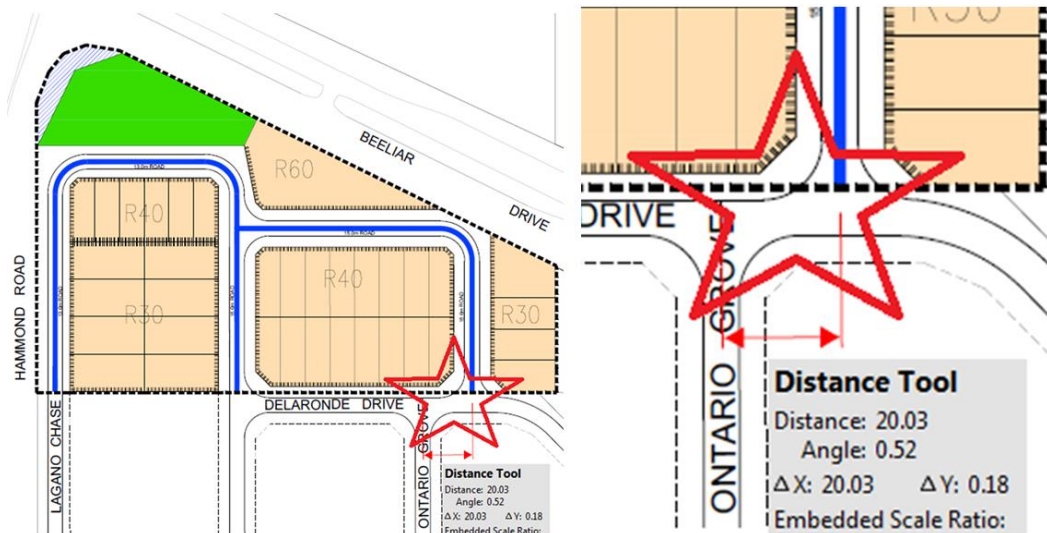
“The proposal should be discussed with the Federal Department of Sustainability, Environment, Water, Population and Communities as there may be a requirement to refer the proposal under the EPBC Act.”

The applicant is obligated to ensure they address any requirements associated with the federal legislation, and it is appropriate that Council note this to the applicant.

Traffic Safety

There has been concern raised by a resident under an objection in regards to traffic safety. Specifically the objection mentions that an adjacent (existing) property is positioned opposite a proposed (future) local road intersection. This is a traffic safety concern in the opinion of the objector.

The proposed streets are defined as “access streets” under the State Governments’ operational policy ‘Liveable Neighbourhoods’ (LN). Table 5 under element 2 of LN indicates a 20m (minimum) *‘junction spacing measured from road reserve centreline to terminating street pavements’* to be required. In accordance with this guidance (safety standard) within LN, the proposed road is considered to be acceptable from a road safety aspect as follows:



The above image has been edited to identify the subject area in question by the red star. As can be seen the junction spacing is measured at the minimum 20m. As such the proposed road network is considered to be safe as it is designed in accordance with LN (safety) principles. The concerns from this objection are therefore considered to have been addressed by the applicants' proposal in accordance with best practice (LN).

Bushfire requirements

The subject site is identified as being classified under the State Governments 'map of bushfire prone areas'. This is shown below in regard to the pink shading over the subject site and beyond;



On the above basis the applicant was required under State Planning Policy No. 3.7 to submit a Bushfire Management Plan in order to address the potential bushfire threats on future residential lots.

During the advertising period the Bushfire Management Plan (BMP) was referred to the *Department of Fire and Emergency Services* for their comment. Please refer to submission 11 under Attachment 3 for details.

As can be noted in Attachment 3 of this report, DFES advises that the BMP *“has adequately identified issues arising from the bushfire risk assessment and that DFES has considered how compliance with the bushfire protection criteria can be achieved for the Structure Plan”*.

The structure plan assumes a single stage of development meaning the bushfire threat is expected to be eliminated prior to dwellings being built over the subject site. On this basis whilst the current vegetation is a bushfire threat to existing residences the clearing (to facilitate the future residential development over the subject site) will significantly reduce the threat on current (existing) residences.

City officers do not have concerns with the details provided within the BMP; however, should a future subdivision propose a staged approach then the future subdivision application will then need to address the bushfire issues created by staged clearing. This is not considered to be an issue in need of addressing at the Structure Plan stage given SPP 3.7 applies separately at the subdivision stage in the manner described above.

As can be seen by Attachment 1 (aerial photograph) the subject site is the last parcel of residential land to be cleared in this pocket of Success. Historically the properties immediately south of the subject site were required to build to bushfire requirements (Bushfire Attack Levels “BAL”) at the time of their respective Building Permits under the Building Act/ Building Code of Australia.

These property owners have now come to realise that the bushland over the subject site is likely to be cleared under a future subdivision application (should the proposed Structure Plan be approved by the Department of Planning, Lands and Heritage ‘DPLH’).

The potential for the existing bushland on the subject site to be cleared has been interpreted by some objectors to be justification for “reimbursement” of the BAL measures endured by existing adjacent residences.

To these objections it is noted as follows; building to AS3959-2009 Bushfire Construction Standards is required under the Building Code of Australia where proposed Class 1, 2, 3 or 10a structures are impacted by designated Bushfire prone areas/ mapping.

The legislation applies at the time of housing assessment/ determination pre-construction. On this basis should a dwelling be constructed to a particular Bushfire Attack Level (BAL) under AS3959-

2009 that requirement (to mitigate the proposed dwelling from the impacts of bushfire at that time) is obligatory.

Should the bushfire threat vegetation be cleared at a future date (post construction) there is no right to compensation under the Building Code of Australia or under any other means with respect to either the Building Act or the Planning Act.

There is no way of knowing how long bushfire prone vegetation will be a treat for. It could be 1 year, 10 years, 50 years or 100+ years. On this basis there will be no reimbursement for the BAL measures that existing residents have had to incorporate.

The objectors are to note however, some bushfires are started by ember attack. Embers can travel over 2km (from a distant bushfire).

Being a BAL 19 (for example) the objectors' house (in this example) should be built to withstand ember attack and therefore whilst the immediate bushland may/ may not be cleared the objectors' property will continue to be protected from bushfire (at a level of BAL 19 in this instance). This is of importance in a drying climate as indicated under the bushfire guidelines;

“Significant likely impacts of climate change for the State include the increased risk of bushfire and drought and decreased average rainfall in south-west Western Australia”.

The clearing of part or all of the subject bushland will not remove the existing building improvements of BAL 19 (for example) in this circumstance. The objector and their family will continue to benefit from a BAL 19 home (as is the case with this example) from a bushfire that may be outside of the bushland over the subject site.

Alternatively it is to be noted that a hypothetical Structure Plan approval does not necessarily imply that a Subdivision (clearing) will be undertaken. There could hypothetically be a period of years between Structure Plan approval and on site clearing. During this time bushfires (from the subject site) could eventuate and cause destruction of property and life. It is for this reason that the described practice is maintained irrespective of whether clearing may be undertaken in the future.

Conclusion

The proposal is considered to be of moderate complexity generally compliant Structure Plan proposal. It meets the requirements of road safety as indicated under Liveable Neighbourhoods. In addition the vegetation (significant trees) on site will be partially protected where it will be retained within the proposed Parks and Recreation Reserve.

The bushfire concerns are not related to the subject proposal rather they have been raised by neighbours that are enquiring if compensation will be granted for their properties. This compensation is requested on the basis that their properties were (in the past) required to build to bushfire requirements due to the subject sites bushfire threat.

The future (potential) subdivision clearing of the subject site will not guarantee bushfire safety from existing adjacent residences. It is considered a positive housing asset to be built to AS3959-2009 as bushfires can cause house fires via embers which can travel 2km+. On this basis, and as described above, there will be no compensation as this is not a requirement under the legislation.

In conclusion the proposal is recommended for support to the Department of Planning Lands and Heritage subject to minor modifications as listed, and justified, above.

Strategic Plans/Policy Implications

City Growth

Ensure a variation in housing density and housing type is available to residents.

Moving Around

Identify gaps and take action to extend the coverage of the cycle way, footpath and trail networks.

Budget/Financial Implications

The required fee was calculated on receipt of the proposed Structure Plan and has been paid by the proponent. There are no other direct financial implications associated with the Proposed Structure Plan.

Legal Implications

Pursuant to Clause 20 of the Deemed Provisions, the local government must prepare a report on the proposed structure plan and provide it to the Commission no later than 60 days after the close of advertising.

Community Consultation

The proposed Structure Plan was lodged with the City on 11 January 2019.

Following subsequent discussions with the applicant the proposal was later advertised for 28 days, from 29 January 2019 to 26 February 2019.

Advertising included letters to the adjacent property owners and to various government agencies and service providers. Advertising was also undertaken via a notice in the local newspaper with all correspondence directing submitters to the City's website.

Council received a total of twelve submissions in response to the proposal during the advertising period of which ten submissions (83%) were generally in support of the proposal and two submissions were objecting to the proposal.

The submissions are identified in the Schedule of Submissions (refer Attachment 3). Each of these submissions are responded to in detail in the schedule and summarised (in part) within the report, for ease of reference.

Risk Management Implications

There are no obvious risks from the City's perspective in implementing the recommendation. Should Council consider not implementing the recommendation the City could be faced with a suboptimal planning outcome.

Each of the above mentioned recommendations relate to separate components of the proposal and each is to be considered separately.

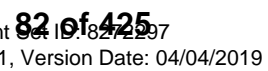
Whilst the recommendations might not entail financial risks to the Council, should they not be supported, however the associated risks in that regard relate to (potentially) fewer dwellings provided under the details of Perth and Peel @ 3.5 Million housing targets. Accordingly, in light of the above, it is respectfully suggested Council recommend to the WAPC the above suite of conditions.

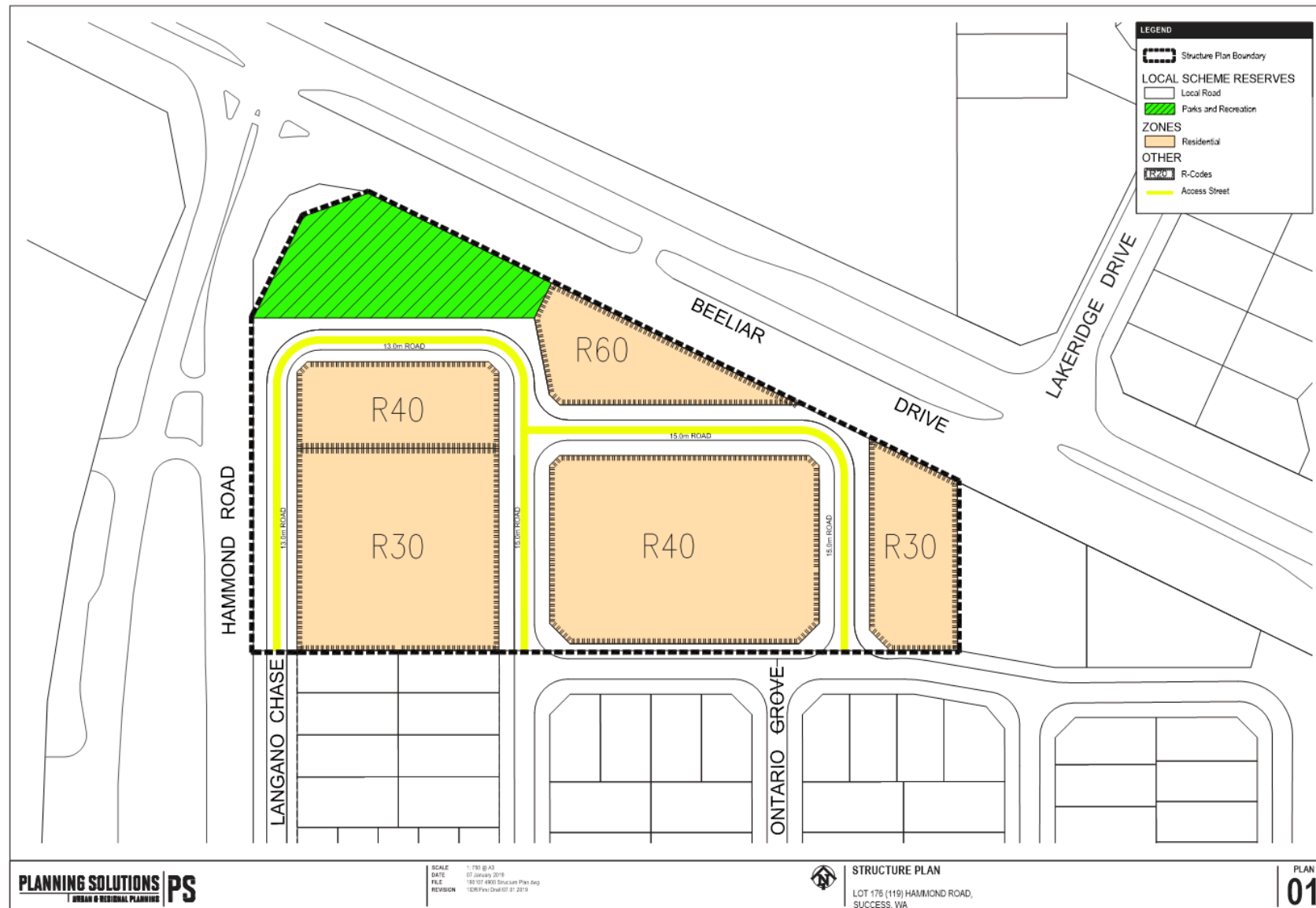
Advice to Proponent(s)/Submitters

The Proponent(s) and those who lodged a submission on the proposal have been advised that this matter is to be considered at the 11 April 2019 Ordinary Council Meeting.

Implications of Section 3.18(3) *Local Government Act, 1995*

Nil.





SCALE 1:750 @ A3
 DATE 07 January 2019
 FILE 19107-000 Structure Plan.dwg
 REVISION 10/01/2019



STRUCTURE PLAN


LOT 176 (119) HAMMOND ROAD,
 SUCCESS, VA

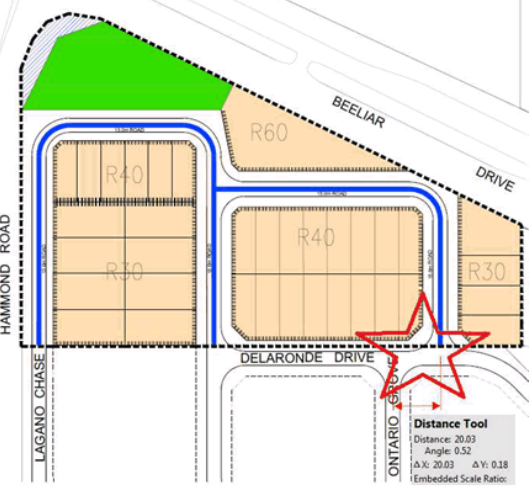
PLAN
01

File No. 110/193

SCHEDULE OF SUBMISSIONS
PROPOSED STRUCTURE PLAN – LOT 176 (NO. 119) HAMMOND ROAD, SUCCESS

NO.	NAME/ADDRESS	SUBMISSION	RECOMMENDATION
1	Owner – Requested for details to be treated as confidential.	SUPPORT No further details provided.	Noted.
2	Janice Wong of 44 Delaronde Drive Success	SUPPORT I, Janice Wong of 44 Delaronde Drive Success fully support the above proposal. The reasons being less fire hazard and more roads to main-road and the addition of another park. Thank you for your consideration.	Noted.
3	Scott Clifford Walpole 64 Delaronde Drive Success WA 6164	SUPPORT We are curious as to what is happening to the piece of land that isn't marked as being developed; we live adjacent to it and at the moment it serves as a dumping ground for people's rubbish.	Noted. The subject land is a Structure Planning zone owned by private owners. As such the development of this site is at the owner's discretion. Should the structure plan be approved (by the State government) the next step will be for the owner(s) to lodge a subdivision application. The timing of these two processes is at the discretion of the State government and the owner(s). As such there isn't a particular date in mind as to when 'development' may happen. However it seems the owners are intending to develop this land. Removal of rubbish is expected to take place as part of the process.
4	Parks and Wildlife Service Locked Bag 104, Bentley Delivery Centre, Western Australia 6983	REFERRAL REQUIRED The proposed development may result in the loss of habitat for Carnaby's Black Cockatoo, Baudin's Black Cockatoo, and the Forest Red-tailed Black Cockatoo as defined in the Commonwealth Environmental Protection and Biodiversity Conservation Act (EPBC Act) referral guidelines for threatened black cockatoo species. These species are listed as 'Endangered' and 'Vulnerable' respectively under the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act 1999). These species are also listed as 'Specially Protected' under the Western Australian Wildlife Conservation Act 1950.	Noted. The application as submitted for advertising included an Environmental Assessment Report (EAR) dated 11 January 2019. The EAR indicates; <i>"The vegetation is not considered to represent any state or federally listed Threatened or Priority Ecological Communities."</i> Please refer also to page 18 section 2.1.1 and 2.1.2 of the

NO.	NAME/ADDRESS	SUBMISSION	RECOMMENDATION
		<p>The proposal should be discussed with the Federal Department of Sustainability, Environment, Water, Population and Communities as there may be a requirement to refer the proposal under the EPBC Act.</p>	<p>Structure Plan report which elaborates on these points further. There is no mention within the Structure Plan document or the EAR of there being any intention of referring the proposal to the Federal Department of Sustainability.</p> <p>Should the department of Parks and Wildlife recommend such a referral, in spite of the information identified above, it is recommended that the department of Parks and Wildlife recommend such conditions to the DPLH at subdivision stage. Likewise should the DPLH consider the SP to be amended accordingly the DPLH should make the necessary changes to the SP prior to the determination of the SP by the Statutory Planning Committee.</p>
5	<p>Yulius Rendy Wardhana Usman 54 Delaronde Drive Success WA 6164</p>	<p>OBJECTION</p> <p>My name is Rendy and we live in 54 Delaronde (see pic below – submitters house identified in blue “our house”)</p>  <p>We bought and built our house here 2 years ago and we picked this lot because Murray said that the bush in front of our house was going to be bush forever, And We didn't expect the current proposal. Firstly we don't mind that you build the house(s) there but these are the things that we</p>	<p>Noted. In relation to Point 1 the distance of the centreline to centreline is 20m. This is shown below (in red) as follows;</p>

NO.	NAME/ADDRESS	SUBMISSION	RECOMMENDATION
		<p>didn't like it and disagree;</p> <ol style="list-style-type: none"> 1. If you see the picture, our house position is direct to the road which is basically dangerous for us because I heard so many accident happened in Australia. Some random cars drove into the house and we don't that happened to us. 2. Why you didn't build a park in front of Our House makes better view and also good for environment. 3. We pay extra when we build the house it's because if the bush but now the money that we spend seems for nothing <p>Thank you for letting us put a comment; we hope you can consider this matter for Our family</p>	 <p>The proposed streets are defined as "access streets" under the State governments' operational policy 'Liveable Neighbourhoods' (LN). Table 5 under element 2 of LN has been extracted and inserted below. As can be seen from table 5 a 20m 'junction spacing measured from road reserve centreline to terminating street pavements'. As per LN the proposed road is considered to be acceptable from a road safety aspect.</p>

NO.	NAME/ADDRESS	SUBMISSION	RECOMMENDATION												
			<div><div>Liveable Neighbourhoods</div><div>a Western Australian Government submission</div></div> <div>Element 2 - Movement network</div> <div>Table 5 – Junction spacing (measured from road reserve centreline to terminating street pavements)</div> <table><tr><th>Street type</th><th>L/R staggers (to avoid overlapping right turns)</th><th>R/L staggers To provide for left-turn deceleration lanes arterials and to avoid corner cutting on local streets</th></tr><tr><td>Local streets</td><td></td><td></td></tr><tr><td>Laneway</td><td>NA</td><td>NA</td></tr><tr><td>Access street*</td><td>20 m</td><td>20 m</td></tr></table> <p>The notion that a car could potentially/ hypothetically drive into your house is not considered to be increased in likelihood as a result of the proposed road design. Traffic accidents generally result from driving under the influence and/or speeding. Approval of this application does not necessarily imply an increased level of safety risk to residents. On this point objection point 1 is respectfully dismissed.</p> <p>It is understood that the request is for the park to be built in front of your house for better views (your view presumably) and also 'good for the environment'. Whilst this position may benefit your family the planning merits for such modifications are not based on planning rationale and are therefore not supported.</p> <p>It is understood that there is fondness for the existing bush and its environmental significance. However, the land is zoned for residential development and therefore residential development is permissible (subject to the approval of a Structure Plan) which would allow clearing of the existing vegetation on site.</p>	Street type	L/R staggers (to avoid overlapping right turns)	R/L staggers To provide for left-turn deceleration lanes arterials and to avoid corner cutting on local streets	Local streets			Laneway	NA	NA	Access street*	20 m	20 m
Street type	L/R staggers (to avoid overlapping right turns)	R/L staggers To provide for left-turn deceleration lanes arterials and to avoid corner cutting on local streets													
Local streets															
Laneway	NA	NA													
Access street*	20 m	20 m													
6	Tanesh Naidoo 60 Delaronde Drive, Success WA 6164	OBJECTION We purchased on the perimeter of the estate so that we may enjoy the beautiful view of the trees and the tranquil sound of the birds. We had a choice of lots to choose from at the time, but opted for this lot, in spite of	Noted. Building to AS3959 Bushfire Construction Standards is required under the Building Code of Australia where proposed Class 1, 2, 3 or 10a structures are												

NO.	NAME/ADDRESS	SUBMISSION	RECOMMENDATION
		<p>the additional requirements of building in accordance with Bushfire Attack Level (BAL) 19 standards. We feel that this development will significantly impact our current experience of living here through the removal of the natural bush land. If this development were to go through, we would definitely need reimbursement of the BAL 19 measures we've had to incorporate at a minimum.</p>	<p>impacted by designated Bushfire prone areas/ mapping.</p> <p>The legislation applies at the time of assessment/ determination pre-construction. On this basis should a dwelling be constructed to a particular Bushfire Attack Level (BAL) under AS3959-2009 that requirement is obligatory to mitigate the proposed dwelling from the impacts of bushfire.</p> <p>Should the bushfire threat vegetation be cleared at a future date (post construction) there is no right to compensation under the Building Code of Australia or under any other means with respect to either the Building Act or the Planning Act.</p> <p>There is no way of knowing how long bushfire prone vegetation will be a treat for. It could be 1 year, 10 years, 50 years or 100+ years (who knows). On this basis there will be no reimbursement for the BAL measures you have had to incorporate.</p> <p>Please note however some bushfires are started by ember attack. Embers can travel over 2km at a time of a bushfire (a bushfire could be over 2km away from your property). Being a BAL 19 your house should be built to withstand ember attack and therefore whilst the immediate bushland may/ may not be cleared your property will continue to be protected from bushfire at a level of BAL 19.</p> <p>The clearing of part or all of the subject bushland is not a reason not to have a house to BAL 19 in this circumstance. You and your family will continue to benefit from a BAL 19 home which is a positive.</p>
7	Department of Water and Environmental Regulation PO Box 332 Mandurah Western Australia 6210	<p>NO OBJECTION</p> <p>Consistent with Better Urban Water Management (BUWM) (WAPC, 2008) and policy measures outlined in State Planning Policy 2.9, Water Resources the proposed Structure Plan should be supported by an</p>	<p>Noted. It is understood whilst the proposal does not have a LWMS it does however have a Drainage Strategy. It is understood that the proposed DS is therefore acceptable</p>

NO.	NAME/ADDRESS	SUBMISSION	RECOMMENDATION
		<p>approved Local Water Management Strategy (LWMS) prior to final approval of the Structure Plan.</p> <p>The LWMS should demonstrate how the subject area will address water use and stormwater management. It should contain a level of information that demonstrates the site constraints and the level of risk to the water resources.</p> <p>The DWER reviewed the supporting document, Drainage Strategy – Lot 176 Hammond Road, Success (Porter, December 2018) and it was deemed satisfactory to the DWER. Accordingly, the DWER has no objections to this proposed Structure Plan proceeding.</p>	to the DWER for this stage of the development process on the basis of the relatively small size and scale of the proposed development.
8	ATCO Gas Land Management Coordinator Gas, Australia 81 Prinsep Road, Jandakot WA 6164	<p>NO OBJECTION</p> <p>ATCO Gas Australia (ATCO) has Medium Pressure (DN100PVC MP 70kPa) gas mains and gas infrastructure in the immediate vicinity of the identified Lot, within the road reserve of Hammond Road and medium pressure gas mains (DN63PE MP 70Kpa) within the road reserves of Langano Chase and Chrysoberyl Drive, Success</p> <p>ATCO has no objection to the proposed Structure Plan.</p>	Noted. The applicant will be made aware of these comments via this schedule of submission table.
9	Kulasinghe Gamaladalage Karadana 48 Delaronde Drive, Success WA 6164	<p>SUPPORT</p> <p>Please make sure this area only local traffic and residential parking only now Delaronde Drive get block with public parking always 20/30 cars parked along the Delaronde Drive every school days. Please let the school to provide enough parking students and stuff. Thanks</p>	Noted. The proposal will result in local traffic only, just the same as any other residential development. The school parking requirements is a separate matter which will be required to be considered under separate means.
10	Department of Transport Level 8, 140 William Street, Perth WA 6000	<p>NO COMMENT</p> <p>The Department of Transport (DoT) has no comment to provide for the proposal.</p> <p>DoT recommend that the application is formally referred to the Department Planning, Land, and Heritage (Infrastructure Planning).</p>	Noted.
11	Department of Fire & Emergency Services Rural Fire Division PO Box	<p>SUPPORT</p> <p>It should be noted that these comments relate only to State Planning</p>	Noted.

NO.	NAME/ADDRESS	SUBMISSION	RECOMMENDATION
	P1174 Perth WA 6844	<p>Policy 3.7 Planning in Bushfire Prone Areas (SPP 3.7) and the Guidelines for Planning in Bushfire Prone Areas (Guidelines). It is the responsibility of the proponent to ensure that the proposal complies with all other relevant planning policies and building regulations where necessary. This advice does not exempt the applicant/proponent from obtaining necessary approvals that may apply to the proposal including planning, building, health or any other approvals required by a relevant authority under other written laws.</p> <p><u>Recommendation – supported compliant application</u></p> <p>DFES advises that the BMP has adequately identified issues arising from the bushfire risk assessment and considered how compliance with the bushfire protection criteria can be achieved for the Structure Plan.</p>	
12	Main Roads Western Australia PO Box 6202, East Perth WA 6892	<p>SUPPORT – SUBJECT TO TECHNICAL ADVICE</p> <p>Main Roads acknowledges that neither Beeliar Drive nor Hammond Road are under Main Roads control; however as these are both important regional roads Main Roads offers the following advice.</p> <p><u>Noise</u></p> <p>Main Roads Environment Branch have reviewed the noise assessment conducted by Lloyd George Acoustics (Reference: 18054419-01 dated January 2019) and offer the following recommendations:</p> <ul style="list-style-type: none"> Noise walls along the boundary of the subdivision should be built to a suitable height to reduce noise levels to be below the SPP 5.4 limit, at a height that removes line of sight between the receiver and the traffic, and have a surface density no less than 15 kg/m2. Building treatment packages applied to the development are to comply with the requirements of the SPP 5.4 Implementation Guidelines to ensure that noise levels achieve the noise criteria. Notification on titles required for affected lots (i.e. lots predicted to receive noise levels above the target) are to be in accordance with SPP 5.4 Implementation Guidelines. 	<p>Noted. The acoustic report has been assessed by the City of Cockburn's technical experts (Health Officers) for compliance with SPP 5.4. One of the unknowns at this stage with respect to noise is the final ground levels. These levels are required to accurately condition the required noise wall height. At this stage of development these details are unknown and therefore the SP is recommended to address this matter at the next stage of planning (subdivision). The Council recommendation makes such reference as to meet the requirements of SPP 5.4.</p>

NO.	NAME/ADDRESS	SUBMISSION	RECOMMENDATION
		<ul style="list-style-type: none">• All affected lots are to provide at least one outdoor living space that complies with the SPP 5.4 target, or if not practicable, the limit. They should also be orientated away from traffic noise.• Specialist acoustic advice should be sought for any 2-storey dwelling proposed.	

14.8 RESOLUTIONS TO ENABLE A CLASS RESERVATION STATUS OF LAND - BIBRA LAKE

Author(s) A Trosic

Attachments N/A

RECOMMENDATION

That Council:

- (1) agrees to relinquish the management order over the northern portion Lot 65 (Reserve 46787) to enable its inclusion in the new A Class Reserve managed by DBCA. The City requests that the DBCA support the initiative of the City for appropriate ongoing signage interpretation to recognise the Local Government Inventory listing of the former Australian Women's Army Service Camp in this general location;
- (2) supports the northern portion of Lot 50 on Plan 7183 for vesting for A class reservation managed by DBCA;
- (3) seeks the southern portion of Lot 50 on Plan 7183 for vesting for C class reservation for management by the City of Cockburn as part of the broader Bibra Lake Reserve;
- (4) subject to no objection being received during the advertising process, resolves to formally close in accordance with Section 56 of the Land Administration Act 1997 the unmade road reserves on the north side of Hope Rd, south side of Farrington Street and corner of Hope Road and Bibra Drive. Once closed, Council requests the unmade road reserves north of Hope Road and south of Farrington Street (Lot 3 and 304) be included in the A class reservation for management by DBCA, and the remaining portion on the corner of Hope Road and Bibra Drive be vested with the City as part of the C Class reservation of Bibra Lake;
- (5) agrees to relinquish the management order over Lot 2550 (Reserve 33728) to enable its inclusion in the new A Class Reserve managed by DBCA; and
- (6) seeks Lot 40 on Plan 2073 to be vested as a crown reserve, and to form part of the integrated water body and foreshore of Bibra Lake.

Background

The Labor State Government is not proceeding with the Roe 8 Project, which reflects the City of Cockburn's position to not support this project. In accordance with the State Government's decision not to proceed, a

series of actions have occurred to effectively remove the project from delivery.

Environmental approvals have been amended to remove that section of the project west of Bibra Drive, and now action is being taken to formally place this land within a new A Class Reservation. This will be managed by the Department of Biodiversity, Conservation and Attractions (DBCA), and affords the highest level of reservation protection under the crown land law framework.

In order to affect this action, there are various resolutions required of the City of Cockburn. This is the purpose of this report.

Submission

N/A

Report

By way of announcement in mid-2018, the State Government is progressing an action to ensure that all land located within the pocket of Bibra Lake bordered by Farrington Road to the north, Bibra Drive to the east, Hope Road to the south, and Progress Drive to the west is amalgamated and set aside as an A-Class conservation reserve to be managed by the DBCA. This reflects removal from the proposed Roe 8 Highway extension project that section of road reserve west of Bibra Drive, and the addition of the A Class conservation status which affords a high level of protection for the land in question.

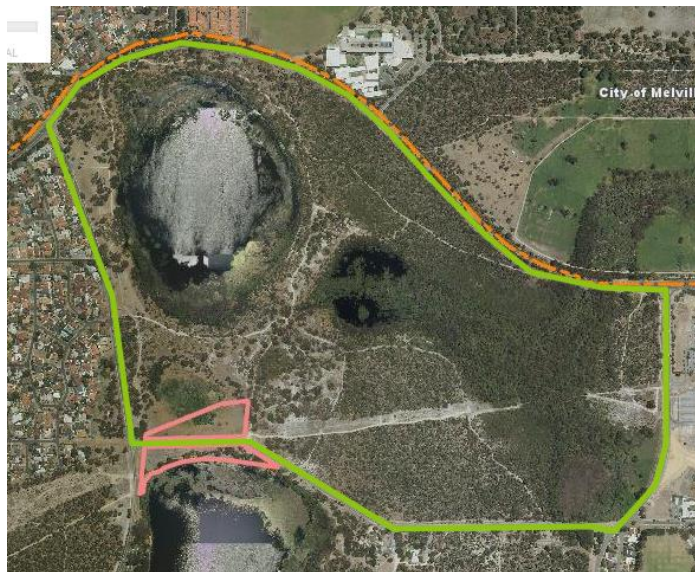
To affect this outcome, a number of resolutions are required of the City of Cockburn. These are explained following, together with a graphic to show the land in question.

Northern portion of Lot 65 (Reserve 46787)



The northern portion of Reserve 4687 north of Hope Road is Crown Reserve currently managed and maintained by the City of Cockburn. The City is required to formally advise its agreement to relinquish its management order over this portion of the Reserve. It is recommended that the City do this to enable this portion of land to be included into the new A Class Reserve managed by DBCA. In doing so, the City should also request that the DBCA support the City's initiative for an appropriate form of signage interpretation to recognise the Local Government Inventory listing of the former Australian Women's Army Service Camp in this general location.

Lot 50 on Plan 7183



Lot 50 exists as a tied lot on both the north and south side of Hope Road reserve. In order to affect the A class reservation north of Hope Road, and to recognise that the southern portion is logically managed as part of Bibra Lake Reserve, it is recommended that Council:

- support the northern portion to vesting for A class reservation managed by DBCA;
- support the southern portion to vesting for C class reservation for management by the City of Cockburn as part of the broader Bibra Lake Reserve.

Unmade roads

The unmade road reserves on the north side of Hope Road need to be formally resolved to be closed by the City of Cockburn, and once converted to unallocated crown land included within the A Class reservation for management by DBCA.

The portion of road reserve on the south side of Hope Road, should also be closed and included within the City's C Class reservation for Bibra Lake.

Reserve 33728

This is currently managed as a Crown reserve by the City of Cockburn. The City is required to formally advise its support to relinquish management order over this reserve. It is recommended that the City do this, to enable it to be included in the new A Class Reserve managed by DBCA.

Lot 3 and 304

These land parcels on the former of Hope Rd and Bibra Drive are State Government owned, but logically are managed by the City of Cockburn as part of the Bibra Lake C Class Reserve. It is recommended that the City seek the vesting of these as C Class reserve for management as part of Bibra Lake.

Lot 40 on Plan 2073

Lot 40 has never been vested as a crown reserve, and forms part of the integrated water body and foreshore of Bibra Lake. It is recommended that this be requested by the City, to have it vested as a C Class reserve for management by the City.

By making these resolutions, the City is able to facilitate the advancement of the A Class reservation north of Hope Road and west of Bibra Drive. It will also be able to ensure Bibra Lake Reserve is appropriately consolidated.

Strategic Plans/Policy ImplicationsCommunity, Lifestyle & Security

Create and maintain recreational, social and sports facilities and regional open space.

Economic, Social & Environmental Responsibility

Further develop adaptation actions including planning; infrastructure and ecological management to reduce adverse outcomes arising from climate change.

Budget/Financial Implications

The various land surveying and document preparation will be done by the State Government. There will be no cost incurred by the City in this regard. For the portions of land being added to Bibra Lake Reserve, these already form integrated elements of the overall park and don't

pose significant future liability in terms of overall management of the reserve.

Legal Implications

Land Administration Act 1997

Transfer of Land Act 1893

Community Consultation

The road closures have been advertised in accordance with the requirements of the Land Administration Act 1997 and associated regulations.

Risk Management Implications

The key risk in not advancing these resolutions is that the A class reservation status may not be afforded, which places at risk the City's objective to not see Roe 8 built.

Advice to Proponent(s)/Submitters

Those who lodged a submission on the proposal have been advised that this matter is to be considered at the 11 April 2019 Ordinary Council Meeting.

Implications of Section 3.18(3) *Local Government Act, 1995*

Nil.

14.9 CONSIDERATION OF ADOPTION OF ROCKINGHAM ROAD UPGRADE CONCEPT PLAN

Author(s) D Di Renzo

Attachments

1. Option 1 Draft Concept Plan [↓](#)
2. Option 2 Draft Concept Plan [↓](#)
3. Shopping Centre proposed interim plan [↓](#)
4. Cambridge Street, West Leederville - Before and After Photographs [↓](#)
5. Schedule of Submissions [↓](#)

RECOMMENDATION

That Council

- (1) adopt Option 2 Rockingham Road concept plan (included at Attachment 2) for the purposes of progressing to detailed design, including the following elements:
 1. That the portions of land owned by Phoenix Shopping Centre and required for the proposed Coleville Crescent and northern Phoenix Shopping Centre access roundabouts be made available at no cost to the City to enable the City to undertake the ultimate construction of this infrastructure. The Phoenix Shopping Centre is to ensure that vacant possession of these portions of land is delivered to the City to coincide with the commencement of construction of the project. An appropriate agreement being entered in to between the City and Phoenix Shopping Centre to ensure the Shopping Centre's performance in this regard.
 2. That the Phoenix Shopping Centre funds the cost associated with beautifying their existing section of car park and frontage between the southern driveway entry and McDonald's restaurant, on Rockingham Road. This beautification is to include demolition of the screen wall; widening and redevelopment of the footpath/bus stop area to become a befitting plaza type environment with shade and appropriate landscape treatment; extension of this plaza to make use of the unutilised car park area and; additional aesthetic screening to help moderate the visual impact of the existing loading dock. An appropriate agreement being entered in to between the City and Phoenix Shopping Centre to ensure the Shopping Centre's performance in this regard.
 3. That the power infrastructure be focussed upon as a community led place marking initiative.
 4. That detailed design extend to include traffic calming treatments on Kent Street, changes to Phoenix Road (west of

Rockingham Road) to provide turning pockets into/out of the medical centre site and changes to Phoenix Road (east of Rockingham Road) to convert Grandpre Crescent and Phoenix Road intersection to a right into Grandpre and left in / left out of Grandpre only, to ensure car drivers use the U-turn pocket for right out movements from Grandpre located further eastward along Phoenix Road.

5. Undertaken further consultation with affected landowners and businesses as required, including land acquisition from private property owners on the western side of Rockingham Road at the proposed roundabout locations
6. Undertaking the works to minimise the impact of roadworks on businesses, including consideration of undertaking elements of the project as night works.

(2) advise property owners, business owners and submitters of Council's decision.

Background

The upgrade of Rockingham Road is an important initiative for Spearwood to help improve the Phoenix Town Centre in response to longstanding community and business concerns regarding the safety and appearance of the road.

The Rockingham Road upgrade was identified as a key action of the Phoenix Central Revitalisation Strategy, adopted by Council in 2009. This identified an upgrade to Rockingham Road in order to:

- Improve the amenity of the public realm;
- Improve connectivity for various transport modes including pedestrians and cyclists;
- Enhance bus stop facilities;
- Promote mixed use development along the western side of Rockingham Road;
- Enhance the streetscape;
- Reduce the negative impact of excessive signage along Rockingham Road;
- Reduce the negative impact of excessive car parking and crossovers along Rockingham Road.

Two concepts have been advanced for detailed public and stakeholder engagement, including forums, surveys, open day events, direct letters and promotion through media. This is based on Council's decision from March 2017, which deferred the upgrade of the road to enable the shopping centre to further advance its master planning, and to also enable staff to undertake further engagement with business stakeholders north of Lancaster Street.

As a result of the further engagement that has taken place; the lack of advancement of master planning for the shopping centre and; the need for revitalisation of the town centre environment to occur; this report recommends that Council adopt Option 2 for the purposes of advancing to detailed design and delivery in the coming financial year.

Option 2 reflects the general principles that have been communicated by the shopping centre for its (yet to be defined) redevelopment ambitions, and also deals successfully with the concerns that businesses raised in respect of access north of Lancaster Street and south of Phoenix Road. It provides the opportunity for extensive aesthetic improvements, and assists in creating a town centre destination that is safe for pedestrian, cyclists, public transport users and customers.

Submission

N/A.

Report

This project has been a strategic priority for the City stretching back to the foundations of the Phoenix Central Revitalisation Strategy, which was the first place plan undertaken by Council in 2009. It addresses long held community and business stakeholder aspirations for an attractive, welcoming and confident town centre environment that demonstrates and reassures people of its role as an important district centre for the City. The following reveals the most recent background of events that have occurred.

14 August 2014 OCM

Council endorsed the commencement of a multidisciplinary internal workgroup represented by Strategic Planning, Parks Services and Engineering Services. The purpose of this was to advance concept planning for Rockingham Road.

The work group identified key objectives and preliminary concept plan options for the revitalisation of Rockingham Road to understand the future desired form and function of the road. The key objectives are:

1. To promote pedestrian use across and along Rockingham Road, through the provision of a safe and attractive environment.
2. To improve the amenity around bus stops and encourage the use of buses by giving priority to the bus service.
3. To create a visual identity which reassures and welcomes people to the town centre by conveying its sense of place.
4. To create safe and legible vehicle access arrangements which serves the town centre as a destination.
5. In practical terms:
 - Minimise land acquisition requirements;
 - Create maximum opportunities for landscaping to beautify the road;
 - Reduce the number of crossovers to Rockingham Road while facilitating access to businesses through a 'roundabout system';
 - Reduce traffic speeds through new 50km or 40km speed limits (subject to Main Roads), and a narrowing of the road that will slow traffic.

The Rockingham Road concept produced by the workgroup was subsequently reviewed by Porter Consulting Engineers and developed into a feasible design capable of being implemented. This design was developed into a draft suitable for community consultation.

9 June 2016 OCM

A draft concept plan was adopted by Council for the purposes of community consultation. Extensive community and stakeholder consultation was undertaken for a period of 60 days, ending on 22 October 2016.

December 2016 OCM

Subsequent to consultation, Council considered adopting a design concept for Rockingham Road, and a decision was deferred by Council to enable further discussion with the Phoenix Shopping Centre, and to enable the Phoenix Shopping Centre to brief Council on their proposed future Master Plan for the site. This took place in February 2017.

9 March 2017 OCM

Council considered a concept plan for Rockingham Road (Attachment 1) and resolved to defer adoption of a plan for a period of two years to allow Phoenix Shopping Centre additional time to progress a master plan for their site.

2017-2018

During this two year deferral period City officers have periodically met with representatives of the owners of the Phoenix Shopping Centre and their consultants seeking updates on the master planning process.

The City formulated a second concept plan (Attachment 2) that responded to issues raised through the 2016 consultation. Some of these key issues were:

- Concern from businesses and the community regarding difficulty accessing properties between Lancaster Street and Phoenix Road due to the restrictions posed by the continuous median.
- Concern from residents in Kent Street regarding potential additional traffic resulting from the proposed Kent Street/Rockingham Road roundabout.
- Additional feedback from the Phoenix Shopping Centre regarding their preferred outcome for Rockingham Road, with Option 2 extensively based upon what was expressed as the ultimate design outcome for the centre.

Subsequently, the original advertised plan (Option 1) was advertised for public comment alongside this new Option 2 during February and March of 2019. This report now deals with the outcomes of that advertising.

Consultation and key issue analysis

Community consultation has been undertaken on two concept plans for Rockingham Road, being the concept plan previously advertised in 2016/2017, and a new concept plan that incorporates previous consultation outcomes and feedback from the Phoenix Shopping Centre.

A key feature of both plans is the change from a dual carriageway (two lanes in both directions) to a single carriageway (one lane in each direction). This key change provides the opportunity to change the character of the road through beautification works (such as landscaping), and to slow traffic to create a more pedestrian friendly environment.

The current road reserve is too narrow to accommodate any landscaping elements if the road remains dual carriageway. Reduction to a single carriageway is also critical to slow traffic, while still enabling a smooth flow of traffic to occur albeit at slower, safer speeds. The treatment of design will moderate driver behaviour to around a 40 to 50km/hr speed, providing a pleasant and safer public space

environment for pedestrians, cyclists and customers who seek to access and linger in the town centre.

At this stage neither option include undergrounding of power as previous quotations have demonstrated it to be cost prohibitive. However, underground power could be implemented in either concept plan should it become financially viable in the future. There is no contingent link between undertaking this project, and needing to adjust the current power supply.

Indeed, as Council considered recently in respect of the water corporation distribution towers in Coolbellup, there is an opportunity to consider some form of tactical urbanism treatments to the power poles, such that they become a part of the overall aesthetic lift that this project will result in. Power pole art has been an emerging aspect of community led place making.



Option 1 (Attachment 1): Reflecting the original advertised 2016/2017 concept:

1. Reduction to single carriageway;
2. A mostly continuous median to allow landscaping opportunities and to control access;
3. New roundabouts at Lancaster Street (replacing the traffic signals) and Kent Street (to a new shopping centre entrance);
4. Conceptual changes to entry points of Phoenix Road;

5. Dedicated bus embayments;
6. Dedicated 1.5m wide cycle lane;
7. Amenity space in the area to the north east of the proposed Kent Street roundabout at the current southern entry to the Phoenix Shopping Centre to improve the interface with Rockingham Road;

Option 2 (Attachment 2): A new alternative concept that incorporates feedback from previous consultation:

1. Reduction to single carriageway;
2. Proposed roundabout at Lancaster Street (replacing the traffic signals), the Coleville Crescent intersection, and an additional proposed roundabout at the northern Shopping Centre entrance;
3. Proposed roundabout at Coleville Crescent rather than Kent Street in response to concerns from residents in Kent Street and feedback from the Shopping Centre;
4. The restriction of right-out movements north of Lancaster Street, while still allowing left-in and right-in movements;
5. A mostly continuous median to allow landscaping opportunities and control access;
6. Conceptual changes to entry points of Phoenix Road.
7. No dedicated cycle lanes because certain design features (turning pockets) do not allow a safe bike lane - cyclists would use the footpath (at slower speeds) or the road (confident cyclists at higher speeds).

2016/2017 Community Consultation

The 2016/2017 community and stakeholder consultation comprised the following key elements:

1. Preliminary consultation with key affected stakeholders:
 - Inviting adjacent landowners in May 2016 to meet with staff to ensure they understood the impact that the proposed changes would have on them.
 - Meetings with Phoenix Shopping Centre and their consultants to discuss the plans.
 - Meetings with Phoenix Working Group, comprised of community members, and on occasion affected landowners, also met and discussed the plan.

2. Formal 60 day consultation with key affected stakeholders and the broader community. This included letters to landowners in the area, letters to government agencies, and a display at the Phoenix Shopping Centre.

The key issues raised through this consultation were:

- Concern from businesses and landowners north of Lancaster Street regarding the continuous median restricting access. Option 2 has been developed in response to these concerns.
- Request for consideration of a roundabout between Lancaster Street and Phoenix Road to provide access to businesses on both sides of the road. The City has now tested a potential additional roundabout between Lancaster Street and Phoenix Road to improve access to properties/businesses in this area. It was found that additional roundabout cannot be accommodated in this area, primarily due to level differences adjacent. This is why Concept 2 does not include an additional roundabout, and alternatively it includes only restriction to right-out movements, while allowing left-in and right-in movements.
- Concern with the proposed reduction to one lane, perceiving it to be a downgrade that will create traffic congestion.

2018/2019 Community Consultation

The 2018/219 consultation (two options) commenced on 5 February 2018, closing on 12 March 2019. It included:

1. 600 letters to nearby landowners and businesses;
2. Display and Information Sheets at the Phoenix Shopping Centre and Council offices;
3. Drop in sessions at the Phoenix Shopping Centre (Saturday morning) and Council offices (Monday evening);
4. One on one meetings;
5. Project webpage;
6. Presentation to Spearwood Community Association.

A total of 120 submissions were received, with 76 submissions supporting either Option 1 or Option 2, and 30 submissions not supporting the project. All submissions are included and addressed in Attachment 5.

The majority of submissions that were received recognise that improvements to the road are necessary and desirable. Indeed a number of submissions commented on the current external image of

the town centre, as being unattractive, unsafe, and uninviting as well as an unsightly entry statement to our local government area. Certainly consultation reveals clear dissatisfaction amongst the community with Rockingham Road and the adjacent commercial development, including the Phoenix Shopping Centre.

As key civic elements of the City of Cockburn will remain consolidated within the broader town centre, this dissatisfaction also affects the setting that the City offers its community in the various community facilities that exist on the civic centre site. It is of particular strategic importance to have a centre that sets a keynote impression for what the City of Cockburn stands for in terms of having attractive, vibrant and inviting centres that knit communities together across the district.

Option 2 received the greatest level of support (39 per cent), with 25 per cent of respondents supporting Option 1.

For those who supported Option 1 the main reason was the inclusion of bike lanes. Option 2 does not include dedicated bike lanes; the rationale for this is that under Option 2, the traffic speeds of cars will be moderated by the three roundabouts and pedestrian crossing points to around 40km/hr.

For dedicated cyclists, and those with electronically assisted bikes, this is a speed that can be maintained and thus there is no level of safety risk that requires separating cyclists from cars. Non-dedicated cyclists will be able to share the two paths either side of the road, with full safety that comes from separation from vehicles. Accordingly, one of the benefits of Option 2 is a safer overall environment for all users of the town centre.

Overall community consultation reveals two key views on the function and character of Rockingham Road – those who see the road's primary function being to move vehicles; and those who also see the road as having an important role to play in creating a town centre environment.

In this regard those who supported a proposed upgrade (either option) supported it for the following reasons:

- Much needed improvement to pedestrian/cyclist environment.
- Enhancing the appearance of the road and town centre.

Conversely, those who have objected to the proposed upgrade altogether, or who have expressed concerns with the reduction to a single carriageway, are concerned with the following:

- Concern that the reduction to one carriageway will cause traffic congestion.

- The view that upgrading the road will not improve the shopping centre/privately owned land adjacent to the road and is therefore not worthwhile pursuing.

Traffic modelling has been undertaken by Urbsol for both concepts, demonstrating that the proposed road upgrade will not create unacceptable traffic congestion in either option. The City has also recently completed an update of the District Traffic Study that tested the impact of this option on the surrounding road network. Minimal impact resulted on the surrounding roads from decreasing this section of Rockingham Road to one lane either way.

In terms of access, it is important to note that the slower traffic speeds, and the introduction of roundabouts to break traffic, will make it easier for vehicles to exit properties on Rockingham Road and improve pedestrian safety. Current access for cars to the town centre is actually perceived by many to be unsafe, and thus the traffic calming of the road will help to improve access. Further adjustments on the Phoenix Road approaches east and west to Rockingham Rd will also extensively improve safety and access.

A good relevant Perth metropolitan example is Cambridge Street in West Leederville. This carries a similar number of vehicles as Rockingham Road and a section was reduced to a single carriageway in 2015. Attachment 4 includes some before and after photographs demonstrating the resultant improvements. This includes additional landscaping, and the creation of a road that is significantly easier for pedestrians to cross. Also note that in some sections the overhead powerlines are still present yet the reduction to single carriageway still results in substantial aesthetic improvements. These are also shown following for ease of reference:



BEFORE



AFTER



BEFORE - 2014



AFTER – Reduction to single carriageway

A number of respondents expressed the desire to see Rockingham Road upgraded but without reducing the road to a single carriageway. In this regard the following key issues are pertinent in considering the future of Rockingham Road:

- If the road remains a dual carriageway there is very limited opportunities for landscaping elements and therefore very few opportunities to improve the appearance of the road – i.e. the road will remain as it is.
- Upgrading the road is a key action Council can take to beautify the area and create the right environment to attract private investment.

Consultation with Phoenix Shopping Centre and McDonalds

The Phoenix Shopping Centre is a major stakeholder in this project, and for this reason the City has undertaken early and extensive consultation with them on the project over a period of more than three years. The following engagement was undertaken as part of the previous 2016/2017 consultation:

- 2008 to 2016 – Several meetings to keep the Shopping Centre informed regarding the implementation of the Phoenix Central Revitalisation Strategy.
- 10 February 2016 – the City advised the Phoenix Shopping Centre owners that plans were being developed for the upgrade and beautification of Rockingham Road.
- 23 March 2016 – the City presented and provided draft copies of the plan ahead of formal advertising to enable sufficient time to consider implications of the plan for their site master planning process.
- 2016 - Five meetings held with Phoenix Shopping Centre and their consultants throughout the year. City officers also met on two occasions with representatives from McDonalds.
- 2016 formal advertising period – A 60 day advertising period at the request of the Shopping Centre (extended from the normal 28 days), and a further 14 day extension at their request.

In 2016/2017 the Phoenix Shopping Centre expressed concern regarding implementing works in relation to the proposed upgrade of Rockingham Road that may need to be modified if the Shopping Centre is redeveloped. They advised that they were in the process of undertaking a master planning process for the centre with a view to examining more substantial refurbishment and redevelopment works.

In response to these concerns Council deferred adoption of the Rockingham Road upgrade for a period of two years at the 9 March 2017 OCM.

Subsequently, throughout 2017 and 2018 the City has convened a number of meetings with Phoenix Shopping Centre, and requested regular updates on the master planning process. No master plan is yet to be developed.

During the 2018/2019 advertising of the two options, Phoenix Shopping Centre made a submission objecting to Option 1; while supporting Option 2 subject to the plan being modified to maintain full access to McDonalds and the southern entry point. Their plan is included at Attachment 3. They assert that this is an interim solution ahead of the full redevelopment of the shopping centre, whereby Option 2 would be implemented in its entirety.

The City has been in discussions with Phoenix Shopping Centre since January 2016 regarding these plans and to date have not been provided with any concept plans; no development applications have been lodged; and no commitments have been made regarding timeframes or actions for upgrades to the Shopping Centre. At this stage there is no indication that redevelopment will occur. It is therefore considered there is significant uncertainty surrounding redevelopment of the Shopping Centre, and this creates concern regarding any proposed 'interim measures' and the likelihood that they will remain the indefinite outcome.

The proposed alternative interim plan falls completely short in addressing any of the key objectives of the proposal, and is not supported for the following reasons:

- It does not remove any unsafe vehicle turning movements, particularly right out movements.
- It significantly reduces the opportunities to beautify the road with landscaping, and the clutter of kerbing and road infrastructure required to manage a complex arrangement of vehicle movements in a short stretch of road will be more unattractive and blighted than the current road environment.
- Overlaid plans demonstrate that this plan results in almost as much bitumen and road surface as there is currently (despite the reduction to single carriageway), providing very few opportunities for beautification and greening.
- Creates a road environment that is confusing for motorists and pedestrians through a clutter of kerbing and turning pockets etc. required to manage traffic movements.
- Does not rationalise access points which is a key objective of the project to make the road safer and improve the pedestrian and cyclist environment.

- Further degrades the pedestrian environment through:
 - Introduction of two roundabouts without the offset of rationalised crossovers/access, resulting in the area being more unpleasant to traverse as a pedestrian with greater interruptions to the footpaths.
 - Proposed turning pockets essentially result in almost the same crossing distance for pedestrians along this stretch of road which is unacceptable given this is a key section of the town centre, and the importance of access to bus stops etc.

In summary, there is considered to be very little benefit to the wider community to introduce new roundabouts at Coleville Crescent and the northern shopping centre entry as shown in Option 2 (which primarily serve to benefit the shopping centre) whilst still allowing full access to the current entry points.

It is acknowledged that under Option 1, the 400m travel distance required to undertake the U-turn movement to access McDonalds or the northern Shopping Centre does not offer convenient access for vehicles heading north.

However, Option 2 is considered to respond entirely to this issue and is workable for the Shopping Centre with the additional roundabout in both the interim period, and longer term should it be redeveloped. Option 2 actually serves to benefit the shopping centre for the following reasons:

- The Shopping Centre gains significantly improved access through a new roundabout at the northern carpark where the current access is considered unsafe and unattractive to many users. This roundabout will make access to the centre more prominent and legible, and improves access to their largest car park area.
- The proposed Coleville Crescent roundabout serves to improve access to the shopping centre southern upper deck, as currently there is no access to Coleville Crescent from Rockingham Road.
- Access to McDonalds only requires a U-turn at the roundabout directly to the north, providing safer and more legible access. This access is considered to provide an acceptable level of convenience and is unlikely to deter customers.

It is therefore considered that there is no justification to support the alternative 'interim' plan, and it is considered that Option 2 is a workable concept.

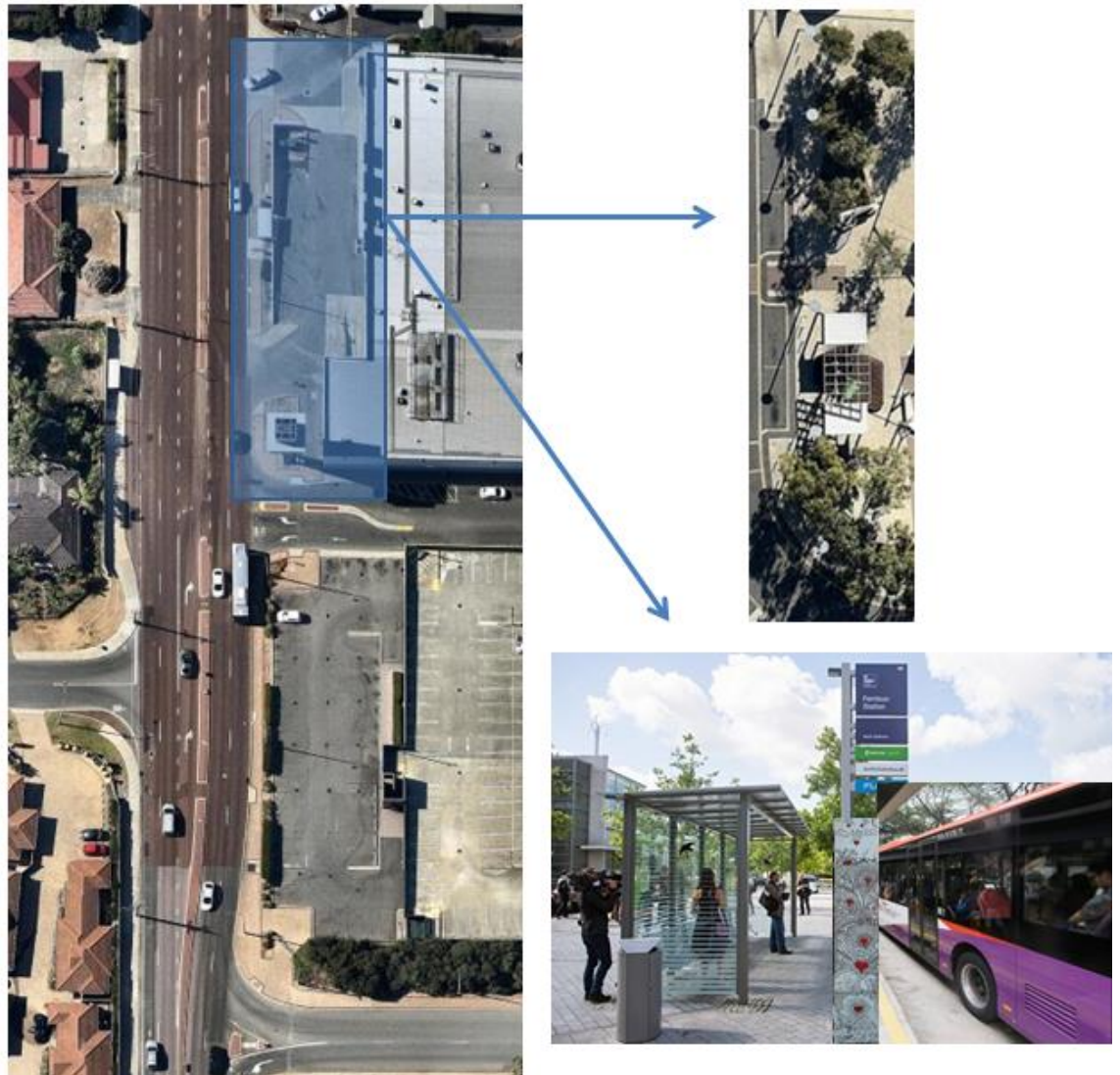
It is also recommended that the Shopping Centre undertake a minor refurbishment to the section of car parking between the existing southern centre entrance and the McDonalds restaurant. It makes sense from an efficiency and value for money perspective that this be undertaken as part of the overall project, to an acceptable blend and relate to the overall design concept.

The idea for this space is to tactfully convert it to a more inviting edge to the critical environment that existing as the southern entry in to the town centre. By flowing a concept that begins at the new Coleville Crescent roundabout, up to the McDonalds restaurant, there is the realistic potential to begin a transition in people's minds to a reassuring and welcoming environment. Key aspects of this work should include:

- demolition of the screen wall;
- widening and redevelopment of the footpath/bus stop area to become a befitting plaza type environment with shade and appropriate landscape treatment;
- extension of this plaza to make use of the unutilised car park area and;
- additional aesthetic screening to help moderate the visual impact of the existing loading dock.

An appropriate agreement will need to be developed to have the centre contribute to the cost of the works where they exist on their private land, and to also contribute to the portion of funds for ongoing maintenance.

This will interpret the space like as follows:



Northern End (Lancaster Street to Phoenix Road)

When Option 1 was advertised in 2016/2017 significant concerns were expressed from landowners and business owners/operators north of Lancaster Street on both sides of the road that full access should be provided otherwise there would be a loss of business from passing trade.

On the western side of the road there is a Pharmacy, medical suites, and office uses, which currently take access from one point of Rockingham Road (full access), which allows customers to access this area travelling in either direction. The concern from landowners and businesses is that vehicles travelling south on the road will not be prepared to use the proposed Lancaster Street roundabout to U-turn and access their businesses; and that the more difficult exiting scenario will be too inconvenient for customers.

These concerns are acknowledged. The impact of the continuous median without easy means to undertake a U-turn movement as

created south of Lancaster Street is considered to create an unacceptable level of restriction to businesses which is not in the interest of businesses or the greater community.

These concerns with Option 1 have been again expressed in 2018/2019 consultation, and Option 2 has been supported by the majority of businesses between Lancaster Street and Phoenix Road.

Whilst the majority of businesses have supported Option 2 as proposed, BP has supported Option 2 subject to full access being maintained to their property. This is one of the most unsafe right-out movements given proximity to the Phoenix Road intersection, and its retention is not supported, nor is it needed. There is considered to be adequate alternative options for exiting vehicles, and the City will consider changes to the access to Phoenix Road to ensure safe, convenient and appropriate options.

To also address the full access options, it is recommended that the detailed design concept which is the next step include changes to Phoenix Road (west of Rockingham Road) to provide turning pockets into/out of the medical centre site and changes to Phoenix Road (east of Rockingham Road) to convert Grandpre Crescent and Phoenix Road intersection to a right into Grandpre and left in / left out of Grandpre only, to ensure car drivers use the U-turn pocket for right out movements from Grandpre located further eastward along Phoenix Road. This creates a viable solution for the northern precinct.

Discussion of Concept Plan Options

Community consultation demonstrates that the community and majority of stakeholders recognise the need for improvements to Rockingham Road to occur, with 64 per cent of respondents supporting upgrades. Option 2 received the greatest level of support (39 per cent), with 25 per cent of respondents supporting Option 1.

Of the 25 per cent of respondents that objected to the proposed upgrades occurring, the primary concern was that the reduction to a single carriageway would result in traffic congestion. However, traffic modelling has shown the traffic will be free flowing under either option.

This project represents Council's biggest opportunity to influence the character and function of this town centre, to improve safety, and to create an attractive environment to attract private investment and new businesses.

Option 2 has received the greatest level of community and stakeholder support, and provides the most workable solution for upgrading the road and achieving the key objectives set out for this project.

Between Lancaster Street and Phoenix Road, Option 2 allows access into businesses and properties to remain as it is currently, but restricts the right out movements. The right out movements are considered to be the most unsafe therefore the plan is considered to represent a significant safety improvement whilst still allowing good access to businesses.

Between Coleville Crescent and Lancaster Street Option 2 is also considered to provide safer, more convenient access to the Shopping Centre and McDonalds than Option 1, whilst still improving safety and beautifying the road. It is therefore considered that there is no justification to support the alternative interim plan proposed by the Phoenix Shopping Centre.

It is also noted that Option 2 does not rely on the support of the Phoenix Shopping Centre, and can be implemented by the City without requiring any significant changes internally on the site.

In Option 2 the roundabout at Coleville Crescent rather than Kent Street also addresses concerns from residents in Kent Street that this roundabout will encourage more traffic in Kent Street. Additionally, the recommendation to council recommends traffic calming for Kent Street.

Based on the outcomes of community and stakeholder consultation, and consideration of the needs of all road users, town centre users, and businesses, it is considered that Option 2 presents the most practical option for the road upgrade. It is therefore recommended that Council adopt Option 2 to progress to detailed design.

Progressing Option 2

Option 2 requires the provision of land by the Phoenix Shopping Centre to accommodate the proposed Coleville Crescent and northern entrance roundabouts, as well as a small land acquisition from the private properties on the western side of Rockingham Road. It is recommended that Phoenix Shopping Centre be required to ensure delivery of vacant possession of this land, in order to assist the City in building the overall project (noting this is a very good outcome that will improve many aspects of access to the centre).

It is considered reasonable that the land required for these roundabouts are provided at no cost to the City, particularly the northern entry roundabout, is primarily to provide improved access to the shopping centre and McDonalds. Appropriate agreements need to be reached with the private property owners.

The Phoenix Shopping Centre is to ensure that vacant possession of these portions of land is delivered to the City to coincide with the commencement of construction of the project. An appropriate agreement being entered in to between the City and Phoenix Shopping

Centre to ensure the Shopping Centre's performance in this regard. Additionally, the centre will need to contribute funds to the upgrade of the existing car park immediately adjoining the McDonalds restaurant, as mentioned in the preceding section. The City will undertake design and delivery of the works to ensure a coordinated and befitting edge is created here, but this is subject to the centre agreeing to fund and contribute to maintaining those sections of the work that project in to its private land.

It is also noted that a number of business owners in the northern end between Lancaster Street and Phoenix Road requested that the works be done as night works to minimise disruption to business operations. It is recommended that Council consider this request in planning the roadworks.

Strategic Plans/Policy Implications

City Growth

Continue revitalisation of older urban areas to cater for population growth and take account of social changes such as changing household types.

Moving Around

Improve connectivity of transport infrastructure.

Community, Lifestyle & Security

Provide safe places and activities for residents and visitors to relax and socialise.

Economic, Social & Environmental Responsibility

Create opportunities for community, business and industry to establish and thrive.

Improve the appearance of streetscapes, especially with trees suitable for shade.

Budget/Financial Implications

Both options for the upgrade to Rockingham Road are estimated to cost approximately \$4,000,000, and will need to be budgeted by Council. The detail design is proposed for the 2019/20 financial year to allow approvals to be obtained including any service relocation costs. The construction project would thus be timed for the 2020/21 financial year.

Legal Implications

N/A.

Community Consultation

Community consultation included the following:

- 600 letters to nearby landowners and businesses;
- Drop-in sessions (for people to look at the plans and talk to City staff, particularly those who may find it difficult to view the plans/speak to staff during business hours) at:
 - Phoenix Shopping Centre: Saturday 16 February 2019 (any time between 9:30am and 11am) or City of Cockburn Administration Centre: Monday 11 February 2019 (anytime between 4:30pm and 7pm).
- One-on-one meetings – Landowners/businesses invited to contact the City to arrange to meet with City planning staff and the Business Engagement Officer to discuss the plans.
- Project webpage (Comment on Cockburn) – The City's project webpage comment.cockburn.wa.gov.au/planning, contains all relevant information including copies of the concepts, traffic analysis for both, FAQs etc. (comments can be made here online also).
- City of Cockburn Administration Centre - Plans available to view at City's administration centre at 9 Coleville Crescent, Spearwood between 8.30am and 4.30pm weekdays.
- Presentation to Spearwood Community Association on 28 February 2019.
- Display at the Phoenix Shopping Centre and notice in the newspaper to ensure people who visit the centre had the opportunity to see the proposed plans and comment.

Risk Management Implications

If an upgrade to Rockingham Road is not pursued there is a risk that the town centre will further decline as the current public realm does not create the right environment to attract private investment.

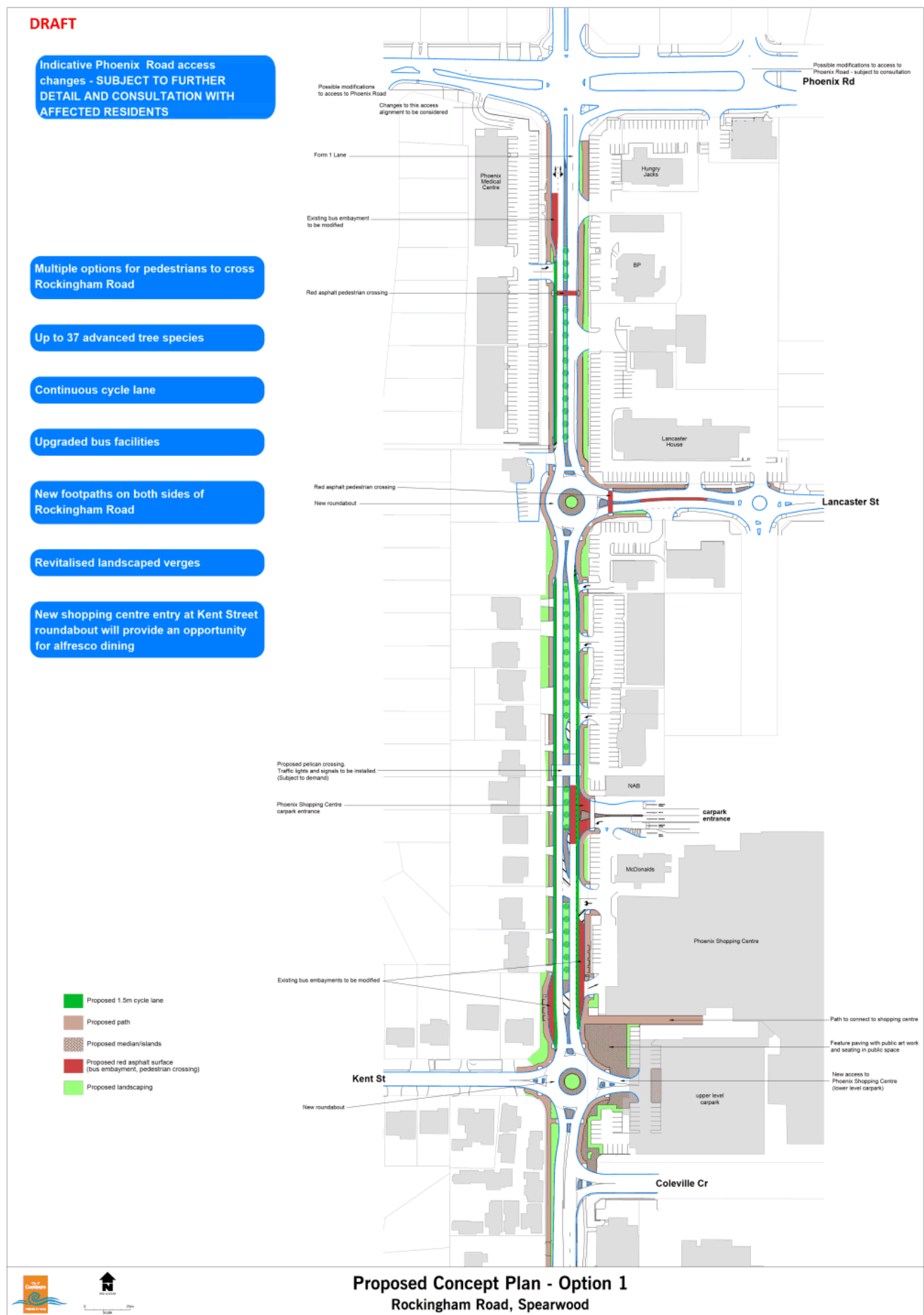
It is important to note that landscaping and other opportunities to enhance the town centre are very limited (and unlikely to have any significant impact) unless the road is reduced to a single carriageway.

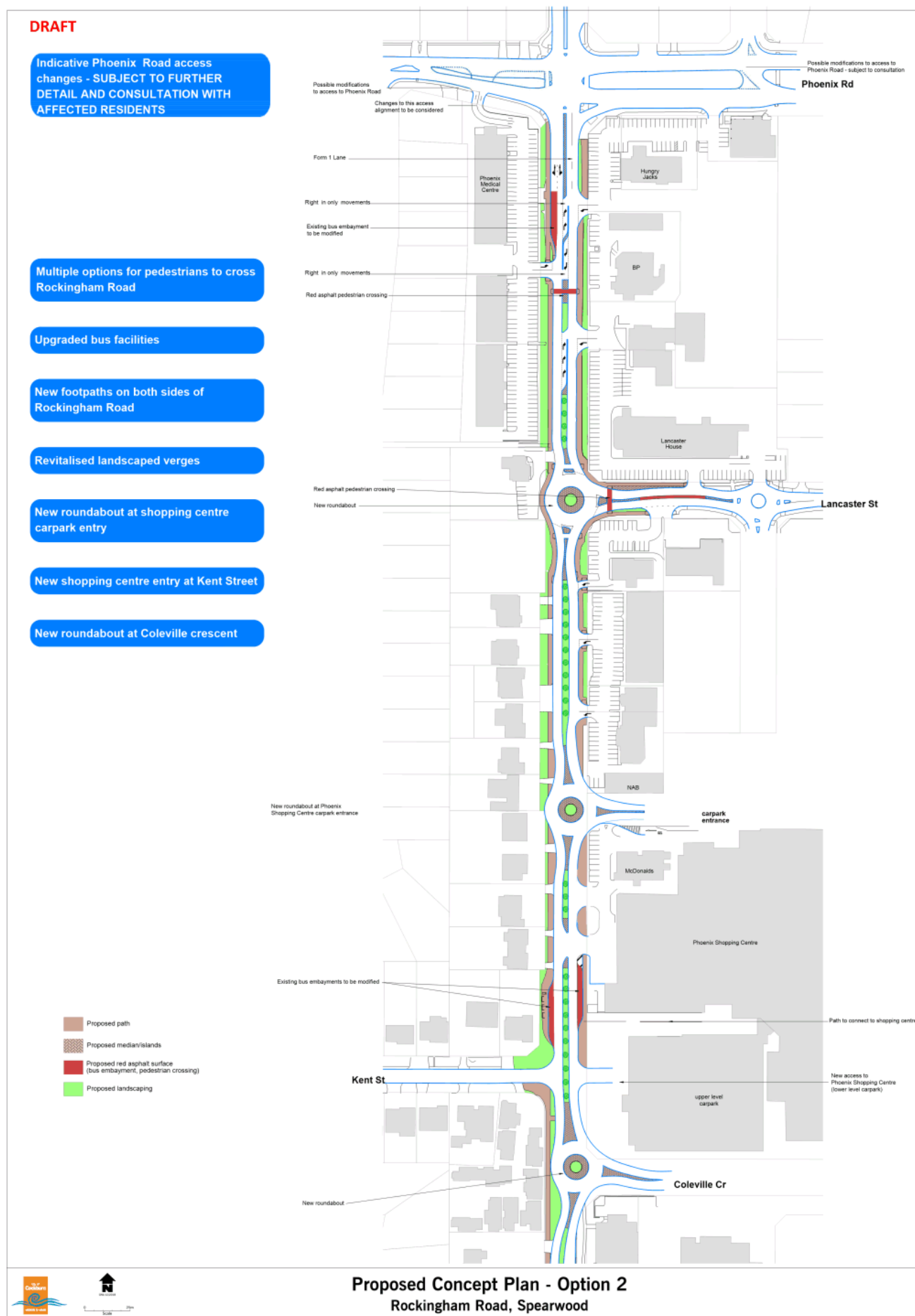
Advice to Proponent(s)/Submitters

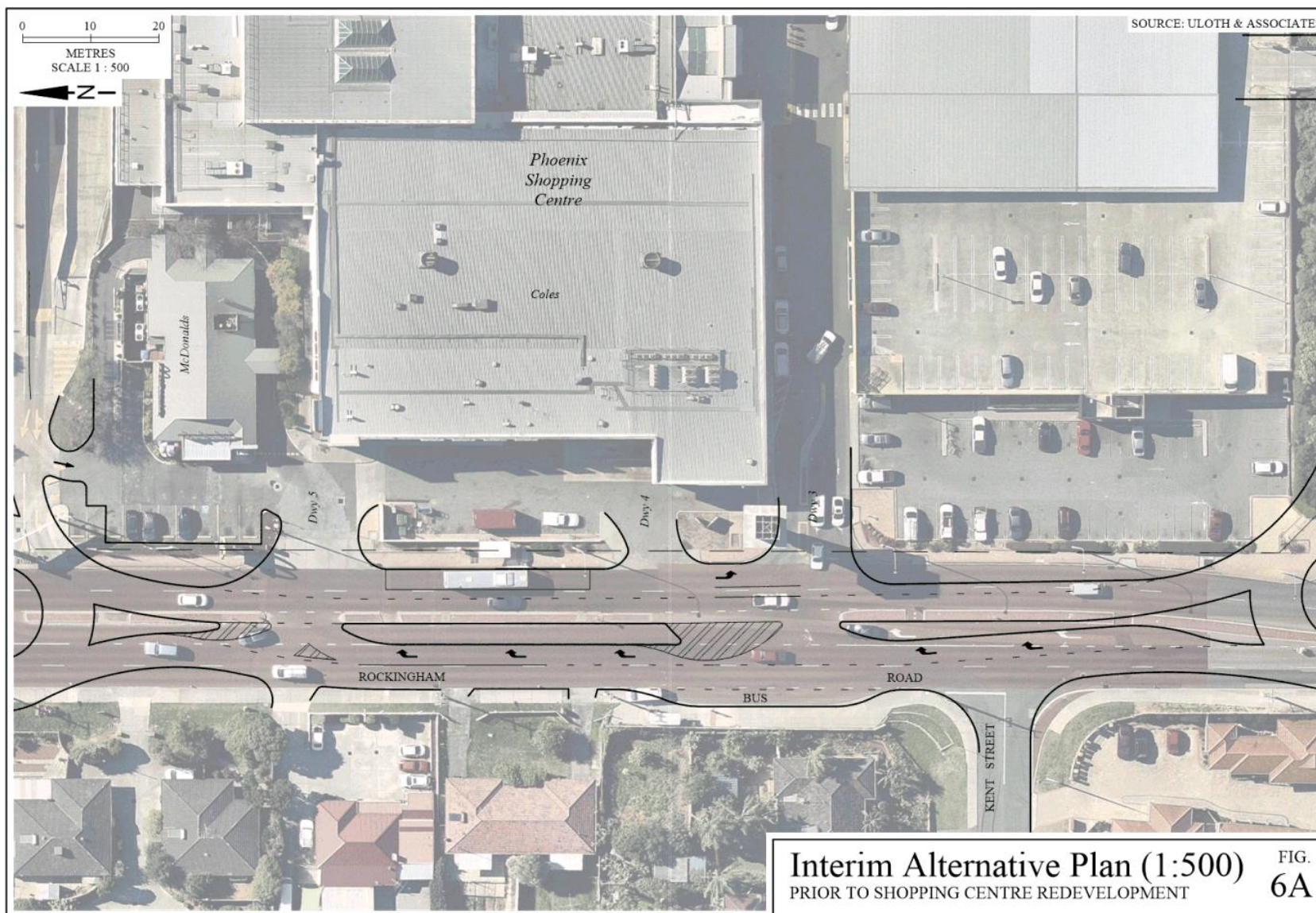
Those who lodged a submission on the proposal have been advised that this matter is to be considered at the 11 April 2019 Ordinary Council Meeting.

Implications of Section 3.18(3) *Local Government Act, 1995*

Nil.







Cambridge Street, West Leederville



BEFORE - 2014



AFTER – Reduction to single carriageway

Cambridge Street, West Leederville



Cambridge Street, West Leederville



SCHEDULE OF SUBMISSIONS - Upgrade to Rockingham Road

NO.	NAME/ADDRESS	SUBMISSION	COMMENTS
1	Lou Vieira – Parks Manager/Parks Services	<p>Consideration should be given to removing the centre median island from both concepts for the following reasons;</p> <ul style="list-style-type: none"> • The depth of the verge area is increased enabling the planting of a large species of tree. • Tree alignment will not be encumbered by existing underground assets. • Shade will be provided where it is most needed over the footpath/cycle path. • Cycle path alignment can re-directed from the road edge to run parallel to the footpath. 	The median is important to restrict unsafe traffic movements, and the overhead powerlines on the western side restrict tree planting.
2	Mike Blackman 81 Leaside Way Rockingham	<p>Neutral</p> <p>Very briefly either Option 1 or 2 would be great but what is missing is a controlled pedestrian crossing at the bus stop cnr Kent St/ Rockingham Rd.</p> <p>Many residents, particularly older residents and young mums with prams and littlies in tow who live in the immediate area, cross the road here to get to the shops and it can be quite dangerous at times to do this. Also people getting off the bus at the stop also have to run the gauntlet as well.</p>	<p>Noted.</p> <p>If the road is reduced to single carriageway with a reduced speed limit it would be easy for pedestrians to cross the road at many points along the road.</p>
3	Property Owner Yakas Chase, Spearwood	<p>Support Option 2</p> <p>I support the intent of the project and my preference is Option 2.</p> <p>Firstly I consider there is insufficient time for consultation to take place. There are not enough sessions with Council planners. You've only offered 1.5 hours on a Saturday at the phoenix shopping centre (when most school sports are a Saturday morning) and you've only offered one other day for a few hours at Council offices. Secondly, I consider there is very insufficient information on the "beautification" of this stretch of road. The concept designs show small swatches of green "intended to create a continuous verge?" and some indicative road center trees. IS there room for the centre strip to be a rain swale and contain small native plantings as in other suburbs (e.g. Wandi in Kwinana). These are also shown in studies to help slow traffic. There should be designs which show road centre width and proposed tree types and also show proposed plantings on the verge. This stretch of road already has stretches of dying grass which looks hideous. Beautification will not happen through reducing road lanes, and creating a bike path. Thirdly, how do these concepts truly address the access issues on</p>	<p>City planning staff were available any time between 8:30am and 4:30pm, Monday to Friday to speak about the plans. The other times stated (the Monday evening and Saturday morning) were intended to be additional times outside of business hours to suit people who may not be available during business hours.</p> <p>The two plans are very much concepts, so they show areas where landscaping could occur, however a detailed landscaping plan would be required. If a concept is adopted by Council there would further detailed work regarding access, crossovers, road and</p>

NO.	NAME/ADDRESS	SUBMISSION	COMMENTS
		<p>Rockingham Road. I don't believe they do. They don't appear to reduce any ingress/egress points to local businesses. Fourthly - each concept appears to have a dedicated pedestrian crossing on almost the brow of the hill on Rockingham Road (as you head north). Is there not a safer location for this?</p> <p>Fifth - as part of the beautification and attempt to slow traffic, has Council given consideration to alternative road surfaces? i.e. paving rather than asphalt, or at least in round about areas to slow traffic making turns etc. Six - why not extend the beautification down to Spearwood Ave? Stopping at Colville Crescent seems counter intuitive to the objectives of slowing traffic and beautifying the area.</p>	<p>footpath treatment, artwork and landscaping.</p> <p>Rockingham Road in this section has a very narrow road reserve and the reduction to one lane in each direction provides the space for landscaping enhancements which is one of the primary objectives of the project. Regardless, there is insufficient room in the centre median for a rain swale and native plantings, and it is likely that only trees could be planted in this median. However, there are verge areas where native plantings could be possible.</p> <p>Given the fragmented land ownership of properties and businesses along Rockingham Road there are limited opportunities to rationalise crossovers, as all businesses still require legal access. However, by restricting certain vehicle movements (mainly right-out movements and some right-in movements) the intention is to make access safer.</p>
4	Dean Couling	<p>Objection.</p> <p>I've just had a look at the plans for Rockingham rd and I can't understand why or how taking a lane away in each direction is going to benefit motorists. Bottle necks just frustrate motorists and motorists are who the road is for.</p> <p>Also there's no need to spend a huge amount of money to just try and make the road look a bit nicer. It's not or ever will be Fremantle or Mt Lawley and doesn't need to be. The area works fine. Money would be better spent sorting out the ridiculous system that's been implemented at the junction of Stock Rd and Beeliar Drive that just causes traffic as Beeliar Drive for some reason goes to 1 lane and back to 2 at the traffic lights. Every local resident who I've spoken with is at a loss as to why 2 lanes aren't maintained all the way through. Very poor planning and frustrating for motorists.</p>	<p>The purpose of the changes to the road are improve pedestrian safety and the appearance of the road. The proposal also removes unsafe traffic movements. Traffic modelling has been undertaken for both options, and demonstrates that traffic will be free flowing.</p> <p>The proposed upgrades are responding to community concerns regarding the appearance and safety of the road.</p>

NO.	NAME/ADDRESS	SUBMISSION	COMMENTS
		Thank you	
5	Peter Gorman	<p>Support Option 2</p> <p>I have been looking at this project, and seem to prefer option 2 for better access. Median strips should be hedges that don't grow too high and can be trimmed once a month or so.</p> <p>I saw what you did to Northlake Road out the front of the Omeo Rd shops, going back 15 to 20 years. You put down wood chip ground cover which used to dry up and catch fire with the occasional cigarette but was thrown from a car, then you planted gum or paper bark trees, ok when they were juvenile, but 5 years down the track obscured vision of oncoming cars as they got mature, a nice hedge as I have seen in Victoria Park, mains street, they went and reticulated it and once a month on a Sunday trimmed it to a box hedge, flowering plant placed at intervals to add colour.</p> <p>It would even be better if it could remain a dual carriage way in both directions to ensure flow of traffic for buses and through traffic looking to the future.</p> <p>I live in Mell Gardens estate and commented on the Rigby Rd traffic calming, the people that live in the street got their wish but don't change the way they park their cars, if a car comes through there and runs straight, there are at least 2 places where they will smack into a parked car.</p>	Comments noted.
6	Denis & Joan Clarke	<p>Support Option 2</p> <p>We wish to advise that we are in favour of option 2 of the Rockingham Road Shopping Centre concept plan. The reason for our favour is that it allows traffic to enter Rockingham Road from Coleville Crescent and turn north as we are located on Travers Street. If this plan is to work the Phoenix Shopping Centre must be updated including the row of shops on Rockingham Road north of the centre.</p>	Support for Option 2 noted.
7	G Bevan Goodreid	<p>Support Option 2</p> <p>In relation to the Rockingham Road Town Centre Boulevard Project, I make the following comments as the proprietor of Cockburn Chiropractic Centre, located opposite Lancaster Street at 243 Rockingham Road.</p> <p>1 Access to the premises in both concepts is from the south. The current access is likewise from the south and is acceptable. However, both concepts appear to show a narrower driveway into the premises which requires a very tight turning circle, particularly if there is another vehicle waiting to exit. There is barely sufficient space to accommodate vehicles entering and exiting the premises at present, let alone a tighter u-turn that is being proposed.</p> <p>Possible solutions:</p>	<p>Support for Option 2 noted.</p> <p>Comments in relation to access to the business/property are noted and will be subject to further discussion.</p>

NO.	NAME/ADDRESS	SUBMISSION	COMMENTS
		<p>a) Retain a wide drive to allow an adequate turning circle</p> <p>b) Consider creating access to the premises directly from the Lancaster Road roundabout</p> <p>c) Consider creating a southern access point to the premises (in only) and retain northern exit (which could be narrower)</p> <p>2 Exiting vehicles in both concepts are required to travel north. In option 1, vehicles wanting to head south would:</p> <p>a) Turn travel north along Rockingham Road, right into Phoenix and then right again and travel through the businesses surrounding Hungry Jacks; or</p> <p>b) Turn travel north along Rockingham Road, right into Phoenix right and then u-turn further along Phoenix Road; or</p> <p>c) Turn into the business carpark on the western side of Rockingham Road, exit onto Phoenix and then right again onto Rockingham Road.</p> <p>In option 2, vehicles could at least turn right into the business carparks on the eastern side of Rockingham road and do a u-turn. (Preferred option)</p> <p>General comments</p> <p>3 Loss of bike lane in option 2. Will the width of the road allow vehicles to pass a cyclist legally? In my view the road should be either wide enough to allow this safely OR narrow enough to clearly indicate that cyclists on the road cannot be overtaken.</p> <p>4 Overall concepts <i>Option 2 appears to allow a better balance</i> with access in and out of businesses south of Lancaster Road and the added roundabout into the shopping centre would have a further traffic calming effect along that stretch.</p>	
8	Greg Mackenzie	<p>Support Option 2</p> <p>I strongly believe that Option 2 is a far better option of the two you propose. Access to the major medical hub opposite the Phoenix Shopping Centre needs to be made as easy as possible. Patients need easy access as they are usually sick, frail, or health compromised that does not need testing when visiting the doctors.</p> <p>Patients need access from both NORTH and SOUTH into the medical precinct carpark.</p> <p>Despite my email address, I have no financial interest in the Pharmacy 777 Spearwood.</p>	Support for Option 2 noted.

NO.	NAME/ADDRESS	SUBMISSION	COMMENTS
9	Grant Gaskett	<p>Opposed to both Options</p> <p>I am strongly opposed to both concept plans, reducing a main thoroughfare from 2 lanes to one has no consideration for traffic travelling through the area and not accessing any of the businesses. It would only increase travel time through the area, a redesign allowing unrestricted free flowing traffic movements for traffic travelling past the area would be a better option. Rockingham rd has been 2 lanes for a good reason don't follow the examples of Hampton rd and Farrington rd by reducing lanes, these roads are the most frustrating roads to navigate!</p>	<p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.</p> <p>The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist.</p>
10	Landowner - Spearwood	<p>Support Option 2</p> <p>This submission is in full support of the Rockingham Road upgrade between Phoenix Road and Colville Crescent - Option 2.</p> <p>I believe this road will have the following positive benefits to the immediate road and surrounding businesses, nearby homes and the wider suburb of Spearwood.</p> <ul style="list-style-type: none"> - It will slow traffic down to make it safer for pedestrians and vehicles entering and exiting businesses along Rockingham Road - Whilst the time taken to travel the length of road will slow down a little, the journey will be far more pleasant and the additional time taken will not be disproportionate to the benefits gained. - the removal of a bike lane is a positive. This roads needs to utilise the space well for improved amenity which is more important at this stage than bike lanes. A confident bike rider can use the vehicle lane and less confident riders can use the footpath, or they will seek alternative parallel road routes. - The slightly slower speed and roundabouts will keep traffic flowing provided that bus embayments are OFF the main flow of traffic. Bus embayments should be non-negotiable. - The roundabout to Colville Crescent provides benefits for vehicles travelling from the south to access the Phoenix shopping centre car park, the current City of Cockburn Council offices and the Seniors Centre, which we currently don't have. - The roundabout entrance to the north carpark of Phoenix shops will help with way finding, and landmarking, providing a real village centre entrance feel and make this entrance safer - The roundabout at Lancaster Street will help provide way finding and a landmark entrance for shops in this corner area - Proposed landscaping (if done well using mature plants suitable for centre median strip planting) and along all areas of verge will help provide an immediate greening of the area to increase amenity - Increased amenity will hopefully help drive the Phoenix Centre management to move forward more 	<p>Support for Option 2 is noted.</p> <p>The City is in the process of obtaining new quotation for underground power.</p> <p>Other comments regarding landscaping and wayfinding will be considered in the detailed design and landscaping plans.</p>

NO.	NAME/ADDRESS	SUBMISSION	COMMENTS
		<p>quickly with plans to reenergise their shopping centre and draw back people from the large catchment area</p> <ul style="list-style-type: none"> - Increased amenity will also hopefully attract new business to the area who would be pleased to have their business on a strip of road with appeal <p>Other items I would like Council officers to consider when making a recommendation to the Council are:</p> <ul style="list-style-type: none"> - Obtain costing for under grounding of power along the stretch of road to determine if it is cost prohibitive or not - Explore other options for rationalising power distribution on Rockingham road IF the under grounding is cost prohibitive (i.e. can some of the overhead poles be rationalised through movement/replacement, or reduction in the number of poles?) - Ensuring that landscaping only uses mature species AND, uses as much green coverage and in terms of planting numbers as can possibly be put into the verge areas (i.e. no vacant areas of mulch with sparse planting). - Ensure that signage on the stretch of road is rationalised. For example, when sitting at the lights on Rockingham Road (travelling north) at the intersection with Lancaster, on the left there are several poles all trying to point out street names. This street furniture can be tidied up through the use of one well designed way finding street pole. This could happen along the length and I would encourage Council to ensure all these small details are addressed when spending money on this stretch of road, so that the appeal and amenity is increased and got right the first time. - Please consider improving verge planting for amenity between Colville Crescent and Spearwood Ave. I appreciate that the western verge boundary appears to abut the house boundaries very close to the road meaning there is little to no verge. On the western side (in particular between Spearwood Ave and the entrance to the Council offices, the verge is dismal. It would make a big change to ensure this whole length of Rockingham Road upgrade is seen as one contiguous length. This is the southern entrance to the "village /town centre" so why not spend a little more and tidy this area up. The cost will not be significant in the scheme of the overall project cost and yet the benefits gained will be huge by comparison. <p>Overall I encourage the City of Cockburn and the Councillors to push ahead with the upgrade and "Do it Right the first time". Give the Community something to be wowed over, and impressed by. Spearwood needs an injection of life, and creating a town village feel on this stretch of road through increased street appeal and amenity is a good first step.</p>	

NO.	NAME/ADDRESS	SUBMISSION	COMMENTS
11	Anthony McCaw	<p>Comments</p> <p>I would like to comment on the proposals.</p> <ol style="list-style-type: none"> 1. Why restrict Rockingham Road to one lane, can't it still be two lanes and less trees in the middle and less maintenance. 2. By creating a continuous median strip and one lane each way, congestion will force a lot more traffic onto already congested Hamilton Road to avoid going through that headache. I'm biased obviously, because of my address, but I like the idea of better access to Phoenix shopping centre. 3. Inclusion of a bike lane is ok, I'm a bike rider myself, but where to for the lane after Phoenix Road and Spearwood Avenue? Back onto footpath or road. 4. How will provision for extra bus stop infrastructure affect traffic and where will they get the extra room from? This one lane proposal will create traffic congestion behind all the buses that use , drop off and pick up along both sides of Rockingham Road. 5. Option 1, roundabout at Kent Street suits us, but how will it affect entry into the shop Carpark? Looks like a major rework of the Carpark. Can the original entrance be kept? 6. Option.1. Our access to shops at Phoenix and Rockingham roads intersection will create congestion at either Lancaster Street or via the proposed u-turn on Phoenix Road. This will create congestion for traffic accessing the chemist and doctors and other services on the west side of Rockingham Road. 7. Option 2. Roundabout at Lancaster Street would be good, but the one at Coleville Crescent would tend to push a lot of traffic into that upstairs Carpark, congesting an already congested Carpark. I would suggest that a roundabout be better placed at the southern entrance (already there), at the top of Kent Street. 8. Option 2. Access for traffic exiting McDonald's and turning right, would create illegal turns from traffic heading north on Rockingham Road intending to turn into Phoenix Carpark, and doing illegal u-turn. 9. Option.2. Access in and out of Grandpre Crescent, needs upgrading, yes, but it must be designed in a way that stops or prevents illegal right hand turns from Hungry Jacks/Subway restaurants Carpark onto Phoenix Road. I've nearly been head on smashed there on a number of occasions. 10. Option.2. Access in and out of the doctors/chemists Carpark onto Phoenix Road will create a bottleneck at the lights as some customers exiting Carpark will want to go North on Rockingham Road and have to cross three lanes of traffic. 	<p>There is insufficient space to create a median with trees if the road remain dual carriageway, so this is not possible.</p> <p>The traffic modelling has demonstrated that unreasonable congestion will not occur.</p> <p>The plans include dedicated bus embayments so that traffic is not queuing. The reduction to single carriageway allows this to be designed in.</p> <p>The Kent Street roundabout in Option 1 would require internal modifications to the Shopping Centre.</p> <p>It is acknowledged that changes to Phoenix Road and Grandpre need to be considered as part of any planned upgrade.</p>

NO.	NAME/ADDRESS	SUBMISSION	COMMENTS
		My suggestion is to close this median strip here and force traffic to go West on Phoenix Road and turn at the existing roundabout.	
12	Jenny Haywood – Phoenix Medical Centre	<p>Support Option 2</p> <p>Thank you for the opportunity to comment on the proposed changes to Rockingham Rd. Our preference is option 2 with slips lanes allowing for RH turns.</p> <p>To minimise the impact of the road works to our patients it would be appreciated if night works could be considered</p>	Support for Option 2 noted. Request for night works also noted.
13	McDonald's Marc Re – Property Asset Manager WA	<p>Support Option 2</p> <p>McDonald's took part in the consultation and review of the original concept in 2016/17, in collaboration with the owners of the Phoenix Shopping Centre. The original Town Centre Boulevard concept proposed significant access changes along Rockingham Road and challenges for businesses in the locality.</p> <p>The original concept was deferred from adoption by Council at its Ordinary Council Meeting on 9 March 2017 in response to strong views and concerns from the owners of the Phoenix Shopping Centre, McDonald's and the surrounding businesses.</p> <p>The recently advertised proposal comprises two concepts. Concept 1 reflects the original concept from 2016/17 and Concept 2 proposes an alternative plan comprising the repositioning of the proposed roundabouts, along with other modifications. It is McDonald's view that Concept 2 is an improvement on the original concept and goes some way in addressing the strong views and concerns raised by the owners of the Phoenix Shopping Centre and McDonald's in previous submissions. We provide the following comments in relation to the advertised concepts.</p> <p>Concept 1 - Original Concept</p> <p>McDonald's, through consultant's Planning Solutions, made a submission and representations in relation to the original concept (Concept 1) during the consultation period undertaken in October/November 2016. Refer to Appendix 1 for copy of the McDonald's submission dated 8 November 2016.</p> <p>McDonald's objected to Concept 1 and requested the City consider an alternative access plan to maintain satisfactory access to the restaurant. McDonald's objected to Concept 1 for the following reasons:</p>	<p>The proposed alternative plan falls completely short in addressing any of the key objectives of the proposal, and is not supported for the following reasons:</p> <ul style="list-style-type: none"> • It does not remove any unsafe vehicle turning movements, particularly right out movements; • It significantly reduces the opportunities to beautify the road with landscaping, and the clutter of kerbing and road infrastructure required to manage a complex arrangement of vehicle movements in a short stretch of road will be more unattractive and blighted than the current road environment; • Overlayed plans demonstrate that this plan results in almost as much bitumen and road surface as there is currently (despite the reduction to single carriageway), providing very few opportunities for beautification and greening. • Creates a road environment that is confusing for motorists and pedestrians through a clutter of kerbing and turning

NO.	NAME/ADDRESS	SUBMISSION	COMMENTS
		<p>. The proposed concept removes direct access to the McDonald's restaurant for motorists travelling northbound on Rockingham Road. Fast food restaurants with drive throughs and other similar car orientated businesses rely heavily on exposure, passing traffic and convenient access. The proposed access arrangements will significantly affect the business, operations and viability of the restaurant.</p> <p>. As outlined in the traffic counts and analysis undertaken at the time, a significant number of customers access the McDonald's restaurant from the south and use the existing right turn movement (approx. 50% in the weekday peak). McDonald's forecast that removing this access will reduce revenue by at least 30%.</p> <p>. The proposed concept creates indirect and inconvenient access to the McDonald's restaurant for its northbound customers. Under the concept, northbound motorists would need to travel approximately 400 metres to access the restaurant by driving 200 metres northbound, making a u-turn at the Lancaster Street roundabout and then drive 200 metres southbound back towards the store. This creates inconvenient access and in turn will significantly affect the viability of the business.</p> <p>. Motorists familiar with the site will likely use the former Coles service vehicle crossover to access the McDonald's restaurant. This will create conflicts between McDonald's customers with large service trucks, and create potential congestion and hazardous situations at the McDonald's southern crossover.</p> <p>. The change in trading conditions, as a consequence of the proposed access modifications, will affect the opportunity to reinvest in the restaurant and deliver improved facilities to the community.</p> <p>For the reasons outlined above, McDonald's maintains its strong objection to Concept 1 and requests the City does not proceed with this option.</p> <p>Concept 2 - Alternative Concept The introduction of a roundabout adjacent to the shopping centre's car park entrance and McDonald's restaurant outlined in Concept 2 is an improvement. In comparison to Concept 1, Concept 2 is preferred by McDonald's. Notwithstanding, the closure of the right turn access from Rockingham Road into the McDonald's crossover contemplated in Concept 2 will impact the operations and viability of the restaurant.</p> <p>McDonald's supports Concept 2, subject to retaining the right turn movement into the McDonald's crossover, as outlined in the Alternative Access Plan in Appendix 2. The Alternative Access Plan proposes the retention of the full movement access to the McDonald's crossover to preserve the current operations, traffic movements and servicing arrangements.</p> <p>Whilst the City may perceive the retention of the full movement access to the McDonald's crossover</p>	<p>pockets etc. required to manage traffic movements;</p> <ul style="list-style-type: none"> Does not rationalise access points which is a key objective of the project to make the road safer and improve the pedestrian and cyclist environment; Further degrades the pedestrian environment through: <ul style="list-style-type: none"> Introduction of two roundabouts without the offset of rationalised crossovers/access, resulting in the area being more unpleasant to traverse as a pedestrian with greater interruptions to the footpaths. Proposed turning pockets essentially result in almost the same crossing distance for pedestrians along this stretch of road which is unacceptable given this is a key section of the town centre, and the importance of access to bus stops etc. <p>It is acknowledged that under Option 1 the 400m travel distance required to undertake the U-turn movement to access McDonalds or the northern Shopping Centre does not offer convenient access for vehicles heading north.</p> <p>However, Concept 2 is considered to be workable for McDonalds in both the interim period, and longer term should it be</p>

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		<p>may compromise its objectives, the actual loss of landscaping in this vicinity is very minor and inconsequential in the context of the overall proposal, which extends along Rockingham Road for some 650 metres.</p> <p>In addition, the Alternative Access Plan includes sufficient space in the median adjoining the right turn lane and along the street verge adjoining the McDonald's restaurant for high quality landscaping, to achieve the City's intent and objectives.</p> <p>It is also noted Concept 2 contemplates the removal of the internal crossover from McDonald's to the car park entrance, to facilitate the proposed roundabout. Whilst it is acknowledged the plan is conceptual in nature and detailed design will be required at a later stage, McDonald's requires the retention of the existing left-in access for vehicles egressing the shopping centre car park (refer to the Alternative Access Plan). We trust this will be satisfactorily addressed during the detailed design process, in consultation with McDonald's.</p> <p>Conclusion</p> <p>McDonald's supports the City's initiative to activate Rockingham Road and beautify the streetscape, however we are concerned with the proposed access arrangements, change in traffic conditions and direct impacts on the McDonald's business.</p> <p>In summary:</p> <ul style="list-style-type: none"> . McDonald's strongly objects to Concept 1 due to the obvious and significant access modifications, and subsequent impact on the operations and viability of the restaurant. . McDonald's considers Concept 2 is an improved access outcome for Rockingham Road and supports the location of the proposed roundabout adjacent the shopping centre's car park entrance and McDonald's restaurant. . McDonald's request the City modify Concept 2 by introducing a right turn lane into the McDonald's crossover, as outlined in the Alternative Access Plan in Appendix 2. <p>We request the City notify us of any modifications made to the concepts and provide details of the upcoming Council meeting at which the matter will be considered</p>	redeveloped.
14	Anthony Dow	<p>Support Option 2</p> <p>Good to see a proposal for this area as its long overdue. I'd like to see a pedestrian crossing that stops traffic so that people can safely cross from the shopping</p>	<p>Support for Option 2 noted.</p> <p>With the proposed reduction to a single carriageway the road will be easy to cross at</p>

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		<p>centre to the bus stop on the other side of Rockingham rd. I regard this as essential.</p> <p>I have witnessed many times pedestrians especially the elderly taking risks trying to cross this road and it seems that you plans have not addressed this issue.</p> <p>I hope my feedback helps you consider the pedestrian aspect of your plans.</p> <p>Plan B I like Better.</p>	many points.
15	Dr Megan Jaceglav	<p>Support Option 1</p> <p>In regards to the above proposal I favour Option 1. Many more east/ west links are needed in this area. I also favour extending the one lane section to Rigby Avenue</p>	Support for Option 1 noted.
16	Malcolm Dally 55 Norland Way Spearwood WA 6163	<p>Please do not install a 4 way round-a-bout at the intersection of Rockingham Road and Kent St.</p> <p>If option one was adopted and the round-a-bout was installed this would result in extra traffic on Kent St. More specifically, it would become a short cut for impatient drivers heading west using Kent St instead of waiting at the traffic lights at Spearwood Ave.</p> <p>Attract speeding drivers trying to avoid regular radar traps on Spearwood Ave.</p> <p>Attract drug or alcohol impaired drivers trying to avoid "booze buses" on Spearwood Ave.</p> <p>Kent St is a 50 KPH residential street with dozens of houses and units fronting on to it.</p> <p>Spearwood Ave (between Rockingham Rd Sandy Hamilton Rd) is an arterial and divided road with zero houses fronting onto it.</p> <p>Option one roundabout onto Kent St is unnecessary and will attract extra traffic into a quiet area. It could even result in pedestrians being killed.</p> <p>Please do not install a 4 way roundabout at Kent St.</p>	Submission does not support option 1 – concerns with Option 1 are noted.
17	Ingrid Maher – Planning Solutions on behalf of BP Australia Pty Ltd, registered proprietor of Lot 2 (222) Rockingham Road Spearwood	<p>Support Option 2 with modifications</p> <p>Planning Solutions acts on behalf of BP Australia Pty Ltd, the registered proprietor of Lot 2 (222) Rockingham Road, Spearwood (subject site). We refer to the City's invitation to provide comment on the proposed upgrades to Rockingham Road Town Centre Boulevard.</p> <p>On behalf of our client, we support the City's initiative to activate Rockingham Road and beautify the streetscape. We also accept and support the premise that the upgrade of Rockingham Road could potentially help to improve the Phoenix Town Centre including business such as the BP Phoenix service station located on the subject site.</p>	<p>Including the right out movement from the BP access point is not supported as this is one of the most unsafe traffic movements.</p> <p>The City will look at appropriate options to modify the access to Phoenix Road which will ensure adequate options for motorists looking to head north on Rockingham Road.</p>

NO.	NAME/ADDRESS	SUBMISSION	COMMENTS
		<p>Whilst we broadly support the City's initiative to upgrade Rockingham Road, we do not support Concept Plan – Option 1. We do, however, in principally support the City's Concept Plan – Option 2 subject to a right-out movement being provided from the existing crossover identified in Figure 1 below.</p> <p>We request the City modify Concept Plan- Option 2 for Rockingham Road, as advertised, to include the right-out movement. Our submission outlines the alternative access proposal and reasons for why this full movement of vehicles is necessary to allow for the ongoing operation of the BP service station.</p> <p>Existing Vehicle Access The BP Phoenix service station is located within the Phoenix Town Centre and operates 24 hours a day, seven days per week. The service station has frontage and direct access to Rockingham Road, and comprises a retail building and fuel canopy forecourt area, which is setback from Rockingham Road to provide vehicular access and street front car parking.</p> <p>The BP Phoenix service station operates under the following existing access arrangements:</p> <ul style="list-style-type: none"> • Vehicle access from Rockingham Road through a full movement access crossover to the BP service station (left-in, left-out, right-in and right-out). This crossover provides direct access to the service station for northbound and southbound motorists travelling along Rockingham Road. Northbound and southbound service vehicles (ie. fuel tanker, deliveries, waste services etc) currently utilise this crossover to access the subject site. • Vehicle access from the commercial centre through a crossover Phoenix Road to the north east of the BP service station and Lancaster Street to the south. These crossovers provide indirect access to the service station for users of the commercial centre. <p>The BP service station is currently accessible for motorists travelling in both directions along Rockingham Road. The current access arrangements provide clear, direct and uninterrupted access to the BP Phoenix service station and surrounding commercial operations.</p> <p>CONCEPT PLAN - OPTION 1 The proposed Concept Plan – Option 1 for Rockingham Road includes two new roundabouts and a mostly continuous median strip along Rockingham Road that will restrict northbound vehicle access to the subject site and adjoining businesses.</p>	

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		<p>On behalf of our client, we confirm our strong objection to the proposed Concept Plan - Option 1, as advertised, for the following reasons:</p> <p>1. The proposed Option 1 upgrade works removes direct access to the BP Phoenix service station for motorists travelling northbound on Rockingham Road. Service station businesses rely heavily on exposure, passing traffic and convenient access. The proposed Option 1 access arrangements will have a significant impact on the business, operations and viability of the BP Phoenix service station. This would also impact BP's decision in make future investments to improve and upgrade this facility.</p> <p>2. The City's indicative diagrams do not clearly show how motorists travelling northbound on Rockingham Road would access the BP service station. Refer to Figure 2 below, which depicts Option 1 access to the broader commercial centre from Phoenix Road to the north and Lancaster Road to the south. Under Option 1, the Phoenix Road crossover will provide for the closest access point to the service station for northbound motorists, which is located approximately 120 metres to the north east of the BP service station. It is considered potential customers of the BP service station are unlikely to access the subject site via the Phoenix Road or Lancaster Street crossovers, given the access arrangements are unclear, indirect and will be inconvenient for motorists travelling northbound on Rockingham Road. Service station businesses rely on convenient access in order to capture convenience oriented and 'impulse buy' patrons, as commonly associated with service station patronage.</p> <p>3. It is suggested in Figure 2 that northbound motorists will access the BP by using Lancaster Street. Motorists would firstly need to know the BP's location to make this manoeuvre as this street is approximately 120m away from the site. In most circumstances, the purchase of fuel is price sensitive. Motorists don't make their decision until they can determine the price of fuel. This decision cannot be made for northbound customers until after they have travelled through the Lancaster intersection.</p> <p>4. Therefore, under Concept Plan – Option 1, northbound motorists would need to travel up to an additional 600 metres to access the service station, by driving approximately 80 metres northbound on Rockingham Road, turning right at Phoenix Road, traveling approximately 200 metres eastbound, make a u-turn and drive approximately 150 metres eastbound on Phoenix Road, turning left into the Phoenix Road crossover located between the Subway and Hungry Jacks restaurants, then drive approximately 120 metres in a south westerly direction to access the BP service station fuel canopy area. In this way, Concept Plan – Option 1 creates inconvenient and indirect access to the BP service station for</p>	

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		<p>motorists travelling northbound on Rockingham Road, and in turn will significantly impact on the amount of patronage to the BP and surrounding businesses.</p> <p>5. Under Concept Plan – Option 1, service vehicle access to the BP service station for larger service vehicles (ie. fuel tankers and delivery trucks) will be effectively restricted to a left-in, left-out crossover on Rockingham Road and southbound service vehicle movements along Rockingham Road. It is not anticipated that large vehicles/trucks will be able to access the service station through the commercial centre, via the Phoenix Road and Lancaster Street access points depicted on Figure 2 above, due to the required turning circle of large vehicles and the likely conflicts with other motorists within the commercial centre. This restricted access arrangement could have a significant impact on the BP business operations, with service vehicles potentially having to make significant detours in order to access the site from the Rockingham Road crossover.</p> <p>For the reasons outlined above, we object to Concept Plan – Option 1 upgrades for Rockingham Road and request this option be removed from consideration for the future upgrades.</p> <p>CONCEPT PLAN - OPTION 2</p> <p>The proposed Concept Plan – Option 2 for Rockingham Road comprises three new roundabouts and a mostly continuous median strip along Rockingham Road. The plan includes a right-turn slip lane for northbound traffic adjacent to the subject site, allowing for ongoing direct vehicle access to the BP service station. This plan also includes a modified access crossover on Rockingham Road, with egress restricted to left-out only from the subject site.</p> <p>On behalf of our client, we confirm our in principle support for Concept Plan – Option 2, as advertised, subject to a right-out vehicle movement being provided at the Rockingham Road access crossover adjoining the subject site (refer Figure 1 above).</p> <p>Our in principle support for Concept Plan – Option 2 is provided for the following reasons:</p> <ol style="list-style-type: none"> 1. The proposed Option 2 upgrade works will provide for direct and convenient access to the BP service station for motorists travelling northbound on Rockingham Road. This will support the ongoing business, operations and future investment in the facility. 2. The proposed Option 2 upgrade works will provide for a safer and more functional road environment for all road users including pedestrians, cyclists and motorists travelling along 	

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		<p>Rockingham Road. Further, the proposed Option 2 concept plan will not create potential congestion, traffic hazards and conflict between road users on Phoenix Road, as may result from the proposed Option 1 upgrade works.</p> <p>3. The proposed Option 2 upgrade works achieve the City's objectives in providing an activated, attractive and pedestrian friendly Rockingham Road streetscape and Phoenix Town Centre, whilst maintaining direct access to the commercial tenancies, including the BP service station and thereby supporting the ongoing business, operations and future investment in the facility.</p> <p>Whilst our client in principally supports Concept Plan – Option 2, we are concerned with the proposed modification to the access crossover on Rockingham Road located adjacent to the service station. The existing full access crossover will be restricted to remove the right-out movement to Rockingham Road. The proposed modifications to the existing full movement crossover will restrict vehicle access out of the site and be inconvenient for motorists wishing to travel northbound on Rockingham Road after refuelling, and potentially create conflict between motorists within the service station and broader commercial centre when motorists seek an alternate exit via the Phoenix Road or Lancaster Street crossovers to the north and south of the service station.</p> <p>To address these issues and achieve a satisfactory access to and from the commercial tenancies, including the BP service station, a proposed modification to Concept Plan – Option 2 is proposed below.</p> <p>PROPOSED MODIFICATION TO CONCEPT PLAN - OPTION 2</p> <p>We request the City modify the Rockingham Road upgrade Concept Plan – Option 2, as advertised, to allow for right-out vehicle movements from the Rockingham Road crossover adjoining the BP service station. The following modifications would be required to Concept Plan – Option 2:</p> <ul style="list-style-type: none"> • Updated median island to allow for the right out movement of vehicles from the crossover identified in Figure 1. • Updated line marking to provide right and left out movements. <p>The amended access proposal is considered appropriate for the following reasons:</p> <p>1. The alternative access proposal provides satisfactory and safe access to and from the BP service station in order to preserve their operational requirements, including access for tankers and delivery</p>	

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		<p>vehicles accessing the property from the south.</p> <p>2. The alternative access proposal will avoid conflicts between motorists moving through the subject site and surrounding commercial centre, who seek turn right out of the service station onto Rockingham Road.</p> <p>3. The right-out movement would not conflict with other crossovers or streets within proximity to the subject site.</p> <p>For the reasons outlined above, we request Concept Plan – Option 2 be amended to incorporate a right-out movement to Rockingham Road.</p> <p>CONCLUSION</p> <p>As outlined above, we object to the proposed Concept Plan – Option 1, as advertised, as this plan removes access to the BP service station for motorists travelling northbound on Rockingham Road, creating indirect and inconvenient access to the facility.</p> <p>We support the City’s initiative to upgrade Rockingham Road and in principally support the proposed Concept Plan – Option 2, subject to a right-out movement being provided from the existing crossover on Rockingham Road.</p> <p>We request the City modify the Rockingham Road upgrade Concept Plan – Option 2, as advertised, to allow for right-out vehicle movements from the Rockingham Road crossover adjoining the BP service station. The amended access proposal is appropriate for the following reasons:</p> <p>1. The alternative access proposal provides satisfactory and safe access to and from the BP service station in order to preserve their operational requirements and viability.</p> <p>2. The alternative access proposal will avoid conflicts between motorists moving through the subject site and surrounding commercial centre, who seek turn right out of the service station onto Rockingham Road.</p> <p>3. The right-out movement would not conflict with other crossovers or streets within proximity to the subject site.</p> <p>Thank you for the opportunity to provide comment on the City’s proposed Rockingham Road Concept Plans – Option 1 and Option 2. We look forward to working positively with the City to achieve the best possible outcomes for local residents, businesses and visitors to the Phoenix Town Centre.</p>	

NO.	NAME/ADDRESS	SUBMISSION	COMMENTS
18	Tikita Gabrielsen	Support Option 1 Hi there, I've read the plans and wish to advise of my full support for Option 1. This looks really great and I really hope it proceeds. It will transform the Shopping District. I particularly love the proposal for bike lanes and the single width road with limit of 40km/h. This will really open up our connections with South Fremantle down Rockingham Road. Many Thanks.	Support for Option 1 is noted.
19	Phoenix Shopping Centre Prepared by Darren Levey – Uloth & Assoc	Support Option 2 with modifications As requested, we have reviewed the 2 concept plans prepared by City of Cockburn regarding the proposed changes to Rockingham Road, including access modifications for Phoenix Shopping Centre. For ease of reference, the attached Figure 3 (from our Traffic Investigation Report dated 5 December 2018) shows the existing road layout and access driveways along the Rockingham Road frontage of the Shopping Centre, with the existing access driveways identified as Driveways 3, 4, 5 and 6. Out comments regarding the proposed Concept Plans are as follows: Proposed Concept Plan - Option 1 <ul style="list-style-type: none"> The access modifications in Option 1 are such that the overall accessibility of the shopping centre does not appear to have been a high priority. The concept plan relies on significant land-take from the Centre to enable the creation of the proposed roundabout at Kent Street, with no justification of why right turn movements should be introduced at Kent Street. Instead, it seems that the only reason for a roundabout is to enable u-turns for vehicles currently turning right out of the various existing driveways south of Lancaster Street. The proposed roundabout location also significantly impacts traffic circulation within the adjacent car park (seemingly with no regard for the fact that this driveway is the single busiest driveway for the entire Centre). The Option 1 concept plan also removes the right turn movements into the Centre at Driveway 5 and 6, which prevents northbound traffic from accessing McDonalds and the northern parking areas, other than to travel all the way up to Lancaster Street to then do a u-turn and travel back south again. It is also important to note that the traffic volumes at Driveway 6 are such that a left-turn lane should be provided within Rockingham Road at this location (as well as every other access driveway). Without these left turn lanes, traffic turning left will be in danger of causing rear-end crashes. Alternatively, these vehicles will seek to turn left at higher speeds, which will in-turn create a dangerous situation for pedestrians. Proposed Concept Plan - Option 2	The proposed alternative plan falls completely short in addressing any of the key objectives of the proposal, and is not supported for the following reasons: <ul style="list-style-type: none"> It does not remove any unsafe vehicle turning movements, particularly right out movements; It significantly reduces the opportunities to beautify the road with landscaping, and the clutter of kerbing and road infrastructure required to manage a complex arrangement of vehicle movements in a short stretch of road will be more unattractive and blighted than the current road environment; Overlayed plans demonstrate that this plan results in almost as much bitumen and road surface as there is currently (despite the reduction to single carriageway), providing very few opportunities for beautification and greening. Creates a road environment that is confusing for motorists and pedestrians through a clutter of kerbing and turning pockets etc. required to manage traffic movements; Does not rationalise access points which is a key objective of the project to make

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		<p>The access modifications proposed under Option 2 are considered to be reasonable as a medium to long-term objective. However, there are critical elements of the Option 2 concept plan that cannot be implemented in the short term, as follows:</p> <p>It is not viable to restrict access via Driveway 3 (to the lower level car park opposite Kent Street) until such time that this area is redeveloped to include improved Centre access from the upper level car park, as well as internal car park ramps linking the upper and lower car park levels.</p> <p>It is not possible to restrict access at Driveway 5 (the McDonalds access driveway) with McDonalds in its current configuration. In addition to the significant impacts on McDonald's business (resulting from the proposed access restrictions), the currently proposed plan will also result in McDonalds traffic travelling through the adjacent loading dock to carry out right turns to/from Rockingham Road. This introduces significant safety concerns within the loading dock area, particularly since this loading dock is expected to be significantly busier in the future with the introduction of Farmer Jacks.</p> <p>Recommended Interim Plan for Option 2</p> <ul style="list-style-type: none"> • In order to address the significant issues identified above regarding the proposed Option 2 concept plan, the attached Figure 6A shows a recommended Interim Plan that could be introduced prior to any redevelopment of the Shopping Centre. • The interim plan includes the proposed construction of the median within Rockingham Road, together with the proposed roundabouts at Colleville Crescent and at Driveway 6, but retains the existing access arrangements at Driveways 3, 4 and 5, until such time that these areas are redeveloped. • It is therefore important to note that this alternative plan would only be an interim step to the full implementation of Option 2 once the overall shopping centre has been redeveloped. 	<p>the road safer and improve the pedestrian and cyclist environment;</p> <ul style="list-style-type: none"> • Further degrades the pedestrian environment through: <ul style="list-style-type: none"> ○ Introduction of two roundabouts without the offset of rationalised crossovers/access, resulting in the area being more unpleasant to traverse as a pedestrian with greater interruptions to the footpaths. ○ Proposed turning pockets essentially result in almost the same crossing distance for pedestrians along this stretch of road which is unacceptable given this is a key section of the town centre, and the importance of access to bus stops etc. <p>There is considered to be very little benefit to the wider community to introduce new roundabouts at Coleville Crescent and the northern shopping centre entry as shown in Option 2 (which primarily serve to benefit the shopping centre) whilst still allowing full access to the current entry points.</p> <p>It is acknowledged that under Option 1 the 400m travel distance required to undertake the U-turn movement to access McDonalds or the northern Shopping Centre does not offer convenient access for vehicles heading north.</p>

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			However, Concept 2 is considered to be workable for the Shopping Centre with the additional roundabout in both the interim period, and longer term should it be redeveloped.
20	Denyse MacNish	Support Option 1 I wish to submit my preference for Option 1. of the Rockingham Road upgrade. In addition, I would like to see the one lane section of Rockingham Road extended further south to provide for a greater area of traffic calming and pedestrianisation. Thank you for registering my submission.	Support for Option 1 and other comments noted.
21	Community member	Neutral Close the exit of Coleville Cresc into Rockingham road and connect the Phoenix SC with council. This will create more space for additional services and a walk through to the shopping centre. It has merit if at all possible. No idea what the planning implications are.	Comments noted. Connection between the Shopping Centre and Council site will be considered when concepts for the Council site civic precinct are progressed.
22	Ken Wilman 15 Sparrow Way SPEARWOOD, WA	Neutral I can't believe this council is still talking about an upgrade. This road is a disgrace and has been for many years I've lived in the immediate area for all my adult life, I'm 73 years now this plan is about mark 1V twenty years you have been talking about an upgrade at least. This plan doesn't even include underground power as far as I can see. We must be the only main shopping are in the state that hasn't got rid of the ugly power lines, LEP money was missed to put them underground. The extra rates from all the extra apartments etc in the area should cover the improvements but I won't hold my breath.	Comments regarding the need for an upgrade are noted.
23	Spearwood resident	Neutral I'm happy with anything to make Rockingham road look nicer. I don't think it will make any more traffic into the centre, the centre needs a change, and I feel spearwood has been left behind.	Comments regarding the need for an upgrade are noted.

24	Munster resident	<p>No opinion</p> <p>I agree the road needs an upgrade and could look a lot nicer which would add value to the area. However I am concerned that by reducing the lane to one we are moving backwards. This area is growing in population and will likely need more lanes with more traffic in the years to come. Let's plan for the future</p>	<p>Comments regarding the need for an upgrade are noted.</p> <p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.</p> <p>The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist.</p>
25	Charlie 18 Hydaspe Vista NORTH COOGEE, WA	<p>Object to the upgrade</p> <p>Traffic congestion in Cockburn overall is terrible, leave this road as is otherwise Stock Road and Forest Road will become a car parks the same as Beeliar Drive / Armadale Road are at certain times of the day The main shopping centre is now a joke, is being allowed to fall into a ghost centre, less cars / and people are not using it as more shops are closed.</p>	<p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.</p> <p>The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist.</p>
26	Rosie Da Conceicao 13 Howe Street BEELIAR, WA	<p>Object to the upgrade</p> <p>There is sufficient traffic on the road to warrant the use of 4 lanes - two in both directions. By reducing it to two will just cause traffic to build up. Then in a few years time when you realise the error it will cost more money to put it back to what it was originally - 4 lanes.</p> <p>As they say if it's not broken, then don't fix it!</p>	<p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.</p> <p>The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist.</p> <p>The upgrade to Rockingham Road is considered important given that the community have expressed longstanding concerns regarding Rockingham Road,</p>

			particularly how unsafe it is to cross; unsafe traffic movements being taken; and a desire to improve the appearance of the road.
27	Hamilton Hill resident	<p>Object to the upgrade</p> <p>Reducing the number of lanes on Rockingham Road is a very poor idea. Reducing lanes creates more bottlenecks, specially when there are buses plying on the same road. Is someone looking at the bigger picture here (looking at the usage of Rockingham Road and it's connectivity with other suburbs) rather than just exploring a short term view of increasing footfalls at a defunct shopping centre which hardly has much attraction anyway. The reason for vendors pulling out of the shopping centre is not because of it's access, it is because the owners have not invested in upgrades or been able to attract suitable vendors to fill the shops!</p> <p>Don't understand how modifying Rockingham Road will expect it to increase accessibility to Phoenix Shopping centre and suddenly make it a popular destination anyway.</p>	<p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.</p> <p>The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist. This will create an improved environment for private investment.</p>
28	Rechelle Biffin 1/6 Paddington Court BIBRA LAKE, WA	<p>Object to the upgrade</p> <p>I think the upgrade to landscaping and the inclusion of roundabouts etc are a great idea as that area is looking extremely tired and outdated, however believe the reduction of traffic down to 1 lane either way will cause traffic chaos in the area, particularly around Phoenix Shopping Centre.</p>	<p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.</p> <p>The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist.</p>
29	Coogee resident	<p>Object to the upgrade</p> <p>I feel this is a total waste of funds. Phoenix shopping centre is all but dead and this proposal won't change that. Also it would divert traffic to Hamilton road causing traffic jams</p>	<p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.</p> <p>The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping</p>

			that currently do not exist. This will create an improved environment for private investment.
30	Yangebup resident	<p>Object to the upgrade</p> <p>Reducing Rockingham Road to 1 lane is absolute stupidity. Making it more difficult to access and increasing congestion isn't going to increase the number of people who want to go to this shopping precinct.</p>	<p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.</p> <p>The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist. This will create an improved environment for private investment.</p> <p>The proposed plan has deliberately reduced the number of access points to Rockingham Road to reduce the number of unsafe traffic movements (particularly right hand turns), and to enable more comfortable pedestrian movement along Rockingham Road, given that crossovers disrupt pedestrian movement.</p>
31	Spearwood resident	<p>Object to the upgrade</p> <p>It needs upgrading but Not what you are proposing. It's crazy to take this down to one lane each side. The bank up of traffic with the amount of buses will be ridiculous. I can't believe you could not come up with a better option. It's just a joke the way you waste money on useless project instead of useful designs.</p>	<p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.</p> <p>The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist. This will create an improved environment for private investment.</p>

			The upgrade to Rockingham Road is considered important given that the community have expressed longstanding concerns regarding Rockingham Road, particularly how unsafe it is to cross; unsafe traffic movements being taken; and a desire to improve the appearance of the road.
32	Spearwood resident	Object to the upgrade Why reduce to one lane to make it look better?	The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist. This will create an improved environment for private investment.
33	Spearwood resident	Object to the upgrade Agree Rockingham Road needs an upgrade, but dropping it to one lane in either direction is a crazy notion and will do nothing to improve the Phoenix Shopping Centre and surrounding retail outlets.	The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist. This will create an improved environment for private investment.
34	Annette Lenarz 12 Korcula Court MUNSTER, WA	Object to the upgrade The roundabouts are a good idea, as the exit from Phoenix shopping centre is a bit dangerous when turning right onto Rockingham road. I do NOT support reducing the number of lanes on Rockingham Road. It is a busy through-road and needs to be able to carry the current volume of traffic, as well as additional traffic from new developments nearby into the future. If you want to make the area a "destination", do it at the back of the shops, where it doesn't impact on traffic. Trees on median strips usually block some of the view for drivers, which will just make the road more dangerous for drivers, riders and pedestrians.	The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway. Appropriate tree species will be selected to ensure sightlines are maintained.
35	Yangebup resident	Object to the upgrade I support either concept, but object to the narrowing of Rockingham Road. I often travel down both Spearwood and Rockingham Roads and I feel that having only one lane will make both roads	The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single

		significantly more congested and there is not other sensible alternative routes that I can take to reach my destinations.	carriageway.
36	Brian Hunt 12 Manberry Way YANGEBUP, WA	<p>Object to the upgrade</p> <p>Any narrowing of the road will only add to congestion in the area. Rockingham road is currently dual lanes from Hampton road down to the rail crossing south of Spearwood Avenue. Why create a second bottleneck?</p> <p>Pheonix is suffering from old age and accessibility. New shopping areas like Beeliar and gateways are attracting shoppers with more variety. Coles leaving was a major setback, and the reason I no longer go to Pheonix. I was around when Pheonix was built and have seen the changes.</p>	<p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.</p> <p>It is considered that the road upgrade will create an improved environment to encourage private investment.</p>
37	Yangebup resident	<p>Object to the upgrade</p> <p>Landscaping in the middle of the road cuts down on driver vision, it also collects rubbish. Narrowing the road causes traffic jams, creating anger among some drivers. People who wish to shop at Phoenix will shop there, creating a barricade for those that do not go there will create traffic to find other ways to by- pass it, some of those drivers do stop in for shopping. Please do not narrow the roads, I shop there, but if I encounter traffic jams I will shop elsewhere.</p>	<p>Appropriate tree species will be selected to ensure sightlines are maintained, and the whole stretch of road would be maintained to a 'town centre' standard.</p> <p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.</p>
38	Spearwood resident	<p>Object to the upgrade</p> <p>I don't completely object to the upgrade but the Phoenix shopping center itself needs a serious upgrade. It's old and it's dirty and there are far better shopping centers popping up all over the place. Is there any guarantee that if this is done the private owners will put any effort into revitalization and attracting customers?</p>	<p>It is considered that the road upgrade will create an improved environment to encourage private investment.</p>
39	Hamilton Hill resident	<p>Object to the upgrade</p> <p>If you make it a one lane road, congestion will be horrendous. Bad enough trying to get out of shopping centre carpark most days already.</p>	<p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.</p> <p>With the proposed roundabout access to the centre will be improved – safer and more</p>

			convenient.
40	Spearwood resident	<p>Object to the upgrade</p> <p>I think most of us would like a similar Phoenix town centre, with a safe, uncongested road, fringed with attractive, varied and thriving businesses. But I do not think the planned Rockingham Rd upgrade can deliver this outcome.</p> <p>The City of Cockburn strategic planning group has stated that “improving” Rockingham Rd will attract viable businesses, although in their own words, this is “a leap of faith”. I do not believe having a “pretty road” will attract viable new businesses. Roads such as Subiaco’s Rokeby Rd and Mt Lawley’s Beaufort St have been cited as examples of how Rockingham Rd could be after the upgrade. There have been extensive media reports over the last year of how both of these streets are suffering, with many long established and successful shops and restaurants closing due to lack of trade, tied to the poor WA economy. These areas have a much wealthier population demographic than Cockburn, so the economic downturn will be more severely felt in Cockburn, and would be expected to result in businesses closures. “Pretty” streets haven’t protected businesses in those suburbs and there is no reason to expect differently in Cockburn.</p> <p>The City of Cockburn strategic planning group has proposed “improving” Rockingham Rd by reducing the number of lanes, installing numerous roundabouts and reducing the road speed. Indeed, their stated objective is that there is no through traffic – the shopping precinct becomes a “destination”, a place that people go to specifically, not drive past. This ignores the reality that there are few north-south roads in the area. The railway bisects Spearwood – the only way of crossing north-south over the railway are the defacto highway of Stock Rd, Rockingham Rd, Hamilton Rd (2 lanes, already with 7 roundabouts) and Cockburn Rd (2 lanes) on the coast. The people of Coogee, Spearwood and Munster will frequently be travelling north-east since most of Perth is located in this direction. Consequently, Rockingham Rd is a significant transit route for local people. The strategic planning group claims that the planned Rockingham Rd upgrade will not result in traffic congestion, even with planned increased population densities in the area, because “through” traffic will go elsewhere. Where? There are limited options.</p> <p>The City of Cockburn strategic planning group has stated that the Rockingham Rd upgrade will take approximately two months to complete. I believe this is completely unrealistic. I’ve discussed this with many people and the consensus is this would require 12-24 months for completion. There is a possibility that different definitions of “completion” are being used. I would define completion as sub-surface services, drainage, all roadworks (including roundabout, turning lanes and bus stop lanes, kerbing, resurfacing and signage painted and installed), foot/bike/dual use paths, and landscaping</p>	<p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.</p> <p>While concerns with the impact on businesses is noted, it is considered that the state of the centre warrants improvement and the City would work to minimise the impact and disruption of works on businesses.</p> <p>The submitters suggested modifications, such as improving maintenance of verges and footpaths etc. would have minimal impact/improvement on the road and area generally.</p> <p>Given the fragmented land ownership of properties and businesses along Rockingham Road there are limited opportunities to rationalise crossovers, as all businesses still require legal access. Suggesting businesses should rationalise crossover without Council committing to any substantial investment and upgrade to the public realm would be onerous and unreasonable, particularly given the minimal impact this action/change would have in isolation.</p>

		<p>being completed. Essentially, this would be the point that there would no longer being work done along the road, there would be no more witches-hats, and traffic would be able to move freely. The strategic planning group may be using a “road narrowing and roundabout only” meaning of completion, so access would still be limited afterwards. Although my own straw poll suggests even this step is likely to take about six months. This major difference in perceived completion time will probably be matched by a difference in projected project cost – a project taking 12 months will most probably cost a lot more than one taking 2 months.</p> <p>The impact to businesses along Rockingham Rd needs to be considered also. During this projected Rockingham Rd upgrade access to the Phoenix Shopping Centre and the businesses north of the Centre to Phoenix Rd will be severely affected – and if it is hard to get to these businesses, people will go elsewhere. This will translate into severely reduced trade during the upgrade period – and some businesses will not be able to survive, and the longer the affected period, the more businesses will suffer. Even after the upgrade has been completed, the businesses will need to win customers back from the other shops that customers have got in the habit of using. And the longer the disruption, the more habituated to the other shops people will be, and the more difficult to regain their trade. I would also suggest that the stated objective of there being no “through” traffic after the upgrade will alarm the affected businesses – it essentially means “no passing customers”.</p> <p>I believe the proposed upgrade will be highly disruptive for residents and businesses in the area, and will not result in the postulated community hub and flourishing business.</p> <p>I believe that the City of Cockburn can assist the area by:</p> <ul style="list-style-type: none"> • undertaking needed routine maintenance to kerbs, verges and footpaths • encouraging businesses to improve the appearance of their businesses (paint, signage) • encouraging businesses to rationalise front carpark and carpark access to Rockingham Rd, improving car and pedestrian access from one business to another • examining a case for a crosswalk near Kent St (near the bus stops) • determining if a bus cut-in can be made on the eastern side of the road near Phoenix Shopping Centre to overcome the current dangerous congestion point. <p>These are small, achievable improvements. In the longer term, a community hub will probably develop on the current City of Cockburn Administration site as other planned rebuilding is done. Business success in the area will be largely reliant on an improved economy, businesses providing good quality goods and services of the type wanted in the area and the actions of business property owners in leasing premises at reasonable rates and making their premises clean and attractive.</p>	
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<p>It is considered that any upgrade plan for the road needs the following key elements to have any impact:</p> <ul style="list-style-type: none"> • Substantial additional landscaping and greening elements; • Slowing of traffic; • Removing right out movements. <p>These cannot occur without the reduction of the road to a single carriageway.</p>			
41	Spearwood resident	<p>Object to the upgrade</p> <p>Whilst an upgrade to the aesthetics and streetscape is long overdue in Spearwood, (where it seems all money has been spent in new areas in particular Success/Gateways precinct), it shouldn't be at the expense of functionality. One way exits will be unbearable putting more traffic onto Phoenix Road out of BP etc where you can turn right either. To leave this area and head towards Phoenix Rd to Stock Rd and North is not functional let alone the congestion this will create in the area turning it onto another gateways roundabout debacle! Fix the roads and streetscape the area instead!</p>	<p>It is acknowledged that the proposed plans may require changes to access to Phoenix Road and this would be addressed as part of any planned upgrade to manage exiting traffic.</p>
42	North Coogee resident	<p>Object to the upgrade</p> <p>Most of the proposal is fine but reducing traffic to one lane there would be a nightmare. It's already too busy. If you want to annoy the majority of users of the area (including those using the centre) then reducing lanes is the way to do it.</p>	<p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway. It is envisaged that access to businesses will be improved through safer, more legible access points that there is currently.</p>

43	Spearwood resident	<p>Object to the upgrade</p> <p>I'm all for the landscaping and a freshen up for the area, but to reduce the lanes to one will bring the phoenix area to a stand still at busy times. Why reduce traffic flow? Roundabouts are great but a single lane roundabout not so effective</p>	<p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.</p> <p>The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist.</p> <p>It is also important traffic is slowed, and that the roundabouts provide some breaks in the traffic to allow pedestrians to cross safely at most points along the road, and to provide breaks for vehicles entering Rockingham Road.</p>
44	Spearwood resident	<p>Object to the upgrade</p> <p>Changing from 2 lanes too 1 is a ridiculous idea. Only gonna cause more congestion and force people to go an alternative route. Which will have the opposite impact on the shopping area as too what yer trying to do. Gobshites</p>	<p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.</p> <p>The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist.</p>

45	Spearwood resident	<p>Object to the upgrade</p> <p>I think that is a waste of money to change the road structure, does need new road topping. I have lived in Spearwood since 1972 & found the traffic flow between phoenix & Spearwood ave to flow very well</p> <p>what you propose would restrict traffic & take away business from the shopping centre as people would drive to other centres to shop if it course more traffic congestion as for accident you cannot build a road for the village idiots that are behind the wheel</p>	<p>The upgrade to Rockingham Road is considered important given that the community have expressed longstanding concerns regarding Rockingham Road, particularly how unsafe it is to cross; unsafe traffic movements being taken; and a desire to improve the appearance of the road.</p> <p>The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist.</p> <p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.</p>
46	Associated with business on Rockingham Road	<p>Object to the upgrade</p> <p>I would prefer there to be no upgrade as I feel it will severely affect the businesses on Rockingham Road Spearwood. Many elderly people access these facilities and the new road concept would confuse these elderly people.</p> <p>However if there is no choice and something will go ahead I would prefer concept two, and request that any road works be carried out at night time to minimise effects of people accessing these businesses during the day</p>	<p>Request for night works is acknowledged.</p> <p>It is considered that the road would be more legible and safer for access under the proposed changes.</p>
47	Grant Gaskett 12 king street COOGEE, WA	<p>Object to the upgrade</p> <p>I object to reducing Rockingham rd from 2 lanes to 1 lane, neither option addresses traffic travelling through the area who are not accessing the businesses, it will only cause increased travel time and frustration for through traffic, Rockingham rd is 2</p>	<p>The upgrade to Rockingham Road is considered important given that the community have expressed longstanding concerns particularly from Spearwood residents regarding</p>

		lanes for a good reason, leave it that way!	<p>Rockingham Road, particularly how unsafe it is to cross; unsafe traffic movements being taken; and a desire to improve the appearance of the road.</p> <p>The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist.</p> <p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.</p> <p>It should also be noted that traffic numbers on the road are less than they have been the past.</p>
48	Spearwood resident	<p>Object to the upgrade</p> <p>The single lane is ridiculous, Rockingham Road is busy enough to reduce it to one lane will only push the traffic congestion to Hamilton Road, leave it two lanes, don't make the mistake like you have with Gateways traffic there is ridiculous and people avoid going there because of that reason. Emergency services use Rockingham Road all the time reducing to a single lane could cause delays. Please think this through properly think about planning for the future.</p>	<p>The upgrade to Rockingham Road is considered important given that the community have expressed longstanding concerns regarding Rockingham Road, particularly how unsafe it is to cross; unsafe traffic movements being taken; and a desire to improve the appearance of the road.</p> <p>The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist.</p>

			The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.
49	Munster resident	<p>Object to the upgrade</p> <p>It's busy enough at all times of the day without reducing it to one lane. The buses stop all along this road on both sides. People using the facilities along this road will have limited opportunities to pull out onto Rockingham road and will cause more congestion than what it currently has.</p> <p>A traffic light monitored pedestrian cross walk would be a far better option if the council is trying to make it safer crossing the road.</p>	<p>The upgrade to Rockingham Road is considered important given that the community have expressed longstanding concerns regarding Rockingham Road, particularly how unsafe it is to cross; unsafe traffic movements being taken; and a desire to improve the appearance of the road.</p> <p>The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist.</p> <p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway. All bus stops will have dedicated bus embayments to ensure buses do not hold up traffic.</p>
50	Spearwood resident	<p>Object to the upgrade</p> <p>Are you serious??? Just so the Cockburn council can have a "nice" frontage??? Mate... sort out the people on drugs! Cockburn will never be beautiful until it sorts out all the filth in the town! Listen to what the old people have been trying to tell you for years! That is the issues we have about Cockburn cement, water Corp waste</p>	<p>The upgrade to Rockingham Road is considered important given that the community have expressed longstanding concerns regarding Rockingham Road, particularly how unsafe it is to cross; unsafe traffic</p>

		treatment plant. Stop wasting the rate payers hard earned money and get a life!!! What will happen next... rates will go up further... more homeless people in Cockburn... more poverty! I heard there is a new council building getting built in Cockburn central??? What is wrong with where it is???	movements being taken; and a desire to improve the appearance of the road.
51	Spearwood resident	Object to the upgrade Are you guys out of your god damn minds ?? If this goes ahead or any attempts to push this through - I think it is about time the government went though this council with a fine tooth comb. People who are wedged between rockingham and hamilton roads will effectively be gridlocked from 7.30 to 9.30am and 2.30. - 5.00pm 52weekdays . Absolute sheer stupidity	The upgrade to Rockingham Road is considered important given that the community have expressed longstanding concerns regarding Rockingham Road, particularly how unsafe it is to cross; unsafe traffic movements being taken; and a desire to improve the appearance of the road. The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist. The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway. All bus stops will have dedicated bus embayments to ensure buses do not hold up traffic.
52	Patricia Hilliard 4/265 Rockingham Rd SPEARWOOD, WA	Object to the upgrade Option 1 is better than Option 2 but both are very bad proposals for those who live in the section of supposed improvement. Both options will make it more difficult for pedestrians as currently we can cross the road easily anywhere in this section of the road but the options both remove easy access to the cross the road due to proposed landscaping on most of the median strip. With only 1 lane this will seriously hinder the ability of vehicles to exit my home as	While the comments of the submitter are noted, other feedback we have received from this and other consultation is that the road is very difficult and unsafe to cross currently. The upgrade to Rockingham Road is considered important given that the

		<p>there will be more traffic in the one lane. Currently at certain times it is difficult to exit and it will be much worse. Because of no turn right there will be more traffic passing my home, going round to roundabout, to get to the business they require.</p> <p>Buses will often block the road completely as the bus entrapment will not be long enough to accommodate the number of buses stopping at one time. There can be 4, sometimes 5 buses pulling up at the same time and currently queue well past McDonalds, with the change it means the 1 lane will be blocked. Recently there have been more link buses on this route taking up a lot more road space.</p> <p>The need for assistance in crossing Rockingham Rd is near the bus stops in front of Phoenix Shopping Centre. Currently pedestrians run across the road at the most dangerous part of the road and this is where crossing assistance is needed.</p> <p>Option 2 there is a roundabout outside my home and this scares me as (a) buses always find it hard to get past roundabouts (b) large trucks are exiting the centre via the ramp and will need to go around the roundabout when turning right (c) cars travel very fast(well above the speed limit) in the evening/night along Rockingham Rd and roundabouts don't stop this happening as is often seen on the news (d) I have spoken to 2 estate agents and they advised that a roundabout outside my house will lower the value and also make it harder to sell, as people don't want a roundabout nearby.</p> <p>In Option 2 the footpath in front of 263 Rockingham Rd disappears (but is shown clearly on the other roundabouts). What happens to pedestrians here as this section has a high foot traffic rate.</p> <p>I cross the road carrying my shopping from the underground car park but would be limited to using the median strip directly beside the roundabout, which frightens me in Option 2. Currently I can easily cross the road using the median strip with no issues whatsoever.</p> <p>When I bought my house at age 60 six years ago I carefully reviewed what it meant in the future for me as I got older. I chose this house as it was close to the shopping centre and I could easily cross the road with my shopping. I had buses close by that would take me where I needed to go. I checked with the Council if there were any plans to change my environment and was told no. All of these things would hopefully enable me to live independantly and not needing assistance. If these</p>	<p>community have expressed longstanding concerns regarding Rockingham Road, particularly how unsafe it is to cross; unsafe traffic movements being taken; and a desire to improve the appearance of the road.</p> <p>The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist.</p> <p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway. All bus stops will have dedicated bus embayments to ensure buses do not hold up traffic.</p> <p>The proposed bus embayments will be long enough to accommodate the correct number of buses.</p>
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53	Brian Tomlinson 3A Perlinte View NORTH COOGEE, WA	Support Option 1	Support for Option 1 is noted.
54	Emma Tapp 6 Regina Court HAMILTON HILL, WA	Support Option 1 Concept one plans look and sound more pedestrian friendly. And aesthetically look better. I never allow my children ages 12 and 11 to cross Rockingham Rd near the Phoenix Shopping Centre on foot or bike, as the entire road is dangerous. Currently the layout and the shops are in major need of a redevelopment. Trees, cycle paths, one lane either way, roundabouts in needed positions - all a huge improvement.	Support for Option 1 is noted.
55	Hamilton Hill resident	Support Option 1 From the options available, I support option 1 - with the suggestion that the one-lane Rockingham road section (with bike path) should extend to at least Rigby Ave.	Support for Option 1 is noted.

56	Spearwood resident	Support Option 1	Support for Option 1 is noted.
57	Beeliar resident	<p>Support Option 1</p> <p>I believe that the narrowing of Rockingham Road in front of the shopping centre will be beneficial to pedestrians and bicycle riders. Slowing down traffic will make this road safer and easier to navigate. Hopefully this will increase foot traffic to the shopping centre and increase patronage in turn.</p> <p>It is a significant stretch of bitumen and concrete and will be livened up by better landscaping also.</p> <p>I support Option 1 because I believe 3 roundabouts in close proximity is a bit over the top, and feel that the position of the two better suits the most used entry points to the centre.</p> <p>I also believe limiting the turning across traffic will make the road safer for all users.</p>	Support for Option 1 and support for the reduction to single carriageway is noted.
58	Spearwood resident	<p>Support Option 1</p> <p>I support the intent of the project and my preference is Option 2.</p> <p>Firstly I consider there is insufficient time for consultation to take place. There are not enough sessions with Council planners. You've only offered 1.5 hours on a Saturday at the phoenix shopping centre (when most school sports are a Saturday morning) and you've only offered one other day for a few hours at Council offices.</p> <p>Secondly, I consider there is very insufficient information on the "beautification" of this stretch of road. The concept designs show small swatches of green "intended to create a continuous verge?" and some indicative road center trees. Is there room for the centre strip to be a rain swale and contain small native plantings as in other suburbs (e.g. Wandi in Kwinana). These are also shown in studies to help slow traffic. There should be designs which show road centre width and proposed tree types and also show proposed plantings on the verge. This stretch of road already has stretches of dying grass which looks hideous. Beautification will not happen through reducing road lanes, and creating a bike path.</p> <p>Thirdly, how do these concepts truly address the access issues on Rockingham Road. I don't believe they do. They don't appear to reduce any ingress/egress points to local businesses.</p>	<p>Support for Option 1 is noted.</p> <p>City planning staff were available any time between 8:30am and 4:30pm, Monday to Friday to speak about the plans. The other times stated (the Monday evening and Saturday morning) were intended to be additional times outside of business hours to suit people who may not be available during business hours.</p> <p>The two plans are very much concepts, so they show areas where landscaping could occur, however a detailed landscaping plan would be required. If a concept is adopted by Council there would further detailed work regarding access, crossovers, road and footpath treatment, artwork and landscaping.</p> <p>Rockingham Road in this section has</p>

		<p>Fourthly - each concept appears to have a dedicated pedestrian crossing on almost the brow of the hill on Rockingham Road (as you head north). Is there not a safer location for this?</p> <p>Fifth - as part of the beautification and attempt to slow traffic, has Council given consideration to alternative road surfaces? i.e. paving rather than asphalt, or at least in round about areas to slow traffic making turns etc.</p> <p>Six - why not extend the beautification down to Spearwood Ave? Stopping at Colville Crescent seems counter intuitive to the objectives of slowing traffic and beautifying the area.</p>	<p>a very narrow road reserve and the reduction to one lane in each direction provides the space for landscaping enhancements which is one of the primary objectives of the project. Regardless, there is insufficient room in the centre median for a rain swale and native plantings, and it is likely that only trees could be planted in this median. However, there are verge areas where native plantings could be possible.</p> <p>Given the fragmented land ownership of properties and businesses along Rockingham Road there are limited opportunities to rationalise crossovers, as all businesses still require legal access. However, by restricting certain vehicle movements (mainly right-out movements and some right-in movements) the intention is to make access safer.</p>
59	Norman of Dale 295 Yangebup Road YANGEBUP, WA	<p>Support Option 1</p> <p>Roundabouts will slow traffic and there will be more space between cars for pedestrians</p>	Support for Option 1 is noted.
60	Coogee resident	<p>Support Option 1</p> <p>Great to have the cycle lane included</p>	Support for Option 1 is noted.

61	Spearwood resident	<p>Support Option 1</p> <p>I understand the changes made to concept one however to create option two, however I support option one as I feel that the introduction of a cycling lane and the planned community places (near phoenix) would be a great addition to the area. I would appreciate it if the city was able to consider taking some of the points from option 2 (change of round about at Kent street and some turning options at Hungry Jacks/BP) and incorporating them into option 1 if and where possible.</p>	Support for Option 1 is noted; and support for the roundabout at Coleville rather than Kent Street, and additional access north of Lancaster Street (as shown in Option 2).
62	John Simunovich 89 Goldsmith Rd SPEARWOOD, WA	Support Option 1	Support for Option 1 is noted.
63	Elizabeth Antonio 5/289 Rockingham road SPEARWOOD, WA	<p>Support Option 1</p> <p>The road is long overdue for an overhall including traffic calming, better footpaths, safer road surface and curbs, and overall visual attractiveness. I've been a rate payer who owns a unit on this road for over 15 years and it's about time this project was commenced. Thank you</p>	Support for Option 1 is noted.
64	Gillian Street 18A March St SPEARWOOD, WA	<p>Support Option 1</p> <p>I would love be to see the Phoenix Area become walk and cycle friendly with coffee shops. Get it done soon please! I am currently renting out my Spearwood house and would love to come back to a friendlier Spearwood. FYI, I could only access a plan for concept 1 on my phone, not concept 2.</p>	Support for Option 1 is noted.
65	Hamilton Hill resident	<p>Support Option 1</p> <p>Option 1 appears to create the most options for entering and exiting Phoenix Shopping centre, this will help the centre continue to progress. I also like the new entry area for the shopping centre which I'm sure will act as a catalyst for Phoenix Shopping Centre to inject some much needed capital. With the median strip planting can I please make the recommendation to plant trees which will grow very large over time and quickly, potentially Norfolk pines or London plain trees, it will help give the area a degree of scale and sense of arrival.</p>	Support for Option 1 is noted. Recommendations for landscaping also noted, and will be explored through a future landscaping plan.

66	Beeliar resident	<p>Support Option 1</p> <p>I think it's a great idea to make it a town centre for people to socialise and it should be a strip Rockingham road like FREMANTLE cafes and restaurants social type of stuff. I think because the area has so much crime and drugs we will need high security and hopefully the cameras and security guards will catch the bad people and get them in jail where they belong. I think as Coogee is such a lovely area, Spearwood needs a serious upgrade</p>	Support for Option 1 is noted.
67	Stacey Meldrum 5 Balfern Way SPEARWOOD, WA	<p>Support Option 1</p> <p>I strongly support the Concept One plans. That stretch of road is difficult to cross for pedestrians and the traffic is not so heavy that a single lane won't suffice. I think it will make a really positive change to the traffic flow and pedestrian experience. The landscaping will help beautify an area that is (let's be honest) looking a bit ratty right now.</p>	Support for Option 1 is noted.
68	Tricia Cleary 311A Rockingham Rd Spearwood WA 6163 SPEARWOOD, WA	<p>Support Option 1</p> <p>Firstly let me say how delighted I am that Rockingham Rd - the heart of Spearwood - is going to get some much needed attention. I actually prefer the original concept because the roundabouts will be positioned at points that cater for the largest amount of traffic. However I also think the Concept 2 notion of reduction of right-out movements North of Lancaster Street is a good idea too in terms of ease of traffic congestion</p>	Support for Option 1 is and comments regarding Option 2 are noted.
69	Lachlan Gatland 7 Chesters Way WINTHROP, WA	<p>Support Option 1</p> <p>Absolutely support the proposal - the place feels like a post apocalyptic disaster at the moment. Definitely choose option one, option two is no where near as good. The introduction of bicycle separated infrastructure and the overall pedestrian realm in option one is far superior to that of option two, and to be honest, option two doesn't seem like a huge change from the current.</p> <p>If I can make one suggestion, particularly in the small public space outside the shopping centre and down the median strip of option one, include some proper sized native trees - for god sake stop planting these dinky little metre high trees which do nothing to provide shade and make tall people like me have to duck and weave. You can landscape as much as you want, but without providing some proper vegetation, the entire centre is still going to feel like a baron, dead place,</p>	Support for Option 1 is noted.

70	Spearwood resident 1 Prada Way SPEARWOOD, WA	Support Option 1 Phoenix rd shopping district is in desperate need of a revamp. With many vacant premises and run down shops, it is an eyesore for visitors who may choose to shop elsewhere. I prefer option 1 as it will really lift the Phoenix Shopping Centre entry and allow alfresco dining which will hopefully attract more good cafes/restaurants and other business owners to the area. I'm excited about these plans and really hope that these get approved.	Support for Option 1 is noted.
71	Frank vanWees 13 Tidewater close YANGEBUP, WA	Support Option 2 I, very much support the councils proposals However I am a bit concerned about the bus port will they being constructed wide enough for the passing traffic. I support Proposed concept plan OPTION 2	Support for Option 2 is noted. The bus embayments will be designed to ensure that buses do not cause queuing.
72	Spearwood resident	Support Option 1	Support for Option 1 is noted.
73	Mark Harney 8 Norland Way SPEARWOOD, WA	Support Option 1 Can't wait for this concept to happen.	Support for Option 1 is noted.
74	Joe 23 Ferris Way SPEARWOOD, WA	Support Option 1 The dedicated cycle path in option one is a good idea particularly as we have new laws that require vehicles to give bicycles a wide berth. Also it separates bicycles from pedestrians making it safer for both and encourages people to walk and cycle in a leisurely manner I also prefer the continuous medium strip allowing for landscaping and trees in option 1 This project is long overdue and much needed, currently that strip is very unattractive and uninviting.	Support for Option 1 is noted.

75	Hamilton Hill resident	<p>Support Option 1</p> <p>I support concept one as aesthetically and practically I feel this would work for the street. Big trees in the medium strip please ie Norfolk Pines or White Gums. Established would be better and regular watering so they don't die.</p>	Support for Option 1 is noted.
76	Spearwood resident	<p>Support Option 1</p> <p>Great concept, very progressive, can't wait for it to start.</p>	Support for Option 1 is noted.
77	Spearwood resident	Support Option 1	Support for Option 1 is noted.
78	Kimberley Macphail 16 Birbeck Way SPEARWOOD, WA	<p>Support Option 1</p> <p>I support Option 1 design. I am satisfied the continuous island median design of Option 1 will not reduce traffic capacity. The right only movements of Option 2 have a negligible impact on the traffic analysis and do not warrant compromising the objective of this project ("Phoenix Revitalisation Strategy identified the need to upgrade and beautify the road environment as a key project to deliver revitalisation of the area").</p> <p>Street trees/landscaping, wide footpaths, alfresco dining, island medians and reducing to one lane in each direction are key elements to enhancing pedestrian amenity. The functionality and revitalisation of Rockingham Road is also affected by the walkability of surrounding area. I prefer the roundabout at Kent Street over Coleville Crescent because the proposed public art/seating space builds on the existing network of public spaces through to Manning Park and Eliza Ponds/Packham North town centre.</p> <p>Overall I believe the Option 1 design provides sufficient vehicle access to the key sites as well as the flexibility for pedestrian prioritisation and street activated redevelopment.</p> <p>Keep up the good work!</p>	Support for Option 1 is noted.

79	Sonali Raikundalia 267 Rockingham Rd SPEARWOOD, WA	Support Option 1 I manage the day-care centre on Rockingham Road, Little Peoples Place. I support concept one as I feel like it would slow cars down and be safer for our children and families who cross the road. Any chance a zebra crossing would be considered??	Support for Option 1 is noted.
80	Cristina 7 Orsulich loop Spearwood SPEARWOOD, WA	Support Option 1 We need more advanced trees in Spearwood.	Support for Option 1 is noted. Advanced tree species will be considered for the landscaping to maximise their impact.
81	Spearwood resident	Support Option 2 Concept 2 is more pedestrian, private vehicle and bus friendly than concept 1. That along will bring more people to live and enjoy this part of Cockburn.	Support for Option 2 is noted.
82	Hamilton Hill resident	Support Option 2 This would be a much safer option. Can a right arrow be installed at Phoenix and Rockingham Road for traffic turning west into Phoenix Road towards Hamilton Road	Support for Option 2 is noted. Modifications to traffic signals will be considered as part of the upgrade.

83	Spearwood resident	<p>This road is a main artery to travel through Hamilton hill, Spearwood and Munster. Why would you inhibit the flow of traffic through this space? The population is continually growing and this will create further issues getting into and out of the shopping centre. Start catering for growth!!</p> <p>Option 1 - You have added a cycle lane that then ends into a roundabout, this introduces additional risk to both cyclists and motorists. How many incidents and near misses does this introduce?</p> <p>Option 2 - I can't see any benefit of this layout - what does it actually improve? Just restricts the flow of traffic.</p> <p>In addition to these - how does this fit in with the proposed development plan for the council building?</p> <p>The focus should be on the current state of Phoenix shopping centre and the lack of shops that draw people. If you restrict the ease of which people can access this area this will drive people away from going to the shopping centre and will put more pressure on other roads in the area by people that will avoid using Rockingham road.</p> <p>Stop wasting ratepayers money by focusing purely on the visual aspects on the areas and make it something that is easy to access with a shopping precinct that people will want to go to.</p>	<p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.</p> <p>The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist. This will create an improved environment for private investment.</p>
84	Bibra Lake resident	<p>Support Option 2</p> <p>Prefer remain as is, but prefer option 2</p>	Preference for Option 2 is noted.
85	David Goodall 7 Kerry St HAMILTON HILL, WA	<p>Support Option 2</p> <p>In my opinion, Option 2 seems to favor access to opposite sides of the road around Hungry Jacks, BP and Phoenix medical centre where option 1 may promote illegal u-turns at the traffic lights or increase turning congestion on Pheonix rd.</p>	Support for Option 2 is noted.

86	Coogee resident	I agree it is a very uninviting road as it is at present, I think trees are needed and also reduction to 2 lanes, my only worry is that traffic flow may be to restricted.	Support for change and landscaping is noted. The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.
87	Spearwood resident	Support Option 2 Thanks for the options and look forward to the upgrade happening, will make a significant difference to the area. Option 2 keeps the traffic moving along Rockingham road and leads traffic to the main feeder roads, having a main entry off Kent street (Option 1) will increase traffic flow into the suburb areas, which I don't think is desirable. Love the inclusion of bicycle lanes and love the tree planting and landscaping. I feel that even more tree planting could be included down Phoenix road on the median strip outside Phoenix primary school.	Support for Option 2 noted.
88	Craig Ashworth Napier Mews Yangebup YANGEBUP, WA	Support Option 2 Why did you never do this sort of consultation with the community about Roe 8?	Support for Option 2 noted.
89	Coogee resident	Support Option 2 I support option two as I think it has better traffic flow, in addition I would like to see a dedicated bike lane added into option two, and also a pedestrian crossing just north of Kent St added in as I think it would make it safer for people using the buses. The feature paving near the shopping centre entrance could also be added to Option 2 as it would spruce up the area and make more of an entry statement.	Support for Option 2 noted. Because of certain design features of the road (turning pockets) a safe bike lane cannot be incorporated into the road. This means that in Option 2 cyclists would use the footpath (at slower speeds) or the road (for confident cyclists at higher speeds).
90	Coogee resident	Support Option 2 My reasons are very much the same as before. Dropping Rockingham road to a single carriageway road is ridiculous. Perth in general is a growing city with increased congestion. To have an existing dual lane road and drop it to one simply for "beautification" is beyond belief. No doubt if it did come to pass the speed limit	The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.

		<p>will be dropped to allow "safe" pedestrian access further compounding congestion. If anything I would start by getting rid of all the overhead powerlines and going underground. This could possibly give some more room to play with and plant some trees without altering the road layout.</p>	<p>The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist. This will create an improved environment for private investment.</p> <p>The cost to underground power has proven cost prohibitive because of the limestone, however should it become cost effective in the future it could undergrounded at that time. However, if the road were to remain dual carriageway this still would not provide much opportunity for tree planting due to the narrowness of the road reserve.</p>
91	Spearwood resident	<p>So Cockburn has just spent millions to build a bridge on Spearwood ave and make that road dual carriage to improve traffic congestion. And now you want to make Rockingham road (which is much more busier) single lanes!!! This is insane. You will only be encouraging traffic congestion by doing this. Also pretty sure residents would appreciate getting from location A-B nice and quickly rather than observing the 'beautification' that the council wants to waste money on. Reducing Rockingham road to one lane both ways will also not work with bus stops. Cars are going to be backed up 100's of metres because we won't be able to get around the buses (they always seem to go into the other lane). Eventually everyone will just avoid the area because they will be sick of congestion and slow traffic.</p>	<p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.</p> <p>The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist. This will create an improved environment for private investment.</p>

92	Spearwood resident	<p>Support Option 2</p> <p>What was once a central hub for the area and its surrounds has now sadly become a place many wish to avoid or merely drive thru hence why I support an upgrade to the area.</p> <p>Putting pressure on/give incentives to all those who own establishments/properties adjacent rockingham road would likely also help. Spearwood has the potential to become a southern suburbs version of Floreat/Wembley, time for those with a little vision and boldness to help make it happen.</p>	<p>Support for Option 2 noted.</p> <p>It is considered that the road upgrade will create an improved environment for private investment. In the future Council may consider other such incentives.</p>
93	Spearwood resident	<p>Support Option 2</p> <p>I support Option two, with a few changes, I would like to dual carriageway in both direction if feasible for future reference, less disruption to buses and through traffic. the Media strip should be narrow with a hedge in lieu of trees, as per Vic Park, main street.</p>	<p>The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist. This will create an improved environment for private investment.</p> <p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.</p>
94	Gabrielle Rowe 536 Rockingham Road MUNSTER, WA	<p>Support Option 2</p> <p>I first agreed to this change but traffic has increased significantly in recent years & the road now is very busy & used to get from A to B not stroll around so 1 lane I think would be chaos-possible push people onto Stock Rd if that is the aim?</p> <p>I suggest using the back area of Phoenix into a 'town centre' where there are more shops & slower traffic & making it easier not harder to get to.</p>	<p>The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist. This will create an improved environment for private investment.</p> <p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.</p>

95	Spearwood resident	<p>Support Option 2</p> <p>Both are good options. Option 2 appears to be safer for pedestrians. Please keep bike traffic in mind when designing. I've found some roads with introduced median strips have forced bike riders into traffic which is both frustrating for drivers and dangerous for riders.</p> <p>*Please do something about the old Chicken Treat site, it is disgusting!</p>	Support for Option 2 is noted.
96	Bernard Alfred Taylor 12 Beckett Close MUNSTER, WA	<p>Support Option 2</p> <p>The plan to reduce Rockingham Road, Spearwood to a single lane seems ridiculous considering there are more vehicles using the road system in the Cockburn area than ever before. This will surely create frustration leading to accidents as drivers are already short tempered and impatient if they have to wait 10 seconds to get past you even if you are turning into a side road along Rockingham Road. No one will sit patiently behind a bus at a bus stop either if only one lane! Your own website states: Road and traffic projects: "As traffic is the number one priority for Cockburn residents, the City will spend \$14.16M on roads projects in 2018-19, using a combination of local, state and federal funding to improve traffic flow and safety on our road network" surely narrowing Rockingham Road Spearwood negates the overall consensus of opinion that "traffic is a number one priority for Cockburn residents"</p> <p>Scrap the plan and save money - leave Rockingham Road as it is. Spend the money on cleaning up the mess where Chicken Treat used to be!</p>	<p>The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist.</p> <p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.</p>
97	Stewart Dallas 15 Bailey St HAMILTON HILL, WA	<p>Support Option 2</p> <p>I would support all of Rockingham Rd being reduced to one lane in each direction all the way to Hampton Rd in South Fremantle! In my experience (15 years resident in Hamilton Hill) I don't think there is sufficient traffic at any time of day to support 2 lanes in each direction and removing one lane would allow a dedicated cycle lane to be included in both directions. It would also allow for some substantial tree planting to improve the visual aesthetic (currently very barren) entering into the City of Cockburn off Hampton Rd, improve air quality, increase shade, reduce temperatures and reduce noise.</p>	Support for Option 2 is noted.

98	Spearwood resident	<p>Support Option 2</p> <p>The proposed public space of Option 1 realistically wouldn't be used by anyone due to the dodgy and suspicious persons that often hang around that area, both security and police patrols need to be ramped up to actually make any public space in this area, attractive for public use.</p> <p>I disagree with the roundabout to Coleville Cres as traffic is often minimal to this street but this 2nd concept includes a roundabout to the Phoenix SC carpark entry (adjacent to NAB) which is notoriously difficult and often dangerous to turn from. Roundabout at Lancaster x Rockingham is desperately needed. I also object to reducing Rockingham Rd from 2 lanes each way to just one lane each way, this significantly increases traffic congestion and more importantly, increases risks of incidents with pedestrians, as has been proven by the failures of other councils that have done the same to their local streets (ie: Subiaco, Perth CBD, Leederville, etc). Overall despite some downsides, this is a good proposal to improve driver safety and as a regular cyclist in this area, this should improve safety too, provided there is a sufficiently wide-enough cyclist lane or sidewalk.</p>	<p>Support for Option 2.</p> <p>The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist.</p> <p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.</p>
99	Beeliar resident	Support Option 2	Support for Option 2 is noted.
100	Spearwood resident	<p>Support Option 2</p> <p>I do not like either of these options. The lanes should not be narrowed down to a single carriage way at all. Maybe if it was a quiet are such as Medina Ave in Kwinana But not in Spearwood. It is already dangerous enough to cross.</p> <p>I would ask you to put in a pedestrian over pass so both cyclist pedestrian can cross safely. Your roundabouts will only cause more chaos, The traffic lights work perfectly fine. You can however fix the roundabout on Phoenix road and Bolingbrook . so so Dangerous to turn into your home when you have cars screaming down on you and think you are interacting to leave the roundabout and not to enter your own home.</p> <p>Another foot bridge would be great for the kids who are walking to and from phoenix primary school and need to cross over Rockingham road. There are no crossing guards to help them cross, Nor do cars give way to pedestrians. As for alfresco dinning, Are you serious? Why on earth would anyone want eat out side alongside trucks, cars and the odd cattle or sheep truck that goes by? Not sure</p>	<p>The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist.</p> <p>The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.</p> <p>There is insufficient space for a pedestrian overpass, and this would require substantial private land acquisitions (eg. Businesses and/or homes) which the City considers</p>

		about anyone else but I do not like a side of Carbon Monoxide with my meal nor the smell of animal urine.	highly undesirable and not in the best interests of the community. In addition, pedestrian overpasses are very expensive, and would consume most of the budget available for the upgrade. It is also important to note that pedestrian overpasses do not actually provide good accessibility because the distances required to walk are significant due to the long ramps.
101	Spearwood resident	Support Option 2 Whatever is done, do not reduce to one lane. Traffic is already horrendous, and all you will do is build up traffic on an alternative road which is so unnecessary. Focus your money and resource on fixing Phoenix Park and making our already existing roads better - the multitude of potholes and bumps could use the attention.	The reduction to one lane is considered important to slow traffic, and to create opportunities for street trees and landscaping that currently do not exist. This will create an improved environment for private investment. The traffic modelling that has been undertaken for the proposed concept plans demonstrates that free flowing traffic will still be achieved with the reduction to a single carriageway.
102	Josh Morrison 246A Hamilton Rd SPEARWOOD, WA	Support Option 2	Support for Option 2 noted.
103	Associated with business on Rockingham Road	Support Option 2	Support for Option 2 noted.

104	Spearwood resident	<p>Support Option 2</p> <p>Create a more engaging and aesthetic community centre , with green spaces / corridors and more inviting pedestrian infrastructure. When things look nice people are more likely to look after them and develop more care and pride for their area. Would be great to see the community grow along these lines.</p>	Support for Option 2 noted.
105	Hamilton Hill resident	<p>Support Option 2</p> <p>Thank you for meeting with me on Tuesday the 29th of February 2019 (Donna Di Renzo) to discuss this proposal. I own the Puma service station on the corner of Rockingham Road and Phoenix Road, Hamilton Hill. I note that my property will not be affected by this proposal. I had previously provided my comments on the initial proposal via email to "Comment on Cockburn" on the 19th of April 2018 at 1.34pm. Even though my property is not affected by the current proposal/s, my comments of 19 April 2018 still stand. Thank you for the opportunity to respond.</p>	Support for Option 2 noted.
106	Tegan Dillon 7/223 Rockingham Road SPEARWOOD, WA	<p>Support Option 2</p> <p>As an owner of Pharmacy 777 Spearwood on Rockingham Rd Option 1 will not allow our customers travelling from the north to south to turn into our driveway and enter our complex. This will have a dramatic effect on our customers numbers just after we have completed a major and expensive fit out of the store.</p> <p>I would also like to propose that the road works are done at night to minimise the restrictions of traffic flow in the area as this will also affect our business adversely.</p>	Support for Option 2 noted, and request for night works is noted.
107	Luke Dillon 7/223 Rockingham Road SPEARWOOD, WA	<p>Support Option 2</p> <p>As an owner of Pharmacy 777 Spearwood, my only option is to support Concept plan 2 as it allows access to our Pharmacy from both North and South for our customers. Option 1 will have a dramatic negative effect on our customers numbers as they won't be able to access our business if coming from the North.</p> <p>I would like to suggest the council undertakes the proposed road works at night to further minimise disruption to traffic flow and our businesses</p>	Support for Option 2 noted, and request for night works is noted.
108	Associated with business on Rockingham Road	<p>Support Option 2</p> <p>It will allow better access to sick and frail people accessing doctors and Pharmacy services</p>	Support for Option 2 noted.

109	Brad Gallagher 11a Loma Street COTTESLOE, WA	Support Option 2 I am a G.P. At the Phoenix Medical Centre and wish patients to be able to easily access the centre when heading south on Rockingham Rd.	Support for Option 2 noted.
110	Associated with business on Rockingham Road	Support Option 2 Option 2 has less impact to our practice	Support for Option 2 noted.
111	Michael Ghodsi SPEARWOOD, WA	Support Option 2	Support for Option 2 noted.
112	Associated with business on Rockingham Road	Support Option 2 I object to the proposal disrupting my business but option 2 is the preferred option of the two available. I would prefer that any works to be done are done at night to minimise disruptions to my business.	Support for Option 2 noted, and request for night works is also noted.
113	Associated with business on Rockingham Road	Support Option 2	Support for Option 2 noted.
114	Coogee resident	Support Option 2 Option 1 will result in increased traffic on Kent street. Option 2 provides better access to shopping centre car parks.	Support for Option 2 noted.
115	Thea Linke (PhD) Centre for Sustainable Aquatic Ecosystems Environmental & Conservation Sciences Murdoch University WA 6150	Support Option 1 I would like to opt for option 1, and am suggesting that the one-lane Rockingham road section should also extend to Rigby Avenue.	Support for Option 1 noted.

116	Steve Srhoy Director SBAS Holdings Pty Ltd	<p>Support Option 2</p> <p>As our Company SBAS Holdings Pty Ltd has owned Lot 851 (Lancaster House – 2 Lancaster Street, Spearwood) for well in excess of 30 years we believe we are in a good position to provide the City with valuable input as regards the proposed changes to Rockingham Road.</p> <p>All the Directors of SBAS Holdings Pty Ltd have lived in the Cockburn District their entire lives and have a strong passion for the area.</p> <p>Council currently has two options under consideration. Please note that the Directors of SBAS Holdings Pty Ltd fully support option 2. We would also like to point out that the exercise would not be complete without a round - about at the Phoenix Road intersection.</p>	Support for Option 2 noted.
117	Patricia Hope of 22 March Street, Spearwood	I, Patricia Hope of 22 March Street, Spearwood, hereby request that you make urgent provision for the inclusion in the Phoenix Precinct Plan, of arrangements to stop commercial traffic using March Street, in particular between the intersection of March and Lancaster Streets, and the Woolworths docking bay in March Street. Please advise me of what arrangements you have made as soon as practicable.	Comments noted. This project is focussed on Rockingham Road however the City is aware of concerns with March Street.
118	Slavko Vujasinovic 26 March Street Spearwood	I, Slavko Vujasinovic of 26 March Street, Spearwood, hereby request that you make urgent provision for the inclusion in the Phoenix Precinct Plan, of arrangements to stop commercial traffic using March Street, in particular between the intersection of March and Lancaster Streets, and the Woolworths docking bay in March Street. Please advise me of what arrangements you have made as soon as practicable.	Comments noted. This project is focussed on Rockingham Road however the City is aware of concerns with March Street.
119	Jason Crane 2-24 March Street Spearwood	I, Jason Crane of 2-24 March Street, Spearwood, hereby request that you make urgent provision for the inclusion in the Phoenix Precinct Plan, of arrangements to stop commercial traffic using March Street, in particular between the intersection of March and Lancaster Streets, and the Woolworths docking bay in March Street. Please advise me of what arrangements you have made as soon as practicable.	Comments noted. This project is focussed on Rockingham Road however the City is aware of concerns with March Street.
120	Ms Catriona McKay 8a Lancaster Street Spearwood	<p>Support Option 2</p> <p>I am writing to express my support for Option 2 – Rockingham Road Draft Concept Plan. My main concern is whether or not an overpass between Phoenix Shops and bus stop. People say you won't consider it but please consider the demographic of the area. We are mental health and outcare residents. I have been here 18 years</p>	<p>Support for Option 2 noted.</p> <p>There is insufficient space for a pedestrian overpass, and this would require substantial private land acquisitions (eg. Businesses and/or</p>

		<p>and some activity is criminal. Lots of elderly people trying to navigate a trolley across Rockingham Road are in danger. I already live on the small Lancaster Street roundabout and the driving school boy errors are very evident. Also hoons rev heads and non-stop freight to feed three loading bays. Changed Days. This is a simply a safety suggestion and a commendation for above plan option 2.</p>	<p>homes) which the City considers highly undesirable and not in the best interests of the community. In addition, pedestrian overpasses are very expensive, and would consume most of the budget available for the upgrade. It is also important to note that pedestrian overpasses do not actually provide good accessibility because the distances required to walk are significant due to the long ramps.</p> <p>With the proposed reduction to a single carriageway it is expected that the road will be easy to cross along many sections, with a smaller distance to cross and slower traffic speeds.</p>
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14.10 DEVELOPMENT APPLICATION - SINGLE DWELLING - NO. 13 (LOT 992) OTHELLO QUAYS, NORTH COOGEE

Author(s)	M Ball
Attachments	<ol style="list-style-type: none"> 1. Location Plan ↓ 2. House Plans ↓ 3. 3D Perspectives ↓
Location	13 Othello Quays, North Coogee
Owner	Catherine Victoria Barnes and Sameh Antoine Gwegati
Applicant	Richard Smith (Home Builders Advantage)
Application Reference	DA18/1008

RECOMMENDATION

That Council

- (1) grant planning approval for a single dwelling at 13 (Lot 992) Othello Quays, North Coogee, in accordance with the following conditions and footnotes:

Conditions

1. Development may be carried out only in accordance with the details of the application as approved herein and any approved plan.
2. Walls, fences and landscape areas are to be truncated within 1.5 metres of where they adjoin vehicle access points where a driveway and/or parking bay meets a public street or limited in height to 0.75 metres.
3. All service related hardware (air conditioning, condenser units, solar hot water units etc.) are to be positioned in locations where they are not visible from adjoining properties and the public realm, or effectively screened to the satisfaction of the City.
4. The proposed crossover shall be located and constructed in accordance with the City's specification and satisfaction.
5. The surface finish of the boundary wall(s) abutting the adjoining lot/s shall be rendered the same colour as the external appearance of the subject dwelling to the satisfaction of the City.
6. The undercroft area designated on the plans hereby approved shall remain as a non-habitable space as defined

by the Residential Design Codes of Western Australia.

7. The finished lot level of RL1.25mAHD within the 4.0m rear building setback area shall be maintained except for the specific purpose of access steps. No excavation associated with the provision of steps or landscaping shall take place below 0.75mAHD.

Footnotes

1. This is a Planning Approval only and does not remove the responsibility of the applicant/owner to comply with all relevant building, health and engineering requirements of the City, or with any requirements of the City of Cockburn Town Planning Scheme No. 3. Prior to the commencement of any works associated with the development, a building permit is required.
 2. No activities causing noise and/or inconvenience to neighbours being carried out after 7.00pm or before 7.00am, Monday to Saturday, and not at all on Sunday or Public Holidays.
 2. With regards to Condition 4, copies of crossover specifications are available from the City's Engineering Services or from the City's website www.cockburn.wa.gov.au
 4. Any clothes drying and refuse and general storage areas and ground based water tanks are to be screened from public view.
 5. Please be advised that as part of the transitioning of Australia to the National Broadband Network (NBN), it is recommended that you contact NBN Co on 1800 687 626 or newdevelopments@nbnco.com.au to ascertain requirements around future connections and the timing of infrastructure provision.
 6. Any additional development on the subject land is to comply with the requirements with the requirements of the Detailed Area Plan applicable to Stage 4C unless otherwise agreed to, or approved by the City. In the event any changes are proposed to the dwelling or works to be undertaken, the City should be consulted to determine if further approvals are required.
- (2) notify the applicant and those who made a submission of Council's decision.

Background

The subject property is 555m² in area and abuts a residential dwelling under construction to the east, a vacant residential lot to the west, Othello Quays to the north, and a waterway to the south. There is no existing development on the dry lot area, or the rear mooring area.

The proposal is for a single house is being referred to Council for determination as three objections were received during the consultation period, which were unable to be resolved.

Submission

N/A

Report

Proposal

The proposed dwelling comprises a three storey dwelling with a rear undercroft. The third storey is raised above the lower storey's concealed roof, and is therefore cannot be considered a loft.

Neighbour Consultation

The application was advertised to five nearby landowners for a period of 21 days. Three submissions were received, all of which were objections. The objections relate to the overall height of the dwelling, loss of light, bulk and scale and inconsistency with the existing streetscape. All concerns have been discussed in detail in the assessment section of this report.

Planning Framework

The site is zoned 'Urban' under the Metropolitan Region Scheme (MRS) and Residential R25 under the City of Cockburn's Town Planning Scheme No. 3 (TPS 3). The objective of the Residential Zone is:

'To provide for residential development at a range of densities with a variety of housing to meet the needs of different household types through the application of the Residential Design Codes.'

The site is also subject to a Local Development Plan (Detailed Area Stage 4C 'Seaspray') (LDP), and the Port Coogee Design Guidelines.

Assessment

The assessment of the proposal is compliant with relevant planning framework other than the following items:

- Front Setback;

- Lot Boundary (side) Setback;
- Building Height;
- Visual Privacy; and
- Fencing

The proposed house design received a developer's endorsement as required for all applications within the Port Coogee area. There are no notes objecting to the variations proposed within the estate architects report.

Front Setback

The LDP requires a minimum 1.5m and maximum 3m setback for dwellings. The proposal details a maximum setback of 5.5m for the ground floor entry and 5.5m for the first floor stairs. As the proposal does not comply with the front setback requirements of the LDP, the variation is assessed against the following design principles:

'Buildings set back from street boundaries an appropriate distance to ensure they:

- *contribute to, and are consistent with, an established streetscape;*
- *provide adequate privacy and open space for dwellings;*
- *accommodate site planning requirements such as parking, landscape and utilities; and*
- *allow safety clearances for easements for essential service corridors.*

Buildings mass and form that:

- *uses design features to affect the size and scale of the building;*
- *uses appropriate minor projections that do not detract from the character of the streetscape;*
- *minimises the proportion of the façade at ground level taken up by building services, vehicle entries and parking supply, blank walls, servicing infrastructure access and meters and the like; and*
- *positively contributes to the prevailing development context and streetscape.'*

The middle floor includes a large front balcony pulling bulk forward to within the 3m maximum setback. Whilst the ground floor is setback behind this, the overall bulk of the middle floor ensures that the proposal will appear consistent with the streetscape. It is noted that the adjoining site to the east proposes a 3m setback to both floors, ensuring that the proposal will not be out of character for the area.

Lot Boundary Setback

The LDP is silent on third floor setbacks because it generally contemplates two storey plus loft rather than three storey development, the Residential Design Codes (R-Codes) Table 2a has therefore been used to assess the upper floor setbacks. The upper floor western bulk has a length of 18m and a total maximum height of 9m and is setback 2.2m in lieu of the required 2.8m. As the proposal does not comply with the requirements of the LDP, the variation is assessed against the following design principles:

'Buildings set back from lot boundaries so as to:

- reduce impacts of building bulk on adjoining properties;*
- provide adequate direct sun and ventilation to the building and open spaces on the site and adjoining properties; and*
- minimise the extent of overlooking and resultant loss of privacy on adjoining properties.'*

The upper floor bulk consists of a 5m long portion of screening, and a 13m wall section consisting of four highlight windows. Due to the angle of the view up towards the reduced setback, and the location of lower floors/boundary walls and second floor eaves, there will be minimal view of the third floor from the adjoining lot once a dwelling is constructed. This is due to the permissibility of double storey boundary walls and heavily reduced side boundary setbacks in the area. There will be minimal loss of solar access given the near north/south orientation of the lot, and the setback of the upper floor from the side boundary. No overlooking is created by the reduced setback as the upper floor has compliant screening to both side boundaries.

Building height

The LDP permits an overall maximum building height of 10m and a maximum built form of two storeys with a loft. The proposal is within the 10m height limit, however due to the concealed roof design, the proposal presents as a three storey dwelling. As the proposal does not comply with the requirements of the LDP, the variation is assessed against the following R-Code design principles:

- 'Building height that creates no adverse impact on the amenity of adjoining properties or the streetscape, including road reserves and public open space reserves; and where appropriate maintains;*
- adequate access to direct sun into buildings and appurtenant open spaces;*
- adequate daylight to major openings into habitable rooms; and access to views of significance.'*

The upper floor is set back more than 15m from the street, and given the height of the street elevation, will not be visible from the street. The only potential impact would be to adjoining properties upper floors which is acceptable. The setbacks from front and side boundaries will ensure that there is minimal loss of solar access, and the setbacks from side boundaries will ensure that there is minimal additional building bulk impacting adjoining owners. There will be no loss of views outside of what could be produced by a compliant 10m high pitched roof design as the entirety of the structure is contained within the 10m maximum roof height. As the dwelling is no higher than a permitted two storey dwelling, and the proposal is consistent with other approved developments in the local area, the variation considered acceptable.

Visual Privacy

The proposal details overlooking to the west from the middle floor master bedroom and balcony. These are setback less than 4.5m and 7.5m respectively as required by the R-Codes. As the proposal does not comply with those requirements, the variation has been assessed against the following R-Code design principles:

'Minimal direct overlooking of active habitable spaces and outdoor living areas of adjacent dwellings achieved through:

- *building layout and location;*
- *design of major openings;*
- *landscape screening of outdoor active habitable spaces; and/or*
- *location of screening devices.*

Maximum visual privacy to side and rear boundaries through measures such as:

- *offsetting the location of ground and first floor windows so that viewing is oblique rather than direct;*
- *building to the boundary where appropriate;*
- *setting back the first floor from the side boundary;*
- *providing higher or opaque and fixed windows; and/or*
- *screen devices (including landscaping, fencing, obscure glazing, timber screens, external blinds, window hoods and shutters).'*

The front facing balcony and master bedroom provide visual surveillance over the primary street and public domain. The overlooking will impact a screened balcony and a highlight window to a habitable room of the adjoining upper floor and a garage boundary wall on the lower floor. There will be no line of view into habitable areas due to the lower upper floor level of the proposed house when compared to the upper floor level of the adjoining house. The areas of the adjoining site overlooking will be mostly visible from the street given the setbacks

form the front /side lot boundary. As there is no direct overlooking of habitable rooms/areas, and the openings/areas are setback from the side lot boundary, they are considered to meet the design principles.

Fencing

The application proposes a 1.8m high solid fence along the side boundaries up to a setback of 1.5m from the front lot boundary. The Design Guidelines permit fencing no higher than 0.5m to distinguish the front lot boundary, and this wall can return along the side boundary to the building line. As such, the proposal does not comply with the Design Guidelines, as there is solid fencing higher than 0.5m forward of the building line.. There are no design principles in the LDP, however justification has been provided below.

The fence is consistent with other developments on Othello Quays, with other portions of higher solid fencing previously supported forward of the building line. The proposal will not impact visual sight lines, and therefore can be supported as it will not detract from safety or the appearance of the streetscape.

Conclusion

The proposed dwelling is supported for the following reasons:

- the proposal is consistent with the planning framework for the area; and
- the proposal will not detract from the amenity of the neighbours or the streetscape.

It is therefore recommended that the proposal be approved subject to conditions contained in the recommendation.

Strategic Plans/Policy Implications

City Growth

Ensure planning facilitates a desirable living environment and meets growth targets.

Ensure a variation in housing density and housing type is available to residents.

Leading & Listening

Deliver sustainable governance through transparent and robust policy and processes.

Budget/Financial Implications

N/A

Legal Implications

N/A

Community Consultation

Community Consultation commenced on 1 February, 2019. The consultation concluded on 22 February 2019, with three submissions received.

Risk Management Implications

Should the applicant lodge a review of the decision with the State Administrative Tribunal, there may be costs involved in defending the decision, particularly if legal Counsel is engaged.

Advice to Proponent(s)/Submitters

The Proponent(s) and those who lodged a submission on the proposal have been advised that this matter is to be considered at the 11 April 2019 Ordinary Council Meeting.

Implications of Section 3.18(3) *Local Government Act, 1995*

Nil.



COTTAGE & ENGINEERING SURVEYS Licensed Surveyors		87-89 Guthrie Street, Osborne Park, Western Australia Telephone: (08) 9446 7361 Facsimile: (08) 9445 2998 Email: perth@cottage.com.au Website: www.cottage.com.au		Builder : Home Builders Advantage CLIENT : Gowageti LOT 992 #13 Othello Quays, North Coogee	SSA AREA	LEGEND SEC Dome Power Pole Phone Pits Water Conn. Top Pillar/Post Top Wall Top Retaining Top Fence
J/N:	DATE:	SCALE:	DRAWN:	D. Plan406029		
441902	03 Sep 18	1:200	M. Bateman			

DISCLAIMER:
 Lot boundaries drawn on survey are based on landgate plan only. Survey does not include title search and as such may not show easements or other interests not shown on plan. Title should be checked to verify all lot details and for any easements or other interests which may affect building on the property.

DISCLAIMER:
 Survey does not include verification of cadastral boundaries. All features and levels shown are based on orientation to existing pegs and fences only which may not be on correct cadastral alignment. Any designs based or dependent on the location of existing features should have those features' location verified in relation to the true boundary.

DISCLAIMER:
 Survey shows visible features only and will not show locations of underground pipes or conduits for internal or mains services. Verification of the location of all internal and mains services should be confirmed prior to finalisation of any design work.

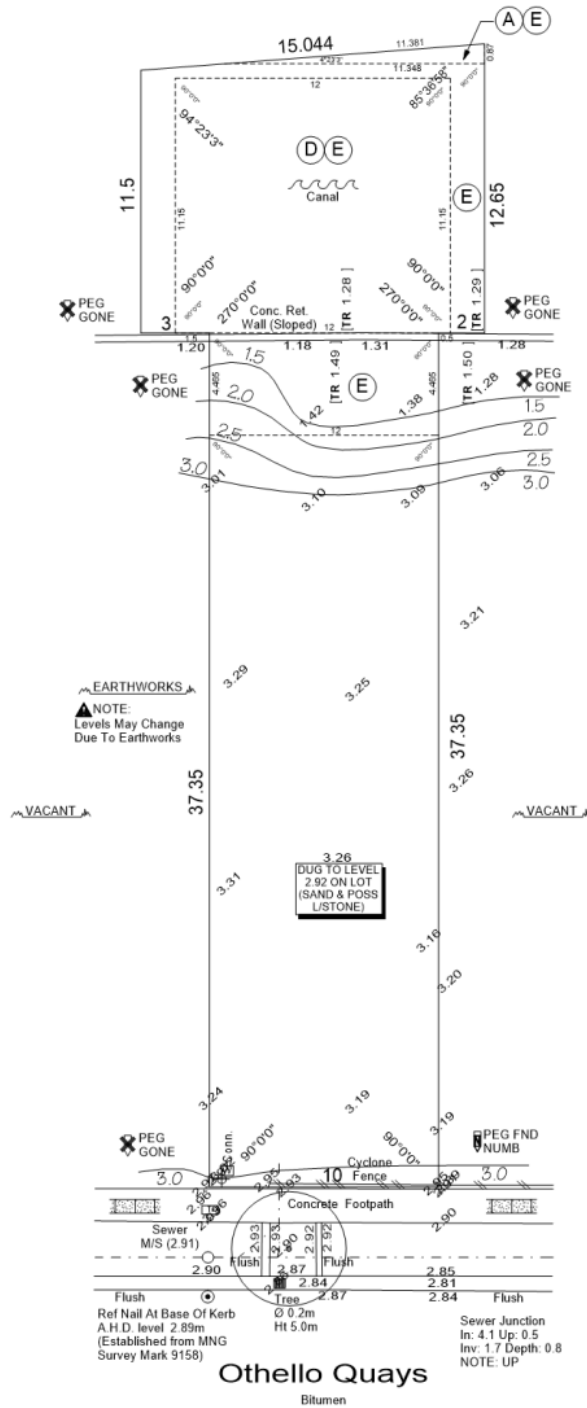
DISCLAIMER:
 Cottage & Engineering surveys accept no responsibility for any physical on site changes to the parcel or portion of the parcel of land shown on this survey including any adjoining neighbours levels and features that have occurred after the date on this survey. All source details plotted from information supplied by Water Corporation.

LOT MISCLOSE

0.000 m

SOIL DESCRIPTION

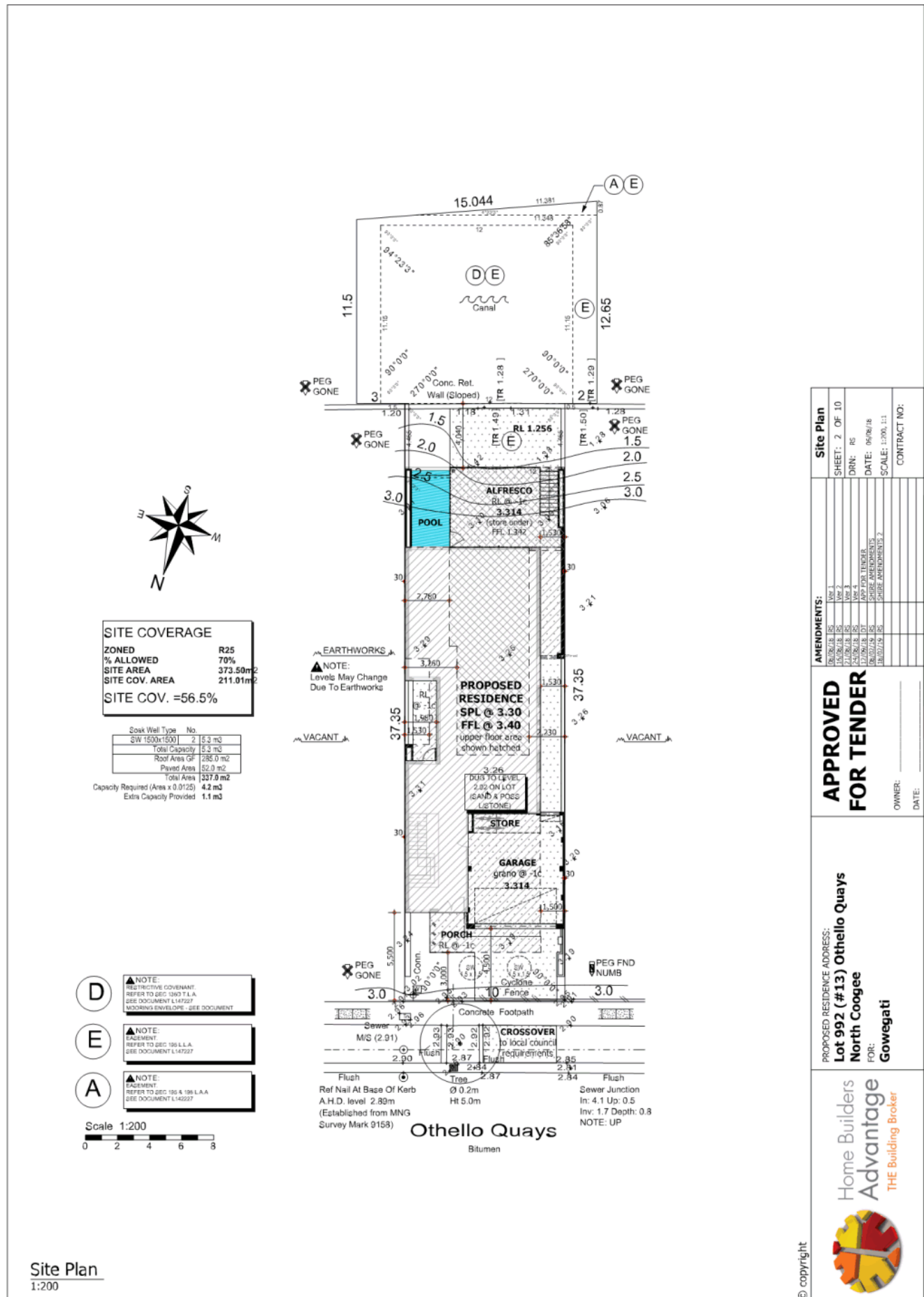
Sand / L/Stone(Poss)
 Light Grass Cover

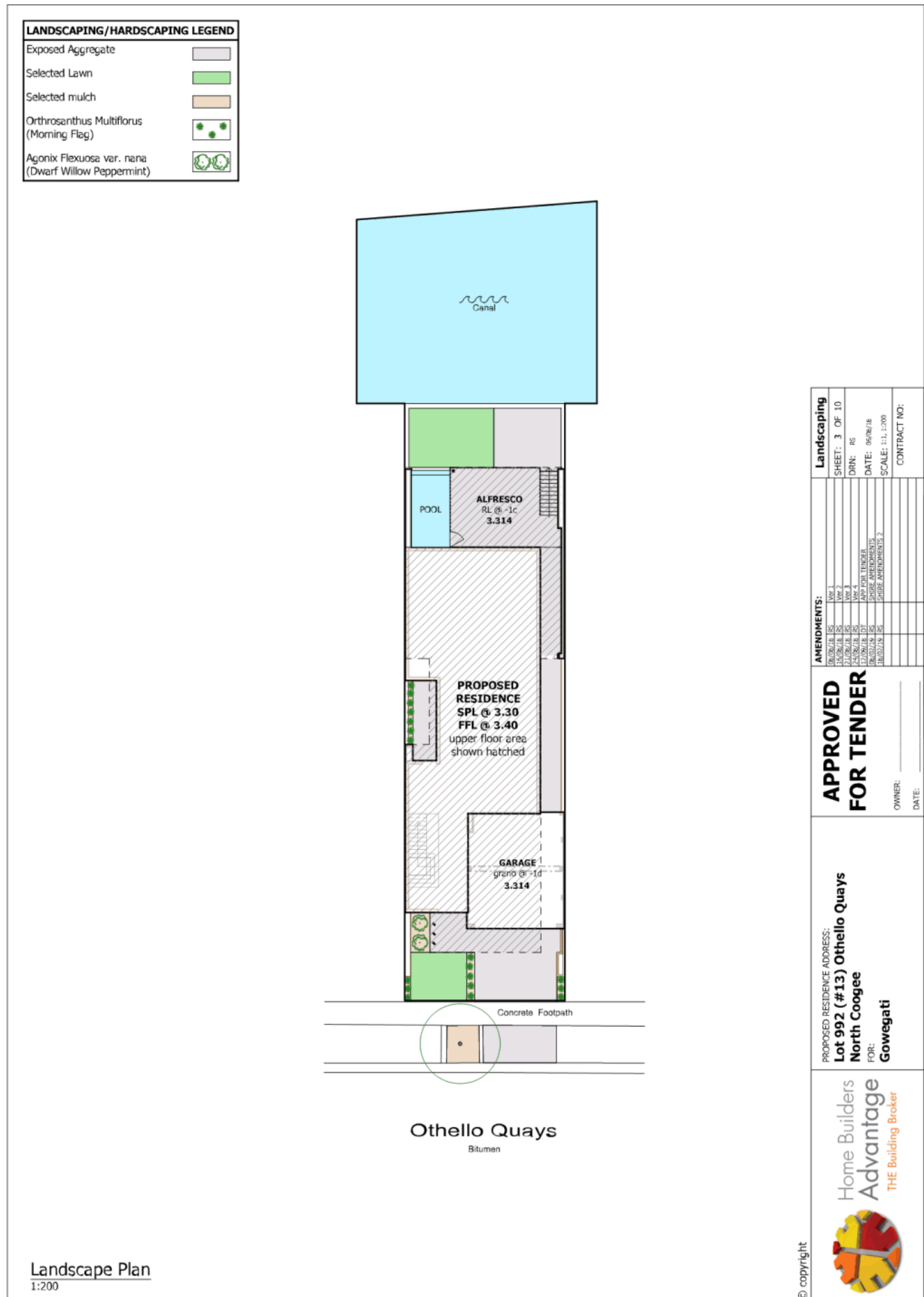


Survey

D	NOTE: RESTRICTIVE COVARIANT. REFER TO SEC 1140 T.L.A. SEE DOCUMENT L147217 WORKING ENVELOPE: SEE DOCUMENT
E	NOTE: EASEMENT. REFER TO SEC 185 L.L.A. SEE DOCUMENT L147227
A	NOTE: EASEMENT. REFER TO SEC 185 & 186 L.L.A. SEE DOCUMENT L142227

Scale 1:200
 0 2 4 6 8

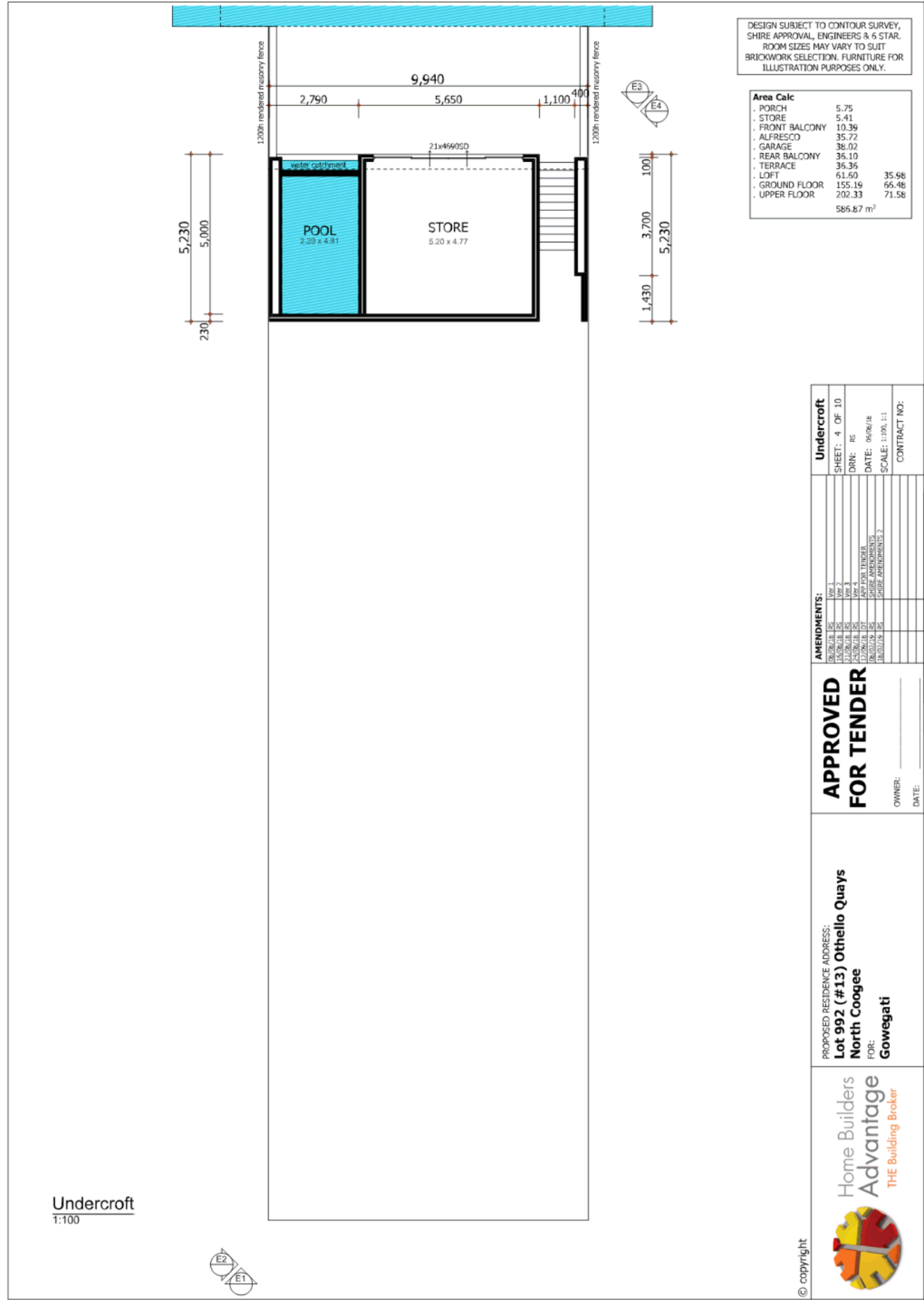


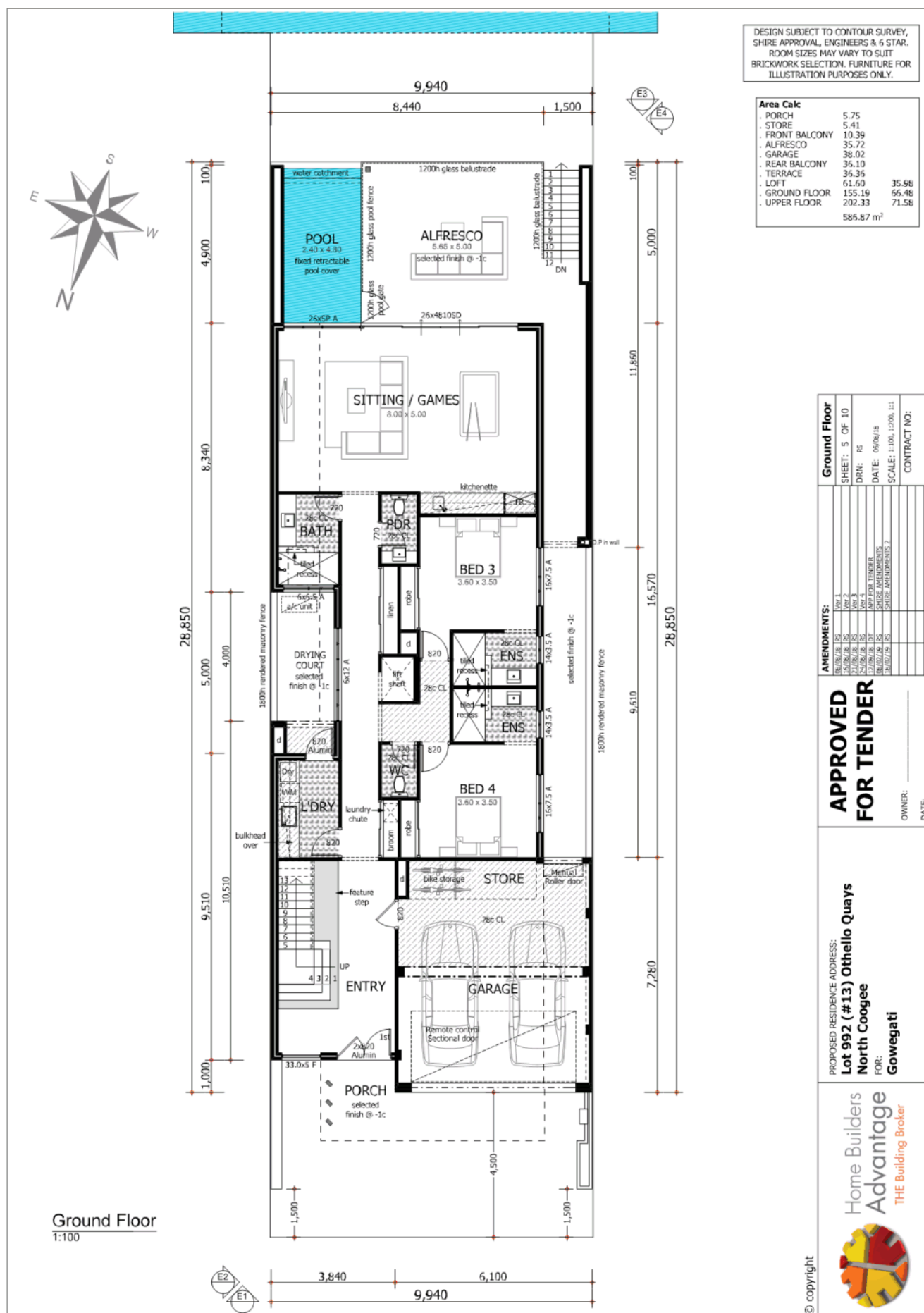


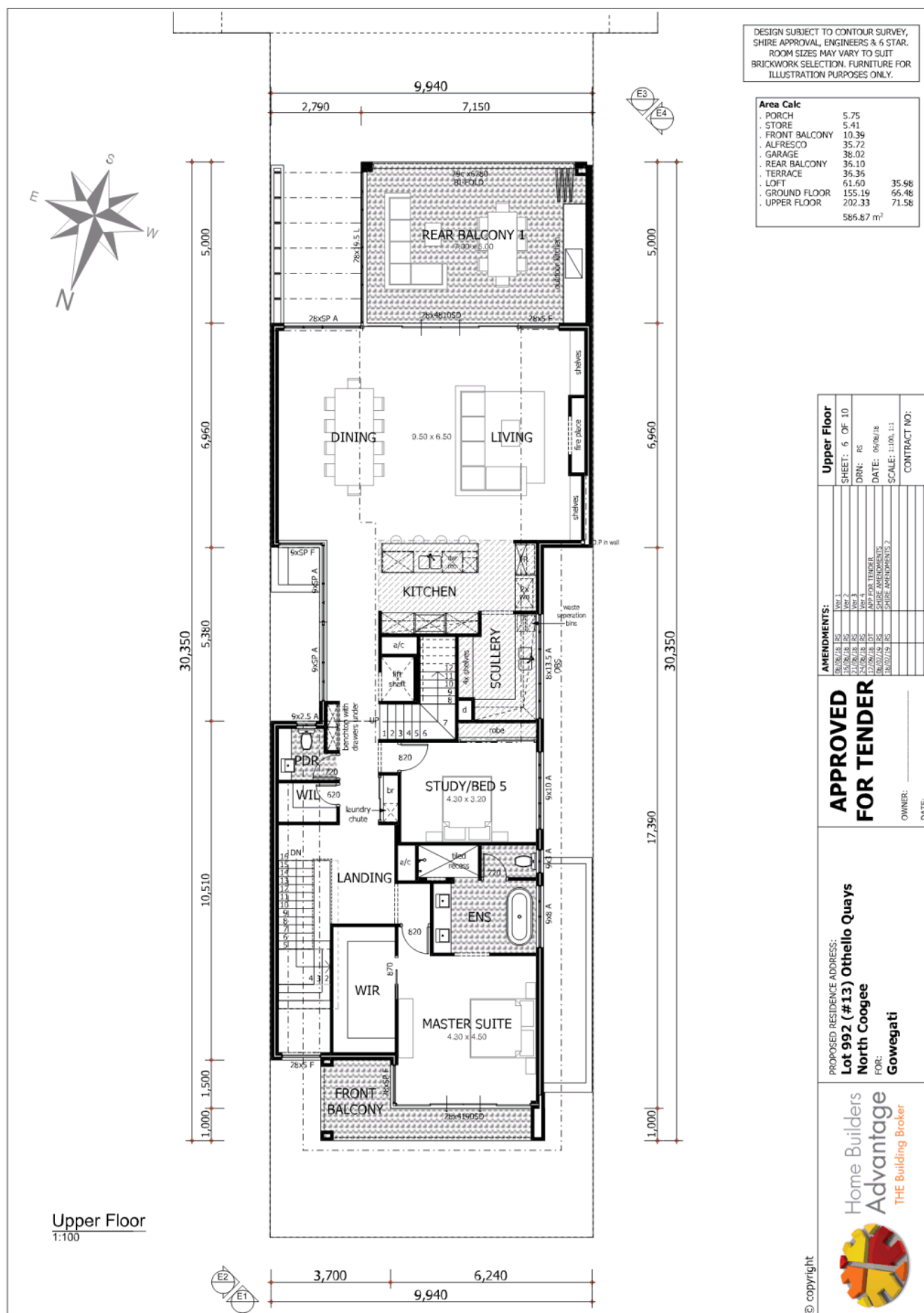
Landscape Plan
1:200

© copyright

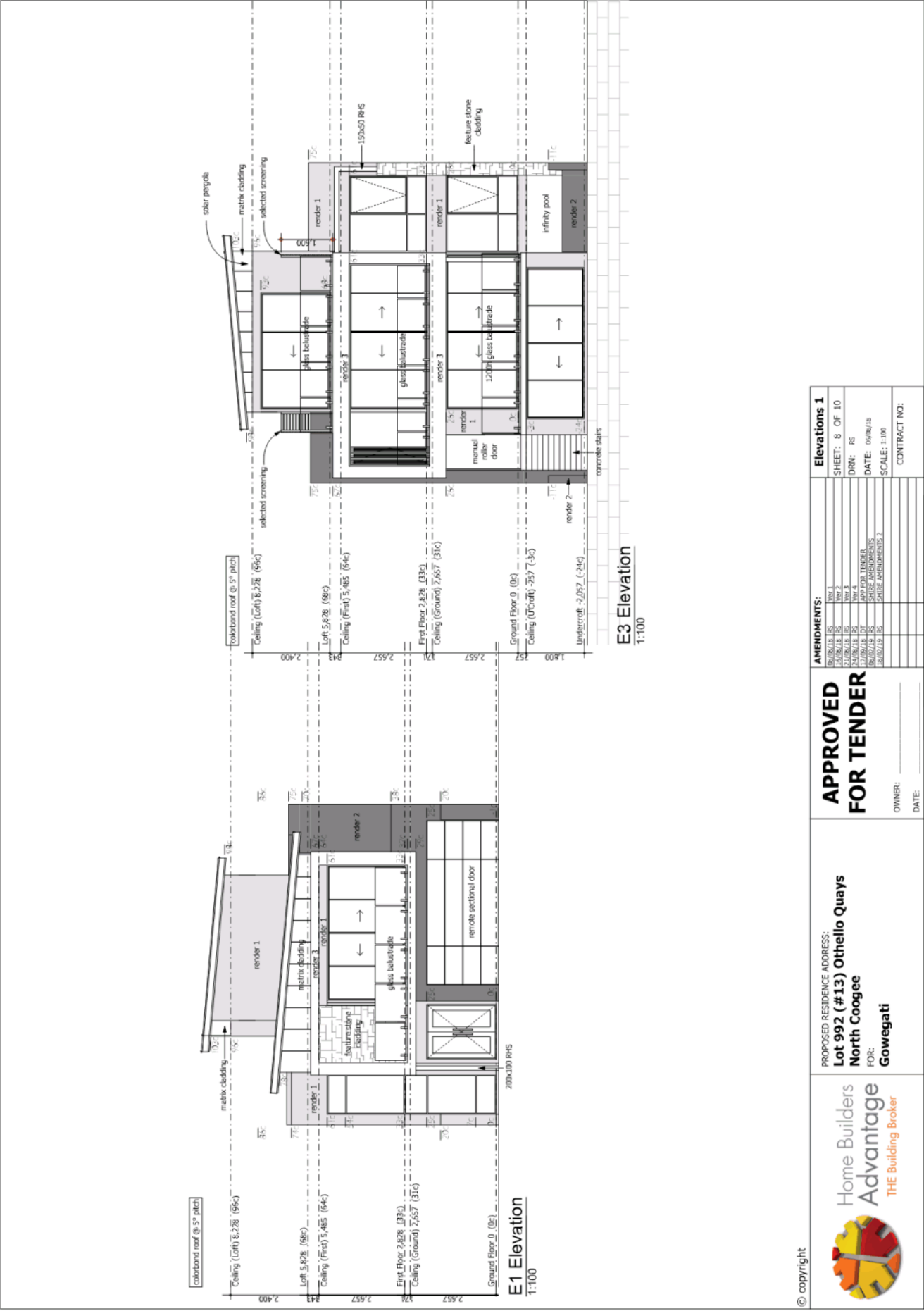


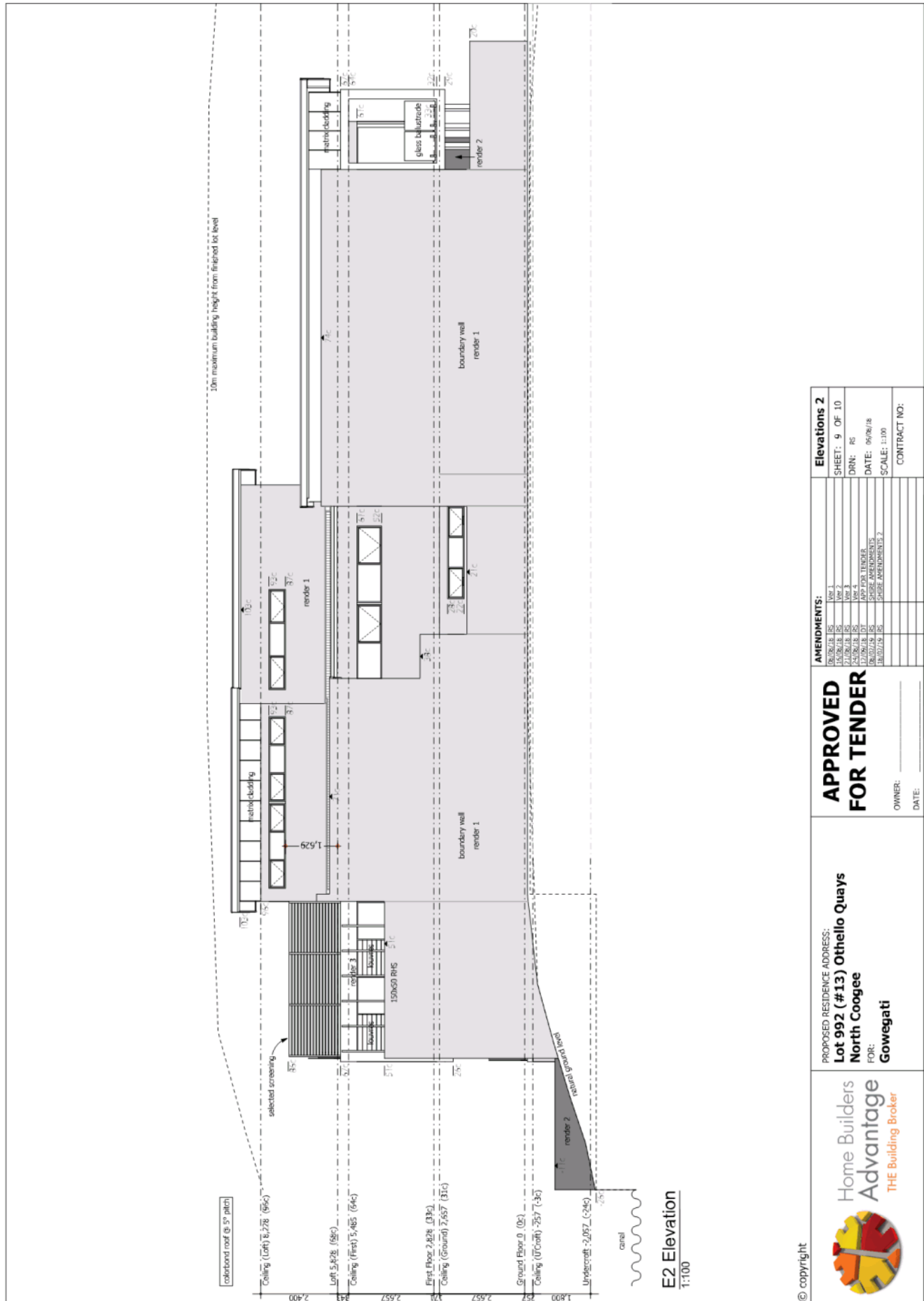
















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Gowegati Residence
Lot 992 (#13) Othello Quays, North Coogee

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Gowegati Residence
Lot 992 (#13) Othello Quays, North Coogee

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15. FINANCE & CORPORATE SERVICES DIVISION ISSUES

15.1 LIST OF PAYMENTS MADE FROM MUNICIPAL AND TRUST FUND - FEBRUARY 2019

Author(s) N Mauricio

Attachments 1. Payment Listing - February 2019 [↓](#)

RECOMMENDATION

That Council receive the List of Payments made from the Municipal and Trust Funds for February 2019, as attached to the Agenda.

Background

Council has delegated its power to make payments from the Municipal or Trust fund to the CEO and other sub-delegates under LGAFCS4.

Regulation 13(1) of the *Local Government (Financial Management) Regulations 1996* requires a list of accounts paid under this delegation to be prepared and presented to Council each month.

Submission

N/A

Report

A listing of payments made during February 2019 totalling \$12,722,858.08 is attached to the Agenda for review. Listed are the details for the 683 individual EFT payments made by the City for goods and services received, as well as summarised totals for credit card, payroll and bank fee payments. Any cancelled payments are also listed for completeness purposes.

Strategic Plans/Policy Implications

Leading & Listening

Deliver sustainable governance through transparent and robust policy and processes

Ensure sound long term financial management and deliver value for money

Budget/Financial Implications

All payments made have been provided for within the City's annual budget as adopted and amended by Council.

Legal Implications

This item ensures compliance with S 6.10(d) of the *Local Government Act 1995* and Regulations 12 & 13 of the *Local Government (Financial Management) Regulations 1996*.

Community Consultation

N/A

Risk Management Implications

Council is receiving the list of payments already made by the City in meeting its contractual obligations. This is a statutory requirement and allows Council to review and question any payment made.

Advice to Proponent(s)/Submissioners

N/A

Implications of Section 3.18(3) *Local Government Act, 1995*

Nil

FEBRUARY PAYMENTS LISTING

MUNICIPAL & TRUST FUND

Payment Ref.	Payee No.	Payee Details	Date	\$Value
EF118740	26987	CTI RISK MANAGEMENT	5/02/2019	1,001.50
		SECURITY - CASH COLLECTION		
EF118741	99996	PAMELA PETROW	5/02/2019	459.79
		RATES REFUND		
EF118742	10747	IINET LIMITED	5/02/2019	729.84
		INTERNET SERVICES		
EF118743	10118	AUSTRALIA POST	11/02/2019	26,243.47
		POSTAGE CHARGES		
EF118744	10152	AUST SERVICES UNION	11/02/2019	1,089.70
		PAYROLL DEDUCTIONS		
EF118745	10154	AUSTRALIAN TAXATION OFFICE	11/02/2019	443,739.00
		PAYROLL DEDUCTIONS		
EF118746	10305	CHILD SUPPORT AGENCY	11/02/2019	2,057.38
		PAYROLL DEDUCTIONS		
EF118747	10733	HOSPITAL BENEFIT FUND	11/02/2019	57.45
		PAYROLL DEDUCTIONS		
EF118748	10888	LJ CATERERS	11/02/2019	7,676.57
		CATERING SERVICES		
EF118749	11001	LOCAL GOVERNMENT RACING & CEMETERIES EMPLOYEES UNION LGRCEU	11/02/2019	102.50
		PAYROLL DEDUCTIONS		
EF118750	11857	CHAMPAGNE SOCIAL CLUB	11/02/2019	496.00
		PAYROLL DEDUCTIONS		
EF118751	11860	455 CLUB	11/02/2019	18.00
		PAYROLL DEDUCTIONS		
EF118752	18553	SELECTUS PTY LTD	11/02/2019	13,799.48
		PAYROLL DEDUCTIONS		
EF118753	19726	HEALTH INSURANCE FUND OF WA	11/02/2019	1,452.75
		PAYROLL DEDUCTIONS		
EF118754	25987	TOYOTA FLEET MANAGEMENT	11/02/2019	608.14
		PAYROLL DEDUCTIONS - NOVATED LEASE		
EF118755	88888	HARVEST PROPERTIES (WA) PTY LTD	11/02/2019	7,865.63
		MAINTENANCE BOND REFUND		
EF118756	88888	MICHAEL LEWIS	11/02/2019	500.00
		BOND REFUND		
EF118757	88888	G & MJ DELLA MADDALENA	11/02/2019	14,090.00
		BOND REFUND		
EF118758	88888	JAMES H & KATHLEEN M PATERSON	11/02/2019	500.00
		BOND REFUND		
EF118759	99996	CHELSEA LOUISE LITTLE	11/02/2019	150.00
		RATES REFUND		
EF118760	99996	BUZZ HOMES	11/02/2019	184.53
		RATES REFUND		
EF118761	99996	HARRY BERGMAN	11/02/2019	169.35
		RATES REFUND		
EF118762	99996	MARILENA PANNACCHIONE	11/02/2019	4,150.00
		RATES REFUND		
EF118763	99996	HELENA WENGER	11/02/2019	538.20
		RATES REFUND		
EF118764	99996	JESSICA EVANS	11/02/2019	150.00
		RATES REFUND		
EF118765	99996	ALEXANDRU A IORDACHE & MIHAELA IORDACHE	11/02/2019	1,072.64
		RATES REFUND		
EF118766	99996	TONY RAVLICH	11/02/2019	2,189.60
		RATES REFUND		
EF118767	99997	J BROWNING	11/02/2019	20.00
		REFUND FOR PROGRAM - J BROWNING		
EF118768	99997	DEPARTMENT OF HUMAN SERVICES	11/02/2019	230.67
		INVOICE 180091072		
EF118769	99997	JOSEPHINE ELISE PEARSON	11/02/2019	300.00
		GRANTS, DONATIONS & REFUNDS		
EF118770	10047	ALINTA ENERGY	12/02/2019	9,167.10
		NATURAL GAS & ELECTRICITY SUPPLY		
EF118771	10244	BUILDING & CONST INDUSTRY TRAINING FUND	12/02/2019	26,984.89
		LEVY PAYMENT		
EF118772	10484	DEPARTMENT OF MINES, INDUSTRY REGULATION AND SAFETY	12/02/2019	28,105.02
		INDUSTRY REGULATION AND SAFETY		
EF118773	11794	SYNERGY	12/02/2019	75,007.00
		ELECTRICITY USAGE/SUPPLIES		
EF118774	26987	CTI RISK MANAGEMENT	12/02/2019	881.50
		SECURITY - CASH COLLECTION		
EF118775	99997	JEREMY FERGUSON	12/02/2019	4,096.00

		BOND & PEN FEE REFUND		
EF118776	10246	BUNNINGS BUILDING SUPPLIES PTY LTD	12/02/2019	259.81
		HARDWARE SUPPLIES		
EF118777	10375	VEOLIA ENVIRONMENTAL SERVICES	12/02/2019	220.00
		WASTE SERVICES		
EF118778	10535	WORKPOWER INCORPORATED	12/02/2019	1,303.50
		EMPLOYMENT SERVICES - PLANTING		
EF118779	10944	MCLEODS	12/02/2019	5,061.05
		LEGAL SERVICES		
EF118780	10991	BEACON EQUIPMENT	12/02/2019	1,584.00
		MOWING EQUIPMENT		
EF118781	11022	NATIVE ARC	12/02/2019	250.00
		GRANTS & DONATIONS		
EF118782	11028	NEVERFAIL SPRINGWATER LTD	12/02/2019	15.14
		BOTTLED WATER SUPPLIES		
EF118783	11036	NORTHLAKE ELECTRICAL	12/02/2019	35,795.59
		ELECTRICAL SERVICES		
EF118784	11307	SATELLITE SECURITY SERVICES PTY LTD	12/02/2019	1,317.93
		SECURITY SERVICES		
EF118785	11334	SHENTON ENTERPRISES PTY LTD	12/02/2019	6,043.69
		POOL EQUIPMENT/SERVICES		
EF118786	11449	SPEARWOOD FLORIST ULTIMATE CO PTY LTD	12/02/2019	125.00
		FLORAL ARRANGEMENTS		
EF118787	11469	SPORTS TURF TECHNOLOGY PTY LTD	12/02/2019	8,585.50
		TURF CONSULTANCY SERVICES		
EF118788	11557	TECHNOLOGY ONE LTD	12/02/2019	4,395.60
		IT CONSULTANCY SERVICES		
EF118789	11625	TOTAL EDEN PTY LTD	12/02/2019	1,064.76
		RETICULATION SUPPLIES		
EF118790	11789	WALGA	12/02/2019	65.00
		ADVERTISING/TRAINING SERVICES		
EF118791	12796	ISENTIA PTY LTD	12/02/2019	1,496.00
		MEDIA MONITORING SERVICES		
EF118792	13563	GREEN SKILLS INC	12/02/2019	8,716.80
		EMPLOYMENT SERVICES		
EF118793	15850	ECOSCAPE	12/02/2019	3,795.00
		ENVIRONMENTAL CONSULTANCY		
EF118794	16064	CMS ENGINEERING PTY LTD	12/02/2019	4,116.77
		AIRCONDITIONING SERVICES		
EF118795	17827	NILSEN (WA) PTY LTD	12/02/2019	9,798.70
		ELECTRICAL SERVICES		
EF118796	18203	NATSYNC ENVIRONMENTAL	12/02/2019	780.00
		PEST CONTROL		
EF118797	20236	PROTECTION 1 PTY LTD	12/02/2019	49.50
		SECURITY SYSTEMS/SERVICES		
EF118798	21294	CAT HAVEN	12/02/2019	1,080.00
		ANIMAL SERVICES		
EF118799	21371	LD TOTAL SANPOINT PTY LTD	12/02/2019	30,969.24
		LANDSCAPING WORKS/SERVICES		
EF118800	22553	BROWNES FOOD OPERATIONS	12/02/2019	75.27
		CATERING SUPPLIES		
EF118801	24599	POOLWERX SPEARWOOD	12/02/2019	3,030.30
		ANALYTICAL SERVICES		
EF118802	24748	PEARMANS ELECTRICAL & MECHANICAL SERVICES P/L	12/02/2019	1,013.54
		ELECTRICAL SERVICES		
EF118803	24945	NS PROJECTS PTY LTD	12/02/2019	2,200.00
		PROJECT MANAGEMENT SERVICES		
EF118804	25128	HORIZON WEST LANDSCAPE & IRRIGATION P/L	12/02/2019	110.00
		LANDSCAPING SERVICES		
EF118805	25822	FIT2WORK.COM.AU MERCURY SEARCH AND SELECTION PTY LTD	12/02/2019	383.90
		EMPLOYEE CHECK		
EF118806	26020	GRANT ELEVATORS	12/02/2019	858.00
		LIFT MAINTENANCE		
EF118807	26195	PLAY CHECK	12/02/2019	165.00
		CONSULTING SERVICES		
EF118808	26303	GECKO CONTRACTING TURF & LANDSCAPE MAINTENANCE	12/02/2019	308.00
		TURF & LANDSCAPE MAINTENANCE		
EF118809	26359	WILSON SECURITY	12/02/2019	204,984.33
		SECURITY SERVICES		
EF118810	26586	WA TEMPORARY FENCING SUPPLIES	12/02/2019	880.00
		FENCING - TEMPORARY		
EF118811	26591	VALUATIONS WA	12/02/2019	275.00
		VALUATION SERVICES		
EF118812	26606	ENVIRO INFRASTRUCTURE PTY LTD	12/02/2019	2,444.07
		CONSTRUCTION& FABRICATION		
EF118813	26614	MARKETFORCE PTY LTD	12/02/2019	1,142.84
		ADVERTISING		

EF118814	26648	EMC SOLAR CONSTRUCTION PTY LTD SOLAR ENERGY	12/02/2019	1,296.41
EF118815	26779	SAFEMASTER SAFETY PRODUCTS PTY LTD SAFETY PRODUCTS	12/02/2019	484.00
EF118816	26781	THE ARCHERY CENTRE & LASER RANGER ENTRY FEES	12/02/2019	900.00
EF118817	26843	ERGOLINK ERGONOMIC OFFICE FURNITURE	12/02/2019	816.45
EF118818	27027	FRIG TECH WA REFRIDGERATION SERVICES	12/02/2019	236.50
EF118819	27032	WTP AUSTRALIA PTY LTD QUANTITY SURVEYORS	12/02/2019	4,730.00
EF118820	27034	ADELBY PTY LTD FIREBREAK CONSTRUCTION	12/02/2019	286.00
EF118821	27045	GANTNER ELECTRONICS PTY LTD ELECTRICAL	12/02/2019	17,652.80
EF118822	27085	SAVILLS PROJECT MANAGEMENT PTY LTD PROJECT MANAGEMENT	12/02/2019	43,608.40
EF118823	27168	NIGHTLIFE MUSIC PTY LTD MUSIC MANAGEMENT	12/02/2019	515.61
EF118824	27241	LANDSCAPE ELEMENTS PTY LTD LANDSCAPING SERVICES	12/02/2019	40,960.57
EF118825	27245	BEAUMONDE CATERING CATERING	12/02/2019	195.00
EF118826	27317	RAWURBAN CONSTRUCTIONS BUILDING CONSTRUCTION	12/02/2019	1,908.09
EF118827	27371	AFFIRMATIVE GROUP 3 PAVING SERVICES	12/02/2019	462.00
EF118828	27384	SIFTING SANDS SAND CLEANING	12/02/2019	4,021.38
EF118829	27385	PROGRAMMED ELECTRICAL TECHNOLOGIES ELECTRICAL SERVICES	12/02/2019	1,408.00
EF118830	27392	AXIS MAINTENANCE SERVICES PTY LTD MAINTENANCE	12/02/2019	971.90
EF118831	27455	SITE PROTECTIVE SERVICES CCTV PARTS	12/02/2019	1,709.40
EF118832	27546	BPA ENGINEERING CONSULTANCY - ENGINEERING	12/02/2019	891.00
EF118833	27601	10ZIG HARDWARE	12/02/2019	3,437.50
EF118834	99997	FDC FDC PAYMENT WE 10/02/19	14/02/2019	51,325.91
EF118835	99997	IHC IHC PAYMENT WE 10/02/19	14/02/2019	27,796.57
EF118836	10484	DEPARTMENT OF MINES, INDUSTRY REGULATION AND SAFETY INDUSTRY REGULATION AND SAFETY	19/02/2019	10,333.91
EF118837	26987	CTI RISK MANAGEMENT SECURITY - CASH COLLECTION	19/02/2019	926.75
EF118838	27569	SELECT MUSIC ENTERTAINMENT AGENCY	19/02/2019	27,500.00
EF118839	99997	TRUEVENTUS SDN BHD HR DIGITAL TRANSFORMATION	19/02/2019	2,990.00
EF118840	27217	CROTHERS CONSTRUCTION PTY LTD BUILDING CONSTRUCTION SERVICES	20/02/2019	399,885.31
EF118841	10152	AUST SERVICES UNION PAYROLL DEDUCTIONS	25/02/2019	1,115.60
EF118842	10154	AUSTRALIAN TAXATION OFFICE PAYROLL DEDUCTIONS	25/02/2019	432,014.00
EF118843	10305	CHILD SUPPORT AGENCY PAYROLL DEDUCTIONS	25/02/2019	2,057.38
EF118844	10733	HOSPITAL BENEFIT FUND PAYROLL DEDUCTIONS	25/02/2019	57.45
EF118845	11001	LOCAL GOVERNMENT RACING & CEMETERIES EMPLOYEES UNION LGRCEU PAYROLL DEDUCTIONS	25/02/2019	102.50
EF118846	11857	CHAMPAGNE SOCIAL CLUB PAYROLL DEDUCTIONS	25/02/2019	492.00
EF118847	11860	45S CLUB PAYROLL DEDUCTIONS	25/02/2019	18.00
EF118848	18553	SELECTUS PTY LTD PAYROLL DEDUCTIONS	25/02/2019	13,337.73
EF118849	19726	HEALTH INSURANCE FUND OF WA PAYROLL DEDUCTIONS	25/02/2019	1,452.75
EF118850	25987	TOYOTA FLEET MANAGEMENT PAYROLL DEDUCTIONS - NOVATED LEASE	25/02/2019	608.14
EF118851	27492	SUPERCHOICE SERVICES PTY LIMITED PAYROLL DEDUCTIONS	20/02/2019	540,737.76
EF118852	26987	CTI RISK MANAGEMENT	26/02/2019	3,188.85

EF118853	10058	SECURITY - CASH COLLECTION ALSCO PTY LTD	28/02/2019	5,506.33
EF118854	10071	HYGIENE SERVICES/SUPPLIES AUSTRALASIAN PERFORMING RIGHT ASSOCIATION	28/02/2019	4,493.50
EF118855	10091	LICENCE - PERFORMING RIGHTS ASLAB PTY LTD	28/02/2019	5,369.60
EF118856	10097	ASPHALTING SERVICES/SUPPLIES BLACKWOODS ATKINS	28/02/2019	37.25
EF118857	10160	ENGINEERING SUPPLIES DORMA AUSTRALIA PTY LTD	28/02/2019	11,275.00
EF118858	10184	AUTOMATIC DOOR SERVICES BENARA NURSERIES	28/02/2019	517.00
EF118859	10207	PLANTS BOC GASES	28/02/2019	598.83
EF118860	10220	GAS SUPPLIES BOYA EQUIPMENT PTY LTD	28/02/2019	99,990.00
EF118861	10221	EQUIPMENT SUPPLIES BP AUSTRALIA PTY LTD	28/02/2019	24,365.70
EF118862	10226	DIESEL/PETROL SUPPLIES BRIDGESTONE AUSTRALIA LTD	28/02/2019	31,225.96
EF118863	10239	TYRE SERVICES BUDGET RENT A CAR - PERTH	28/02/2019	1,280.00
EF118864	10246	MOTOR VEHICLE HIRE BUNNINGS BUILDING SUPPLIES PTY LTD	28/02/2019	4,753.16
EF118865	10255	HARDWARE SUPPLIES CABCHARGE AUSTRALIA PTY LTD	28/02/2019	49.22
EF118866	10279	CABCHARGES CASTROL AUSTRALIA PTY LTD	28/02/2019	5,527.57
EF118867	10287	GREASE/LUBRICANTS CENTRELINE MARKINGS	28/02/2019	2,227.50
EF118868	10307	LINEMARKING SERVICES CHILDRENS BOOK COUNCIL WA	28/02/2019	60.00
EF118869	10333	CHILDRENS BOOKS CJD EQUIPMENT PTY LTD	28/02/2019	3,788.81
EF118870	10346	HARDWARE SUPPLIES COATES HIRE OPERATIONS PTY LTD	28/02/2019	233.42
EF118871	10353	EQUIPMENT HIRING SERVICES COCKBURN CEMENT LTD	28/02/2019	985.78
EF118872	10357	RATES REFUND COCKBURN ICE ARENA PTY LTD	28/02/2019	671.00
EF118873	10359	ENTERTAINMENT SERVICES COCKBURN PAINTING SERVICE	28/02/2019	13,662.00
EF118874	10375	PAINTING SUPPLIES/SERVICES VEOLIA ENVIRONMENTAL SERVICES	28/02/2019	10,156.51
EF118875	10384	WASTE SERVICES PROGILITY PTY LTD	28/02/2019	2,016.66
EF118876	10425	COMMUNICATION SERVICES CREATING COMMUNITIES AUSTRALIA PTY LTD	28/02/2019	429.00
EF118877	10483	CONSULTANCY SERVICES - COMMUNITY LANDGATE	28/02/2019	2,816.86
EF118878	10502	MAPPING/LAND TITLE SEARCHES DISABILITY SERVICES COMMISSION	28/02/2019	121,972.00
EF118879	10526	DISABILITY SERVICES E & MJ ROSHER PTY LTD	28/02/2019	3,874.55
EF118880	10528	MOWER EQUIPMENT EASIFLEET	28/02/2019	1,598.01
EF118881	10535	VEHICLE LEASE WORKPOWER INCORPORATED	28/02/2019	8,272.96
EF118882	10580	EMPLOYMENT SERVICES - PLANTING FC COURIERS	28/02/2019	2,005.84
EF118883	10589	COURIER SERVICES FINES ENFORCEMENT REGISTRY	28/02/2019	4,445.00
EF118884	10597	FINES ENFORCEMENT FEES FLEXI STAFF PTY LTD	28/02/2019	42,920.07
EF118885	10655	EMPLOYMENT SERVICES GHD PTY LTD	28/02/2019	4,840.00
EF118886	10726	CONSULTANCY SERVICES HOLTON CONNOR ARCHITECTS & PLANNERS	28/02/2019	4,078.25
EF118887	10767	ARCHITECTURAL SERVICES INST OF PUBLIC WORKS ENG AUST - NSW	28/02/2019	6,050.00
EF118888	10778	TRAINING SERVICES IWF FENCING	28/02/2019	1,265.37
EF118889	10787	FENCING REPAIRS/MAINTENANCE JANDAKOT ACCIDENT REPAIR CENTRE	28/02/2019	1,101.23
EF118890	10794	PANEL BEATING SERVICES JASON SIGNMAKERS	28/02/2019	158,837.80
		SIGNS		

EF118891	10804	JBA SURVEYS	28/02/2019	2,750.00
EF118892	10814	LAND SURVEYING SERVICES	28/02/2019	4,326.85
EF118893	10824	JR & A HERSEY PTY LTD	28/02/2019	647.95
EF118894	10859	SAFETY CLOTHING SUPPLIES	28/02/2019	300.00
EF118895	10866	KCI INDUSTRIES PTY LTD	28/02/2019	916.66
EF118896	10879	REPAIRS/MAINTENANCE SERVICES	28/02/2019	1,677.68
EF118897	10888	LAKELAND SENIOR HIGH SCHOOL	28/02/2019	1,625.14
EF118898	10892	ELECTRICAL CONSUMPTION REIMBURSEMENT	28/02/2019	136.00
EF118899	10913	LANDCORP	28/02/2019	3,043.92
EF118900	10923	COCKBURN CENTRAL WEST - AGREEMENT	28/02/2019	2,220.63
EF118901	10938	LES MILLS AEROBICS	28/02/2019	1,226.47
EF118902	10942	INSTRUCTION/TRAINING SERVICES	28/02/2019	1,925.00
EF118903	10944	LJ CATERERS	28/02/2019	40,003.84
EF118904	10991	CATERING SERVICES	28/02/2019	649.35
EF118905	11028	LOCAL GOVERNMENT PROFESSIONALS AUSTRALIA WA	28/02/2019	837.98
EF118906	11036	SUBSCRIPTION	28/02/2019	95,900.31
EF118907	11077	BUCHER MUNICIPAL PTY LTD	28/02/2019	1,498.20
EF118908	11182	PURCHASE OF NEW PLANT / REPAIR SERVICES	28/02/2019	2,281.40
EF118909	11205	MAJOR MOTORS PTY LTD	28/02/2019	55,726.16
EF118910	11208	REPAIRS/MAINTENANCE SERVICES	28/02/2019	2,272.12
EF118911	11244	MAXWELL ROBINSON & PHELPS	28/02/2019	2,168.34
EF118912	11248	PEST & WEED MANAGEMENT	28/02/2019	2.20
EF118913	11284	MCGEES PROPERTY	28/02/2019	3,139.80
EF118914	11304	PROPERTY CONSULTANCY SERVICES	28/02/2019	342.12
EF118915	11307	MCLEODS	28/02/2019	185.14
EF118916	11308	LEGAL SERVICES	28/02/2019	1,474.52
EF118917	11331	BEACON EQUIPMENT	28/02/2019	3,245.00
EF118918	11334	MOWING EQUIPMENT	28/02/2019	13,255.70
EF118919	11337	NEVERFAIL SPRINGWATER LTD	28/02/2019	89.10
EF118920	11361	BOTTLED WATER SUPPLIES	28/02/2019	1,012.10
EF118921	11387	NORTHLAKE ELECTRICAL	28/02/2019	1,724.00
EF118922	11425	ELECTRICAL SERVICES	28/02/2019	286,604.40
EF118923	11459	P & G BODY BUILDERS PTY LTD	28/02/2019	120.00
EF118924	11483	PLANT BODY BUILDING SERVICES	28/02/2019	1,516.78
EF118925	11502	PREMIUM BRAKE & CLUTCH SERVICE	28/02/2019	103.95
EF118926	11504	BRAKE SERVICES	28/02/2019	375.65
EF118927	11511	QUALITY TRAFFIC MANAGEMENT PTY LTD	28/02/2019	83.42
EF118928	11556	TRAFFIC CONTROL SERVICES	28/02/2019	264.69
EF118929	11557	QUICK CORPORATE AUSTRALIA PTY LTD	28/02/2019	28,248.97
		STATIONERY/CONSUMABLES		
		RESEARCH SOLUTIONS PTY LTD		
		RESEARCH SERVICES		
		RICOH AUSTRALIA		
		OFFICE EQUIPMENT		
		ROYAL LIFE SAVING SOCIETY AUSTRALIA		
		TRAINING SERVICES		
		SANAX MEDICAL & FIRST AID SUPPLIES		
		MEDICAL SUPPLIES		
		SATELLITE SECURITY SERVICES PTY LTD		
		SECURITY SERVICES		
		BOSS INDUSTRIAL FORMALLY SBA SUPPLIES		
		HARDWARE SUPPLIES		
		SHAWMAC PTY LTD		
		CONSULTANCY SERVICES - CIVIL		
		SHENTON ENTERPRISES PTY LTD		
		POOL EQUIPMENT/SERVICES		
		SHERIDAN'S FOR BADGES		
		NAME BADGES & ENGRAVING		
		SIGMA CHEMICALS PTY LTD		
		CHEMICAL SUPPLIES		
		BIBRA LAKE SOILS		
		SOIL & LIMESTONE SUPPLIES		
		SOUTHERN METROPOLITAN REGIONAL COUNCIL		
		WASTE DISPOSAL GATE FEES		
		SPEARWOOD VETERINARY HOSPITAL		
		VETERINARY SERVICES		
		ST JOHN AMBULANCE AUST WA OPERATIONS		
		FIRST AID COURSES		
		STATE LAW PUBLISHER		
		ADVERTISING SERVICES		
		STATE LIBRARY OF QUEENSLAND		
		LIBRARY SERVICES		
		STATEWIDE BEARINGS		
		BEARING SUPPLIES		
		TECHNIFIRE 2000		
		FIRE FIGHTING EQUIPMENT		
		TECHNOLOGY ONE LTD		

		IT CONSULTANCY SERVICES		
EF118930	11625	TOTAL EDEN PTY LTD	28/02/2019	24,404.06
		RETICULATION SUPPLIES		
EF118931	11635	TOWN OF KWINANA	28/02/2019	5,816.46
		CONTRIBUTION TO LSL & ADVERTISING		
EF118932	11642	TRAILER PARTS PTY LTD	28/02/2019	632.95
		TRAILER PARTS		
EF118933	11651	TREE WATERING SERVICES	28/02/2019	65,888.00
		TREE WATERING SERVICES		
EF118934	11657	TRUCKLINE PARTS CENTRES	28/02/2019	73.57
		AUTOMOTIVE SPARE PARTS		
EF118935	11667	TURFMASTER FACILITY MANAGEMENT	28/02/2019	76,214.05
		TURF & MOWING SERVICES		
EF118936	11699	VERNON DESIGN GROUP	28/02/2019	7,095.00
		ARCHITECTURAL SERVICES		
EF118937	11701	VIBRA INDUSTRIAL FILTRATION A/ASIA	28/02/2019	1,930.50
		FILTER SUPPLIES		
EF118938	11702	VILLA DALMACIA ASSOCIATION INC.	28/02/2019	400.00
		SPECIAL CLUB ACTIVITIES		
EF118939	11715	WA BLUEMETAL	28/02/2019	5,106.33
		ROADBASE SUPPLIES		
EF118940	11722	WA HINO SALES & SERVICE	28/02/2019	1,085.19
		PURCHASE OF NEW TRUCKS / MAINTENANCE		
EF118941	11726	WA LIMESTONE CO	28/02/2019	18,705.92
		LIMESTONE SUPPLIES		
EF118942	11749	WARREN'S EARTHMOVING CONTRACTORS	28/02/2019	1,705.00
		EARTHMOVING SERVICES		
EF118943	11773	WESFARMERS LANDMARK LIMITED	28/02/2019	721.05
		CHEMICAL SUPPLIES		
EF118944	11787	DEPT OF TRANSPORT	28/02/2019	17.00
		VEHICLE SEARCH FEES		
EF118945	11789	WALGA	28/02/2019	3,081.00
		ADVERTISING/TRAINING SERVICES		
EF118946	11793	WESTERN IRRIGATION PTY LTD	28/02/2019	21,211.22
		IRRIGATION SERVICES/SUPPLIES		
EF118947	11795	WESTERN POWER	28/02/2019	74,257.00
		STREET LIGHTING INSTALLATION & SERVICE		
EF118948	11806	WESTRAC PTY LTD	28/02/2019	105.12
		REPAIRS/MTNCE - EARTHMOVING EQUIPMENT		
EF118949	11810	ABAXA PREVIOUSLY WH LOCATIONS	28/02/2019	3,212.00
		LOCATING SERVICES		
EF118950	11828	WORLDWIDE ONLINE PRINTING - O'CONNOR	28/02/2019	829.39
		PRINTING SERVICES		
EF118951	11835	WURTH AUSTRALIA PTY LTD	28/02/2019	938.71
		HARDWARE SUPPLIES		
EF118952	11854	ZIPFORM	28/02/2019	4,997.44
		PRINTING SERVICES		
EF118953	11873	WATTLEUP TRACTORS	28/02/2019	1,000.40
		HARDWARE SUPPLIES		
EF118954	11985	IVO GRUBELICH	28/02/2019	9,504.00
		BUS HIRE		
EF118955	12153	HAYS PERSONNEL SERVICES PTY LTD	28/02/2019	11,323.60
		EMPLOYMENT SERVICES		
EF118956	12173	CHALLENGE CHEMICALS AUSTRALIA	28/02/2019	213.18
		CHEMICAL SUPPLIES		
EF118957	12219	PARKS AND LEISURE AUSTRALIA	28/02/2019	968.00
		SUBSCRIPTION RENEWAL		
EF118958	12458	KITE KINETICS	28/02/2019	550.00
		ENTERTAINMENT SERVICES		
EF118959	12589	AUSTRALIAN INSTITUTE OF MANAGEMENT	28/02/2019	1,012.00
		TRAINING SERVICES		
EF118960	12693	SUFFLING, THOMAS JAMES T/A RIVERGODS	28/02/2019	900.00
		OUTDOOR ACTIVITIES - RAFTING		
EF118961	12779	WESTERN RESOURCE RECOVERY PTY LTD	28/02/2019	2,937.00
		WASTE DISPOSAL SERVICES		
EF118962	12796	ISENTIA PTY LTD	28/02/2019	1,551.00
		MEDIA MONITORING SERVICES		
EF118963	12811	SPORTS CIRCUIT LINEMARKING	28/02/2019	2,508.00
		SPORTS LINE MARKING SERVICES		
EF118964	12883	CONSERVATION VOLUNTEERS AUSTRALIA	28/02/2019	1,650.00
		ENVIRONMENTAL SERVICES		
EF118965	13039	WEST AUSTRALIAN REPTILE PARK	28/02/2019	330.00
		ENTERTAINMENT SERVICES		
EF118966	13056	CLEANDUSTRIAL SERVICES PTY LTD	28/02/2019	88,035.64
		CLEANING SERVICES		
EF118967	13238	SPINELESS WONDERS	28/02/2019	350.00
		INSECT WORKSHOP		

EF118968	13462	ATI-MIRAGE PTY LTD TRAINING SERVICES	28/02/2019	544.50
EF118969	13563	GREEN SKILLS INC EMPLOYMENT SERVICES	28/02/2019	23,857.26
EF118970	13779	PORTER CONSULTING ENGINEERS ENGINEERING CONSULTANCY SERVICES	28/02/2019	6,561.50
EF118971	13849	MCMULLEN NOLAN GROUP PTY LTD SURVEYING SERVICES	28/02/2019	9,350.00
EF118972	13860	KRS CONTRACTING WASTE COLLECTION SERVICES	28/02/2019	18,099.00
EF118973	13998	AIR & POWER PTY LTD MECHANICAL PARTS	28/02/2019	488.79
EF118974	14297	ARTREF PTY LTD OFFICE EQUIPMENT	28/02/2019	404.71
EF118975	14305	ACHIEVEABILITY PTY LTD TRAINING SEMINAR	28/02/2019	2,750.00
EF118976	14311	BBC ENTERTAINMENT ENTERTAINMENT SERVICES	28/02/2019	5,005.00
EF118977	14350	BAILEYS FERTILISERS FERTILISER SUPPLIES	28/02/2019	1,897.41
EF118978	14667	APPEALING SIGNS SIGNS	28/02/2019	632.50
EF118979	15109	REPLAS WA PLASTIC PRODUCTS	28/02/2019	724.24
EF118980	15224	GILBARCO EQUIPMENT REPAIRS	28/02/2019	1,866.99
EF118981	15271	PLE COMPUTERS PTY LTD COMPUTER HARDWARE	28/02/2019	117.89
EF118982	15393	STRATAGREEN HARDWARE SUPPLIES	28/02/2019	2,204.81
EF118983	15550	APACE AID INC PLANTS & LANDSCAPING SERVICES	28/02/2019	6,000.00
EF118984	15588	NATURAL AREA HOLDINGS PTY LTD WEED SPRAYING	28/02/2019	15,019.61
EF118985	15746	WESTERN AUSTRALIA POLICE SERVICE POLICE CLEARANCES	28/02/2019	15.90
EF118986	15850	ECOSCAPE ENVIRONMENTAL CONSULTANCY	28/02/2019	3,225.75
EF118987	15868	CARDNO (WA) PTY LTD CONSULTANCY SERVICES - ENGINEERING	28/02/2019	14,218.60
EF118988	16064	CMS ENGINEERING PTY LTD AIRCONDITIONING SERVICES	28/02/2019	24,850.05
EF118989	16107	WREN OIL WASTE DISPOSAL SERVICES	28/02/2019	33.00
EF118990	16108	ALTIFORM PTY LTD OUTDOOR FURNITURE	28/02/2019	9,922.00
EF118991	16226	PERTH EXPO DISPLAY/EXHIBITION EQUIPMENT/SERVICES	28/02/2019	3,514.50
EF118992	16396	MAYDAY EARTHMOVING ROAD CONSTRUCTION MACHINE HIRE	28/02/2019	54,430.75
EF118993	16510	LLOYD GEORGE ACOUSTICS PTY LTD CONSULTANCY SERVICES - ACOUSTIC	28/02/2019	792.00
EF118994	16846	ACTION GLASS & ALUMINIUM GLAZING SERVICES	28/02/2019	7,498.70
EF118995	16985	WA PREMIX CONCRETE SUPPLIES	28/02/2019	20,036.94
EF118996	17279	AUSSIE COOL SHADES SAILS AWNINGS & HOME SECURITY SHADE SAILS & AWNINGS	28/02/2019	17,116.00
EF118997	17471	PIRTEK (FREMANTLE) PTY LTD HOSES & FITTINGS	28/02/2019	1,156.82
EF118998	17553	ALTUS TRAFFIC PTY LTD TRAFFIC CONTROL SERVICES	28/02/2019	14,011.65
EF118999	17608	NU-TRAC RURAL CONTRACTING BEACH CLEANING/FIREBREAK CONSTRUCTION	28/02/2019	8,642.36
EF119000	17827	NILSEN (WA) PTY LTD ELECTRICAL SERVICES	28/02/2019	6,521.02
EF119001	17927	SHARYN EGAN ARTISTIC SERVICES	28/02/2019	44,550.00
EF119002	18019	INSTITUTE OF PUBLIC ADMINISTRATION AUST SUBSCRIPTION	28/02/2019	1,320.00
EF119003	18126	DELL AUSTRALIA PTY LTD COMPUTER HARDWARE	28/02/2019	30,240.10
EF119004	18203	NATSYNC ENVIRONMENTAL PEST CONTROL	28/02/2019	9,341.00
EF119005	18272	AUSTRACLEAR LIMITED INVESTMENT SERVICES	28/02/2019	303.70
EF119006	18286	IW PROJECTS PTY LTD	28/02/2019	742.50

		CONSULTANCY SERVICES - CIVIL ENGINEERING		
EF119007	18398	JOE CRISAFIO KIA	28/02/2019	28,407.04
		VEHICLE PURCHASE		
EF119008	18533	FRIENDS OF THE COMMUNITY INC.	28/02/2019	10,202.00
		DONATION		
EF119009	18625	PEDERSENS HIRE & STRUCTURES PTY LTD	28/02/2019	5,912.50
		FUNCTION EQUIPMENT HIRE		
EF119010	18695	MYAREE CRANE HIRE	28/02/2019	968.00
		CRANE HIRE		
EF119011	18734	P & R EDWARDS	28/02/2019	675.00
		ENTERTAINMENT SERVICES		
EF119012	18763	LOCAL COMMUNITY INSURANCE SERVICES	28/02/2019	485.95
		COMMUNITY INSURANCE POLICIES		
EF119013	18799	DOWN TO EARTH TRAINING & ASSESSING	28/02/2019	4,976.00
		TRAINING SERVICES		
EF119014	18962	SEALANES (1985) P/L	28/02/2019	733.52
		CATERING SUPPLIES		
EF119015	19107	FOREVER SHINING	28/02/2019	176.00
		MONUMENT		
EF119016	19502	WORLEYPARSONS SERVICES PTY LTD	28/02/2019	2,949.74
		ENGINEERING CONSULTANCY SERVICES		
EF119017	19533	WOOLWORTHS LTD	28/02/2019	2,680.59
		GROCERIES		
EF119018	19541	TURF CARE WA PTY LTD	28/02/2019	3,775.20
		TURF SERVICES		
EF119019	19558	COMPLETE FIRE DESIGN	28/02/2019	1,100.00
		FIRE CONSULTANCY SERVICES		
EF119020	19713	DISKBANK	28/02/2019	645.15
		CD'S & DVD'S		
EF119021	19776	JOSH BYRNE & ASSOCIATES	28/02/2019	10,246.50
		ENVIRONMENTAL CONSULTANT		
EF119022	20000	AUST WEST AUTO ELECTRICAL PTY LTD	28/02/2019	16,562.89
		AUTO ELECTRICAL SERVICES		
EF119023	20146	DATA#3 LIMITED	28/02/2019	10,907.33
		CONTRACT IT PERSONNEL & SOFTWARE		
EF119024	20236	PROTECTION 1 PTY LTD	28/02/2019	5,247.00
		SECURITY SYSTEMS/SERVICES		
EF119025	20247	CHRISTIE PARKSAFE	28/02/2019	18,161.00
		PARKS & RECREATIONAL PRODUCTS		
EF119026	20321	RIVERJET PTY LTD	28/02/2019	21,994.50
		EDUCTING-CLEANING SERVICES		
EF119027	20399	CODE GROUP	28/02/2019	429.00
		BUILDING SURVEYING SERVICES		
EF119028	20535	HOME-GROWN THEATRE	28/02/2019	3,300.00
		DRAMA CLASSES		
EF119029	20547	GARRARDS PTY LTD	28/02/2019	196.90
		INSECTICIDES / PESTICIDES		
EF119030	20549	A1 CARPET, TILE & GROUT CLEANING	28/02/2019	8,893.50
		CLEANING SERVICES - TILES/CARPET		
EF119031	20885	TACTILE INDICATORS (PERTH) PTY LTD	28/02/2019	2,134.00
		TACTILES		
EF119032	21120	SHOREWATER MARINE PTY LTD	28/02/2019	14,781.58
		MARINE CONSTRUCTION SERVICES		
EF119033	21127	JOANNA AYCKBOURN (VOICES IN SINC)	28/02/2019	500.00
		INSTRUCTION - SINGING		
EF119034	21287	T.J.DEPIAZZI & SONS	28/02/2019	1,417.90
		SOIL & MULCH SUPPLIES		
EF119035	21294	CAT HAVEN	28/02/2019	1,587.00
		ANIMAL SERVICES		
EF119036	21371	LD TOTAL SANPOINT PTY LTD	28/02/2019	20,774.19
		LANDSCAPING WORKS/SERVICES		
EF119037	21469	JOHN HUGHES VOLKSWAGON	28/02/2019	18,925.51
		PURCHASE OF NEW VEHICLE		
EF119038	21525	AUSNET INDUSTRIES	28/02/2019	255.20
		SPORTING EQUIPMENT		
EF119039	21594	GREENSENSE PTY LTD	28/02/2019	1,498.20
		CONSULTANCY - CLIMATE		
EF119040	21627	MANHEIM PTY LTD	28/02/2019	693.00
		IMPOUNDED VEHICLES		
EF119041	21665	MMJ REAL ESTATE (WA) PTY LTD	28/02/2019	10,447.90
		PROPERTY MANAGEMENT SERVICES		
EF119042	21678	IANNELLO DESIGNS	28/02/2019	841.50
		GRAPHIC DESIGN		
EF119043	21697	ICT EXPRESS PTY LTD	28/02/2019	385.00
		CONSULTANCY SERVICES - IT		
EF119044	21744	JB HI FI - COMMERCIAL	28/02/2019	31,613.50
		ELECTRONIC EQUIPMENT		

EF119045	21747	UNICARE HEALTH WHEELCHAIR HIRE	28/02/2019	696.30
EF119046	21915	ECOWATER SERVICES PTY LTD MAINTENANCE SERVICES - WASTE SYSTEMS	28/02/2019	175.40
EF119047	21946	RYAN'S QUALITY MEATS MEAT SUPPLIES	28/02/2019	494.63
EF119048	22106	INTELLIFE GROUP SERVICES - DAIP	28/02/2019	15,189.14
EF119049	22119	BINDI BINDI DREAMING MARISSA VERMA CONSULT - ABORIGINAL EDUCATION/ENT	28/02/2019	946.00
EF119050	22192	VANESSA PAGET - BUSH WISDOM SURVIVAL EDUCATION/ENTERTAINMENT	28/02/2019	462.00
EF119051	22404	CLEVERPATCH PTY LTD ARTS/CRAFT SUPPLIES	28/02/2019	1,289.37
EF119052	22448	CAKES WEST PTY LTD CATERING	28/02/2019	93.98
EF119053	22511	JOHNNY'S TILING TILING SERVICES	28/02/2019	795.00
EF119054	22553	BROWNES FOOD OPERATIONS CATERING SUPPLIES	28/02/2019	664.71
EF119055	22569	SONIC HEALTH PLUS PTY LTD MEDICAL SERVICES	28/02/2019	3,405.60
EF119056	22589	JB HI FI - COCKBURN ELECTRICAL EQUIPMENT	28/02/2019	1,529.00
EF119057	22613	VICKI ROYANS ARTISTIC SERVICES	28/02/2019	300.00
EF119058	22619	KSC TRAINING TRAINING SERVICES	28/02/2019	165.00
EF119059	22624	AUSSIE EARTHWORKS PTY LTD EARTHWORKS	28/02/2019	29,621.00
EF119060	22639	SHATISH CHAUHAN TRAINING SERVICES - YOGA	28/02/2019	288.00
EF119061	22658	SOUTH EAST REGIONAL CENTRE FOR URBAN LANDCARE INC URBAN LANDCARE SERVICES	28/02/2019	20,275.75
EF119062	22681	ABBIEY BLINDS & CURTAINS BLINDS	28/02/2019	275.00
EF119063	22682	BEAVER TREE SERVICES PTY LTD TREE PRUNING SERVICES	28/02/2019	185,774.22
EF119064	22752	ELGAS LIMITED GAS SUPPLIES	28/02/2019	307.23
EF119065	22806	PUMA ENERGY (AUSTRALIA) FUELS PTY LTD FUEL SUPPLIES	28/02/2019	89,844.22
EF119066	22859	TOP OF THE LADDER GUTTER CLEANING SERVICES	28/02/2019	4,967.52
EF119067	22903	UNIQUE INTERNATIONAL RECOVERIES LLC DEBT COLLECTORS	28/02/2019	358.40
EF119068	23288	ARIANE ROEMMELE AMUSEMENT - CHILDREN'S ACTIVITIES	28/02/2019	905.00
EF119069	23351	COCKBURN GP SUPER CLINIC LIMITED T/A COCKBURN INTEGRATED HEALTH LEASING FEES	28/02/2019	1,160.00
EF119070	23450	CLEVER DESIGNS UNIFORMS	28/02/2019	1,076.60
EF119071	23457	TOTALLY WORKWEAR FREMANTLE CLOTHING - UNIFORMS	28/02/2019	3,539.54
EF119072	23549	WEST OZ WILDLIFE AMUSEMENT PARK ENTRY FEES	28/02/2019	1,424.50
EF119073	23570	A PROUD LANDMARK PTY LTD LANDSCAPE CONTRUCTION SERVICES	28/02/2019	119,427.00
EF119074	23579	DAIMLER TRUCKS PERTH PURCHASE OF NEW TRUCK	28/02/2019	6,730.77
EF119075	23671	URBSOL TRAFFIC DESIGN	28/02/2019	8,712.00
EF119076	23685	ASTRO SYNTHETIC TURF PTY LTD SITE INSPECTIONS	28/02/2019	3,412.20
EF119077	23968	BLACK COCKATOO PRESERVATION SOCIETY OF AUSTRALIA ENVIRONMENTAL SERVICES	28/02/2019	315.00
EF119078	24275	TRUCK CENTRE WA PTY LTD PURCHASE OF NEW TRUCK	28/02/2019	1,861.99
EF119079	24281	ECO LOGICAL AUSTRALIA PTY LTD MAPPING SERVICES	28/02/2019	10,037.50
EF119080	24298	TANKS FOR HIRE EQUIPMENT HIRE	28/02/2019	1,493.80
EF119081	24506	AMARANTI'S PERSONAL TRAINING PERSONAL TRAINING SERVICES	28/02/2019	750.00
EF119082	24557	AVELING CONSULTANCY SERVICES	28/02/2019	1,000.00
EF119083	24655	AUTOMASTERS SPEARWOOD	28/02/2019	2,613.00

		VEHICLE SERVICING		
EF119084	24724	QUALITY MARINE COATING SYSTEMS P/L	28/02/2019	1,430.00
		CLEANING SERVICES - ROAD SURFACES		
EF119085	24734	MYRIAD IMAGES	28/02/2019	3,135.00
		PHOTOGRAPHY SERVICES		
EF119086	24748	PEARMAN'S ELECTRICAL & MECHANICAL SERVICES P/L	28/02/2019	2,723.75
		ELECTRICAL SERVICES		
EF119087	24945	NS PROJECTS PTY LTD	28/02/2019	2,200.00
		PROJECT MANAGEMENT SERVICES		
EF119088	24949	BITUMEN SURFACING THE TRUSTEE FOR COMPLETE ROAD SERVICES TRUST	28/02/2019	2,762.10
		BITUMEN SUPPLIES		
EF119089	24978	AMBIUS	28/02/2019	519.56
		PLANTS SUPPLIES		
EF119090	25002	BRAIN AMBULANCE PTY LTD	28/02/2019	3,025.00
		EDUCATION SERVICES		
EF119091	25063	SUPERIOR PAK PTY LTD	28/02/2019	1,282.35
		VEHICLE MAINTENANCE		
EF119092	25092	LINKS MODULAR SOLUTIONS PTY LTD	28/02/2019	990.00
		SOFTWARE - ANNUAL SUPPORT & UPGRADES		
EF119093	25102	FREMANTLE MOBILE WELDING	28/02/2019	9,048.60
		WELDING SERVICES		
EF119094	25115	FIIG	28/02/2019	2,750.00
		INVESTMENT MANAGEMENT SERVICES		
EF119095	25121	IMAGESOURCE DIGITAL SOLUTIONS	28/02/2019	6,023.16
		BILLBOARDS		
EF119096	25127	MILMAR DISTRIBUTORS	28/02/2019	29.00
		PRINTING SERVICES - ID CARDS		
EF119097	25128	HORIZON WEST LANDSCAPE & IRRIGATION P/L	28/02/2019	39,894.02
		LANDSCAPING SERVICES		
EF119098	25264	ACURIX NETWORKS PTY LTD	28/02/2019	12,109.90
		WIFI ACCESS SERVICE		
EF119099	25415	JANDAKOT STOCK & PET SUPPLIES	28/02/2019	101.45
		PET SUPPLIES		
EF119100	25418	CS LEGAL	28/02/2019	20,131.35
		LEGAL SERVICES		
EF119101	25471	ELEMENTAL SURF PTY LTD	28/02/2019	750.00
		SURFING LESSONS		
EF119102	25586	ENVIROVAP PTY LTD	28/02/2019	3,932.50
		HIRE OF LEACHATE UNITS		
EF119103	25645	YELAKITJ MOORT NYUNGAR ASSOCIATION INC	28/02/2019	1,200.00
		WELCOME TO THE COUNTRY PERFORMANCES		
EF119104	25713	DISCUS ON DEMAND THE TRUSTEE FOR DISCUS ON DEMAND UNIT TRUST	28/02/2019	4,471.50
		PRINTING SERVICES		
EF119105	25733	MIRACLE RECREATION EQUIPMENT	28/02/2019	10,362.00
		PLAYGROUND INSTALLATION / REPAIRS		
EF119106	25813	LG CONNECT PTY LTD	28/02/2019	4,224.00
		ERP SYSTEMS DEVELOPMENT		
EF119107	25822	FIT2WORK.COM.AU MERCURY SEARCH AND SELECTION PTY LTD	28/02/2019	76.78
		EMPLOYEE CHECK		
EF119108	25832	EXTERIA	28/02/2019	27,519.80
		STREET AND PARK INFRASTRUCTURE		
EF119109	25874	BRIGHTSKY AUSTRALIA	28/02/2019	439.56
		HEALTHCARE PRODUCTS		
EF119110	25940	LEAF BEAN MACHINE	28/02/2019	800.00
		COFFEE BEAN SUPPLY		
EF119111	25957	GOVERNANCE INSTITUTE OF AUSTRALIA LTD	28/02/2019	2,140.00
		EDUCATION, TRAINING AND MEMBERSHIP SERVI		
EF119112	25962	ALL LINES	28/02/2019	1,155.00
		LINEMARKING SERVICES		
EF119113	26029	AUTOSWEEP WA	28/02/2019	4,147.00
		SWEEPING SERVICES		
EF119114	26067	SPRAYKING WA PTY LTD	28/02/2019	10,291.28
		CHEMICAL WEED CONTROL SERVICES		
EF119115	26110	DASH CIVIL CONTRACTING	28/02/2019	40,777.00
		CONCRETING SERVICES		
EF119116	26114	GRACE RECORDS MANAGEMENT	28/02/2019	1,333.40
		RECORDS MANAGEMENT SERVICES		
EF119117	26120	ECOBURBIA	28/02/2019	660.00
		ENVIRONMENTAL WASTE WORKSHOPS		
EF119118	26160	CORROSION CONTROL ENGINEERING (WA) PTY LTD	28/02/2019	2,614.70
		CONSULTANCY SERVICES		
EF119119	26211	AMCOM PTY LTD	28/02/2019	11,791.48
		INTERNET/DATA SERVICES		
EF119120	26251	HEALING INDIA CREATIVE ARTS	28/02/2019	225.00
		FACILITATION SERVICES - WORKSHOPS		
EF119121	26257	PAPERBARK TECHNOLOGIES	28/02/2019	6,397.45
		ARBORICULTURAL CONSULTANCY SERVICES		

EF119122	26303	GECKO CONTRACTING TURF & LANDSCAPE MAINTENANCE	28/02/2019	151,901.13
EF119123	26314	TURF & LANDSCAPE MAINTENANCE	28/02/2019	7,754.23
EF119124	26321	CPE GROUP	28/02/2019	3,203.75
EF119125	26330	TEMPORARY EMPLOYMENT SERVICES	28/02/2019	1,775.00
EF119126	26359	SKATEBOARDING WA	28/02/2019	204,984.33
EF119127	26399	SKATEBOARDING CLINICS	28/02/2019	5,412.00
EF119128	26418	KENNARDS HIRE - BIBRA LAKE	28/02/2019	741.68
EF119129	26423	EQUIPMENT HIRE	28/02/2019	660.00
EF119130	26442	WILSON SECURITY	28/02/2019	1,250.48
EF119131	26470	SECURITY SERVICES	28/02/2019	17,402.00
EF119132	26512	PAPERSCOUT THE TRUSTEE FOR PETERS MORRISON FAMILY TRUST	28/02/2019	18,627.86
EF119133	26550	GRAPHIC DESIGN SERVICES	28/02/2019	1,120.00
EF119134	26574	INTEGRANET TECHNOLOGY GROUP PTY LTD	28/02/2019	300.00
EF119135	26586	ICT CONSULTANCY SERVICES	28/02/2019	198.00
EF119136	26606	ALPHA PEST ANIMAL SOLUTIONS INVASIVE SPECIES PTY LTD	28/02/2019	35,074.87
EF119137	26610	PEST CONTROL SERVICES	28/02/2019	347,493.39
EF119138	26614	BULLANT SECURITY PTY LTD KEY WEST LOCK SERVICE & SALES	28/02/2019	6,298.97
EF119139	26620	LOCKSMITH & SECURITY SERVICES	28/02/2019	16,500.00
EF119140	26625	SCP CONSERVATION	28/02/2019	476.30
EF119141	26649	FENCING SERVICES	28/02/2019	825.00
EF119142	26655	XCELLERATE IT PTY LTD	28/02/2019	5,499.00
EF119143	26673	IT EQUIPMENT - OCR PROJECT	28/02/2019	119,130.00
EF119144	26694	GAME VAULT PTY LTD	28/02/2019	7,700.00
EF119145	26704	AMUSEMENT SERVICES	28/02/2019	700.00
EF119146	26709	EVA BELLYDANCE	28/02/2019	16,043.50
EF119147	26715	ENTERTAINMENT - BELLY DANCING	28/02/2019	6,150.00
EF119148	26721	WA TEMPORARY FENCING SUPPLIES	28/02/2019	24,038.99
EF119149	26724	FENCING - TEMPORARY	28/02/2019	673.75
EF119150	26732	ENVIRO INFRASTRUCTURE PTY LTD	28/02/2019	595.80
EF119151	26735	CONSTRUCTION & FABRICATION	28/02/2019	20,647.00
EF119152	26736	TRACC CIVIL PTY LTD	28/02/2019	867.15
EF119153	26739	CIVIL CONSTRUCTION	28/02/2019	8,625.10
EF119154	26747	MARKETFORCE PTY LTD	28/02/2019	118.67
EF119155	26752	ADVERTISING	28/02/2019	64,479.14
EF119156	26761	GRA PARTNERS	28/02/2019	900.00
EF119157	26766	CONSULTING/ADVISORY	28/02/2019	935.00
EF119158	26773	ANDOVER DETAILERS	28/02/2019	584.52
EF119159	26774	CAR DETAILING SERVICES	28/02/2019	11,000.00
EF119160	26782	KUBED MEDIA	28/02/2019	20,501.80
		HIRE OF ADVERTISING LED SCREENS		
		WORLDWIDE PRINTING SOLUTIONS EAST PERTH		
		PRINTING SERVICES		
		PROJECT 3 PTY LTD		
		EVENT AND MARKETING AGENCY		
		SANDSTORM EVENTS PTY LTD		
		ARTISTIC - SAND CASTLE SCULPTURES		
		PERTH MERMAIDS		
		ENTERTAINMENT SERVICES		
		TALIS CONSULTANTS PTY LTD		
		WASTE CONSULTANCY		
		AIR BORN AMUSEMENTS		
		AMUSEMENT SERVICES		
		QUAD SERVICES PTY LTD		
		CLEANING SERVICES		
		ARC INFRASTRUCTURE PTY LTD FORMALLY BROOKFIELD RAIL PTY LTD		
		RAILWAY INFRASTRUCTURE		
		AMARE SAFETY		
		CLOTHING UNIFORMS		
		SHANE MCMASTER SURVEYS		
		SURVEY SERVICES		
		GHEMS HOLDINGS PTY LTD		
		REVEGETATION		
		KERB DOCTOR		
		KERB MAINTENANCE		
		BELL-VISTA FRUIT & VEG		
		FRUIT AND VEGETABLES.		
		MG GROUP WA		
		CONSTRUCTION		
		THE SAND CARD COMPANY		
		ENTERTAINMENT SERVICES		
		JPW EARTHMOVING PTY LTD		
		EARTHMOVING SERVICES		
		LASER CORPS COMBAT ADVENTURES		
		ENTRY FEES		
		NATURALISTE LAND SURVEYS		
		SURVEYING SERVICES		
		SOFT LANDING		

EF119161	26789	RECYCLING SERVICES RAECO	28/02/2019	670.21
EF119162	26791	SUPPLIER OF LIBRARY SHELVING AND FURNITU MONSTERBALL AMUSEMENT & HIRE	28/02/2019	990.00
EF119163	26807	AMUSEMENT HIRE TRANSAIR TWO WAY RADIO	28/02/2019	1,122.70
EF119164	26818	EQUIPMENT REPAIRS & MAINTENANCE SERVICES THE MAZE	28/02/2019	454.00
EF119165	26819	AMUSEMENT JANDAKOT EARTHMOVING & RURAL CONTRACTORS	28/02/2019	9,779.00
EF119166	26822	HIRE SERVICES - EARTHMOVING EQUIPMENT CSE CROSSCOM PTY LTD	28/02/2019	4,144.29
EF119167	26824	COMMUNICATION EQUIPMENT WEB KEY IT PTY LTD	28/02/2019	10,861.40
EF119168	26837	WEBSITE CONSULTANCY VINSAN CONTRACTING	28/02/2019	9,955.00
EF119169	26839	RESIDENTIAL DEMOLITION BOKASHI COMPOSTING AUSTRALIA PTY LTD	28/02/2019	1,631.41
EF119170	26846	COMPOSTING SYSTEMS VISABILITY LIMITED	28/02/2019	3,300.00
EF119171	26854	DISABILIBLTY SERVICES IFAP	28/02/2019	1,335.00
EF119172	26884	TRAINING PEOPLE ON BICYCLES	28/02/2019	720.00
EF119173	26888	TRAINING - BICYCLE CLASSES MEDIA ENGINE	28/02/2019	15,140.00
EF119174	26900	GRAPHIC DESIGN, MARKETING, VIDEO PRODUCT BG & E PTY LTD	28/02/2019	6,215.00
EF119175	26901	CONSULTING ENGINEERING ALYKA PTY LTD	28/02/2019	1,155.00
EF119176	26909	DIGITAL CONSULTANCY AND WEB DEVELOPMENT WEST COAST PROFILERS PTY LTD	28/02/2019	113,174.71
EF119177	26917	ROAD PLANING COLD SERVICES CIRRUS NETWORKS PTY LTD	28/02/2019	36,747.79
EF119178	26921	IT NETWORK & TELEPHONY SERVICES JULIET COGHLAN - PHOTOGRAPHER	28/02/2019	240.00
EF119179	26923	PHOTOGRAPHY SERVCIES WOODLANDS DISTRIBUTORS & AGENCIES PTY LTD	28/02/2019	32,267.95
EF119180	26929	RUBBISH COLLECTION EQUIPMENT ELAN ENERGY MATRIX PTY LTD	28/02/2019	1,497.92
EF119181	26938	RECYCLING SERVICES MAJESTIC PLUMBING	28/02/2019	6,937.24
EF119182	26944	PLUMBING SERVICES MRKVI	28/02/2019	1,320.00
EF119183	26946	MASTER CEREMONIES AV TRUCK SERVICES PTY LTD	28/02/2019	560.57
EF119184	26974	TRUCK DEALERSHIP MISTER MAGNETS	28/02/2019	7,398.00
EF119185	26984	PROMOTIONAL PRODUCTS - MAGNETS COMMERCIAL AQUATICS AUSTRALIA PTY LTD	28/02/2019	16,885.00
EF119186	26985	POOL EQUIPMENT ACCESS ICON PTY LTD	28/02/2019	1,155.00
EF119187	26987	DRAINAGE PRODUCTS CTI RISK MANAGEMENT	28/02/2019	1,306.80
EF119188	27002	SECURITY - CASH COLLECTION COCKBURN PARTY HIRE	28/02/2019	2,572.00
EF119189	27010	HIRE SERVICES QUANTUM BUILDING SERVICES PTY LTD	28/02/2019	19,950.32
EF119190	27011	BUILDING MAINTENANCE BAILEYS MARINE FUEL AUSTRALIA	28/02/2019	3,216.07
EF119191	27015	FUEL INTELLI TRAC	28/02/2019	5,973.00
EF119192	27023	GPS TRACKING SOLARGAIN PV PTY LTD	28/02/2019	800.00
EF119193	27027	SOLAR ENERGY PROVIDER FRIG TECH WA	28/02/2019	17,652.11
EF119194	27028	REFRIDGERATION SERVICES TECHNOGYM AUSTRALIA PTY LTD	28/02/2019	4,070.00
EF119195	27031	FITNESS EQUIPMENT DOWNER EDI WORKS PTY LTD	28/02/2019	464,987.36
EF119196	27032	ASPHALT SERVICES WTP AUSTRALIA PTY LTD	28/02/2019	3,630.00
EF119197	27034	QUANTITY SURVEYORS ADELBY PTY LTD	28/02/2019	2,037.20
EF119198	27044	FIREBREAK CONSTRUCTION GRAFFITI SYSTEMS AUSTRALIA	28/02/2019	7,797.17
		GRAFFITI REMOVAL & ANTI-GRAFFITI COATING		

EF119199	27046	TFH HIRE SERVICES PTY LTD HIRE FENCING	28/02/2019	1,389.30
EF119200	27052	EVENT MARQUEES MARQUEE HIRE	28/02/2019	2,817.20
EF119201	27059	FRONTLINE FIRE AND RESCUE EQUIPMENT MANUFACTURE-FIRE VEHICLES/EQUIPMENT	28/02/2019	257.07
EF119202	27065	WESTBOOKS BOOKS	28/02/2019	3,478.85
EF119203	27072	NORDIC FITNESS EQUIPMENT FITNESS EQUIPMENT	28/02/2019	1,113.00
EF119204	27082	KULBARDI PTY LTD STATIONERY SUPPLIES	28/02/2019	597.81
EF119205	27085	SAVILLS PROJECT MANAGEMENT PTY LTD PROJECT MANAGEMENT	28/02/2019	8,316.00
EF119206	27091	GREENEDES PTY LTD SOFTWARE	28/02/2019	3,795.00
EF119207	27093	MAGNETIC AUTOMATION PTY LTD GATES/BARRIERS	28/02/2019	1,481.70
EF119208	27098	Q2 (Q-SQUARED) DIGITAL DATA SERVICE	28/02/2019	203.50
EF119209	27100	SEA JEWELS SWIMWEAR SWIMWEAR	28/02/2019	1,216.05
EF119210	27119	MONITORED SECURITY SYSTEMS PTY LTD SECURITY	28/02/2019	66.00
EF119211	27124	LYCOPodium INFRASTRUCTURE PTY LTD ENGINEERING SERVICES	28/02/2019	5,964.20
EF119212	27130	ADLINE MEDIA PTY LTD DIGITAL MARKETING & SOFTWARE SERVICE PRO	28/02/2019	689.15
EF119213	27131	WEST COAST COMMERCIAL INDUSTRIES LOCKERS	28/02/2019	804.47
EF119214	27132	WILMA SCENINI TRAINING & INSTRUCTOR	28/02/2019	200.00
EF119215	27151	DAVID PIGRAM ENTERTAINMENT - MUSICAL PERFORMANCE	28/02/2019	800.00
EF119216	27154	SUEZ RECYCLING & RECOVERY PTY LTD WASTE SERVICES	28/02/2019	21,208.29
EF119217	27156	EL BENNETT CONSULTING TRAINING	28/02/2019	800.00
EF119218	27161	NEXT POWER SOLAR PANEL	28/02/2019	12,571.34
EF119219	27168	NIGHTLIFE MUSIC PTY LTD MUSIC MANAGEMENT	28/02/2019	515.61
EF119220	27177	INITIAL HYGIENE HYGIENE	28/02/2019	99.00
EF119221	27187	NEVE CONTRACTING DESIGN SERVICES	28/02/2019	60,735.40
EF119222	27189	HEALTHSTRONG PTY LTD HOME CARE	28/02/2019	93.50
EF119223	27215	METAL WORKS PERTH SIGNAGE	28/02/2019	8,992.50
EF119224	27217	CROTHERS CONSTRUCTION PTY LTD BUILDING CONSTRUCTION SERVICES	28/02/2019	685,829.55
EF119225	27234	GO2CUP REUSABLE CUPS	28/02/2019	750.00
EF119226	27237	LOBEL EVENTS EVENT LIGHTING	28/02/2019	18,956.14
EF119227	27238	AUTO INGRESS PTY LTD SERVICE AUTO DOORS	28/02/2019	4,234.17
EF119228	27241	LANDSCAPE ELEMENTS PTY LTD LANDSCAPING SERVICES	28/02/2019	42,192.47
EF119229	27242	KP ELECTRIC (AUSTRALIA) PTY LTD ELECTRICAL SERVICES	28/02/2019	4,400.83
EF119230	27243	ARJOHUNTLEIGH PTY LTD SUPPLY, REPAIRS HEALTH EQUIPEMNT	28/02/2019	523.00
EF119231	27245	BEAUMONDE CATERING CATERING	28/02/2019	2,263.00
EF119232	27246	VEALE AUTO PARTS SPARE PARTS MECHANICAL	28/02/2019	1,277.00
EF119233	27257	BLACKWELL & ASSOCIATES LANDSCAPE ARCHITECTS	28/02/2019	24,102.10
EF119234	27269	INTEGRAPAY PTY LTD PAYMENT PROCESSING	28/02/2019	12,678.07
EF119235	27274	FORTH CONSULTING PTY LTD ENGINEERING SERVICES	28/02/2019	825.00
EF119236	27275	HOSPITALITY TOTAL SERVICES HOSPITALITY CONSULTANTS	28/02/2019	2,931.50
EF119237	27280	FLOORWISE PTY LTD	28/02/2019	449.19

EF119238	27291	FLOORING SERVICES AUSLAN STAGE LEFT	28/02/2019	1,210.00
EF119239	27293	CONSULTANCY - INTERPRETING BASKETBALL WA	28/02/2019	1,600.00
EF119240	27308	SPORTING EVENTS JATU CLOTHING & PPE PTY LTD	28/02/2019	734.73
EF119241	27314	CLOTHING PPE BRINKMAN AUSTRALIA PTY LTD	28/02/2019	4,091.74
EF119242	27317	SALT SUPPLIES (SWIMMING POOL) RAWURBAN CONSTRUCTIONS	28/02/2019	280.50
EF119243	27319	BUILDING CONSTRUCTION NATURE CALLS PORTABLE TOILETS	28/02/2019	1,205.00
EF119244	27324	HIRE - PORTABLE LOOS BEBBCART PTY LTD	28/02/2019	792.00
EF119245	27334	CARTOGRAPHIC AND DRAFTING SERVICES WESTCARE PRINT	28/02/2019	2,634.50
EF119246	27348	PRINTING SERVICES MESSAGE MEDIA	28/02/2019	257.69
EF119247	27351	TELECOMMUNICATIONS PROGRAMMED PROPERTY SERVICES	28/02/2019	16,841.36
EF119248	27352	PROPERTY MAINTENANCE BIKEWISE	28/02/2019	2,860.00
EF119249	27381	TRANSPORT PROMOTIONS FIT FOR LIFE EXERCISE PHYSIOLOGY	28/02/2019	5,060.00
EF119250	27384	EXERCISE CLASSES SIFTING SANDS	28/02/2019	9,276.11
EF119251	27392	SAND CLEANING AXIS MAINTENANCE SERVICES PTY LTD	28/02/2019	4,143.62
EF119252	27396	MAINTENANCE ANKEET MEHTA SPEARWOOD NEWSPAPER ROUND DELIVERY	28/02/2019	441.04
EF119253	27401	NEWSPAPER DELIVERY EMPRISE MOBILITY PTY LTD	28/02/2019	1,480.00
EF119254	27403	MOBILITY EQUIPMENT FREEDOM FAIRIES PTY LTD	28/02/2019	2,200.00
EF119255	27410	AMUSEMENT THE KIT BAG	28/02/2019	135.00
EF119256	27419	PPE CLOTHING SPICE DIGITAL IMAGING PTY LTD	28/02/2019	247.50
EF119257	27423	SINGAGE MECHANICAL PROJECT SERVICES PTY LTD	28/02/2019	3,365.86
EF119258	27426	AIRCONDITIONING SERVICES THE KART CENTRE PTY. LTD	28/02/2019	1,320.00
EF119259	27434	GO - KART HIRE CARTWRIGHT MEDIA	28/02/2019	720.00
EF119260	27437	VIDEO PRODUCTION PB RETICULATION & MAINTENANCE SERVICES PTY LTD	28/02/2019	1,943.92
EF119261	27444	IRRIGATION SERVICES VEEV GROUP PTY LTD	28/02/2019	20,548.00
EF119262	27446	CONSULTANCY BENCHMARK INFRASTRUCTURE SOLUTIONS PTY LTD	28/02/2019	605.00
EF119263	27450	ANTI CLIMB DEVICES AAA PRODUCTION SERVICES	28/02/2019	80,673.53
EF119264	27452	HIRE PA/SATGE SYSTEMS INTEGRATED FUEL SERVICES & SOLUTION PTY LTD	28/02/2019	9,282.90
EF119265	27455	PETROLEUM CHEMICAL SITE PROTECTIVE SERVICES	28/02/2019	18,131.86
EF119266	27456	CCTV PARTS SECUREPAY PTY LTD	28/02/2019	549.18
EF119267	27462	PAYMENT SOLUTIONS OCTAGON LIFTS PTY LTD	28/02/2019	422.40
EF119268	27471	LIFT INSTALLATION, SERVICE AND REPAIRS ELECTRICAL DESIGN CONSULTANTS PTY LTD	28/02/2019	990.00
EF119269	27473	CONSULTANCY - ELECTRICAL ENGINEERING WASTELESS PANTRY MUNDARING PTY LTD	28/02/2019	385.00
EF119270	27476	ENVIROMENTAL EDUCATION MERCHANDISING LIBRARIES PTY LTD	28/02/2019	2,258.91
EF119271	27482	SIGNAGE & DISPLAYS BILLI AUSTRALIA PTY LTD	28/02/2019	27.76
EF119272	27493	WATER FILTER TAPS PERITAS CIVIL PTY LTD	28/02/2019	7,549.86
EF119273	27499	CONSULTANCY HODGE COLLARD PRESTON ARCHITECTS	28/02/2019	22,605.00
EF119274	27502	ARCHITECTS FLOTH PTY LTD	28/02/2019	1,100.00
EF119275	27507	CONSULTANCY - HYDRAULIC ENGINEERING TJS SERVICES GROUP PTY LIMITED	28/02/2019	61,050.20
		CLEANING SERVICES		

EF119276	27512	AGENT SALES & SERVICES PTY LTD POOL CHEMICALS	28/02/2019	1,878.80
EF119277	27516	VOLLEYBALL WA SPORTING ACTIVITY VOLLEYBALL	28/02/2019	210.00
EF119278	27518	KYOCERA DOCUMENT SOLUTIONS AUSTRALIA PTY LTD PHOTCOPYING MACHINES	28/02/2019	3,744.08
EF119279	27523	ROBERT LAWRENCE TOOHEY HIGH PRESSURE CLEANING	28/02/2019	2,486.50
EF119280	27536	PAPERCLIP DESIGNS GRAPHIC DESIGN	28/02/2019	561.00
EF119281	27539	JASMIN CARPENTRY & MAINTENANCE CARPENTRY	28/02/2019	3,155.02
EF119282	27546	BPA ENGINEERING CONSULTANCY - ENGINEERING	28/02/2019	462.00
EF119283	27555	FRICHOT & FRICHOT LEGAL FEES	28/02/2019	13,129.60
EF119284	27556	LEWIS FORTESCUE GROUP CONSULTANCY - HEALTH CARE	28/02/2019	2,079.00
EF119285	27558	ENCHANTED CHARACTERS STILTWALKING	28/02/2019	1,034.00
EF119286	27565	LOLLY BOX MUSIC PTY LTD ARTIST MANAGEMENT	28/02/2019	880.00
EF119287	27575	SHRED X SECURE DESTRUCTION DOCUMENT DESTRUCTION	28/02/2019	10.12
EF119288	27576	ZUMBA FITNESS WITH TRACY ZUMBA FITNESS CLASSES	28/02/2019	640.00
EF119289	27578	VORGEE PTY LTD SWIMWEAR	28/02/2019	471.60
EF119290	27587	NEW GROUND WATER SERVICES PTY LTD IRRIGATION/RETICULATION	28/02/2019	1,628.00
EF119291	27596	ALLWEST PLANT HIRE AUSTRALIA PTY LTD PLANT HIRE AND CIVIL CONTRACTING	28/02/2019	17,517.50
EF119292	27598	LLLUMINATE GROUP TRAINING AND CONSULTING	28/02/2019	412.50
EF119293	27601	10ZIG HARDWARE	28/02/2019	237.60
EF119294	27602	RAWLINSONS (WA) SURVEYING SERVICES	28/02/2019	2,057.00
EF119295	27604	ROCK 'N' TODDLE ENTERTAINMENT	28/02/2019	1,000.00
EF119296	27609	LADY LATTE COFFEE VENDOR	28/02/2019	155.00
EF119297	27617	GALAXY 42 PTY LTD CONSULTANCY - IT	28/02/2019	8,448.00
EF119298	27619	HARLEY DYKSTRA SURVEY SERVICES	28/02/2019	7,057.05
EF119299	27622	TRUGRADE MEDICAL SUPPLIES MEDICAL SUPPLIES	28/02/2019	890.37
EF119300	27627	DBS FENCING FENCING	28/02/2019	7,150.00
EF119301	27631	AQUATIC SERVICES WA PTY LTD POOL EQUIPMENT & MAINTENANCE	28/02/2019	36,427.82
EF119302	27633	LEICA MICROSYSTEMS PTY LTD MICROSCOPE ITEMS	28/02/2019	4,103.97
EF119303	27635	THREAT PROTECT SECURITY	28/02/2019	66.00
EF119304	27637	AQUA RESEARCH AND MONITORING SERVICES MARINE SERVICES	28/02/2019	3,000.00
EF119305	27639	PAUSE REWIND PLAY TRAINING SERVICES	28/02/2019	750.00
EF119306	27640	RANGE FORD MOTOR VEHICLES	28/02/2019	14,573.78
EF119307	27644	CMAX TECHNOLOGIES PTY LTD ICT ENGINEERING & CONSULTING	28/02/2019	20,328.00
EF119308	27646	THE TRUSTEE FOR SAS UNIT TRUST (SITE ARCHITECTURE STUDIO) ARCHITECTURAL SERVICES	28/02/2019	6,105.00
EF119309	27650	DATACOM SYSTEMS (AU) PTY LTD IT SALES, CONSULTING & SERVICE	28/02/2019	56,468.92
EF119310	27657	POSITIVE BALANCE MASSAGE MASSAGE THERAPY	28/02/2019	90.00
EF119311	88888	SUNDRY CREDITOR EFT REFUND	28/02/2019	500.00
EF119312	88888	SUNDRY CREDITOR EFT REFUND	28/02/2019	12,093.32
EF119313	99997	MICHAEL NOBLE COMPOST BIN REBATE JESSICA NOBLE	28/02/2019	50.00
EF119314	99997	THERESA LYNCH	28/02/2019	145.00

EF119315	99997	BOOKING 9411 REFUND	28/02/2019	700.00
		SPANISH CLUB WA INC		
		INVOICE 001		
EF119316	99997	SILVERCHAIN	28/02/2019	3,300.49
		PAYMENT UNSPENT HOME CARE FUNDS		
EF119317	99997	DAVID QUIGG	28/02/2019	300.00
		GRANTS, DONATIONS & REFUNDS		
EF119318	99997	LORNA HIND	28/02/2019	50.00
		COMPOST BIN REBATE LORNA HIND		
EF119319	99997	HEATH MCKENZIE	28/02/2019	50.00
		COMPOST BIN REBATE HEATH MCKENZIE		
EF119320	99997	ANNIE MAWSON	28/02/2019	50.00
		COMPOST BIN REBATE - ANNIE MAWSON		
EF119321	99997	KAREN GORE	28/02/2019	40.92
		COMPOST BIN REBATE - KAREN GORE		
EF119322	99997	JULIE MCCAMLEY	28/02/2019	20.95
		BIRD BATH REBATE - JULIE MCCAMLEY		
EF119323	99997	TOM WALL	28/02/2019	19.00
		BIRD BATH REBATE - TOM WALL		
EF119324	99997	KAREN MOULTON	28/02/2019	42.00
		HALL HIRE		
EF119325	99997	MARLENE PILBEAM	28/02/2019	300.00
		SENIOR SECURITY SUBSIDY SCHEME		
EF119326	99997	GRENVILLE ROSS	28/02/2019	200.00
		SENIOR SECURITY SUBSIDY SCHEME		
EF119327	99997	FRANK MYERS	28/02/2019	200.00
		SENIOR SECURITY SUBSIDY SCHEME		
EF119328	99997	ANDREW JEROVICH	28/02/2019	100.00
		SENIOR SECURITY SUBSIDY SCHEME		
EF119329	99997	AMY DIANNE RHODES	28/02/2019	300.00
		GRANTS, DONATIONS & REFUNDS		
EF119330	99997	KIM MAREE O'NEILL	28/02/2019	300.00
		GRANTS, DONATIONS & REFUNDS		
EF119331	99997	WAI YIN HO	28/02/2019	300.00
		GRANTS, DONATIONS & REFUNDS		
EF119332	99997	SURESH KUMAR THOTA	28/02/2019	300.00
		GRANTS, DONATIONS & REFUNDS		
EF119333	99997	BRENTON RICHARD MAXWELL	28/02/2019	300.00
		GRANTS, DONATIONS & REFUNDS		
EF119334	99997	NAVIN BHANDARI	28/02/2019	300.00
		GRANTS, DONATIONS & REFUNDS		
EF119335	99997	CHRISTOPHER CHAPALIAZ	28/02/2019	50.00
		GRANTS, DONATIONS & REFUNDS		
EF119336	99997	IRENE COPPELL	28/02/2019	300.00
		CROSSOVER CONTRIBUTION IRENE COPPELL		
EF119337	99997	KATHARINE WILLIAMS	28/02/2019	100.00
		ANIMAL ID: 47019 AND 47020		
EF119338	99997	MEG RIGBY	28/02/2019	230.30
		EMPLOYEE REIMBURSEMENT - MEG RIGBY		
EF119339	99997	DAVID MANNING	28/02/2019	679.00
		LANDOWNER BIODIVERSITY GRANT		
EF119340	99997	FIONA WAKE	28/02/2019	50.00
		COMPOST BIN REBATE - FIONA WAKE		
EF119341	99997	MEENAKSHI SUNDARAM MURUGESAN	28/02/2019	300.00
		GRANTS, DONATIONS & REFUNDS		
EF119342	99997	AIZA HOPE RAMOS	28/02/2019	300.00
		GRANTS, DONATIONS & REFUNDS		
EF119343	99997	UVANA SEWPERSADH	28/02/2019	300.00
		GRANTS, DONATIONS & REFUNDS		
EF119344	99997	HEANOCK KAHISSAY	28/02/2019	27.00
		ARC REFUND		
EF119345	99997	MOHAMMED ABU ABDU	28/02/2019	300.00
		GRANTS, DONATIONS & REFUNDS		
EF119346	99997	BETTY VALDA QRR	28/02/2019	223.37
		PAYMENT OF UNSPENT HOME CARE FUNDS		
EF119347	99997	KATHLEEN STOKES	28/02/2019	50.00
		BIRD BATH REBATE - KATHLEEN STOKES		
EF119348	99997	GERARD BLACK	28/02/2019	50.00
		COMPOST BIN REBATE - GERARD BLACK		
EF119349	99997	COMMUNITY OF AUBIN GROVE	28/02/2019	565.40
		NEWSLETTERS		
EF119350	99997	M AND Z READ	28/02/2019	50.00
		COMPOST BIN REBATE - Z READ		
EF119351	99997	SARAI MANNOLINI-WINWOOD	28/02/2019	42.50
		COMPOST BIN - SARAI MANNOLINI-WINWOOD		
EF119352	99997	KAFATAHA ASSOCIATION WA	28/02/2019	300.00
		INVOICE # XXX - KAFATAHA ASSOCIATION WA		

EF119353	99997	CASSANDRA DAWES	28/02/2019	50.00
EF119354	99997	COMPOST BIN REBATE - CASSANDRA DAWES	28/02/2019	988.57
EF119355	99997	RIB AND BOAT MARINE SERVICES	28/02/2019	850.00
EF119356	99997	GRANTS, DONATIONS & REFUNDS	28/02/2019	55.00
EF119357	99997	LEANNETAYLOR	28/02/2019	3,713.22
EF119358	99997	INVOICE 282	28/02/2019	50.00
EF119359	99997	LEANNE TAYLOR	28/02/2019	50.00
EF119360	99997	INVOICE 283	28/02/2019	50.00
EF119361	99997	COCKBURN SES	28/02/2019	50.00
EF119362	99997	REIMBURSEMENT JUNE 18 TO NOV 18	28/02/2019	50.00
EF119363	99997	SHANE TOTTEN	28/02/2019	50.00
EF119364	99997	COMPOST BIN REBATE	28/02/2019	50.00
EF119365	99997	PAIGE TRACEY	28/02/2019	50.00
EF119366	99997	COMPOST BIN REBATE	28/02/2019	50.00
EF119367	99997	TANYA PERICA	28/02/2019	50.00
EF119368	99997	COMPOST BIN REBATE	28/02/2019	50.00
EF119369	99997	KRISTIE KOVACEVIC	28/02/2019	50.00
EF119370	99997	COMPOST BIN REBATE	28/02/2019	50.00
EF119371	99997	ANDREA WHYTE	28/02/2019	50.00
EF119372	99997	COMPOST BIN REBATE	28/02/2019	69.30
EF119373	99997	LAURETTA DAVIES	28/02/2019	362.77
EF119374	99997	LIBRARY MATERIALS REFUND	28/02/2019	1,000.00
EF119375	99997	BEELIAR COMMUNITY VOICE	28/02/2019	300.00
EF119376	99997	LGAC57 NEWSLETTER SUBSIDY	28/02/2019	231.66
EF119377	99997	ZURICH AUSTRALIAN INSURANCE LTD	28/02/2019	140.90
EF119378	99997	EXCESS PAYMENT 638027064 REGO 1EDW622	28/02/2019	872.60
EF119379	99997	CINDY SOOK WAH WOO	28/02/2019	400.00
EF119380	99997	CROSSOVER CONTRIBUTION	28/02/2019	300.00
EF119381	99997	CSDA OFFICIAL DEPARTMENTAL RECEIPTS	28/02/2019	1,000.00
EF119382	99997	DOCUMENT NUMBER: 180092314 CENTREPAY/02	28/02/2019	101.47
EF119383	99997	JANDAKOT VOLUNTEER BUSTI FIRE	28/02/2019	3,991.00
EF119384	99997	INVOICE 276 REIMBURSEMENT	28/02/2019	300.00
EF119385	99997	JANDAKOT BUSHFIRE BRIGADE	28/02/2019	4,200.00
EF119386	99997	JANDAL<OT BUSHFIRE BRIGADE INVOICE 273	28/02/2019	300.00
EF119387	99997	THE BURUNDI PEACE CLIOIR INC	28/02/2019	1,000.00
EF119388	99997	INVOICE # UUXC3 THE BURUNDI PEACE CHOIR	28/02/2019	101.47
EF119389	99997	FRASER SIBBRITT-PETTIT	28/02/2019	3,991.00
EF119390	99997	CROSSOVER CONTRIBUTION - FRASER SIBBRITT	28/02/2019	300.00
EF119391	99997	ZURICH AUSTRALIAN INSURANCE LTD	28/02/2019	1,000.00
EF119392	99997	CLAIM NUMBER : CL,638024943 EXCESS	28/02/2019	101.47
EF119393	99997	MARIE LA FRENAIS	28/02/2019	3,991.00
EF119394	99997	50% REIMBURSEMENT FOR UNI BOOKS	28/02/2019	300.00
EF119395	99997	CURTIN UNIVERSITY	28/02/2019	3,991.00
EF119396	99997	INVOICE 9694298 - SPONSOR ID 11365	28/02/2019	300.00
EF119397	99997	STUART GREER	28/02/2019	300.00
EF119398	99997	GRANTS, DONATIONS & REFUNDS	28/02/2019	1,100.00
EF119399	99997	SAFETY HOUSE WA INC.	28/02/2019	1,000.00
EF119400	99997	GRANTS - SAFETY HOUSE PROGRAM	28/02/2019	1,000.00
EF119401	99997	ANNA DAVEY	28/02/2019	1,000.00
EF119402	99997	INDIVIDUAL SPONSORSHIP - IFSC WORLD CHAM	28/02/2019	4,200.00
EF119403	99997	KWINANA IN TRANSITION	28/02/2019	300.00
EF119404	99997	COMMUNITY GRANT - YOUTH MENTAL HEALTH TR	28/02/2019	100.00
EF119405	99997	MAXINE ROBINSON	28/02/2019	1,000.00
EF119406	99997	SENIOR SECURITY SUBSIDY SCHEME	28/02/2019	2,613.67
EF119407	99997	DAVID YATES	28/02/2019	11,325.83
EF119408	99997	SENIOR SECURITY SUBSIDY SCHEME	28/02/2019	2,613.67
EF119409	99997	FURY NETBALL CLUB KAY DI BISCEGLIE	28/02/2019	4,465.00
EF119410	99997	SPORTS EQUIPMENT GRANT #108	28/02/2019	2,613.67
EF119411	11867	KEVIN JOHN ALLEN	28/02/2019	2,613.67
EF119412	12740	MONTHLY COUNCILLOR ALLOWANCE	28/02/2019	3,003.41
EF119413	19059	MAYOR LOGAN HOWLETT	28/02/2019	2,613.67
EF119414	20634	MONTHLY COUNCILLOR ALLOWANCE	28/02/2019	2,613.67
EF119415	23339	CAROL REEVE-FOWKES	28/02/2019	2,613.67
EF119416	25353	MONTHLY COUNCILLOR ALLOWANCE	28/02/2019	2,613.67
EF119417	26696	LEE-ANNE SMITH	28/02/2019	2,613.67
EF119418	27326	MONTHLY COUNCILLOR ALLOWANCE	28/02/2019	2,613.67
EF119419	27327	STEPHEN PRATT	28/02/2019	2,613.67
EF119420	27475	MONTHLY COUNCILLOR ALLOWANCE	28/02/2019	2,613.67
EF119421		PHILIP EVA	28/02/2019	2,613.67
EF119422		MONTHLY COUNCILLOR ALLOWANCE	28/02/2019	2,613.67
EF119423		CHAMONIX TERBLANCHE	28/02/2019	2,613.67
EF119424		MONTHLY COUNCILLOR ALLOWANCE	28/02/2019	2,613.67
EF119425		MICHAEL SEPAROVICH	28/02/2019	2,613.67
EF119426		MONTHLY COUNCILLOR ALLOWANCE	28/02/2019	2,613.67
EF119427		CHONTELLE SANDS	28/02/2019	2,613.67
EF119428		MONTHLY COUNCILLOR ALLOWANCE	28/02/2019	2,613.67
EF119429		LARA KIRKWOOD	28/02/2019	2,613.67

		MONTHLY COUNCILLOR ALLOWANCE		
EF119392	99996	GAVIN VAN DIEMEN RATES REFUND	28/02/2019	30.00
EF119393	99996	COLIN FRANK TWIST RATES REFUND	28/02/2019	30.00
EF119394	99996	KAYLA SAMPSON RATES REFUND	28/02/2019	150.00
EF119395	99996	DANIEL MARIO LOMBARDO RATES REFUND	28/02/2019	30.00
EF119396	99996	PAMELA MARGARET SCURLOCK RATES REFUND	28/02/2019	25.00
EF119397	99996	OFFICE OF STATE REVENUE RATES REFUND	28/02/2019	113.36
EF119398	99996	AMELIA KRUMHOLETSKI RATES REFUND	28/02/2019	30.00
EF119399	99996	ROSS IVAN SUMICH RATES REFUND	28/02/2019	150.00
EF119400	99996	GAVIN A WELLS RATES REFUND	28/02/2019	581.00
EF119401	99996	OFFICE OF STATE REVENUE RATES REFUND	28/02/2019	755.02
EF119402	99996	PETER CLAYTON RATES REFUND	28/02/2019	50.00
EF119403	99996	A BASILE RATES REFUND	28/02/2019	773.80
EF119404	99996	TIMOTHY AUSTIN RATES REFUND	28/02/2019	147.00
EF119405	99996	RENATA CARATTI RATES REFUND	28/02/2019	926.95
EF119406	99996	CPR BUILDING HOLDINGS PTY LTD RATES REFUND	28/02/2019	147.00
EF119407	99996	INVESTORS EDGE REAL ESTATE RATES REFUND	28/02/2019	398.00
EF119408	99996	INVESTORS EDGE REAL ESTATE RATES REFUND	28/02/2019	380.00
EF119409	99996	OFFICE OF STATE REVENUE RATES REFUND	28/02/2019	18.83
EF119410	99996	COCKBURN CENTRAL PROPERTY EXECUTIVES RATES REFUND	28/02/2019	380.00
EF119411	99996	LOTUS DAKINI RATES REFUND	28/02/2019	15.00
EF119412	99996	AUSTRALIAN OUTDOOR LIVING (WA) PTY LTD RATES REFUND	28/02/2019	147.00
EF119413	99996	VANESSA PALMER RATES REFUND	28/02/2019	150.00
EF119414	10047	ALINTA ENERGY NATURAL GAS & ELECTRICITY SUPPLY	28/02/2019	159.25
EF119415	11794	SYNERGY ELECTRICITY USAGE/SUPPLIES	28/02/2019	314,215.65
EF119416	12025	TELSTRA CORPORATION COMMUNICATIONS SERVICES	28/02/2019	16,163.22
EF119417	27458	AUSSIE SHEDS GROUP SHEDS SUPPLY & INSTALL	28/02/2019	173,568.00
EF119418	10747	IINET LIMITED INTERNET SERVICES	28/02/2019	729.84
EF119419	11758	WATER CORP WATER USAGE / SUNDRY CHARGES	28/02/2019	56,760.99
EF119420	11760	WATER CORPORATION SEWER EASEMENT	28/02/2019	77,911.50
EF119421	99997	FDC FDC PAYMENT WE 24/02/19	28/02/2019	49,545.12
EF119422	99997	IHC IHC PAYMENT WE 24/02/19	28/02/2019	23,897.58
TOTAL OF 683 EFT PAYMENTS				9,861,588.38
LESS CANCELLED PAYMENTS:				
EF118660		J BROWNING	4/02/2019	-20.00
EF118680		DEPARTMENT OF HUMAN SERVICES	4/02/2019	-230.67
EF118718		JOSEPHINE ELISE PEARSON	4/02/2019	-300.00
EF118056		MICHAEL NOBLE	25/02/2019	-50.00
NET EFT PAYMENTS				9,860,987.71
BANK FEES AND CREDIT CARD PAYMENTS:				
BANK FEES				
MERCHANT FEES COC				12,049.34
MERCHANT FEES MARINA				150.61
MERCHANT FEES ARC				2,800.69

MERCHANT FEES VARIOUS OUT CENTRES		108.83
NATIONAL BPAY CHARGE		3,880.80
RTGS/ACLR FEE		
NAB TRANSACT FEE		2,199.82
MERCHANDISE / OTHER FEES		
CBA CREDIT CARD PAYMENT		49,377.70
		70,567.79
PAYROLL PAYMENTS:		
COC23/01/19 Pmt 000131890575 City of Cockburn	6/02/2019	1,395,690.68
COC07/02/19 Pmt 000131989572 City of Cockburn	7/02/2019	645.18
COC07/02/19 Pmt 000131969886 City of Cockburn	7/02/2019	1,732.98
COC07/02/19 Pmt 000132183277 City of Cockburn	12/02/2019	5,499.77
COC14/02/19 Pmt 000132384671 City of Cockburn	14/02/2019	584.95
COC05/02/19 Pmt 000132708870 City of Cockburn	20/02/2019	1,368,066.24
COC21/02/19 Pmt 000132810447 City of Cockburn	21/02/2019	4,871.73
COC22/02/19 Pmt 000132874406 City of Cockburn	22/02/2019	2,848.68
COC20/02/19 Pmt 000133121520 City of Cockburn	27/02/2019	11,362.37
		2,791,302.58
TOTAL MONTHLY PAYMENTS		12,722,858.08

15.2 STATEMENT OF FINANCIAL ACTIVITY AND ASSOCIATED REPORTS - FEBRUARY 2019

Author(s) N Mauricio

Attachments 1. Statement of Financial Activity - February 2019 [↓](#)

RECOMMENDATION

That Council:

- (1) adopt the Statement of Financial Activity and associated reports for February 2019, as attached to the Agenda; and
- (2) amend the 2018/19 Municipal Budget in accordance with the detailed schedule attached as follows:

Revenue	\$176,800	Increase
Expenditure	\$270,835	Increase
Transfer from Reserve	\$84,835	Increase
Net impact on Municipal budget surplus	\$9,200	Decrease

TO BE CARRIED BY AN ABSOLUTE MAJORITY OF COUNCIL

Background

Local Government (Financial Management) Regulations prescribe that a local government is to prepare each month a Statement of Financial Activity.

Regulation 34(2) requires the Statement of Financial Activity to be accompanied by documents containing:–

1. Details of the composition of the closing net current assets (less restricted and committed assets).
2. Explanation for each material variance identified between YTD budgets and actuals.
3. Any other supporting information considered relevant by the local government.

Regulation 34(4)(a) prescribes that the Statement of Financial Activity and accompanying documents be presented to Council within two months after the end of the month to which the statement relates.

The regulations require the information reported in the statement to be shown either by nature and type, statutory program or business unit. The City chooses to report the information according to its organisational business structure, as well as by nature and type.

Local Government (Financial Management) Regulations - Regulation 34 (5) states “Each financial year, a local government is to adopt a percentage or value, calculated in accordance with the AAS, to be used in statements of financial activity for reporting material variances.”

This regulation requires Council to annually set a materiality threshold for the purpose of disclosing budget variances within monthly financial reporting and Council adopted at the July 2018 meeting to continue with a materiality threshold of \$200,000 for the 2018/19 financial year.

Detailed analysis of budget variances is an ongoing exercise, with necessary budget amendments either submitted to Council each month (via this report) or included in the City’s mid-year budget review, as deemed appropriate.

Submission

N/A

Report

Opening Funds

The City brought forward \$11.97 million in opening funds from the previous year (confirmed by audit), which included \$9.56 million of municipal funding committed to carried forward works and projects. The remaining uncommitted \$2.41 million was \$410,382 above the \$2.0 million surplus estimate in the 2018/19 adopted budget. The additional \$410,382 was transferred to the Community Infrastructure Reserve (in line with Council policy).

Closing Funds

The City’s actual closing funds position for the month of \$61.71 million was \$10.32 million higher against the YTD budget. This result includes the annual rates revenue raised in July on an accrual basis and also reflects budget variances across the operating and capital programs as further detailed in this report.

The 2018/19 revised budget is currently showing a closing surplus of \$165,993 (up from \$15,400 in the adopted budget). A reconciliation of the changes is included at note 3 to the financial report.

Operating Revenue

Operating revenue of \$136.96 million was ahead of YTD budget by \$1.31 million. A significant portion of the City’s operating revenue is recognised in July upon the issue of annual rates and charges. The remaining revenue, largely comprising service fees, operating grants

and contributions and interest earnings from investments, flows relatively uniformly over the remainder of the year.

The following table summarises the operating revenue budget performance by nature and type:

Nature or Type Classification	Actual Revenue \$M	Revised Budget YTD \$M	Variance to Budget \$M	FY Revised Budget \$M
Rates	101.85	101.63	0.22	103.75
Specified Area Rates	0.47	0.45	0.02	0.45
Fees & Charges	21.84	20.79	1.05	29.24
Operating Grants & Subsidies	7.86	8.24	(0.38)	10.70
Contributions, Donations, Reimbursements	0.93	1.00	(0.07)	1.53
Interest Earnings	4.01	3.55	0.47	5.02
Total	136.96	135.65	1.31	150.69

Material variance identified for the month included:

- Rates revenue was \$0.22 million ahead of YTD projections mostly due to part year rating on new and improved properties.
- Fees and Charges (\$1.05 million ahead of budget):
 - A \$0.29 million variance against YTD budget for Port Coogee marina fees is caused by timing issues in revenue recognition (fees received in advance); and
 - Landfill associated fees were \$0.36 million or 9.8% ahead of YTD budget (\$4.06m v \$3.70m).
- Operating Grants & Subsidies (\$0.38 million behind budget):
 - Aged care services related funding was \$0.36 million under YTD budget (timing issue).
 - Child day care subsidies received were down a net \$0.18 million YTD, with in-home care down \$0.52 million and family day care up \$0.34 million. This budget area is being reviewed and will be adjusted in due course.

- Interest revenue was up a total \$0.47 million against YTD budget primarily due to an additional \$0.34 million from cash reserves invested.

Operating Expenditure

Operating expenditure (including asset depreciation) of \$94.36 million was under the YTD budget by \$6.67 million (\$4.81m last month).

The following table shows the operating expenditure budget variance at the nature and type level. The internal recharging credits reflect the amount of internal costs capitalised against the City's assets:

Nature or Type Classification	Actual Expenses \$M	Revised Budget YTD \$M	Variance to Budget \$M	FY Revised Budget \$M
Employee Costs - Direct	35.33	36.30	0.98	55.78
Employee Costs - Indirect	0.54	0.70	0.17	1.58
Materials and Contracts	26.08	30.59	4.51	44.68
Utilities	3.45	3.70	0.25	5.52
Interest Expenses	0.44	0.35	-0.09	0.71
Insurances	1.57	1.49	-0.09	1.49
Other Expenses	5.97	6.32	0.36	9.41
Depreciation (non-cash)	21.39	21.47	0.08	32.19
Amortisation (non-cash)	0.72	0.76	0.03	1.14
Internal Recharging-CAPEX	(1.12)	(0.65)	0.47	(0.97)
Total	94.36	101.04	6.68	151.53

- Material and Contracts (\$4.51 million under budget) included the following:
 - The Roe 8 rehabilitation project spending was \$0.64 million behind YTD budget;
 - Spending on the maintenance of bushland reserves was \$0.25 million behind YTD budget.

- Aged care services' spending was \$0.22 million under the YTD budget target.
- Cockburn ARC was showing a \$0.25 million underspend across their business for various service contracts and material costs; and
- Waste Collection contract spending was down \$0.44 million, against YTD budget, mainly due to lower RRRC entry fees (\$0.30 million under).
- Employee Costs – Direct (\$0.97 million under budget):
 - Parks maintenance salaries were \$0.29 million (11.4%) under the YTD budget.
 - Salaries for aged & disabled services were \$0.25 million under YTD budget.
 - The net movement in annual and long service leave provisions was contributing \$0.35 million towards the favourable budget variance.
- Other Expenses:
 - The annual Grants and Donations program was lagging the budget setting by \$0.47 million (\$0.50m last month).
- Utilities:
 - Power charges were lagging budget by \$0.21 million (timing variance only).

Capital Expenditure

The City's adopted budget capital budget of \$40.92 million has since increased to \$70.07 million, primarily due to the addition of carried forward projects and the mid-year review. To the end of the month, actual spending of \$24.39 million was \$1.86 million under the YTD budget setting. This has closed from \$5.45 million last month due to a revision of cash flow forecasts being applied to the budget.

The following table details this budget variance by asset class:

Asset Class	YTD Actuals \$M	YTD Budget \$M	YTD Variance \$M	Revised Budget \$M	Commit Orders \$M
Roads Infrastructure	11.78	11.76	-0.02	23.75	0.06

Asset Class	YTD Actuals \$M	YTD Budget \$M	YTD Variance \$M	Revised Budget \$M	Commit Orders \$M
Drainage	0.41	0.46	0.05	1.90	0.00
Footpaths	0.82	0.79	-0.03	2.04	0.00
Parks Infrastructure	4.31	4.94	0.63	13.66	0.35
Landfill Infrastructure	0.14	0.20	0.07	0.58	0.00
Freehold Land	0.30	0.18	-0.12	2.80	0.00
Buildings	4.73	4.97	0.23	16.83	0.10
Furniture & Equipment	0.02	0.04	0.02	0.10	0.04
Information Technology	0.49	1.31	0.82	2.40	0.22
Plant & Machinery	0.81	1.00	0.19	4.19	0.00
Marina Infrastructure	0.57	0.58	0.01	1.82	0.00
Total	24.39	26.25	1.86	70.07	0.78

Significant project budget variances recorded for the month are detailed below:

- Roads Infrastructure (over by a net \$0.02 million):
 - Spearwood Ave Bridge & Duplication exceeded YTD budget by \$0.35 million as the project is ahead of schedule (timing issue).
 - Verde Drive construction was \$0.32 million over the YTD project budget.
 - North Lake Road (Phoenix to Bibra) underspent by \$0.23 million (timing issue).
- Information Technology (under by \$0.82 million) – a number of IT related software and hardware project initiatives were collectively \$0.84 million below YTD budget;

Capital Funding

Capital funding sources are highly correlated to capital spending, the sale of assets and the rate of development within the City (determining developer contributions received).

Material variances for the month included:

- Developer Contribution Plans (over YTD budget by \$1.79 million):

- \$1.82 million in contributions received for DCP 14 – Cockburn Coast, including a \$1.77 million relating to an aged care facility development. These funds will be needed to offset an existing liability to Landcorp under DCP 14.
- DCP 13 Community Infrastructure contributions of \$3.08 million were in line with the YTD budget setting of \$3.0 million.
- Collectively, contributions for the various roads infrastructure DCA's were \$0.11 million behind the YTD budget forecast.
- Capital Grants & Subsidies
 - Road projects related grants were \$0.24 million ahead of YTD budget.
 - \$0.18 million grant for the Port Coogee Marina day visitor jetty not yet received.
 - Grant funding of \$0.20 million not yet received for the Jandakot volunteer bush fire brigade shed.
 - Grant funding for the Lakelands hockey facility is \$0.16 million behind YTD budget.
- Proceeds from Sale of Assets (\$1.16 million over YTD budget)
 - The sale of freehold land was \$1.10 million over YTD budget with 25 Imlah Court over by \$0.88 million (additional funds) and 27 Clara Rd over by \$0.22 million (timing issue).

Reserve Transfers

- Transfers from reserves of \$17.09 million were \$0.77 million ahead of YTD budget. This mainly comprised funding for the capital program ahead by \$1.17 million;
- Transfers to Reserve of \$24.54 million were up against YTD budget by \$3.19 million. This included developer contributions received (up by \$1.72 million), transfers from land sales (up by \$1.03 million) and transfers of interest revenue into reserves (up by \$0.48 million).

Cash & Investments

The closing cash and financial investment holding at month's end totalled \$182.73 million, slightly up from \$182.50 million the previous month. \$126.51 million of this balance was held for the City's financial reserves (down from \$129.27 million last month). The remaining \$53.46

million represented municipal funds available to meet the operational liquidity requirements for the remainder of the financial year.

Investment Performance, Ratings and Maturity


The City's investment portfolio yielded a weighted annualised return of 2.80 percent for the month (unchanged from last month). This exceeded the City's target rate of 2.60 percent (RBA cash rate of 1.50 percent plus 1.10 percent) by 0.20 percent. Interest earnings on the investment portfolio were \$3.32 million, outperforming the YTD budget by \$0.41 million.

The cash rate was most recently reduced at the August 2016 meeting of the Reserve Bank of Australia (by 25bp to 1.50 percent). Financial markets are now fully pricing a 0.25 percent reduction by August 2019 with some economists predicting two 0.25 percent cuts to interest rates within the next year. If to eventuate, it is estimated these cuts would reduce the City's interest revenue in 2019-20 by up to \$0.6 million.

The majority of investments are currently held in term deposit (TD) products placed with highly rated APRA (Australian Prudential Regulation Authority) regulated Australian and foreign owned banks. All current investments comply with the Council's Investment Policy, other than those made under previous statutory provisions (grandfathered by the updated legislation).

The City's TD investments fall within the following Standard and Poor's short term risk rating categories. During the month, the A-2 holding increased from 53.5 percent to 58.6 percent, as the City chased the best returns on offer. This holding remains within the Council policy limit of 60 percent and all other policy compliance requirements were met by the portfolio.

FIIG Portfolio Limits

Compliant 
City of Cockburn
28 Feb 2019

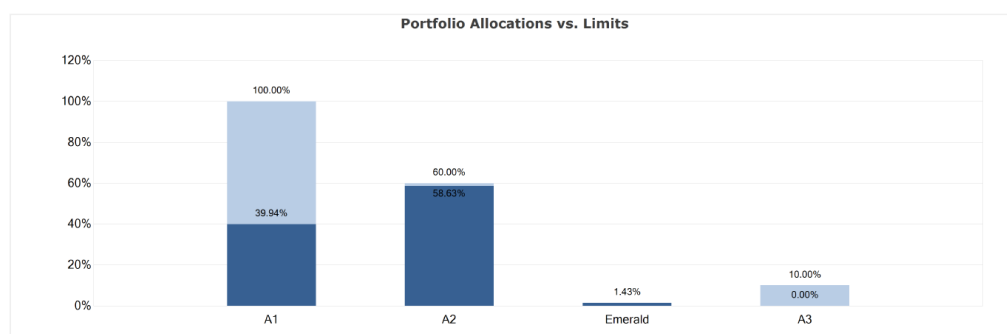


Figure 1: Portfolio allocations compared to Investment Policy limits

The current investment strategy seeks to secure the highest possible rate on offer, subject to cash flow planning and investment policy requirements. Best value is currently being derived within the six to nine month investment range.

The City's TD investment portfolio had an average remaining duration of 180 days or 6.0 months as at 28 February. The maturity profile of the City's TD investments is graphically depicted below, showing sufficient maturities in the zero-90 days range to meet liquidity requirements (\$15 million each month):

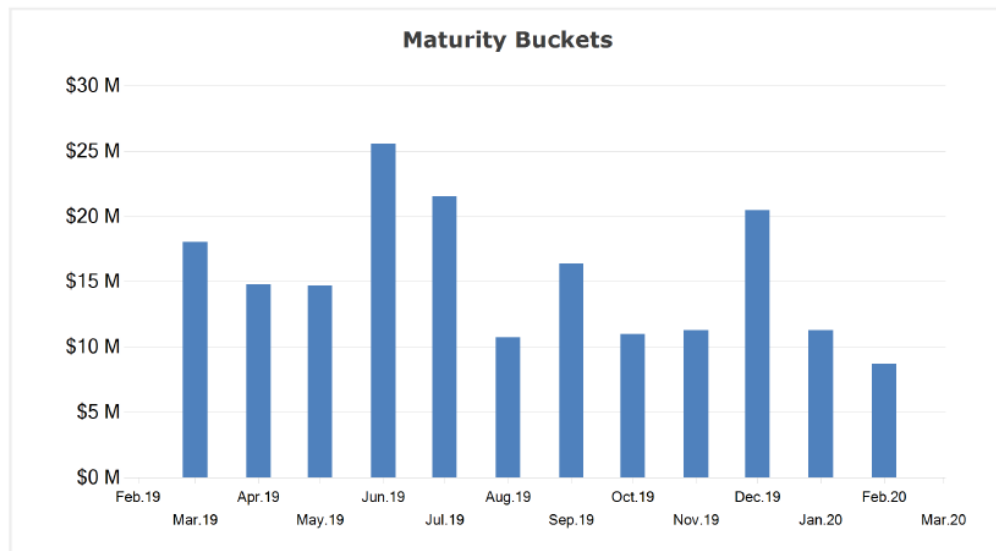


Figure 2: Council Investment Maturity Profile

Investment in Fossil Fuel Free Banks

At month end, the City held 52.0 percent of its TD investment portfolio with banks deemed free from funding fossil fuel related industries (up from 47.8 percent last month). The amount invested with fossil fuel free banks will fluctuate month to month in line with policy limits and the deposit rates available at time of placement.

Rates Debt Recovery

At month's end, the City had collected \$110.1 million (81.7 percent) against the \$127.7 million of rates and other charges levied inclusive of prior year outstanding balances and part year rating). Given this includes rates prepayments of \$1.0 million, this leaves \$18.6 million still to collect from remaining instalments and payment arrangements. There were 501 properties currently owing a total of \$1.42 million engaged in legal recovery processes (compared to 462 properties owing \$1.68 million last month).

Budget Amendments

There were a number of budget amendments identified during the month that require Council adoption. These items are:

- CCTV for Ngarkal Beach - \$9,835. This was a missed carried forward from the 2017-18 budget (funded from the Carried Forward Projects Reserve)
- Demolition of the old Cockburn Bowling Club - \$75,000 (funded from the Land Development Reserve)
- Installation of goals and netting at Atwell Oval (East) - \$15,000 (funded from Municipal surplus via banked savings from Treeby Floodlights project in mid-year review).
- DFES Mitigation Activity Fund - \$171,000 (funded by successful grant application to state government).
- New lease revenue from 159 Phoenix Road - \$5,800 (increases Municipal surplus)

The financial report attached includes a detailed schedule with the proposed budget changes and the associated funding sources.

Description of Graphs & Charts

There is a bar graph tracking Business Unit operating expenditure against budget. This provides a quick view of how the different units are tracking and the comparative size of their budgets.

The Capital Expenditure graph tracks the YTD capital spends against the budget. It also includes an additional trend line for the total of YTD actual expenditure and committed orders. This gives a better indication of how the capital budget is being exhausted, rather than just purely actual cost alone.

A liquidity graph shows the level of Council's net current position (adjusted for restricted assets) and trends this against previous years. This gives a good indication of Council's capacity to meet its financial commitments over the course of the year. Council's overall cash and investments position is provided in a line graph with a comparison against the YTD budget and the previous year's position at the same time.

Pie charts included show the break-up of actual operating income and expenditure by nature and type and the make-up of Council's current assets and liabilities (comprising the net current position).

Trust Fund

At month end, the City held \$11.91 million within its trust fund (unchanged from last month). \$6.20 million was related to POS cash in lieu and another \$5.71 million in various cash bonds and refundable deposits.

Strategic Plans/Policy ImplicationsLeading & Listening

Deliver sustainable governance through transparent and robust policy and processes

Listen to and engage with our residents, business community and ratepayers with greater use of social media

Budget/Financial Implications

The 2018/19 revised budget surplus will reduce by \$9,200 to \$156,793 following the adoption of the budget amendments contained in this report.

Legal Implications

N/A

Community Consultation

N/A

Risk Management Implications

Council's adopted budget for revenue, expenditure and closing financial position will be misrepresented if the recommendation amending the City's budget is not adopted.

Advice to Proponent(s)/Submissioners

N/A

Implications of Section 3.18(3) *Local Government Act, 1995*

Nil.

STATEMENT OF FINANCIAL ACTIVITY

for the period ended 28 February 2019

	Actuals	YTD Revised Budget	Variance to YTD Budget	\$ Variance to YTD Budget	Revised Budget	Adopted Budget
	\$	\$	%	\$	\$	\$
Operating Revenue						
Financial Services	108,089,919	107,416,967	1%	672,952 ✓	111,549,503	113,414,800
Information Services	909	1,000	-9%	(91)	1,500	1,500
Human Resource Management	197,439	194,661	1%	2,778	292,000	292,000
Library Services	32,880	36,231	-9%	(3,351)	54,346	54,346
Recreation & Community Safety	8,975,377	8,830,038	2%	145,339	13,134,858	13,184,010
Community Development & Services	5,787,531	6,333,406	-9%	(545,875) ✗	8,642,839	8,500,008
Corporate Communications	54,945	47,600	15%	7,345	120,865	120,865
Governance & Risk	1,982	533	272%	1,449	800	800
Statutory Planning	635,717	606,334	5%	29,383	977,000	977,000
Strategic Planning	2,537,061	2,456,471	3%	80,590	3,415,862	3,087,944
Building Services	843,397	880,410	-4%	(37,012)	1,263,000	1,263,000
Environmental Health	345,982	285,110	21%	60,872	324,610	323,500
Waste Services	6,960,957	6,565,681	6%	395,276 ✓	8,418,738	8,130,049
Parks & Environmental Services	1,137,551	1,011,656	12%	125,895	1,019,080	1,019,080
Engineering Services	243,979	207,806	17%	36,173	286,709	286,709
Infrastructure Services	956,283	625,576	53%	330,706 ✓	1,023,500	961,000
	136,960,172	135,649,479	1%	1,310,692	150,685,210	151,616,611
Total Operating Revenue	136,960,172	135,649,479	1%	1,310,692	150,685,210	151,616,611
Operating Expenditure						
Governance	(2,064,563)	(2,104,339)	-2%	39,776	(3,225,224)	(3,660,479)
Strategy & Civic Support	(653,891)	(753,853)	-13%	99,962	(1,146,001)	(1,146,001)
Financial Services	(4,742,487)	(4,511,561)	5%	(230,926) ✗	(6,215,893)	(6,082,779)
Information Services	(3,666,060)	(3,986,558)	-8%	320,498 ✓	(5,926,207)	(5,627,001)
Human Resource Management	(1,817,627)	(1,949,255)	-7%	131,628	(3,010,612)	(2,853,188)
Library Services	(2,340,953)	(2,623,028)	-11%	282,076 ✓	(3,902,933)	(3,896,274)
Recreation & Community Safety	(10,220,865)	(10,798,677)	-5%	577,812 ✓	(16,262,149)	(16,391,491)
Community Development & Services	(7,408,175)	(9,038,128)	-18%	1,629,953 ✓	(13,179,568)	(12,429,539)
Corporate Communications	(2,362,500)	(2,734,919)	-14%	372,419 ✓	(4,025,144)	(3,880,774)
Governance & Risk	(353,886)	(318,289)	11%	(35,597)	(479,330)	(479,330)
Statutory Planning	(791,166)	(909,874)	-13%	118,708	(1,435,141)	(1,435,141)
Strategic Planning	(1,517,323)	(1,644,825)	-8%	127,502	(2,202,833)	(1,941,496)
Building Services	(1,023,573)	(1,046,701)	-2%	23,128	(1,702,643)	(1,637,643)
Environmental Health	(1,171,257)	(1,297,550)	-10%	126,293	(1,960,270)	(1,923,740)
Waste Services	(12,730,007)	(13,042,946)	-2%	312,939 ✓	(20,163,073)	(19,593,906)
Parks & Environmental Services	(8,908,746)	(10,138,986)	-12%	1,230,240 ✓	(15,411,157)	(15,210,682)
Engineering Services	(5,066,768)	(5,213,043)	-3%	146,275	(7,937,632)	(7,881,865)
Infrastructure Services	(6,528,347)	(7,344,037)	-11%	815,690 ✓	(10,982,461)	(10,664,608)
	(73,368,192)	(79,456,568)	-8%	6,088,376	(119,168,271)	(116,735,938)

STATEMENT OF FINANCIAL ACTIVITY

for the period ended 28 February 2019

	Actuals	YTD Revised Budget	Variance to YTD Budget	\$ Variance to YTD Budget	Revised Budget	Adopted Budget
	\$	\$	%	\$	\$	\$
Less: Net Internal Recharging	1,119,240	646,745	73%	472,496 ✓	974,082	986,570
Add: Depreciation & Amortisation on Non-Current Assets						
Computer Equipment	(808,817)	(815,909)	-1%	7,092	(1,222,203)	(1,010,616)
Furniture and Equipment	(245,191)	(253,176)	-3%	7,985	(379,764)	(379,764)
Plant & Machinery	(2,185,431)	(2,218,136)	-1%	32,705	(3,338,019)	(3,197,550)
Buildings	(4,204,986)	(4,104,224)	2%	(100,762)	(6,156,336)	(6,156,336)
Infrastructure - Roads	(7,655,854)	(7,718,869)	-1%	63,015	(11,562,551)	(11,369,220)
Infrastructure - Drainage	(1,742,426)	(1,738,936)	0%	(3,490)	(2,608,404)	(2,608,404)
Infrastructure - Footpaths	(922,953)	(940,240)	-2%	17,287	(1,410,360)	(1,410,360)
Infrastructure - Parks Equipment	(2,995,277)	(3,019,934)	-1%	24,657	(4,523,738)	(3,996,360)
Landfill Infrastructure	(724,709)	(759,520)	-5%	34,811	(1,139,280)	(1,139,280)
Marina Infrastructure	(629,679)	(662,072)	-5%	32,393	(993,108)	(993,108)
	(22,115,324)	(22,231,016)	-1%	115,692	(33,333,763)	(32,260,998)
Total Operating Expenditure	(94,364,276)	(101,040,839)	-7%	6,676,563	(151,527,953)	(148,010,366)
Change in Net Assets Resulting from Operations	42,595,895	34,608,640	23%	7,987,255	(842,743)	3,606,245
Non-Operating Activities						
Profit/(Loss) on Assets Disposal						
Plant and Machinery	82,990	(650,030)	-113%	733,020 ✓	(282,483)	(410,272)
Freehold Land	3,897,711	2,630,764	48%	1,266,947 ✓	4,466,234	2,170,000
Buildings	(31,865)	-	0%	(31,865)	-	-
	3,948,836	1,980,734	99%	1,968,102	4,183,751	1,759,728
Capital Expenditure						
Computer Equipment	(491,217)	(1,313,508)	-63%	822,290 ✓	(2,404,085)	(1,063,280)
Furniture and Equipment	(21,225)	(44,000)	-52%	22,775	(96,950)	(30,000)
Plant & Machinery	(812,789)	(1,003,536)	-19%	190,747	(4,193,536)	(4,161,000)
Land	(301,216)	(182,764)	65%	(118,452)	(2,796,100)	-
Buildings	(4,734,486)	(4,965,595)	-5%	231,109 ✓	(16,825,597)	(9,172,800)
Infrastructure - Roads	(11,777,255)	(11,756,560)	0%	(20,696)	(23,746,261)	(14,162,636)
Infrastructure - Drainage	(407,360)	(461,825)	-12%	54,466	(1,899,311)	(1,218,300)
Infrastructure - Footpaths	(821,803)	(791,471)	4%	(30,332)	(2,042,561)	(1,187,072)
Infrastructure - Parks Equipment	(3,437,965)	(4,033,543)	-15%	595,578 ✓	(11,331,030)	(5,847,000)
Infrastructure - Parks Landscaping	(876,473)	(910,388)	-4%	33,915	(2,331,237)	(1,980,000)
Landfill Infrastructure	(138,965)	(204,824)	-32%	65,859	(577,814)	(360,000)
Note 1.	(24,389,123)	(26,248,735)	-7%	1,859,612	(70,066,897)	(40,922,088)

STATEMENT OF FINANCIAL ACTIVITY

for the period ended 28 February 2019

	Actuals	YTD Revised Budget	Variance to YTD Budget	\$ Variance to YTD Budget	Revised Budget	Adopted Budget
	\$	\$	%	\$	\$	\$
Add: Land - Vested in Crown	(98,244)	-	0%	(98,244)	-	-
Add: Transfer to Reserves	(24,540,160)	(21,348,042)	15%	(3,192,118) X	(43,966,589)	(31,528,907)
Add Funding from						
Non-Operating Grants and Subsidies	6,541,720	6,741,979	-3%	(200,259) X	11,582,361	7,341,695
Non-Government Contributions	605,483	568,197	7%	37,286	3,101,100	2,792,000
Developers Contributions Plans: Cash	5,971,686	4,180,022	43%	1,791,664 ✓	5,910,000	5,910,000
Proceeds on Sale of Assets	4,790,257	3,625,582	32%	1,164,675 ✓	6,311,023	3,887,000
Reserves	17,086,545	16,313,090	5%	773,454 ✓	45,336,481	17,168,457
	34,995,691	31,428,871	11%	3,566,820	72,240,965	37,099,152
Non-Cash/Non-Current Item Adjustments						
Depreciation on Assets	21,390,615	21,471,496	0%	(80,881)	32,194,483	31,121,718
Amortisation on Assets	724,709	759,520	-5%	(34,811)	1,139,280	1,139,280
Profit/(Loss) on Assets Disposal	(3,948,836)	(1,980,734)	99%	(1,968,102) ✓	(4,183,751)	(1,759,728)
Loan Repayments	(1,250,000)	(1,250,000)	0%	-	(2,500,000)	(2,500,000)
Non-Current Leave Provisions	258,006	-	0%	258,006 X	-	-
Deferred Pensioners Adjustment	53,443	-	0%	53,443	-	-
	17,227,937	19,000,282	-9%	(1,772,345)	26,650,012	28,001,270
Opening Funds	11,967,494	11,967,494	0%	(0)	11,967,494	2,000,000
Closing Funds	61,708,325	51,389,245	20%	10,319,081	165,993	15,400
	-	-	-	-	-	-

Note 2, 3.

Notes to Statement of Financial Activity

Note 1.

Additional information on the capital works program including committed orders at end of month:

	Actuals	Commitments at Month End	Commitments & Actuals YTD	YTD Revised Budget	Full Year Revised Budget	Uncommitted at Month End
	\$	\$			\$	\$
Assets Classification						
Computer Equipment	(491,217)	(182,686)	(673,904)	(1,313,508)	(2,404,085)	1,730,181
Furniture and Equipment	(21,225)	(38,209)	(59,434)	(44,000)	(96,950)	37,516
Plant & Machinery	(812,789)	(2,392,430)	(3,205,219)	(1,003,536)	(4,193,536)	988,317
Land	(301,216)	(450)	(301,666)	(182,764)	(2,796,100)	2,494,434
Buildings	(4,734,486)	(5,816,096)	(10,550,581)	(4,965,595)	(16,825,597)	6,275,016
Infrastructure - Roads	(11,777,255)	(2,207,470)	(13,984,725)	(11,756,560)	(23,746,261)	9,761,536
Infrastructure - Drainage	(407,360)	(86,591)	(493,951)	(461,825)	(1,899,311)	1,405,360
Infrastructure - Footpaths	(821,803)	(24,173)	(845,976)	(791,471)	(2,042,561)	1,196,585
Infrastructure - Parks Equipment	(3,437,965)	(1,337,629)	(4,775,594)	(4,033,543)	(11,331,030)	6,555,436
Infrastructure - Parks Landscaping	(876,473)	(319,427)	(1,195,900)	(910,388)	(2,331,237)	1,135,337
Landfill Infrastructure	(138,965)	(158,167)	(297,132)	(204,824)	(577,814)	280,682
Marina Infrastructure	(568,369)	(52,609)	(620,978)	(580,721)	(1,822,415)	1,201,437
	(24,389,123)	(12,615,937)	(37,005,060)	(26,248,735)	(70,066,897)	33,061,837

Note 2.

Closing Funds in the Financial Activity Statement are represented by:

	Actuals	YTD Revised Budget	Full Year Revised Budget	Adopted Budget
	\$	\$	\$	\$
Current Assets				
Cash & Investments	181,719,315	182,358,516	113,947,104	126,585,931
Rates Outstanding	18,995,901	3,500,000	3,500,000	3,500,000
Rubbish Charges Outstanding	95,133	-	-	-
Sundry Debtors	5,120,826	3,200,000	3,200,000	3,200,000
GST Receivable	2,267,198	-	-	-
Prepayments	182,952	-	-	-
Accrued Debtors	(265,540)	-	-	-
Stock on Hand	6,069	-	-	-
	208,121,854	189,058,516	120,647,104	133,285,931
Current Liabilities				
Creditors	(10,518,309)	(7,500,000)	(7,898,311)	(7,898,311)
Income Received in Advance	(1,394,537)	(1,400,000)	(1,400,000)	(1,400,000)
GST Payable	(2,463,449)	-	-	-
Withholding Tax Payable	-	-	-	-
Provision for Annual Leave	(3,929,071)	(4,000,000)	(4,000,000)	(4,000,000)
Provision for Long Service Leave	(2,609,004)	(2,400,000)	(2,400,000)	(2,400,000)
	(20,914,370)	(15,300,000)	(15,698,311)	(15,698,311)
Net Current Assets	187,207,484	173,758,516	104,948,792	117,587,620
Add: Non Current Investments	1,010,884	1,100,000	1,100,000	1,100,000
	188,218,368	174,858,516	106,048,792	118,687,620
Less: Restricted/Committed Assets				
Cash Backed Reserves #	(126,510,042)	(123,469,272)	(117,564,428)	(118,672,220)
Deposits & Bonds Liability *	-	-	-	-
	61,708,325	51,389,245	(11,515,635)	15,400
Closing Funds (as per Financial Activity Statement)	61,708,325	51,389,245	(11,515,635)	15,400

See attached Reserve Fund Statement

* See attached Restricted Funds Analysis

Note 3.

Amendments to original budget since budget adoption. Surplus/(Deficit)

Ledger	Project/ Activity	Description	Council Resolution	Classification	Non Change (Non Cash Items) Adjust.	Increase in Available Cash	Decrease in Available Cash	Amended budget Running Balance
					\$	\$	\$	\$
Budget Adoption			Closing Funds Surplus(Deficit)					15,400
GL	235	Cockburn Parenting Service - minor income	OCM13/9/18	Income		500		15,900
GL	105	Increase in FAGS payment	OCM11/10/18	Income		85,977		101,877
OP	6830	New lease income from 159 Phoenix Road	OCM08/11/18	Income		9,000		110,877
								110,877
GL	836	Fuel royalty at the Marina	OCM13/12/18	Income		10,000		120,877
GL	790	Income and expenditure for the new EV Station	OCM13/12/18	Income		2,200		123,077
OP	8591	Better Bins milestone grant	OCM13/12/18	Income		281,700		404,777
		Increased contribution and expenditure for Report/Business						
OP	9008	Development	OCM13/12/18	Income		30,000		434,777
GL	505	Recoup DCA's review and admin costs	OCM14/02/19	Income		103,920		538,697
OP	9080	Adjust review costs for DCA 1-12	OCM14/02/19	Expenditure			9,080	529,617
OP	9081	Adjust review costs for DCA 13	OCM14/02/19	Expenditure			48,755	480,862
Various		Mid Year Budget Review	OCM14/02/19				314,869	165,993
Closing Funds Surplus (Deficit)					0	523,297	372,704	165,993

Statement of Comprehensive Income *by Nature and Type*

for the period ended 28 February 2019

	Actual	Amended YTD Budget	\$ Variance to YTD Budget	Forecast	Amended Budget	Adopted Budget
	\$	\$	\$	\$	\$	\$
OPERATING REVENUE						
01 Rates	101,850,258	101,630,540	219,717	103,971,406	103,751,688	103,700,000
02 Specified Area Rates	465,784	450,000	15,784	465,784	450,000	450,000
05 Fees and Charges	21,839,934	20,787,238	1,052,696	30,288,980	29,236,283	28,988,612
10 Grants and Subsidies	7,857,287	8,236,399	(379,112)	10,321,325	10,700,437	12,233,842
15 Contributions, Donations and Reimbursements	932,862	999,932	(67,070)	1,463,264	1,530,334	1,249,689
20 Interest Earnings	4,014,047	3,545,370	468,676	5,485,143	5,016,467	4,994,467
25 Other revenue and Income	-	-	-	-	-	-
Total Operating Revenue	136,960,172	135,649,479	1,310,692	151,995,902	150,685,210	151,616,611
OPERATING EXPENDITURE						
50 Employee Costs - Salaries & Direct Oncosts	(35,325,263)	(36,300,512)	975,249	(54,806,875)	(55,782,124)	(55,123,882)
51 Employee Costs - Indirect Oncosts	(535,529)	(703,459)	167,930	(1,414,367)	(1,582,297)	(1,571,447)
55 Materials and Contracts	(26,080,438)	(30,591,985)	4,511,547	(40,171,140)	(44,682,687)	(43,245,692)
65 Utilities	(3,449,974)	(3,697,380)	247,406	(5,270,029)	(5,517,435)	(5,460,583)
70 Interest Expenses	(440,123)	(354,473)	(85,651)	(794,596)	(708,945)	(708,945)
75 Insurances	(1,571,637)	(1,485,000)	(86,637)	(1,571,637)	(1,485,000)	(1,485,000)
80 Other Expenses	(5,965,228)	(6,323,760)	358,532	(9,051,251)	(9,409,782)	(9,140,388)
85 Depreciation on Non Current Assets	(21,390,615)	(21,471,496)	80,881	(32,113,602)	(32,194,483)	(31,121,718)
86 Amortisation on Non Current Assets	(724,709)	(759,520)	34,811	(724,709)	(1,139,280)	(1,139,280)
Add Back: Indirect Costs Allocated to Capital Works	1,119,240	646,745	472,496	1,446,577	974,082	986,570
Total Operating Expenditure	(94,364,276)	(101,040,839)	6,676,563	(144,471,630)	(151,527,953)	(148,010,366)
CHANGE IN NET ASSETS RESULTING FROM OPERATING ACTIVITIES	42,595,895	34,608,640	7,987,255	7,524,272	(842,743)	3,606,245
NON-OPERATING ACTIVITIES						
11, 16 Non-Operating Grants, Subsidies and Contributions	7,147,203	7,310,176	(162,973)	14,520,487	14,683,461	10,133,695
18 Developers Contributions Plans: Cash	5,971,686	4,180,022	1,791,664	7,701,664	5,910,000	5,910,000
95 Profit/(Loss) on Sale of Assets	3,948,836	1,980,734	1,968,102	3,948,836	4,183,751	1,759,728
Total Non-Operating Activities	16,969,481	13,470,932	3,498,549	26,072,743	24,777,212	17,803,423
NET RESULT	59,565,376	48,079,572	11,485,804	33,597,016	23,934,469	21,409,668

Notes to Statement of Comprehensive Income

Note 1.

Additional information on main sources of revenue in fees & charges.

	Actual	Amended YTD Budget	Amended Budget	Adopted Budget
	\$	\$	\$	\$
<u>Recreation & Community Safety</u>				
Recreational Services	378,998	379,053	568,580	593,580
Law and Public Safety	472,671	370,397	465,596	465,596
Cockburn ARC	7,519,997	7,441,118	11,097,984	11,152,830
	8,371,666	8,190,568	12,132,160	12,212,006
<u>Waste Services:</u>				
Waste Collection Services	2,603,270	2,582,268	2,654,205	2,647,216
Waste Disposal Services	4,063,371	3,699,349	5,479,288	5,479,288
	6,666,641	6,281,617	8,133,493	8,126,504
<u>Infrastructure Services:</u>				
Port Coogee Marina	922,178	620,576	965,000	955,000
	922,178	620,576	965,000	955,000
	15,960,485	15,092,762	21,230,652	21,293,509

Note 2.

Additional information on Salaries and Direct On-Costs by each Division.

	Actual	Amended YTD Budget	Amended Budget	Adopted Budget
	\$	\$	\$	\$
Executive Services	(1,626,672)	(1,623,226)	(2,471,261)	(2,451,261)
Finance & Corporate Services Division	(5,104,832)	(5,179,348)	(7,974,734)	(7,437,105)
Governance & Community Services Division	(13,146,908)	(13,589,959)	(20,953,131)	(20,997,452)
Planning & Development Division	(3,577,940)	(3,819,238)	(5,819,016)	(5,754,016)
Engineering & Works Division	(11,868,910)	(12,088,741)	(18,563,983)	(18,484,048)
	(35,325,263)	(36,300,512)	(55,782,124)	(55,123,882)

Note 3

Additional information on Materials and Contracts by each Division.

	Actual	Amended YTD Budget	Amended Budget	Adopted Budget
	\$	\$	\$	\$
Executive Services	(959,196)	(1,107,080)	(1,621,078)	(2,076,333)
Finance & Corporate Services Division	(2,610,828)	(2,844,117)	(3,974,565)	(3,952,650)
Governance & Community Services Division	(7,676,507)	(9,396,715)	(13,445,305)	(12,658,920)
Planning & Development Division	(833,547)	(1,007,422)	(1,301,408)	(1,013,391)
Engineering & Works Division	(14,000,360)	(16,236,651)	(24,340,331)	(23,544,399)
Not Applicable	0	0	0	0
	(26,080,438)	(30,591,985)	(44,682,687)	(43,245,692)

City of Cockburn - Reserve Funds

Financial Statement for Period Ending 28 February 2019

<i>Account Details</i>	<i>Opening Balance</i>		<i>Interest Received</i>		<i>t/t's from Municipal</i>		<i>t/t's to Municipal</i>		<i>Closing Balance</i>	
	<i>Budget</i>	<i>Actual</i>	<i>Budget</i>	<i>Actual</i>	<i>Budget</i>	<i>Actual</i>	<i>Budget</i>	<i>Actual</i>	<i>Budget</i>	<i>Actual</i>
<i>Council Funded</i>										
Bibra Lake Management Plan	601,791	601,791	11,324	9,099	-	-	(100,000)	(7,915)	513,115	602,975
Carry Forward Projects	3,618,392	3,618,392	-	-	9,557,112	9,557,112	(10,963,451)	(5,907,537)	2,212,053	7,267,967
Cockburn ARC Building Maintenance	2,010,608	2,010,608	53,573	30,426	-	-	-	-	2,064,181	2,041,034
Cockburn Coast SAR	897	897	-	59	-	18,905	(9,872)	(663)	(8,975)	19,199
Community Infrastructure	14,879,832	14,879,832	127,034	224,990	7,410,382	410,382	(5,665,836)	(1,352,980)	16,751,412	14,162,224
Community Surveillance	903,958	903,958	23,842	12,640	200,000	-	(414,238)	(163,182)	713,562	753,416
Environmental Offset	304,512	304,512	8,033	4,608	-	-	-	-	312,545	309,120
Greenhouse Action Fund	420,432	420,432	10,790	6,362	200,000	-	(81,000)	-	550,222	426,795
HWRP Post Closure Management & Contaminated	2,324,206	2,324,206	50,489	35,165	-	-	(135,000)	(997)	2,239,695	2,358,373
Information Technology	206,565	206,565	8,388	2,812	200,000	-	(121,250)	(90,742)	293,703	118,635
Insurance	1,246,137	1,262,819	8,801	24,059	550,000	550,000	(35,000)	(28,713)	1,769,938	1,808,165
Land Development and Investment Fund	3,756,615	3,756,615	256,447	74,539	5,774,453	4,989,971	(2,436,062)	(178,845)	7,351,453	8,642,280
Major Building Refurbishment	13,093,407	13,093,407	147,574	198,124	1,500,000	-	(175,000)	-	14,565,981	13,291,531
Municipal Elections	79,037	79,037	2,977	1,196	-	-	-	-	82,014	80,233
Naval Base Shacks	1,078,013	1,078,013	24,153	16,313	30,635	-	-	-	1,132,801	1,094,327
Plant & Vehicle Replacement	9,373,858	9,354,672	115,183	139,744	3,394,090	-	(3,433,880)	(593,259)	9,449,251	8,901,157
Port Coogee Marina Assets Replacement	285,423	285,423	-	4,319	1,000,000	-	-	-	1,285,423	289,742
Port Coogee Special Maintenance - SAR	1,629,721	1,418,130	28,417	23,649	380,000	376,879	(206,833)	(185,814)	1,831,305	1,632,843
Port Coogee Waterways - SAR	92,022	92,022	8,852	2,094	70,000	70,000	(50,000)	-	120,874	164,116
Port Coogee Waterways - WEMP	1,763,151	1,763,151	43,009	25,481	-	-	(593,533)	(286,950)	1,212,627	1,501,681
Roads & Drainage Infrastructure	15,446,223	15,446,223	81,300	218,691	2,000,000	-	(8,890,861)	(4,114,856)	8,636,662	11,550,058
Staff Payments & Entitlements	1,709,732	1,709,732	47,023	24,202	125,000	-	(190,000)	(173,263)	1,691,755	1,560,671
Waste & Recycling	14,136,202	14,136,202	363,713	213,075	1,020,065	-	(652,814)	(131,240)	14,867,166	14,218,036
Waste Collection	2,092,296	2,092,296	66,093	31,107	1,159,736	-	(91,207)	(8,201)	3,226,918	2,115,202
Welfare Redundancies	42,634	42,634	797	645	-	-	-	-	43,431	43,279
POS Cash in Lieu (Restricted Funds)	-	-	-	-	-	-	-	-	-	-
	91,095,664	90,881,570	1,487,812	1,323,398	34,571,473	15,973,249	(34,245,837)	(13,225,156)	92,909,112	94,953,061
<i>Grant Funded</i>										
Aged and Disabled Asset Replacement	191,003	191,003	8,628	3,040	81,645	81,645	-	-	281,276	275,688
CIHCF Building Maintenance	6,150,813	6,150,813	5,641	98,012	1,456,941	870,508	-	-	7,613,395	7,119,333
Family Day Care Accumulation Fund	30,674	30,675	-	419	-	-	-	-	30,674	31,094
Naval Base Shack Removal	528,000	528,000	10,822	7,990	56,000	-	-	-	594,822	535,990
Restricted Grants & Contributions	4,398,719	4,532,938	-	-	-	-	(3,975,857)	(3,731,747)	422,862	801,191
Underground Power - Service Charge	-	0	-	-	-	-	-	-	-	0
Welfare Projects Employee Entitlements	506,148	708,130	9,223	10,382	-	-	(11,510)	(11,510)	503,861	707,003
	11,805,357	12,141,558	34,314	119,844	1,594,586	952,153	(3,987,367)	(3,743,257)	9,446,890	9,470,298
<i>Development Cont. Plans</i>										
Cockburn Coast DCP14	(112,255)	(112,255)	-	1,580	-	1,793,383	(56,061)	-	(168,316)	1,682,709
Community Infrastructure DCP 13	5,714,253	5,714,253	231,370	103,186	4,500,000	3,048,337	(6,903,706)	-	3,541,917	8,865,776
Hammond Park DCP	2,742,378	2,742,378	24,032	42,579	500,000	266,815	(9,005)	-	3,257,405	3,051,772
Munster Development	1,260,069	1,260,069	21,830	19,065	80,000	-	(13,921)	(1,729)	1,347,978	1,277,405

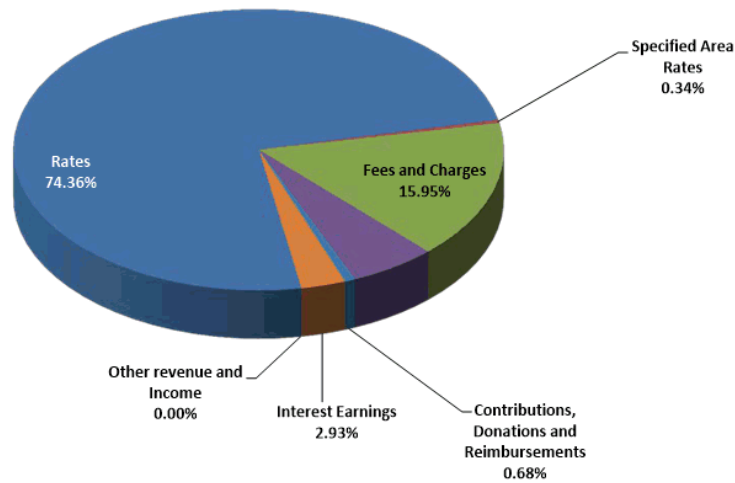
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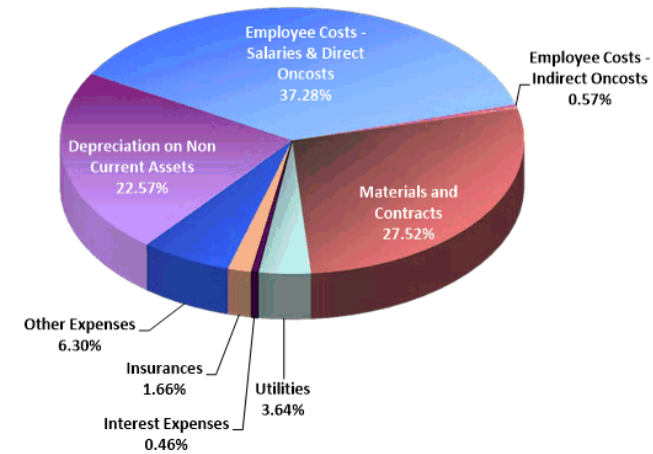
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Muriel Court Development Contribution	257,613	257,613	179	3,883	350,000	-	(76,613)	(8,647)	531,179	252,849
Packham North - DCP 12	15,021	15,021	1,146	662	100,000	106,748	(12,024)	(39,297)	104,143	83,135
Solomon Road DCP	639,757	639,757	16,500	9,678	-	-	(7,991)	(1,729)	648,266	647,705
Success Nth Development Cont. Plans	3,282,848	3,282,848	40,540	51,125	30,000	202,432	(7,916)	(865)	3,345,472	3,535,540
Thomas St Development Cont. Plans	13,262	13,262	294	201	-	-	-	-	13,556	13,462
Wattleup DCP 10	17,141	17,141	3,394	852	250,000	126,226	(9,005)	(65,000)	261,530	79,219
Yangebup East Development Cont. Plans	1,422,610	1,422,610	18,907	21,788	-	361,166	(3,656)	-	1,437,861	1,805,564
Yangebup West Development Cont. Plans	780,602	780,602	10,212	11,811	100,000	-	(3,376)	(865)	887,438	791,548
	16,033,299	16,033,299	368,404	266,409	5,910,000	5,905,107	(7,103,277)	(118,131)	15,208,426	22,086,684
<i>Total Reserves</i>	118,934,320	119,056,427	1,890,530	1,709,651	42,076,059	22,830,509	(45,336,481)	(17,086,545)	117,564,428	126,510,042

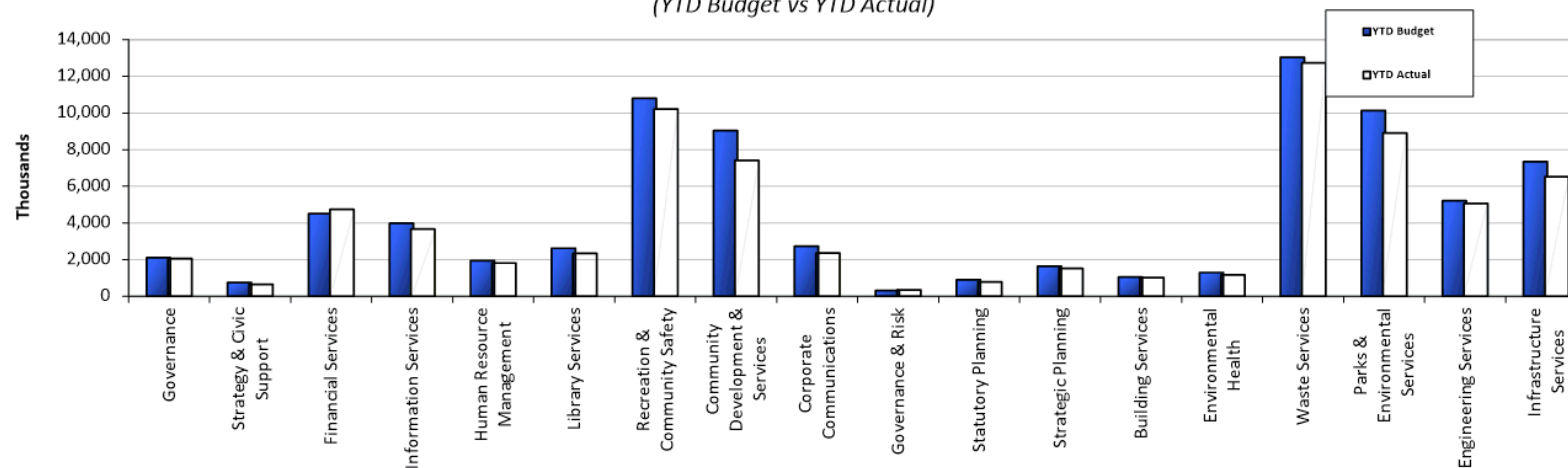
Operating Income by Nature and Type
(YTD Actual)

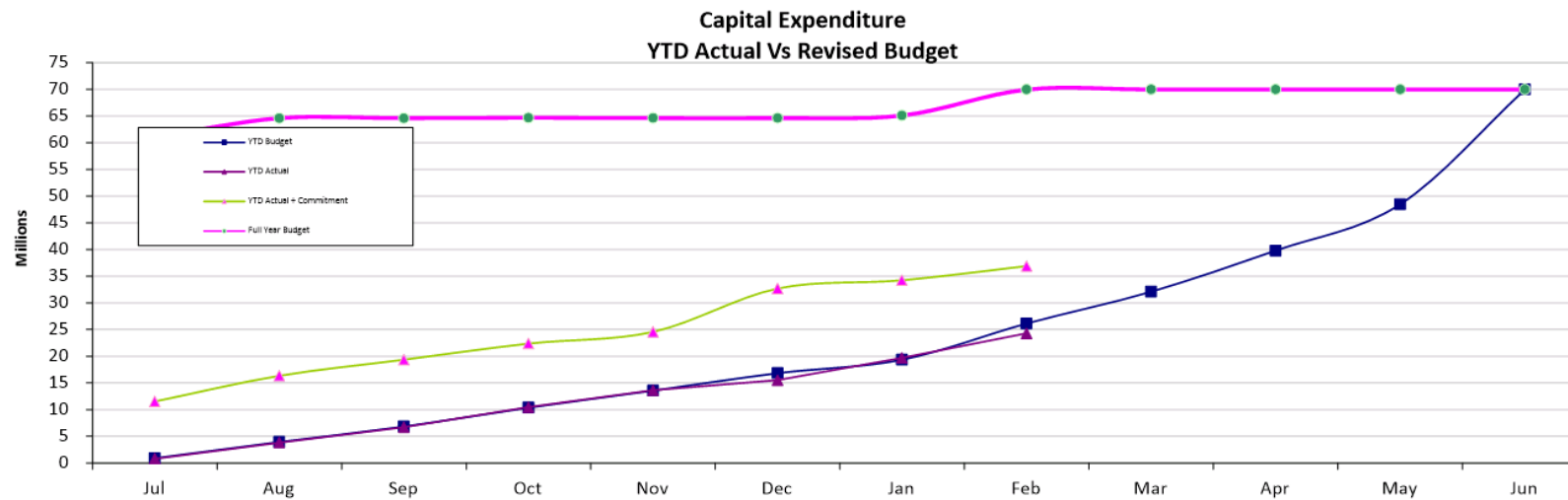
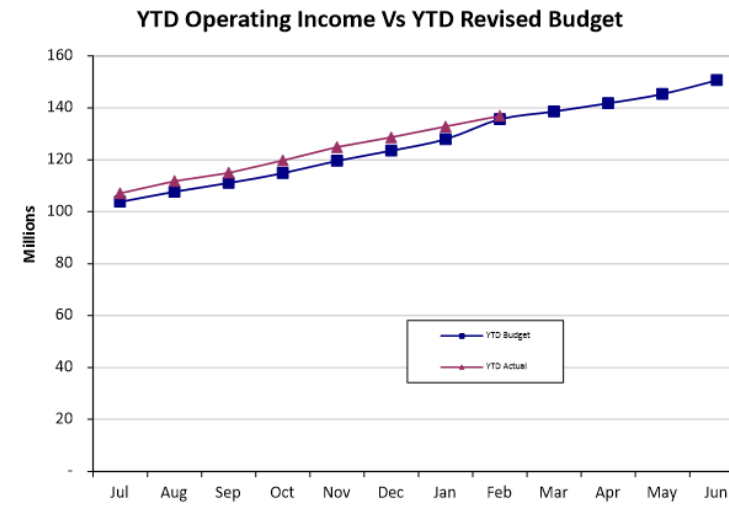
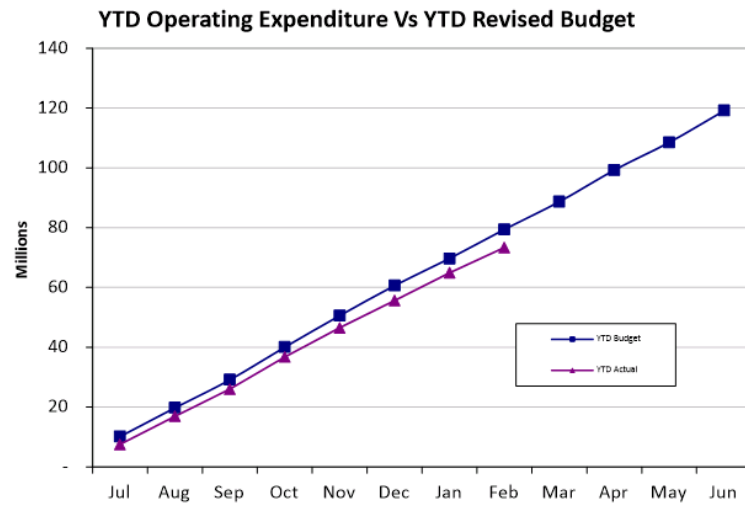


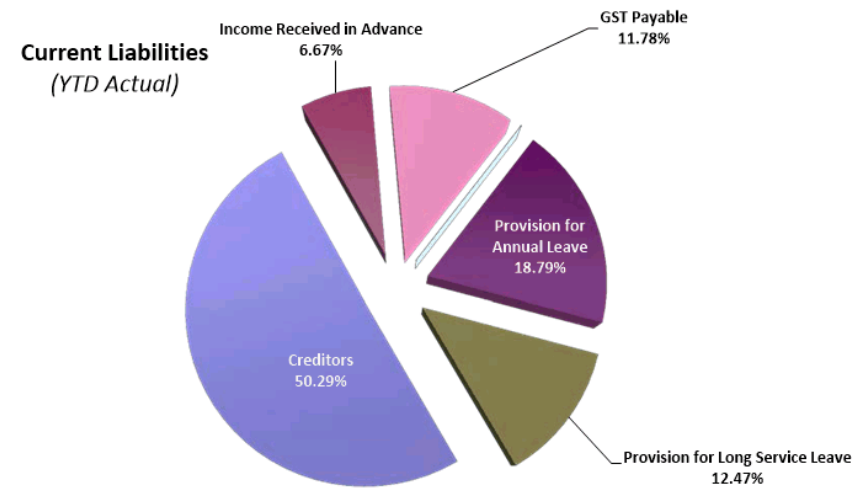
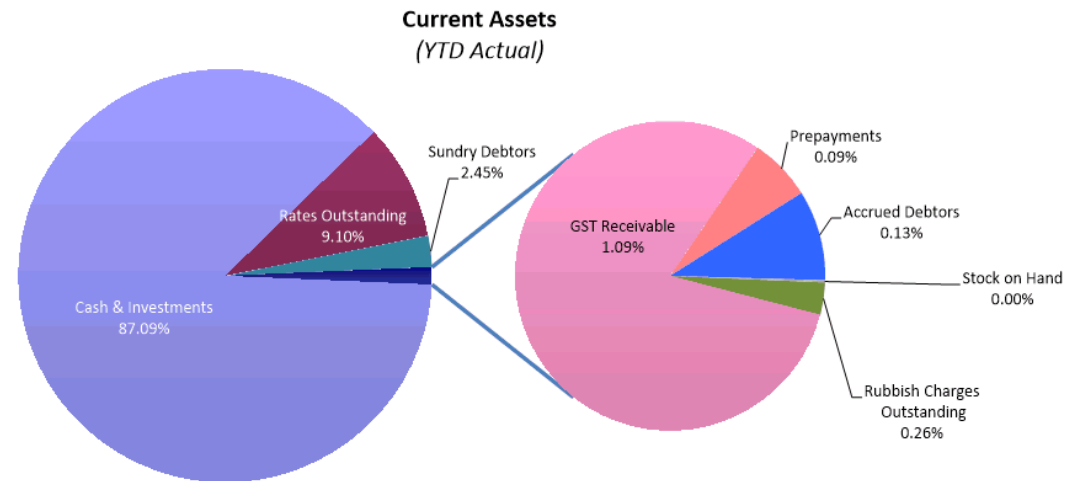
Operating Expenditure by Nature and Type
(YTD Actual)

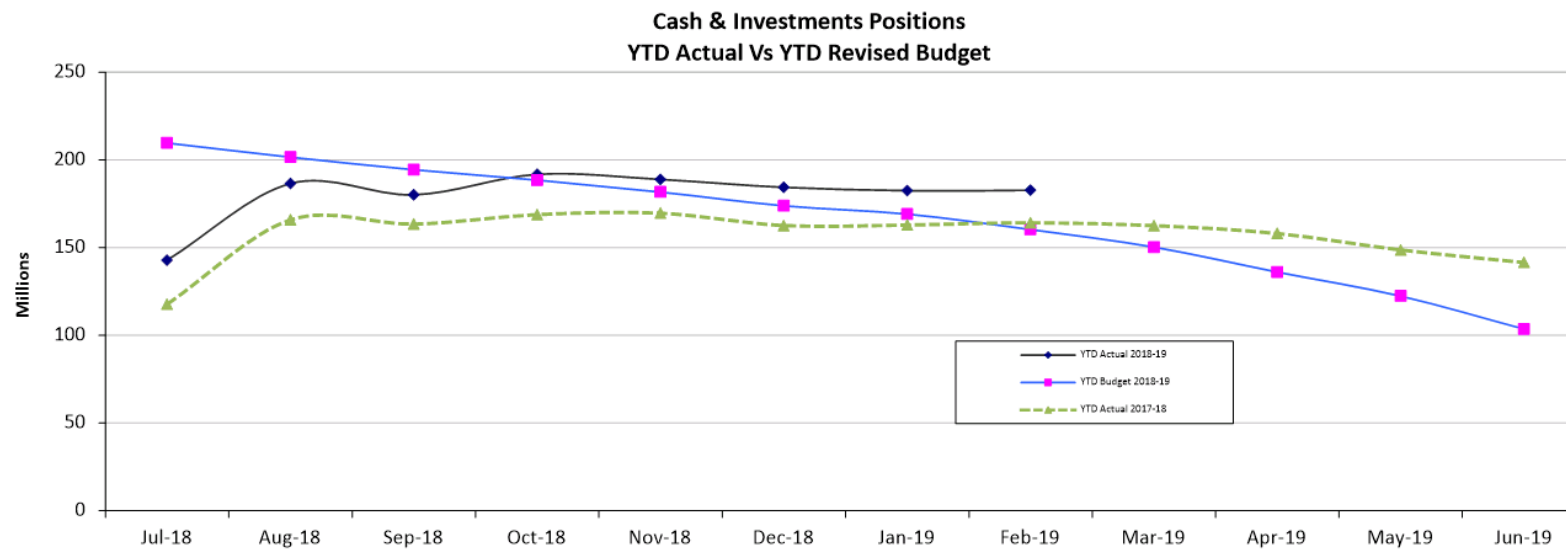
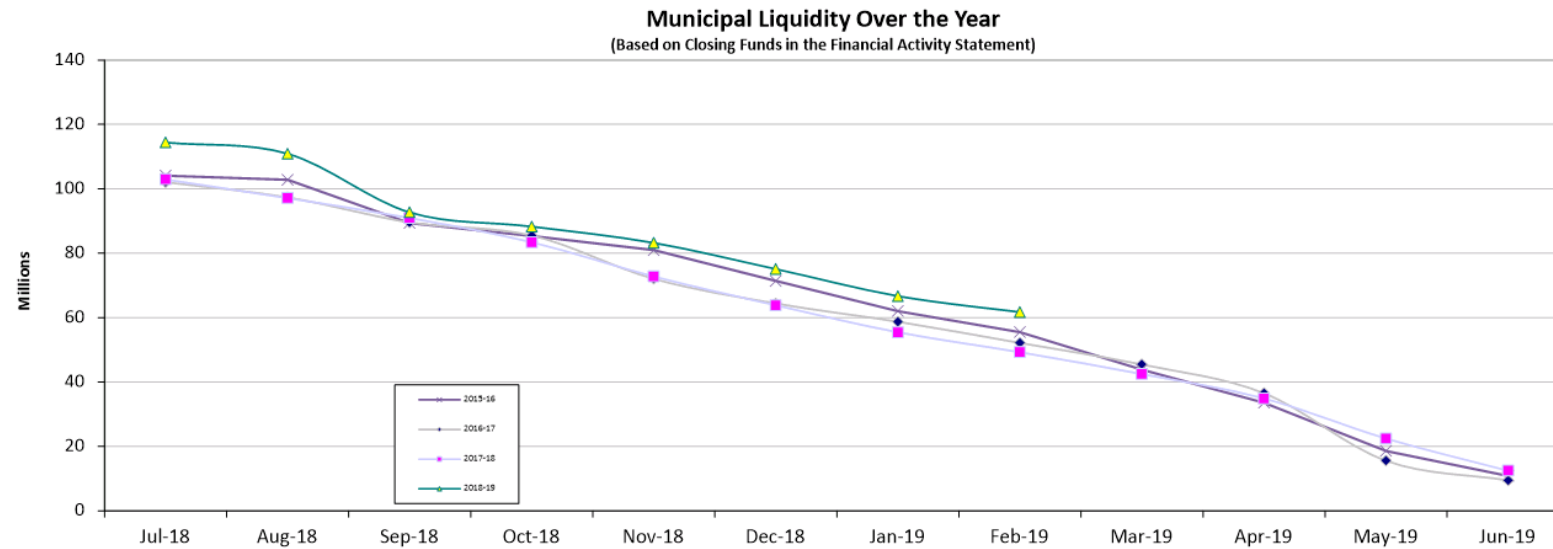


Operating Expenditure by Business Unit
(YTD Budget vs YTD Actual)









DETAILED BUDGET AMENDMENTS REPORT

for the period ended 28 February 2019

PROJECT/ACTIVITY LIST		DESCRIPTION	ADD/LESS	EXPENDITURE	TF TO RESERVE	FUNDING SOURCES			
						RESERVE	EXTERNAL	MUNICIPAL	NON-CASH
CW1469	CCTV Ngarkai Beach	Missed carry forward project from 18/19	ADD	9,835		(9,835)			
CW1633	Land development preparation of the old Cockburn Bowling Club Site & surrounds	Demolishing the old Cockburn Bowling Club	ADD	75,000		(75,000)			
CW5984	Atwell Goals and Netting	Installation of new goals and nets	ADD	15,000				(15,000)	
OP7994	DFES Mitigation Activity Fund	Received new grant	ADD	171,000			(171,000)		
OP6830	159 Phoenix Road, Spearwood	New lease agreement	LESS				(5,800)	5,800	
				270,835	0	(84,835)	(176,800)	(9,200)	0

16. ENGINEERING & WORKS DIVISION ISSUES

16.1 CITY OF COCKBURN DISTRICT TRAFFIC STUDY AND DRAFT REGIONAL & MAJOR ROADWORKS 2018 – 2031

Author(s) J Kiurski

Attachments

1. City of Cockburn 2018 District Traffic Study [↓](#)
2. Consultation Analysis District Traffic Study [↓](#)
3. Regional Major Roadworks-2018-2031 [↓](#)

RECOMMENDATION

That Council:

- (1) endorses the City of Cockburn 2018 District Traffic Study; and
- (2) endorses the revised Regional and Major Roadworks 2018-2031 plan.

Background

At the Ordinary Meeting of Council held on 13 December 2018 (2018/Minute No 0193), a report was considered by Council on District Traffic Study and the following recommendations were adopted:

That Council:

- (1) *receives the City of Cockburn District Traffic Study and Draft Regional & Major Roadworks 2018 – 2031 V11;*
- (2) *releases the City of Cockburn District Traffic Study and Draft Regional & Major Roadworks 2018 – 2031 V11 (Attachments 1 & 3) for the purposes of public comment until the end of February 2019; and*
- (3) *requests that the City of Cockburn District Traffic Study and Regional & Major Roadworks 2018 – 2031 V11, together with the results of community feedback received during the public comment period are reported to Council in April 2019.*

In March 2013, the City completed a review of the City of Cockburn District Traffic Study (DTS; which was developed in 2006 to provide a framework for the future road network planning of the City of Cockburn. The study also assists in assessing road upgrade priorities and timing. A core focus of the study has been the development of a robust tool to forecast road network traffic demand into the future.

The City also made a commitment to review the DTS every five years as a maximum. Engineering consultants ARUP WA were commissioned

to carry out the review which was completed in September 2018. The DTS report has been consulted with wider community and is now presented to Council for adoption (a copy of the DTS is included as Attachment 1). The Regional and Major Roadworks 2018-2031 plan has also been updated and is included as Attachment 2. This report provides an update on actions taken to implement the above recommendations from the December 2018 OCM.

Submission

A number of written submissions were made from various parties during the extensive consultation period and are either included or referred to in Attachment 3.

Report

The objectives of this study were to:

- Update the District Traffic Study completed in 2013 to facilitate the Council's current major road planning identified in the Plan for the District.
- Prepare traffic forecasts for 2021 and 2031 including the development plans for all areas.
- Adjust traffic generation and attractions where considered necessary.
- Give specific attention to development west of Stock Road, the Cockburn Central area, Fiona Stanley Precinct, Jandakot Airport Development, Latitude 32, Australian Marine Complex and Cockburn Coast Development .
- Include specific road network upgrades (including the current major projects being undertaken by Main Roads WA).

The report summarises the process of developing the main outputs from the City of Cockburn strategic transport model. The strategic model is referred to as the Cockburn district traffic model (CDTM). It covers the entire City of Cockburn area utilising more than 100 traffic model zones.

There is considerable development planned within the City of Cockburn boundaries that will generate significant traffic demand. In order to determine the point at which more capacity is required to allow more traffic to pass through a road or intersection, the volume to capacity ratio is used.

Without any changes to the road network by 2021, the model shows widespread congestion with many north-south and east-west links operating at a capacity of 80% or higher. The levels of congestion are expected to be similar between the morning and afternoon peak periods.

Key locations expected to operate at over 80% capacity include:

- North Lake Road (various stretches)
- Phoenix Road
- Rockingham Road
- Cockburn Road (just south of Rockingham Road)
- Stock Road
- Berrigan Drive

Two future year scenarios – 2021 and 2031 have been analysed. The year 2031 is the standard horizon adopted for road network planning in Western Australia and consistent with the MRWA strategic model, ROM24.

For each future year scenarios, two road network scenarios have been modelled:

- Do nothing – the road network is as per year 2016.
- Do minimum – current network plus Main Roads committed road improvements.
- Do Something 1 - City of Cockburn Preferred Network as per the City of Cockburn Regional & Major Roadworks 2016 – 2030 V9 (Attachment 2) and Main Roads committed road improvements projects.
- DoSomething 2 – additional scenarios requested to be investigated by City of Cockburn.

Implications of no further upgrades indicate that the Kwinana Freeway between 2021 and 2031 will remain a congestion issue for its entirety throughout the City of Cockburn. Approaches to the freeway at Farrington Road, South Lake Road, Beeliar Drive and Gibbs Road are also expected to operate close to capacity.

Other locations which were identified to have congestion issues in 2021, where no subsequent road network upgrades are planned, clearly continue to operate at or close to capacity.

City of Cockburn has requested additional option testing to determine the optimal Regional and Major Roadworks Plan to 2031. Initially, it was determined that the following options needed to be tested:

- Network with/without the Forest Road Link.

- Network with and without Hammond Road extension (Beeliar Drive to Berrigan Drive).
- Network with and without Rockingham Road downgrading from four to two lanes
- Network with and without the Farrington Road duplication.
- Network with and without Russell Road duplication.
- Network with and without the Bartram Road Bridge over the Freeway.

The outputs from this DTS inform the review of the City of Cockburn Regional & Major Roadworks 2016 – 2030 V9 program by outlining short, medium and long-term upgrades and actions. The Draft Regional & Major Roadworks 2018 – 2031 has been updated and is included as Attachment 2.

The DTS analysis has shown significant increases in traffic demand and travel times without any road network upgrades. Even with the proposed upgrades there are sections which are forecast to operate over the available road network capacity.

The City was aware of the community's desire to resolve congestion of the road network and the need for network improvement within the Cockburn area.

Feedback on the DTS and Draft Major Roadworks 2018 – 2031 V11

The City posted its draft DTS and Major Roadworks 2018 – 2031 V11 on Comment on Cockburn and called for public feedback by Friday 28 February. This was publicised by an email newsletter to 3,700 people asking that a feedback could be provided by:

- Completing an online survey
- Sending an email to comment@cockburn.wa.gov.au
- Telephoning Engineering Services on 9411 3444
- An email or phone call was made to all the City's Community Groups representatives.

In January 2019, a reminder email was sent to all the Community Group representatives in the City seeking any written comments by the end of February 2019.

Discussion with key stakeholders and the City's Community Groups representatives was made on 15 March 2019 and 22 March 2019 to clarify some of the questions submitted and to discuss the model outputs with the transport engineers from ARUP.

The feedback summary to the DTS results is presented in the table below.

Highlights

TOTAL VISITS	MAX VISITORS PER DAY	NEW REGISTRATIONS
339	41	5
ENGAGED VISITORS	INFORMED VISITORS	AWARE VISITORS
13	110	287

More than 300 residents visited the site and two residents groups and 12 Individuals participated in consultation.

Key points such as Murdoch Drive connection, impact of the Murdoch Activity Centre development and Farrington Road raised by the Murdoch Chase Residents Association have been discussed and an explanation provided by Arup's and the City's engineers.

The Murdoch Drive Connection and Murdoch Activity Centre development traffic volume have been extracted from ROM24 model owned by Main Roads WA. A map showing the modelled area and zoning system used in DTS is provided in Figure 1&2 (Attachment 1, pages 3&4).

It has been confirmed that the zoning structure from the current ROM24 was refined with some zones split to better reflect land use, based on current land use data and future land use changes as reflected in the approved structure plans, Main Roads WA Infrastructure Delivery Plan and City of Cockburn Regional and Major Roadworks Plan and the City Town Planning Scheme.

City of Cockburn has requested additional option testing to determine the optimal Major Roadworks Plan to 2031. Network with and without the Farrington Road duplication was tested.

The modelling results of scenario with Farrington Road Duplication indicated that the road performance is still over capacity after duplication, because duplication attracts almost double the volume to Farrington Road. It is recommended not to duplicate the remainder of Farrington Road.

Key points raised by the Banjup Residents Group (BRG) and also presented by the Jandakot and Treeby Residents Groups was related to traffic growth within those areas.

BRG used available data from the DTS and analysed it to find the implication of the DTS forecast traffic volume to Jandakot Road, Banjup Road and Liddelow Road. It has been confirmed by Arup's engineer that there will be increased traffic congestion pressure on Jandakot, Liddelow and Beenyup Roads, and this is consistent with the DTS outcomes.

Resolution of the effect on rural amenity and change of zoning within Jandakot, Banjup and Treeby was discussed and clarified that those issues are not a part of the DTS. It was confirmed that a core focus of the DTS has been the development of a robust tool to forecast road network traffic demand into the future.

The City engaged Cardno consultants to complete a local traffic study for the Banjup area. The study will commence in April 2019 using DTS traffic data and will involve seeking the Banjup community's views and inputs.

Key points raised by the individuals who participated in the consultation was congestion within Cockburn Central area and a number of recommendations on how to resolve the congestion and provide a better traffic flow through the Cockburn area.

There will be a reduction in congestion on the City's road network as a result of the State road projects currently underway. Armadale Road upgrade and a new bridge over the Kwinana Freeway will remove some traffic from Beeliar Drive and the Cockburn Central area.

The Kwinana Northbound Project, which includes freeway widening from Russel Road to Farrington Road, will also provide more capacity on the freeway and an additional relief for the City's.

The residents recognised the City's Regional & Major Roadworks plan and suggestion to improve the East-West connectivity by proposing the Bartram Rd Bridge over the Kwinana Freeway.

Modelling results of the scenario without Bartram Road Bridge crossing of the Freeway shows a high congestion around Wentworth Parade, Hammond Road, Beeliar Drive, Tapper Road and Kwinana Freeway. This project is recommended through the Main Roads WA program.

In summary, the Main Roads WA does not have the Bartram Road Bridge project on their 2031 plan, but do have it on their 2041 traffic modelling plan.

Also there was a request from the residents for a bridge at Gaebler Rd. What effect on the network if there is a bridge over the freeway at Gaebler Rd rather than at Bartram Road will be tested for the future road planning, as will two other requests from the Banjup Residents Group. Arup have been requested to test these options also.

The DTS analysis has shown significant increases in traffic demand and travel times without any road network upgrades. Even with the proposed upgrades there are sections which are forecast to operate over the available road network capacity.

This indicates that additional road network demand management measures will be required beyond road network upgrades. These could include but not be limited to the following:

- Public transport improvements to rail and bus routes and infrastructure.
- Further encouraging pedestrian and cycle transport modes.
- Examining the impact of peak spreading on road infrastructure requirements.
- Examining the timing and sequencing of development.
- Increasing implementation of Intelligent Transport Systems.

Strategic Plans/Policy Implications

City Growth

Ensure planning facilitates a desirable living environment and meets growth targets.

Moving Around

Reduce traffic congestion, particularly around Cockburn Central and other activity centres.

Improve connectivity of transport infrastructure.

Community, Lifestyle & Security

Provide for community facilities and infrastructure in a planned and sustainable manner.

Economic, Social & Environmental Responsibility

Create opportunities for community, business and industry to establish and thrive.

Leading & Listening

Deliver sustainable governance through transparent and robust policy and processes.

Budget/Financial Implications

The updated Regional and Major Roadworks 2018-203 planned projects have been incorporated into the City's Long Term Financial Plan, recognising that all the major road projects are predicated on the City receiving external funding from both State and Federal governments.

A number of projects are also dependent on land to create the road reserve being provided by land development projects which will also impact the timing of the delivery.

Implications

N/A

Community Consultation

Refer to the report on the results of the consultation period which is included as Attachment 3. Refer above for the results of further discussion with the representatives of the community groups which took place after the close of the consultation period.

Risk Management Implications

Should Council not adopt the recommendations in this report the DTS and major road planning would not be updated and hence be redundant which would impact decision making on projects and budget delivery into the future.

Advice to Proponent(s)/Submitters

The Proponent(s) and those who lodged a submission on the proposal have been advised that this matter is to be considered at the 11 April 2019 Ordinary Council Meeting.

Implications of Section 3.18(3) *Local Government Act, 1995*

Nil

City of Cockburn
2018 District Traffic Study

Final | 29 November 2018

This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 259590-00

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ARUP

Document Verification

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Document title				File reference	
Document ref					
Revision	Date	Filename	Draft City of Cockburn District Traffic Study Report.docx		
Draft 1	30 Jan 2018	Description	First draft		
			Prepared by	Checked by	Approved by
		Name	Stephen Loughnan	Joanna Karasiewicz	Darryl Patterson
		Signature			
Draft 2	8 Aug 2018	Filename	Draft City of Cockburn District Traffic Study Report_02.docx		
		Description			
			Prepared by	Checked by	Approved by
		Name	Stephen Loughnan & Joanna Karasiewicz	Joanna Karasiewicz	Darryl Patterson
	Signature				
Draft 3	13 Nov 2018	Filename	Draft City of Cockburn District Traffic Study Report_02a.docx		
		Description			
			Prepared by	Checked by	Approved by
		Name	Stephen Loughnan & Joanna Karasiewicz	Joanna Karasiewicz	
	Signature				
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			Prepared by	Checked by	Approved by
		Name	Stephen Loughnan & Joanna Karasiewicz	Joanna Karasiewicz	Darryl Patterson
	Signature				
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Document Verification

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Job title		2018 District Traffic Study		Job number 259590-00	
Document title		Click here to enter text.		File reference	
Document ref					
Revision	Date	Filename			
Final	29 Nov 2018	Description	City of Cockburn District Traffic Study Report Final		
			Prepared by	Checked by	Approved by
		Name	Stephen Loughnan & Joanna Karasiewicz	Joanna Karasiewicz	Darryl Patterson
		Signature			
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City of Cockburn

2018 District Traffic Study

Appendices

Appendix A

Assigned volumes

Appendix B

Stock Road and Cockburn Road Widening Scenarios

Appendix C

Additional Scenarios

Appendix D

Demographic data

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1 Introduction

Arup was engaged by the City of Cockburn to undertake an update of the 2013 District Traffic Study (DTS). The study involves updating the forecast traffic volumes throughout the City to assist decision making for future road network improvements and management of the local government controlled road network. This report summarises the process of updating and enhancing the Cockburn District Traffic Model (CDTM) and provides the main outputs from the model.

Our analysis covers three forecast year scenarios; base year (2016), medium term (2021) and long term (2031). The outputs from this study will inform the preparation of a road network work program by outlining short, medium and long-term upgrades and actions.

1.1 Background and scope

In 2006 the City undertook a District Traffic Study aimed at developing traffic forecasts for the years 2016 and 2031. This District Traffic Study was then updated in 2013 to consider future transport conditions in years 2020 and 2031 based on anticipated growth in land use, employment and population but additionally through traffic trips as forecast by the Main Roads Regional Operations Model (ROM). The CDTM took into account forecasted trips from significant development including Cockburn Central area, Murdoch Activity Centre, Jandakot Airport Development, Latitude 32, Australian Marine Complex and Cockburn Coast development. The CDTM was used to test future possible road network upgrades such as the North Lake Road Bridge across Kwinana Freeway, Bartram Road overpass of Kwinana Freeway and Roe Highway Stage 8 extension.

The 2013 CDTM uses the CUBE Voyager which is the same platform as the current Main Roads Regional Operations Model (ROM). Since this time, ROM has been upgraded to include peak period modelling and produces these outputs. This updated version of ROM is known as ROM24.

The 2018 CDTM uses the Aimsun software which gives more flexibility in order to transition from strategic model to microsimulation model if more detailed analysis might be required in the future.

The specific scope of this current commission is as follows:

- Update CDTM completed in 2013 to facilitate the Council's current major road planning identified in the City of Cockburn Regional and Major Roadworks Plan using Aimsun software.
- Prepare traffic forecasts for 2021 and 2031 including the development plans for all areas
- Adjust traffic generation and attractions due to review of demographic data

- Include scenarios with / without road network upgrades such as:
 - Stock Road Widening
 - Cockburn Road Widening

1.2 Glossary

The following terms and abbreviations have been used throughout this document:

Cockburn District Traffic Model	CDTM
Traffic Modelling Software	Aimsun
District Traffic Study	DTS
Integrated Transport Strategy	ITS
Main Roads Western Australia	Main Roads
Metropolitan Region Scheme	MRS
Passenger Car Units	PCU
Regional Operations Model (Main Roads Traffic Model)	ROM24 (current) ROM (previous version)
Town Planning Scheme	TPS
Volume Capacity Ratio	VCR
Assigned Volumes	AV
Roads and Martie Services	RMS

2 Modelling methodology and enhancements

Cockburn District Traffic Model has been built as a strategic model in order to capture the vast area of City of Cockburn. In order to build a feasible strategic model a subarea network and matrices have been extracted from the ROM24 model owned by Main Roads. Both network and matrices were utilised and updated in the Aimsun software. Aimsun is a modelling tool capable of modelling a single intersection to the whole transport network of large cities. The software allows to build both static and dynamic simulations of the environment. It also has a capability to transfer from strategic model into a microsimulation model for more detailed analysis if required in the future. The Cockburn District Traffic model has been modelled using the static assignment method and is considered a strategic model due to the size of the modelled area.

2.1 Modelled area and zoning system

A map showing the modelled area and zoning system used in CDTM is provided in Figure 1. This zoning system is adapted from the zoning system used for the Main Roads Western Australia's ROM24 as shown in Figure 2. The zoning structure from the current ROM24 was refined with some zones split to better reflect land use based on current land use data and future land use changes as reflected in the approved structure plans, Main Roads WA Infrastructure Delivery Plan and City of Cockburn Regional and Major Roadworks Plan and the City Town Planning Scheme. Final zone system used for City of Cockburn District Study has been shown on Figure 3.

City of Cockburn

2018 District Traffic Study

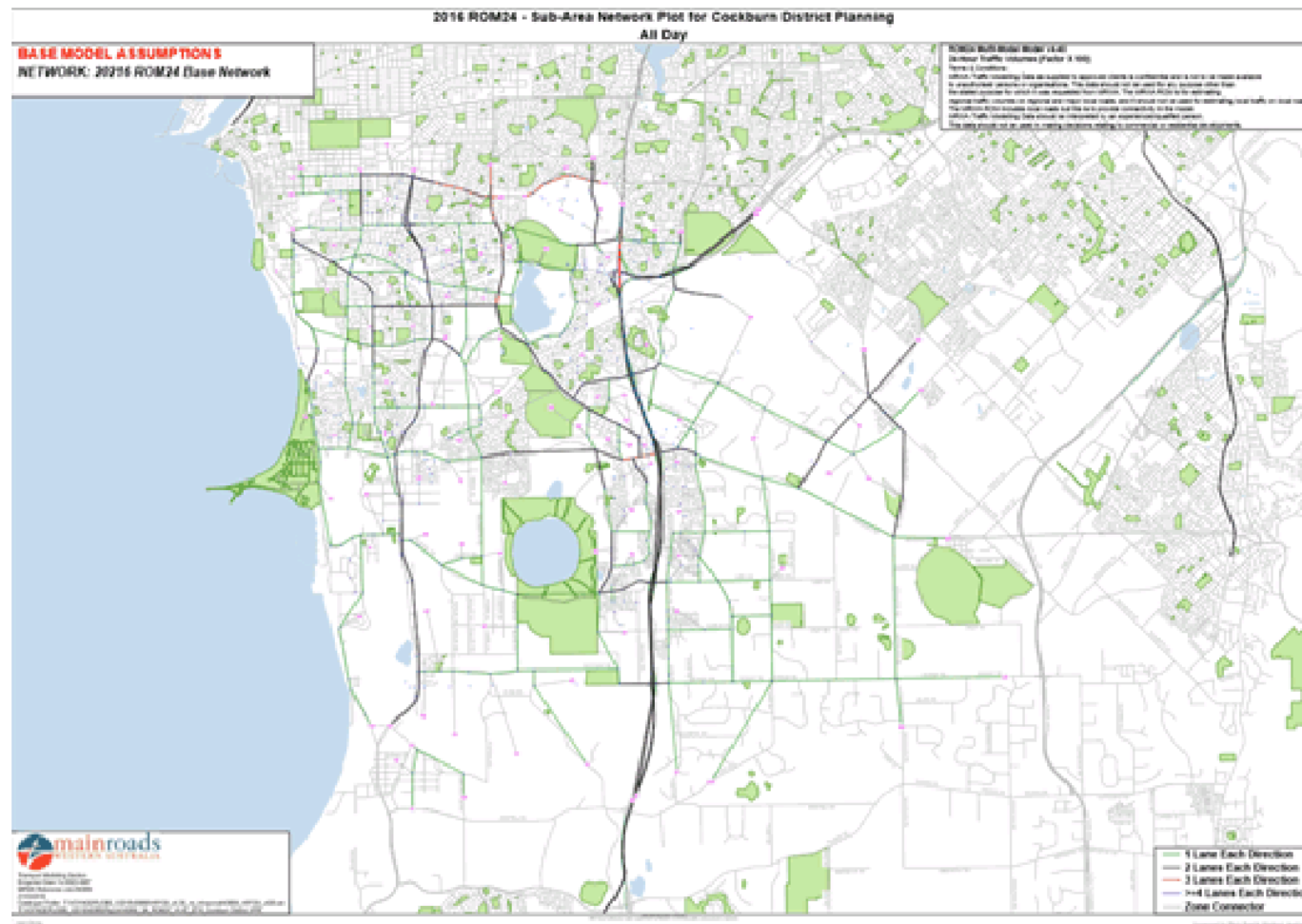


Figure 1 - Cockburn ROM24 Sub-Area Zone System

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2018 District Traffic Study

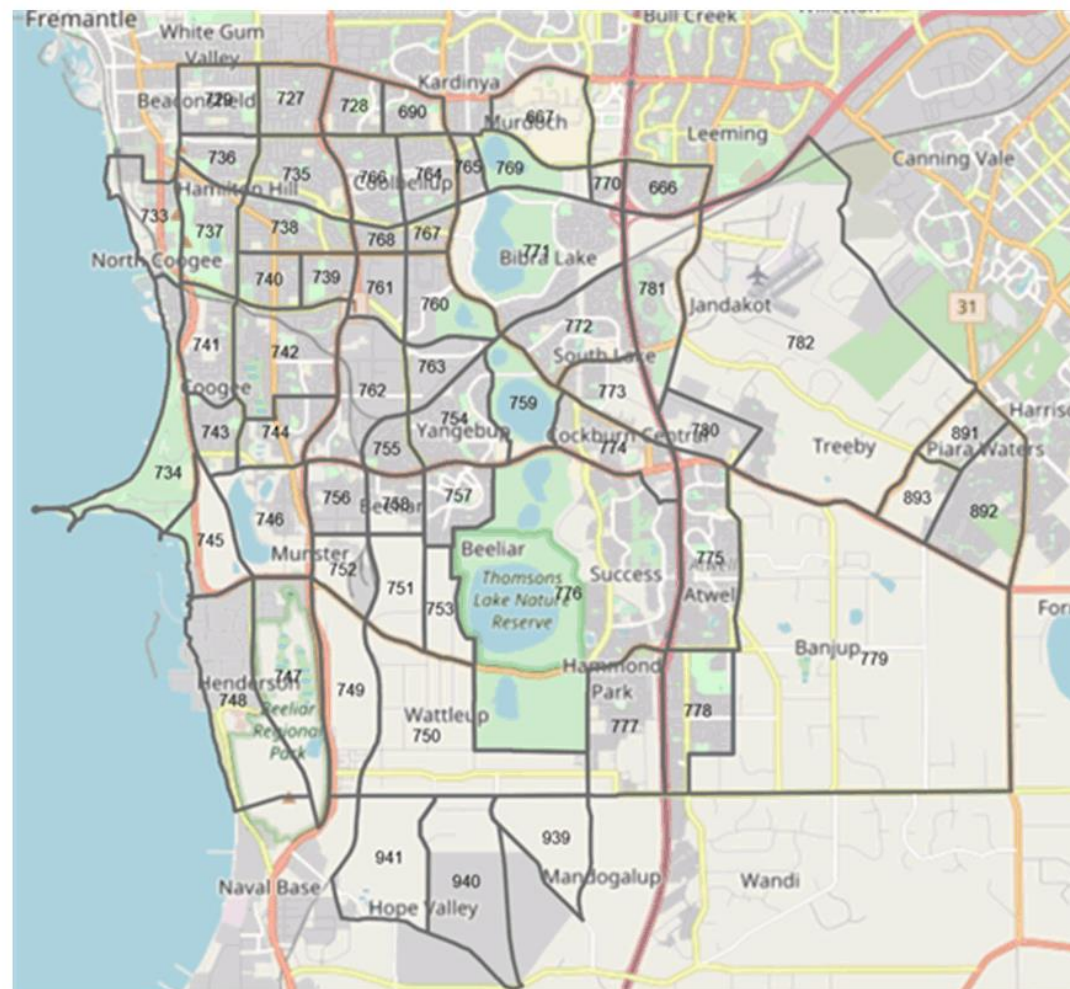


Figure 2 – ROM24 zones for demographic data

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2018 District Traffic Study

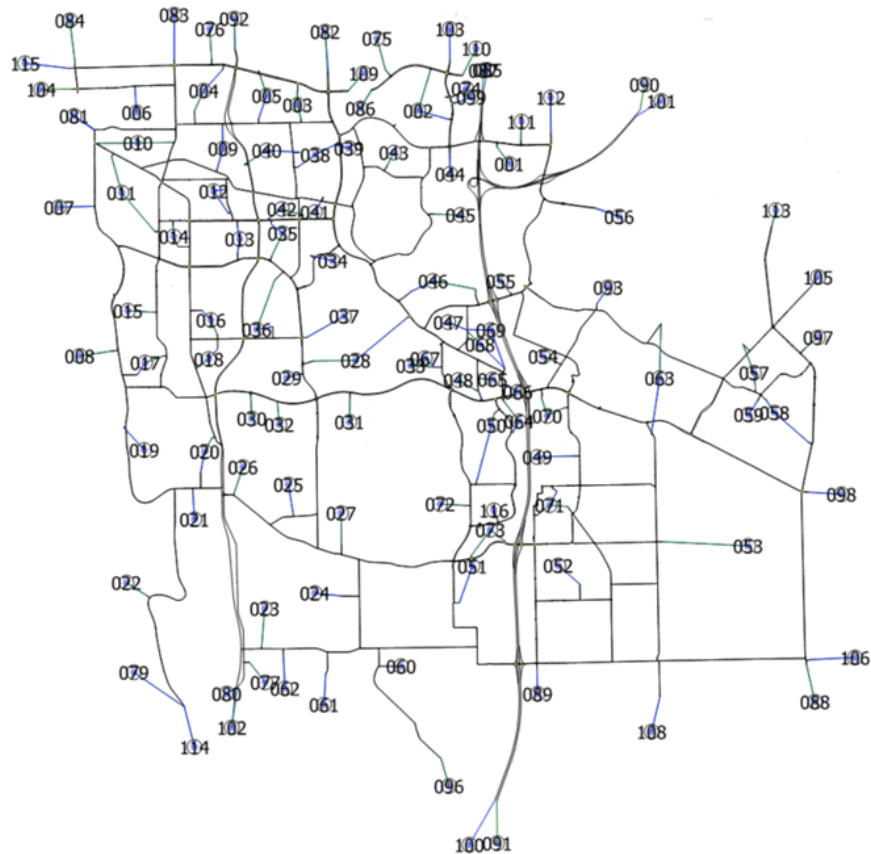


Figure 3 – Modelled Aimsun zone layout

The relationship between the original supplied ROM24 data and the updated data is summarised in Table 1.

Table 1 - Zone breakdown between ROM24 and CDTM

Zone Set	2011	2016	2020	2021	2031
Previous CDTM Internal Zones	77		77		77
Previous CDTM External Zones	23		25		27
Previous CDTM Dummy Zones for Growth	13		13		13

City of Cockburn

2018 District Traffic Study

Zone Set	2011	2016	2020	2021	2031
Previous CDTM Total Zones	113		115		117
ROM24 Internal Zones		59		59	59
ROM24 External Zones		48		50	52
ROM24 Total Zones		107		109	111
CDTM Internal Zones		60		60	60
CDTM External Zones		48		50	52
CDTM Total Zones		108		110	112

The final CDTM has one more zone representing the City of Cockburn area than the ROM24. This slight increase has been made to enhance the accuracy of the forecast around the Wentworth Parade area. The increase in CDTM external zones between 2016, 2021 and 2031 are as a result of additional links from the external network as new corridors in and out of the City of Cockburn area are constructed. The zone system is different to the previous study completed as the zones were reflective of the years 2011, 2020 and 2031.

2.2 Demand matrix

The traffic demand matrix was derived using a sub-matrix from ROM24, with similar parameters to what was used for the existing Cockburn District Traffic Model such as demographics and trip generation confirmed with the city. Table 2 indicates the matrix totals used in the 2016, 2021 and 2031 models.

Table 2 - Demand Matrix Totals

Vehicle	2016		2021		2031	
	AM	PM	AM	PM	AM	PM
Cars	113,632	131,721	135,410	164,271	170,974	201,322
Trucks	12,369	12,835	15,011	18,178	18,959	22,292
Total	126,001	144,556	150,421	182,449	189,933	223,614

2.3 Review of Main Roads zoning, network and key developments

The review of the number of zones was undertaken to understand the detailed development areas along with a review of centroid connectors to better reflect access locations. Zones internal to the Cockburn sub-model were reviewed. This method ensures that road improvements such as roads identified or planned in Structure Plans, the City's future major road works and Main Roads WA planning for the projects such as Armadale Road, North Lake Road Bridge, southern connection road to the Murdoch Activity Centre, Kwinana Freeway Widening, Karel Avenue Projects and other improvements within the State road network are taken into consideration.

The development of the model demographics, based on those supplied by Main Roads as part of the ROM24 model, was guided by the City of Cockburn officers. Figure 4 shows the major development areas as outlined by the City of Cockburn Regional and Major Roadworks diagram, version 9, dated March 2017.

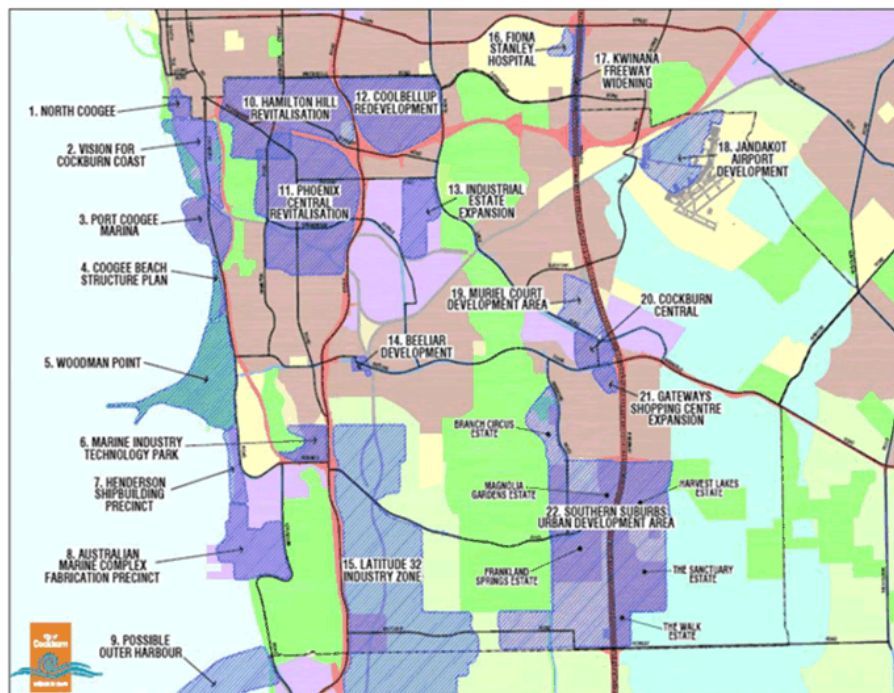


Figure 4 - Major development areas

Source: A Plan for the District 2010 - 2020, City of Cockburn

2.4 Demographic data review

Demographic data was obtained from the City of Cockburn, the Department of Planning, Lands and Heritage, and the Department of Education to review the ROM matrix outputs for the year 2016 for suitability. The three key demographic attributes used to validate the matrices were dwellings, employment and education as they were deemed to be significant factors impacting trip generation.

Total dwellings by zone was sourced from the City of Cockburn 2016 census data, and was adjusted to match the ROM24 zones to directly compare the total dwelling count from both data sets. Appendix D displays the ROM24 numbers and the City of Cockburn census numbers, and the final revised dwelling numbers.

Total local workers by zone was sourced from the City of Cockburn 2016 census data, and was adjusted to match the ROM24 zones to directly compare the total employment numbers from both data sets. These data sets were then compared against survey data retrieved from the Department of Planning, Lands and Heritage which identify the key “complexes” within the City of Cockburn and the levels of employment they generate accordingly. The survey is of all commercial, industrial, public purpose and recreation/open space land uses, with key data including how many people work at each activity centre.

As they are survey results, they were used to validate findings rather than in calibrating the initial ROM24 and City of Cockburn datasets. Once the 2016 employment rates were determined, the 2021 and 2031 predicted employment levels were determined using the growth rates determined from the ROM24 land use data. Appendix D displays the ROM24 input employment numbers, the City of Cockburn census data and the final revised employment numbers.

The total amount of students by zone was validated using student enrolment numbers sourced from the Department of Education, for schools within the City of Cockburn. Once the 2016 employment levels were validated, the ROM growth factors were used to determine 2021 and 2031 education levels. This is also shown in Appendix D.

City of Cockburn

2018 District Traffic Study

Table 3 - Key development area yield assumptions in the supplied ROM24 land use files (source: Main Roads)

Development Area	ROM Zone Nos	ROM Demographic Zones (2016)	Dwellings			Employment			Education		
			2016	2021	2031	2016	2021	2031	2016	2021	2031
Cockburn Central	774	48	123	414	352	300	1181	836	0	0	0
Fiona Stanley Precinct	External to model 667	2	287	270	385	2703	10904	19257	12876	14039	16504
Jandakot Airport Development	782	56	143	196	198	1605	1705	1741	29	14	0
Latitude 32	749, 750, 751, 752, 753, 939, 940 & 941	23, 24, 25, 26, 27, 60, 61 & 62	416	432	468	686	5139	16820	138	135	135
Australian Marine Complex	748	22	7	7	6	3953	4054	4315	457	487	513
Cockburn Coast Development	733	47	255	2510	4849	364	1642	2791	0	250	500

Table 4 - Key development area yield assumptions in the revised CDTM

Development Area	ROM Zone Nos	ROM Demographic Zones (2016)	Dwellings			Employment			Education		
			2016	2021	2031	2016	2021	2031	2016	2021	2031
Cockburn Central	774	48	144	476	634	3305	13008	9205	0	0	0
Fiona Stanley Precinct	External to model 667	2	287	270	385	2703	10904	19257	12876	14039	16504
Jandakot Airport Development	782	56	151	1593	2743	5112	5431	5544	29	14	0
Latitude 32	749, 750, 751, 752, 753, 939, 940 & 941	23, 24, 25, 26, 27, 60, 61 & 62	343	990	1612	614	3936	13744	138	135	135
Australian Marine Complex	748	22	5	6	7	5439	5578	5937	457	487	513
Cockburn Coast Development	733	47	269	1250	3751	516	2328	3958	0	200	500

Table 3 summarises demographic data from ROM 24 in key development areas within City of Cockburn and Table 4 shows demographic data after review. Both demographic data assumes similar growth in a number of the key development areas as shown in Table 3 and 4. In terms of employment growth, Fiona Stanley Precinct, Latitude 32 area and Cockburn Coast Development show the most significant growth compared

to 2016 employment levels. The Jandakot Airport Development area and Cockburn Coast Development show the most significant dwelling growth from 2016 dwelling levels.

From the demographic review process, no employment forecasts for 2021 and 2031 were provided within the city of Cockburn, so the 2016 values were determined for each zone and factored up using the ROM24 forecasted increases.

Latitude 32 is identified as an industrial development area which reflects the significant job growth, however due to the nature of the ROM24 zoning boundaries, some of the surrounding residential areas to the north were captured within this area. This accounts for the dwelling growth identified in Latitude 32 the area.

2.5 Trip generation

Revised trip generation equations were applied to match previous work (City of Cockburn District Traffic Study, 2013) and latest available trip generation information. Research into trip generation trends was also undertaken to review how these may change into the future. The updated 'internal to internal' trip matrices were combined with the 'external to internal'; 'internal to external'; and 'external to external' trip matrices from the ROM24 to produce overall demand matrices for light and heavy vehicles for 2021 and 2031. Interpolation was used for years that do not align with ROM24 forecast years.

Trip generation rates are applied to the yields for each zone in order to establish the quantum of traffic generated by each zone. Trip generation rates were determined for both households and for employment based on a review of first principles data and similar transport model parameters. The trip generation rates for employment were based on a review of modelling practice in Western Australia and within Australia. Employment was divided into three categories:

- Retail
- Commercial
- Industry

Some adjustments were made based on the more detailed breakdown of these categories to adjust the trip rates so they were more relevant to the modelled area. Despite the adjustment residential trip generation rates are conservative and consistent with rates that are traditionally accepted by the Western Australian Planning Commission when assessing new development applications and structure plans.

The trip rates are vehicular trips and are as follows:

- 7 trips per household
- 1 trip per school student
- 9.3 trips per retail employee
- 3.0 trips per commercial employee
- 2.6 trips per industrial employee.

Additionally, trip generation rates were calibrated against total vehicle trips generated in the ROM24 on a zone by zone basis.

2.6 Time period

In a difference to the 2013 DTS, the model was updated to reflect that ROM24 can now provide a breakdown of matrices into peak periods (not available in 2013). This means that the time period splits were undertaken in ROM24 rather than the CDTM. As a result, two time periods have been modelled, morning peak (between 07:00-09:00) and evening peak (between 16:00-18:00). Modelling results are presented for 2 hour peaks throughout the report.

2.7 Mode split

Matrices have been developed based on ROM24 to reflect the mode split to allow for assessment of car/light and heavy vehicle impacts on the network. These rates have been validated against the traffic counts collected from the Main Roads traffic counts mapping tool and traffic counts provided by the City of Cockburn.

It is envisaged that some sensitivity testing on modal share factors may need to be undertaken by the City to mimic greater non-car mode share if a more detailed traffic assessment is required; currently outside of this scope.

2.8 Trip assignment

A key advantage of the Aimsun platform is its ability to undertake the assignment of matrix demand to the road network in a simple robust manner.

A multiclass volume static origin-destination matrix adjustment assignment was undertaken with car/light and heavy vehicles. This approach provided the following:

- Better modelling of the impact of heavy vehicles on road capacity given the mix of freight and non-freight routes in the study area
- Ability to better model the mix of heavy vehicle types and their impact on road capacity
- Volume averaging approach consistent with future upgrade of explicit modelling of intersection operations
- Converges to a stable and consistent result more readily than other assignment techniques

Model network and initial matrices have been extracted from ROM24 and therefore major parameters have been brought from ROM24 into Aimsun. That allowed DTS model consistency with Main Roads strategic modelling.

3 Cockburn district traffic model

The CDTM is a macroscopic Aimsun model derived from ROM24 demand matrices and validated against available count data. Mode share is divided into car/light and heavy vehicles based off the ROM24 matrices and ‘furnished’ to count data to accurately represent existing situation. According to Main Roads Operational Modelling Guidelines furnishing is defined as follow:

“The Furness method of matrix updating is an iterative process to derive matrices that result in the best match to trip end count data. Trip end totals for each zone should be formed from external link survey data, internal link survey data and other filler zones with the values based on surveys, surrounding land use or the number of individual households. Within this, individual OD pairs should be fixed to known survey values or established during the calibration process.”

The public transport data has not been included at this stage of the modelling. Figure 5 and Figure 6 depict the process of the base model development and future model development.

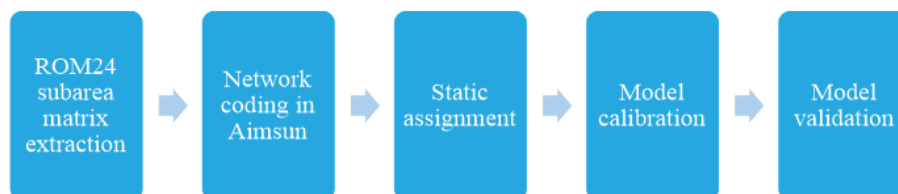


Figure 5 - Base model development

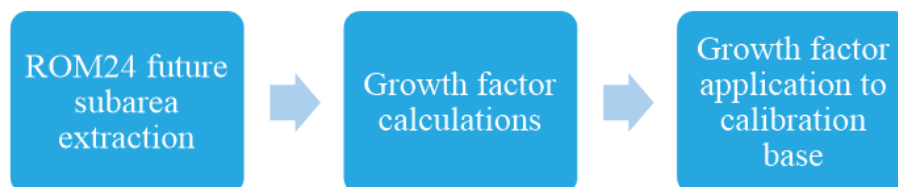


Figure 6 - Future model development

3.1 2016 base year

A 2016 base year model was developed and calibrated with parameters using existing traffic count information to confirm that the model is fit for purpose. Once calibrated and validated the model was used to forecast future changes to traffic volumes associated with changes to land use.

Based on the traffic data available for the study and correlation with the ROM24 data to observed daily traffic counts within the City of Cockburn, the CDTM calibrates to well within industry accepted standards at a daily level and satisfactory for peak periods.

The desirable industry standards extracted from NSW Road and Maritime Services Traffic Modelling Guidelines version 1 and Main Roads OMeGA guidelines are contained in Table 5.

Table 5 - Link Validation Measures

Link Calibration Measure	Desirable Value
GEH < 5	85%
Link Validation Measure	Desirable Value
Coefficient of Determination (R²)	>0.90

Source: "Traffic Modelling Guidelines" Version 1, NSW Road and Marine Services

Additional measures such as GEH have been included as these are required for the Aimsun strategic modelling based on the local Main Roads modelling guidelines.

3.1.1 Base model calibration – GEH statistic

The criteria from Roads and Martie Services (RMS) guidelines for model calibration are based on statistics formula called GEH. As RMS states:

"the formula is a form of Chi-square statistic that is designed to be tolerant of largest errors in low flows. The reason for introducing such a statistic is the inability of either the absolute difference or the relative difference to cope over a wide range of flows."

The GEH equation is as follows:

$$GEH = \sqrt{\frac{(V_o - V_m)^2}{0.5 (V_o + V_m)}}$$

Where:
 V_o is the observed flow in vehicles per hour
 V_m is the modelled flow in vehicles per hour

According to RMS, turn volumes calibration is achieved when "85 per cent of individual turn volumes to have a $GEH \leq 5.0$ ".

3.1.2 Base model calibration results

The calibration has shown a very good model performance against observed flows. All time periods were calibrated above the required 85% margin as shown in Table 6.

Table 6 - GEH results

GEH Results	GEH Range	Car	Heavy Vehicles
AM Peak Hour	≤ 5	86%	93%
	5 to 10	10%	7%
	>10	4%	0%
PM Peak Hour	≤ 5	85%	94%
	5 to 10	14%	6%
	>10	1%	0%

3.1.3 Validation plots – peak periods

The scatter plot validates well against 2016 average peak period traffic volumes with parameters meeting the industry acceptable standard. To demonstrate the model validation scatter plots of 240 traffic count locations versus 2016 CDTM volumes are shown in Figure 7 and Figure 8 for AM peak and PM peak time periods respectively.

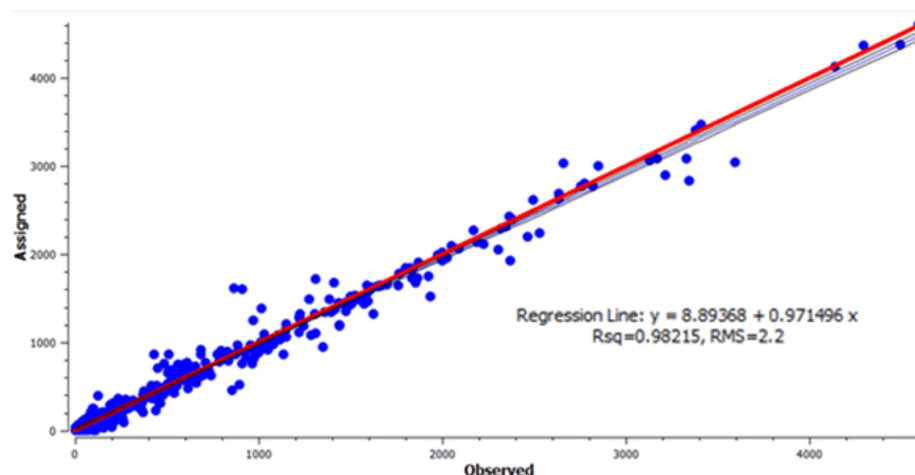


Figure 7 – AM Peak period validation plot

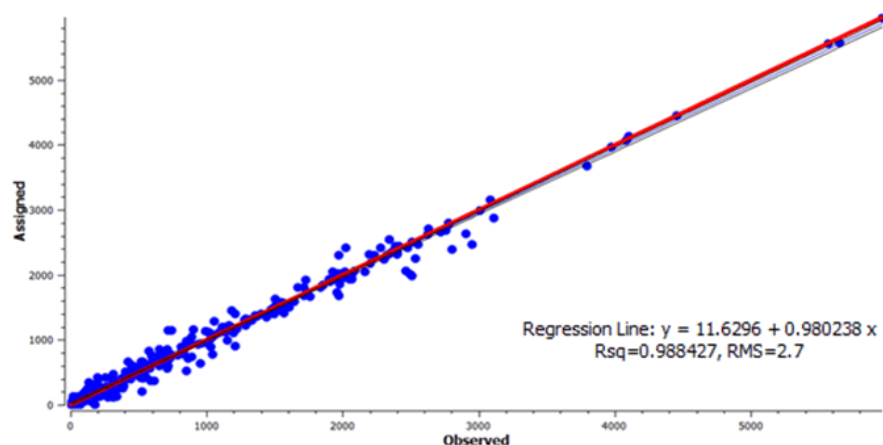


Figure 8 – PM Peak period validation plot

The AM and PM peak periods validate very well to the guideline standards which shows a very good model robustness and fit for purpose. As a result, both modelled peak periods provide a useful guide in understanding peak period traffic, operation including directional bias and traffic growth under congested conditions.

3.1.4 Model convergence

The 2016 base model was run with 50 iterations to ensure it converged appropriately. The AM peak had a relative gap of 3.37% and the PM peak had a relative gap of 2.05%. Model is considered converged when relative gap is lower than 5%, therefore results of both model calibrations show very good model convergence.

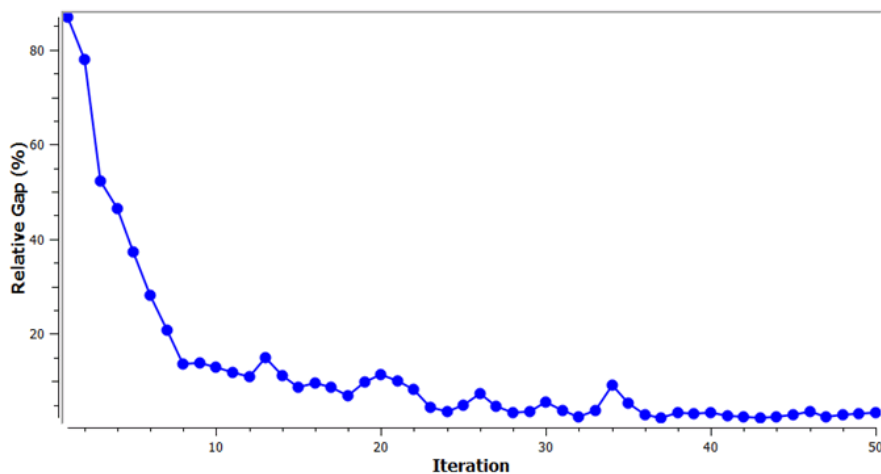


Figure 9 – AM Peak period convergence plot

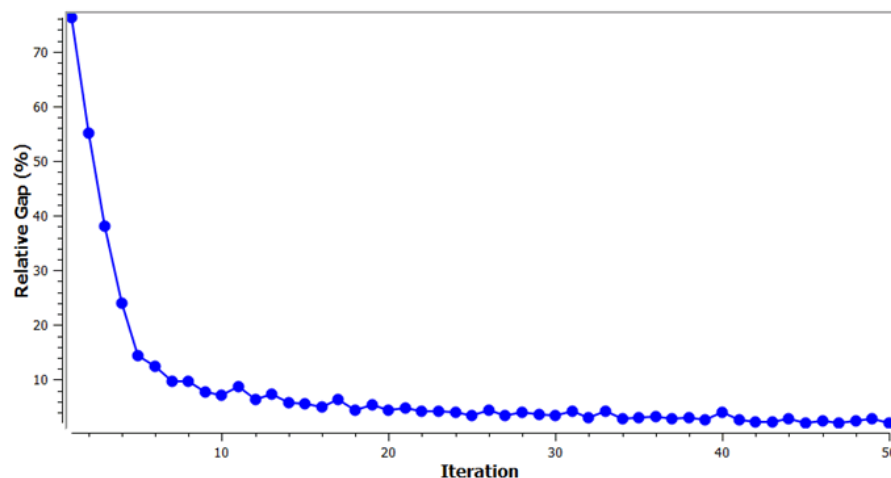


Figure 10 – PM Peak period convergence plot

3.1.5 Validation summary

Overall, the CDTM provides a sound basis for the future modelling of the transport network in and the City of Cockburn area. From a review of the 2016 peak traffic volumes supplied from the Main Roads and City of Cockburn, the CDTM validates very well against required industry standards. Both coefficient of determination (r-square) are over required 0.95%. The R-Square (R2) is a

statistical measure of the correlation between the entire count data set and the predicted model volumes. Unlike the GEH statistic (which applies to individual flows and screenlines), the R-Square (R^2) applies to the entire comparison data set and is expressed as a single value.

As with any transport model, the CDTM will be enhanced through project application in the future to improve performance at a detailed level. As it currently stands, the CDTM would appear to provide the best available tool to understand strategic transport flows on the majority of roads within the City of Cockburn area. A summary of the level of validation for each time period is shown in Table 7.

Table 7 - Validation summary

Link Validation Measure	Desirable Value	AM Peak	PM Peak
Coefficient of Determination (R^2)	>0.90	0.98	0.98

3.2 Use of CDTM

The use of the CDTM output should be treated in a similar manner as other strategic models. Whilst suitable as a strategic network analysis tool, it is recommended that forecast traffic volumes used for design be verified against actual count data collected specifically to each project.

In general, the process for determining forecast traffic volumes should be as follows:

1. Obtain 2016 and forecast year traffic flows from CDTM
2. Calculate growth rate to the required design year based on the CDTM link growth data.
3. Apply traffic growth from the CDTM to existing traffic counts
4. Review the forecast volumes to ensure reasonable in the context of surrounding development and traffic growth

Where new links and intersections are under construction, unmodified CDTM output will require additional scrutiny to ensure reasonable for design purposes such as analysis at intersections.

4 Base modelling results

4.1 Volume capacity ratio

Link capacities are often referred to as the mid-block capacity and when calculated take into account the characteristics of a link between two points, usually intersections. Different methods for calculating road capacities are used for different road environments and flow characteristics.

According to AustRoads document “*Level of Service Metrics (for Network Operations Planning)*”, capacity is defined as the maximum hourly rate at which vehicles can reasonably be expected to traverse a point or uniform section of a lane or roadway during a given time period under the prevailing roadway, traffic and control conditions.

In order to determine the point at which more capacity is required to allow more traffic to pass through a road or intersection, the volume to capacity ratio is used.

The levels of service are calculated based on the assigned volumes produced by strategic model and mid-block capacity coded in the network.

The volume to capacity ratios range from A to F and are defined by qualitative measures describing operational conditions within a traffic stream and their perception by motorists and/ or passengers.

The level of service range and corresponding volume to capacity ratios used in the DTS model are indicated in Table 8.

Table 8 - Volume to capacity ratios governing midblock level of service

Volume Capacity Ratio	Level of Service					
	A	B	C	D	E	F
100km/h	32%	50%	72%	92%	100%	>100%
90km/h	30%	47%	68%	89%	100%	>100%
80km/h	28%	44%	64%	85%	100%	>100%
70km/h	26%	41%	59%	81%	100%	>100%

Source: AustRoads 2009

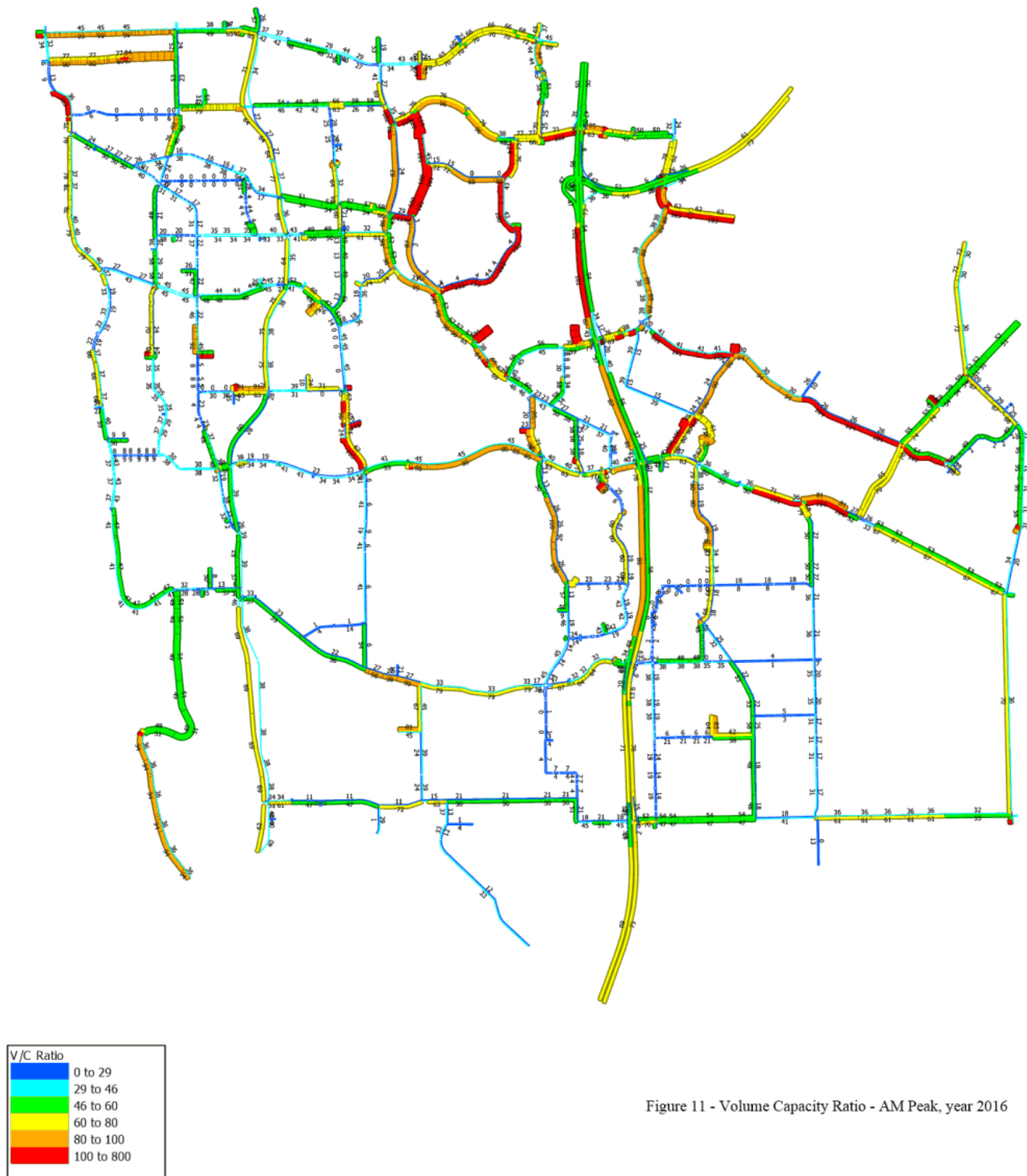
In order to reflect modelling results a unified LOS range has been determined for better visualisation, as shown in Table 9, and used in the peak hour volume plots for the AM and PM peak for the base year 2016, as shown in Figure 11 and Figure 12.

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Table 9 – Volume to capacity ratios used in model to govern level of service

Volume Capacity Ratio	Level of Service					
	A	B	C	D	E	F
Unified Speed Range	29%	46%	60%	80%	100%	>100%



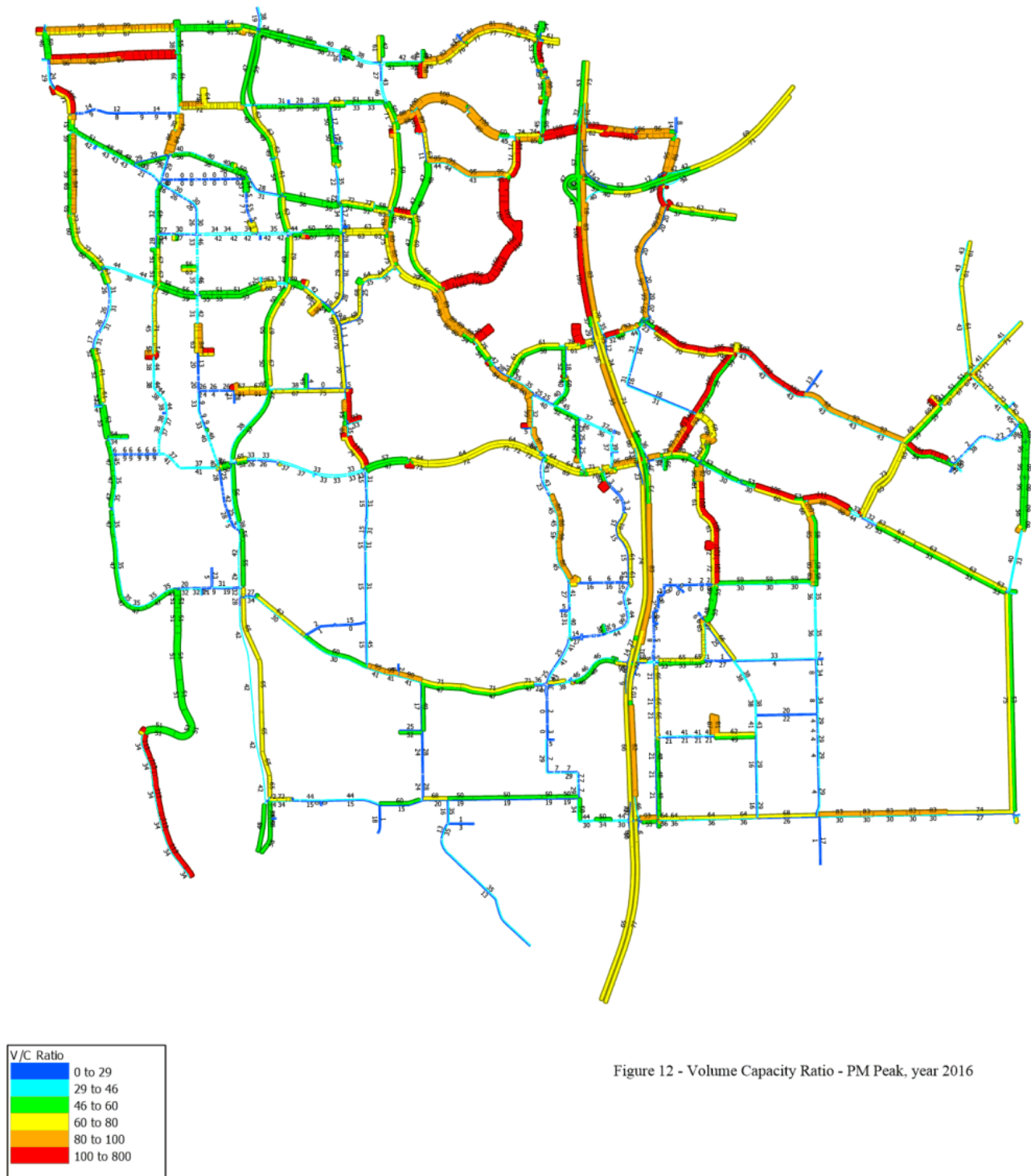


Figure 12 - Volume Capacity Ratio - PM Peak, year 2016

The 2016 model run confirms known congestion hotspots in the City where the modelled volume capacity is over 100%. Most notably sections of the following roads as displayed in Table 10 and Figure 13.

Table 10 - Roads with a volume capacity ratio exceeding 100% in both peak periods.

Reference Number	Road Type	Road Name
1	Primary Distributor	Kwinana Freeway
2	Primary Distributor	Armadale Road
3	Primary Distributor	Farrington Road
4	Regional Distributor	Jandakot Road
5	Regional Distributor	Russell Road
6	Distributor A	Cockburn Road
7	Distributor A	Spearwood Avenue
8	Distributor A	Beeliar Drive
9	Distributor A	Berrigan Drive
10	Distributor A	Karel Avenue
11	Distributor B	Bibra Drive
12	Distributor B	Hammond Road
13	Local Distributor	Tapper Road

Figure 13 depicts the corridor hotspots on the Cockburn network for 2016.

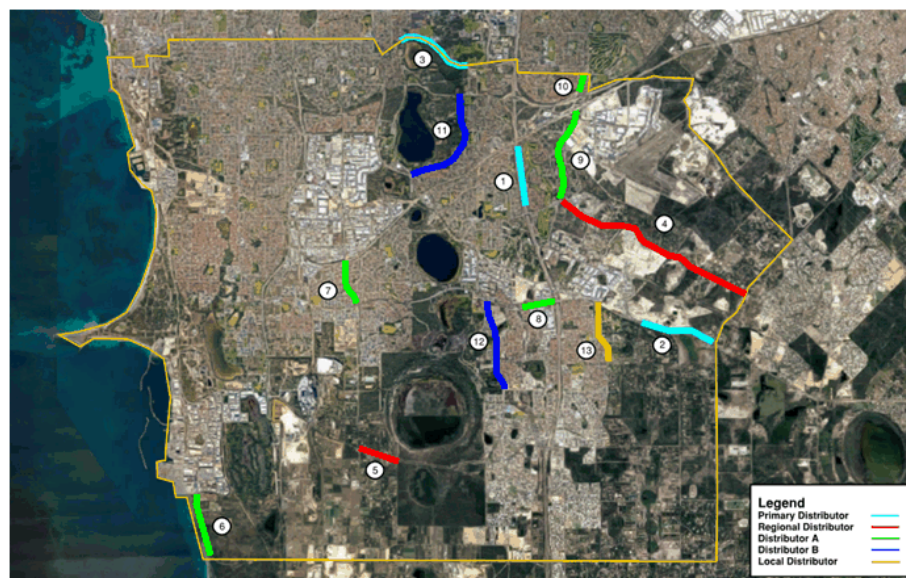


Figure 13 – 2016 corridor hotspots

Some features (eg wetlands/lakes, Jandakot Airport) restrict the permeability of the road network in locations which results in short sections of roads operating close to capacity including Farrington Rd (north of Bibra Lake) and Berrigan Drive (Jandakot Airport).

4.2 Assigned volumes

As part of the strategic modelling exercise model outputs assigned volumes plots. As mentioned in section 4.1 assigned volumes are an output from strategic model, often used for calculation of level of service. Figure 14 shows AM Peak plot and Figure 15 shows PM peak plots. Appendix A shows all remaining assigned volumes plots for all modelled scenarios.

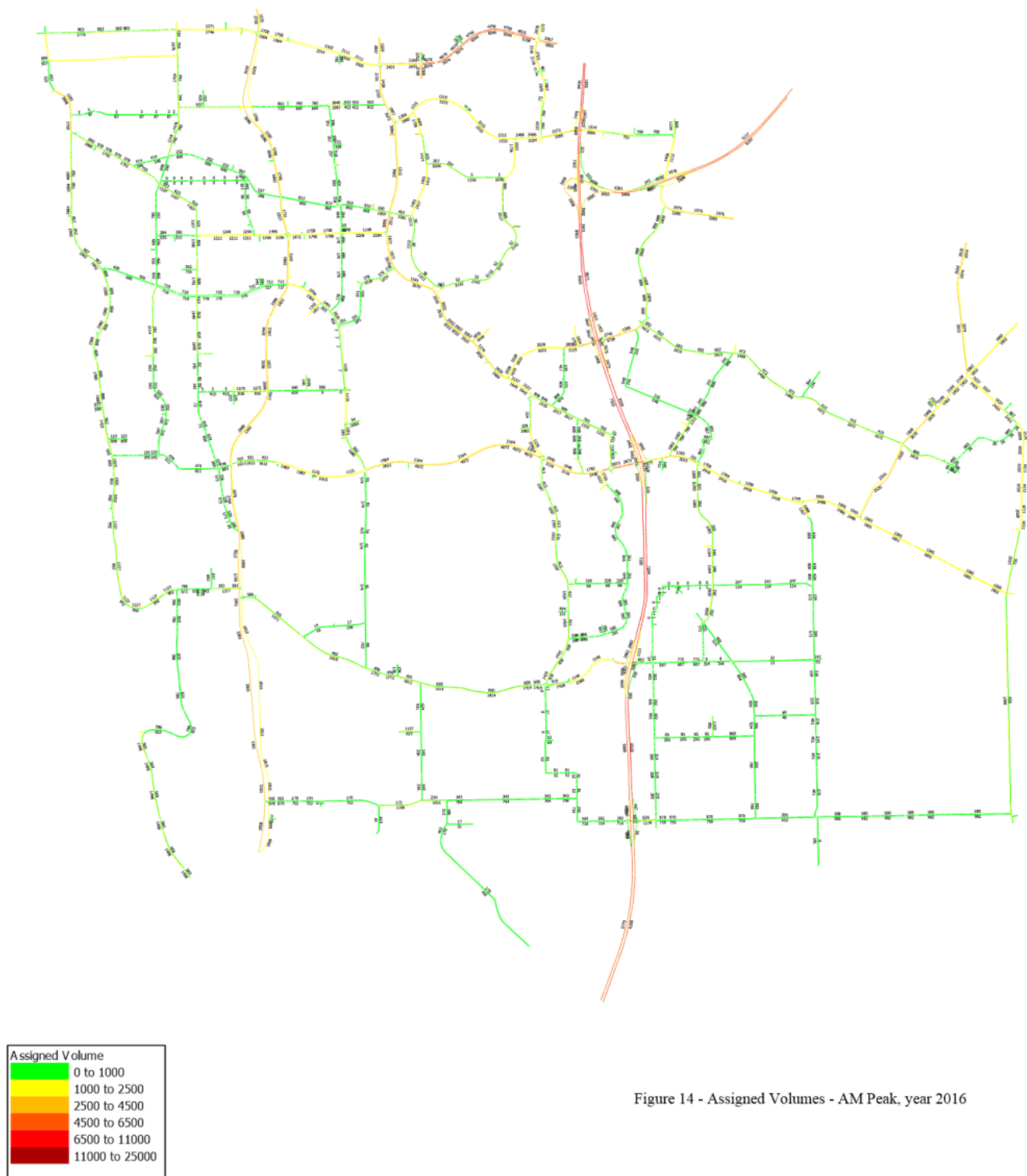


Figure 14 - Assigned Volumes - AM Peak, year 2016

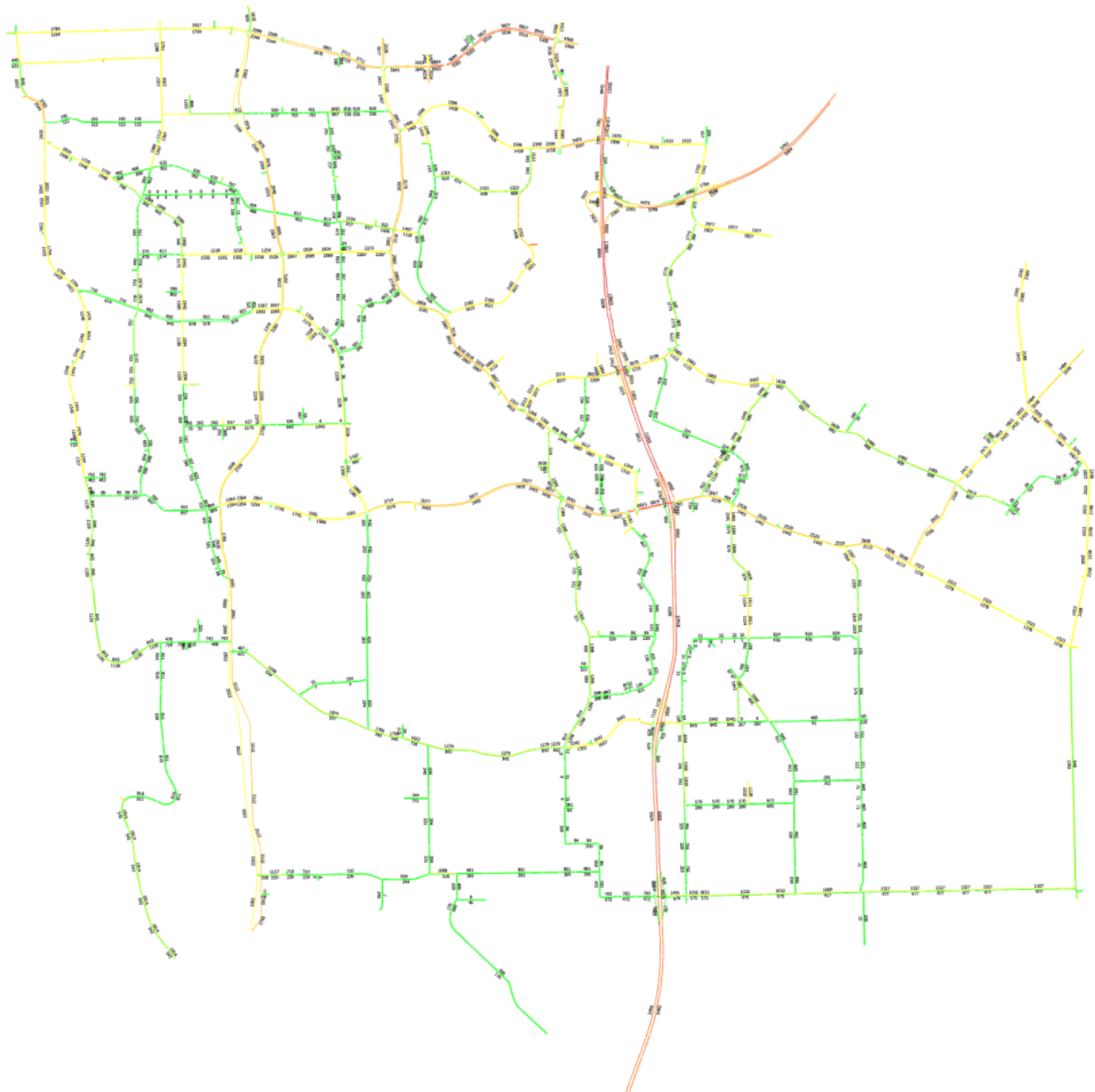
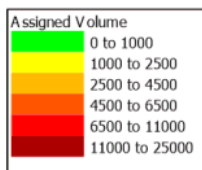


Figure 15 - Assigned Volumes - PM Peak, year 2016



4.3 Base traffic conditions in Cockburn

Given its location in the south-western suburbs of Perth, the City of Cockburn experiences pronounced peak traffic conditions during weekday commuter peaks and in the lead up to long weekends as people travel south along the Kwinana Freeway to the south west. Combined with this demand, is the east west heavy vehicle flows between the industrial areas in the west e.g. Henderson and Fremantle and industrial areas near Perth Airport/ Forresterfield/ Kewdale. Given the level of forecast development, it may be difficult and unsustainable to provide road infrastructure upgrades to accommodate unconstrained peak hour vehicle demand in the future. However, network planning needs to be cognisant of these peak conditions and make some allowances for appropriate traffic management measures to manage peak demand scenarios.

The assessment assumes average weekday peak conditions (i.e. model output); however, it is recommended that capacity targets are kept relatively optimistic (e.g. LoS D) so at least some capacity is kept in reserve for future growth (beyond the forecast horizon of 2031) or if funding constraints result in particular projects being delayed. This desirable level of service will be more applicable to trunk routes such as Rockingham Road; a reduced LoS should generally be considered in the activity centres, where traffic management measures may be better applied and the needs of non-car modes should take greater precedence improving average speeds for motorists.

4.4 Impact of network capacity on non-car modes

It is noted that the adoption of target LoS (Volume Capacity Ratio) can have impacts on non-car modes of transport. Along trunk routes, increased capacity, traffic flows (e.g. added lanes) and higher speed limits generally diminish the attractiveness and safety of the route for walking and cycling trips. Pedestrian crossing movements away from controlled locations (e.g. under/ overpasses or traffic/ pedestrian signals) also become less safe and attractive. In addition, public transport services may be detrimentally affected by route upgrades when opportunities to perform turning movements and manoeuvre in and out of stops are diminished with increased traffic flows. It is important the LoS is chosen with respect to all the modes using road corridors. Further detailed analysis might be required when planning road improvements on individual locations.

Where segregated facilities for walking and cycling trips exist such as along Kwinana Freeway and selected arterial roads in the City, the level of service of the road network has less impact on the experience and safety of pedestrian and cycle movements.

Roads with a low classification within the functional road hierarchy that service activity centres, should afford a high priority to alternative modes to the car, reducing the focus of road network planning on level of service. For example, within Cockburn Central, it is recommended that a lower LoS is accepted to increase opportunities for pedestrians and cyclists to undertake trips safely and with higher amenity. This may be facilitated through:

- Appropriate signal phasing

- Limiting road capacity to one lane in each direction rather than duplication
- Avoiding installation of turning pockets slip lanes at intersections where there are high crossing demands
- Adopting posted speed limits of 50kph or less subject to Main Roads approval

It is recommended to adopt a sliding LoS scale in the first instance, based on the status of each modelled link and its location within the sub-region. The target LoS would be subject to change based on the future land use and network scenarios that are tested.

5 Forecast scenarios

Two future year scenarios – 2021 and 2031 have been analysed. The year 2031 is the standard horizon adopted for road network planning in Western Australia and consistent with the Main Roads strategic model, ROM24. For each year, two road network scenarios have been modelled:

- Do nothing – the road network is as per year 2016
- Do minimum – current network plus Main Roads committed road improvements
- Do Something 01 - City of Cockburn Preferred Network – Main Roads committed road improvements plus network upgrades as identified in current City of Cockburn planning
- Do Something 02 – additional widening scenarios requested to be investigated by City of Cockburn, such as Stock Road and Cockburn Road. These scenarios have been modelled as additional assessment.

The ‘do nothing’ scenario helps to support a case for road network upgrades and identify priority investment locations. This scenario needs to be considered given some of the proposed upgrade projects are unfunded and therefore there is no firm commitment to proceed with the upgrades.

Forecasting for the 2021 and 2031 scenarios was undertaken based on “furnishing” the base 2016 matrix with growth in the trip ends based on the internal zone trip generation rates.

For this commission, Arup undertook modelling of three network scenarios summarised in Table 11.

Table 11 - Scenario Matrix

Scenario	Existing (2016)	Short Term (2021)	Long Term (2031)
Do Nothing - Existing Network	Existing Network	No improvements	No improvements
Do Minimum		ROM24 road improvements	ROM24 road improvements
Do Something		City of Cockburn identified road improvements	City of Cockburn identified road improvements
Stock Road Widening			City of Cockburn identified road improvements with Stock Road widened
Cockburn Road Widening			City of Cockburn identified road improvements with Cockburn Road widened

5.1 Mode share assumptions

The City of Cockburn DTS model has been based on the Main Roads mode share in order to keep consistency with Main Roads strategic model. The adopted mode share is assumed to remain constant at 2016 levels over the modelled future years. This is a conservative approach in light of increased road network congestion.

5.2 Network assumptions

Arup conducted a policy review to understand the potential timings for road network upgrades within the City of Cockburn. The road network upgrades adopted in the modelling are detailed in Figure 16 and Table 12. City of Cockburn structure plans, Table 13, Main Roads projects (Table 14) were also taken into consideration to update the road network and zoning. These timings are as per the Main Roads ROM24, a review of the 2013 City of Cockburn District Traffic Study and final confirmation from the City of Cockburn. As discussed earlier, the inclusion of these projects does not infer a funding commitment to the listed upgrades.

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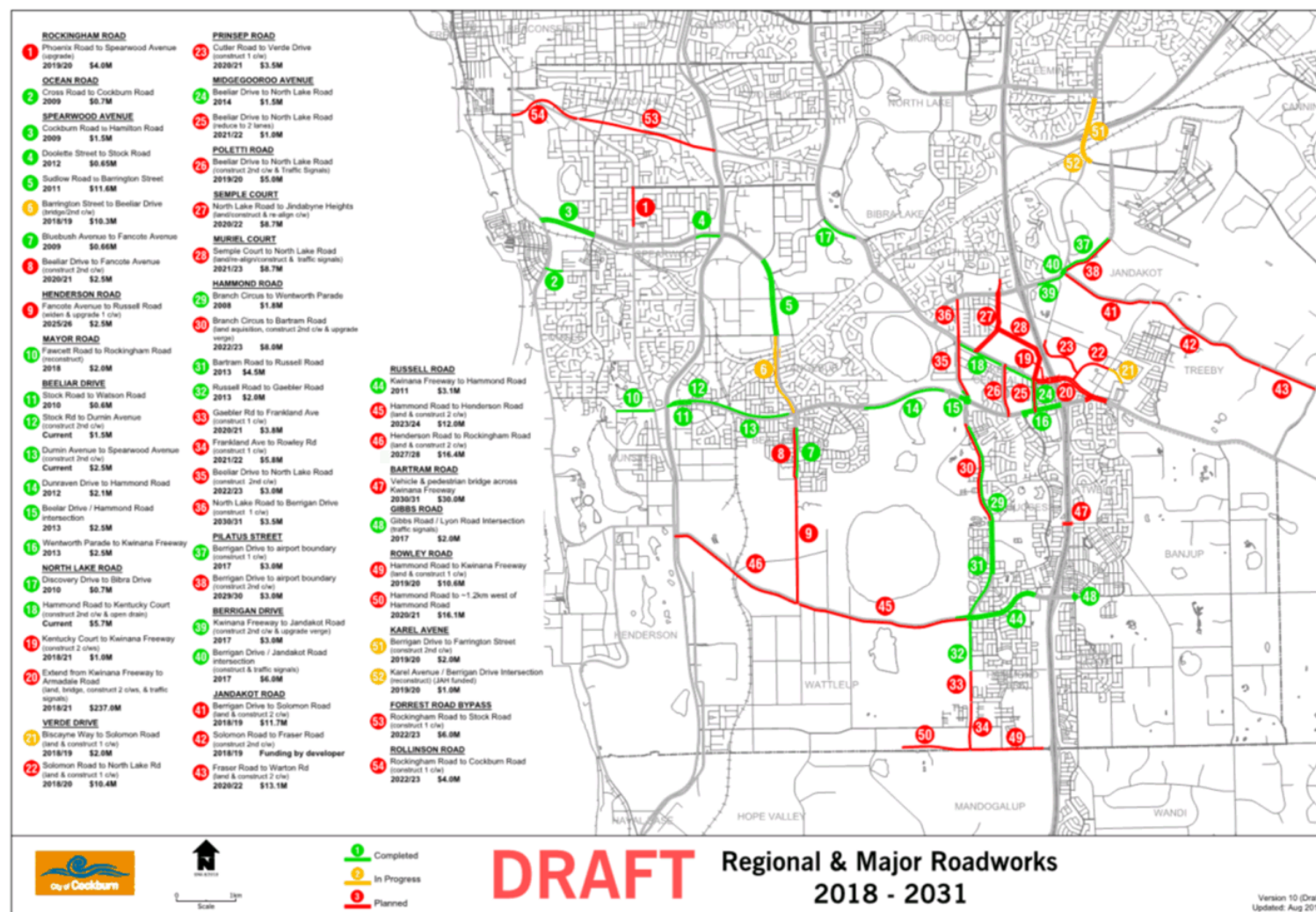


Figure 16 – City of Cockburn Regional and Major Roadworks diagram, version 10, August 2018

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Table 12 - City of Cockburn Road Network Upgrades

Road Network Upgrade	2021	2031	Comment regarding assumption basis
Rockingham Road – Phoenix Road to Spearwood Avenue reconstruction (to 1 lane each way)		✓	Not reflected in ROM model
Spearwood Avenue - Barrington Street to Beeliar Drive (bridge / 2 nd c/w)	✓	✓	Not reflected in ROM model
Spearwood Avenue – Beeliar Drive to Fancote Avenue (construct 2 nd c/w)	✓	✓	Not reflected in ROM model
Henderson Road – Fancote Avenue to Russell Road (widen and upgrade 1 c/w)		✓	Not applicable for strategic modelling
Beeliar Drive – Fawcett Road to Stock Road (reconstruction)	✓	✓	Not applicable for strategic modelling
North Lake Road / Discovery Drive intersection (traffic signals)	✓	✓	Not applicable for strategic modelling
North Lake Road – Kentucky Court to Kwinana Freeway (construct 2 c/ws)		✓	In ROM 2021 & 2031
North Lake Road – Extend from Kwinana Freeway to Armadale Road (land, bridge, construct 2 c/ws, & traffic signals)		✓	In ROM 2021 & 2031
Verde Drive – Biscayne Way to Solomon Road (land & construct 1 c/w)	✓	✓	In ROM 2021 & 2031
Verve Drive – Solomon Road to North Lake Road (land & construct 1 c/w)	✓	✓	In ROM 2021 & 2031
Prinsep Road – Cutler Road to Verde Drive (construct 1 c/w)	✓	✓	Not reflected in ROM model
Midgegooroo Avenue – Beeliar Drive to North Lake Road (reduce to 2 lanes)		✓	
Poletti Road – Beeliar Drive to North Lake Road (construct 2 nd c/w & traffic signals)	✓	✓	Not reflected in ROM model
Semple Court – North Lake Road to Jindabyne Heights (land / construct & re-align c/w)		✓	No impact on network layout
Muriel Court – Semple Court to North Lake Road (land / re-align / construct & traffic signals)		✓	No impact on network layout
Hammond Road – Branch Circus to Bartram Road (construct 2 nd c/w & upgrade verge)		✓	Not reflected in ROM model
Hammond Road – Gaebler Road to Frankland Avenue (construct 1 c/w)	✓	✓	Existing
Hammond Road – Frankland Avenue to Rowley Road (construct 1 c/w)	✓	✓	Not reflected in ROM model
Hammond Road – Beeliar Drive to North Lake Road (construct second c/w)	✓	✓	Not in ROM 2021 & in ROM 2031
Hammond Road – North Lake Road to Berrigan Drive (construct 1 c/w)	✓	✓	Not reflected in ROM model
Pilatus Street – Berrigan Drive to airport boundary (construct 2 nd c/w)		✓	In ROM 2021 & 2031

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Road Network Upgrade	2021	2031	Comment
Jandakot Road – Berrigan Drive to Solomon Road (land & construct 2 c/w)	✓	✓	In ROM 2021 & 2031
Jandakot Road – Solomon Road to Fraser Road (construct 2 nd c/w)	✓	✓	In ROM 2021 & 2031
Jandakot Road – Fraser Road to Warton Road (land & construct 2 c/w)		✓	In ROM 2021 & 2031
Russell Road - Hammond Road to Henderson Road (land & construct 2 c/w)		✓	Not reflected in ROM model
Russell Road – Henderson Road to Rockingham Road (land & construct 2 c/w)		✓	Not reflected in ROM model
Bartram Road – Vehicle & pedestrian bridge across Kwinana Freeway		✓	Not in ROM 2021 & not in ROM 2031, potentially in 2041
Rowley Road – Hammond Road to Kwinana Freeway (land & construct 1 c/w)	✓	✓	Not in ROM 2021 & in ROM 2031
Rowley Road – Hammond Road to ~1.2km west of Hammond Road	✓	✓	Not in ROM 2021 & in ROM 2031
Karel Avenue – Berrigan Drive to Farrington Street (construct 2 nd c/w)		✓	In ROM 2021 & 2031
Forrest Road Bypass – Rockingham Road to Stock Road (construct 1 c/w)	✓	✓	Not Modelled
Rollinson Road – Rockingham Road to Cockburn Road (construct 1 c/w)		✓	Not Modelled

Source: City of Cockburn Regional and Major Roadworks diagram, version 10, August 2018

Approved City of Cockburn District Structure Plans are included in Table 13.

Table 13 - Approved City of Cockburn District Structure Plans

Approved District Structure Plans	2021	2031
Southern Suburbs Stage 3 – Hammond Park west of the Freeway and south of Gaebler Road	✓	✓
Packham North	✓	✓
Branch Circus	✓	✓
Cockburn Coast	✓	✓
Treeby (released December 2017)	✓	✓

Source: Approved Structure Plans on the City of Cockburn website

Main Roads Western Australia (Main Roads) future major works in the Main Roads Infrastructure Delivery Plan 2016-2019 are included in Table 14.

Table 14 - Main Roads WA Infrastructure Delivery Plan Projects

Infrastructure Delivery Plan Projects	2021	2031
Armadale Road – Dual Carriageway – North Lake Road to Tapper Road (Commenced)	✓	✓
Murdoch Drive Connection to Kwinana Freeway and Roe Highway (extension of Murdoch Drive which joins onto Farrington Road) (Commenced)	✓	✓
Kwinana Freeway Northbound Widening – Russell Road to Roe Highway (Commenced)	✓	✓
Stock Road / Beeliar Drive Intersection Upgrade (Development)	✓	✓
Karel Avenue upgrades (Procurement)	✓	✓

Source: Main Roads WA Infrastructure Delivery Plan last updated 22 November 2017

6 Future modelling results

The traffic volumes for the forecast years for key routes are represented in the network plots in Appendix A. Figure 21 to Figure 24 illustrate the volume to capacity ratio of the Do Nothing, for 2021 and 2031 network upgrades for the AM and PM peak periods.

The results of the future scenario modelling are discussed below.

6.1 Network statistics

The summary network statistic for each development year for the 'do nothing' and the upgraded network scenarios (as per Table 12) are shown in Table 15. Those statistics allow identify impact of upgrades on overall travel time and travel distance.

Table 15 - Forecast scenario assignment summary statistics

Network Variable	Base	Do Nothing		Do Something	
	2016	2021	2031	2021	2031
Vehicle Hours (AM Peak)	96,917	2,126,083	2,521,283	1,876,583	1,028,405
Vehicle Kilometres (AM Peak)	763,311	911,291	1,220,820	912,039	1,244,320
Vehicle Hours (PM Peak)	113,826	1,758,417	2,204,200	1,677,867	1,492,047
Vehicle Kilometres (PM Peak)	860,180	1,089,200	1,363,730	1,149,940	1,474,940

The summary of network statistics has also been shown on the Figure 17 and Figure 18.

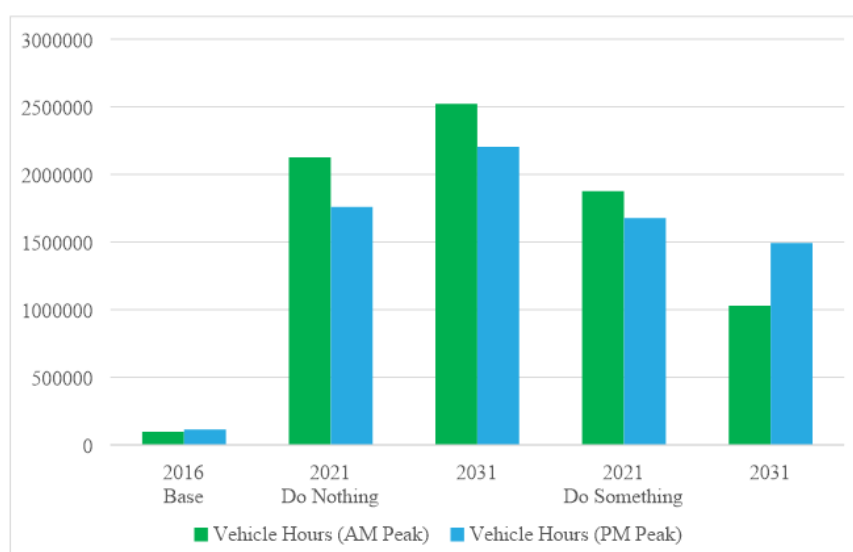


Figure 17 - Vehicle hours travelled across Cockburn road network

Figure 17 indicates significant increase in vehicle hours travelled due to decrease of accessibility to local roads which are result of increased congestion. This is a network wide statistic which includes all the roads modelled within the network. Future models show higher travel times which are result of some minor roads not performing as well. Additionally, results show significant growth in travel time if no network upgrades materialise (i.e. do nothing). However, it also shows a significant decrease in vehicle hours compared to 2021 if planned road improvements are implemented by year 2031.

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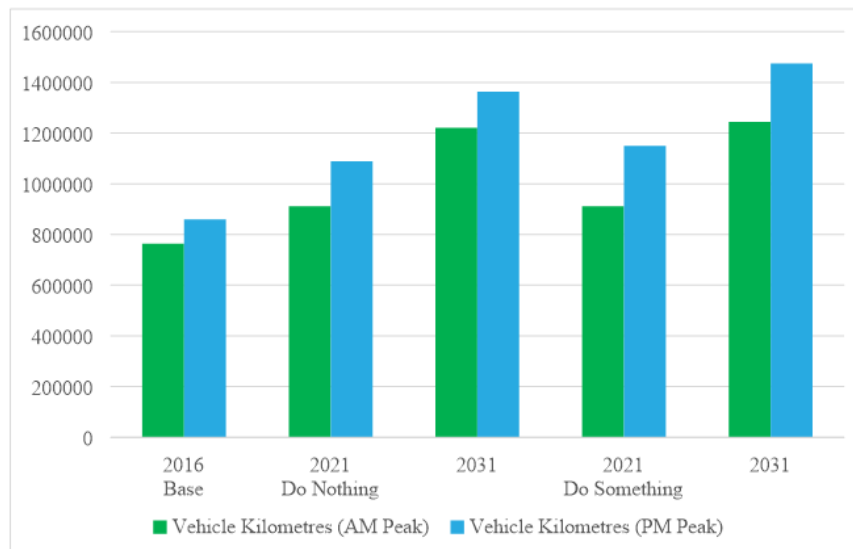


Figure 18 – Vehicle kilometres travelled across Cockburn road network

Vehicle distance travelled in kilometres further confirms need for road improvements but also shows similar pattern of growth between 2021 and 2031.

6.2 Road capacity results – year 2021

Without any changes to the road network, the model shows widespread congestion with many north-south and east-west links operating at a capacity of 95% or higher. The levels of congestion are expected to be similar during both the AM and PM peak periods.

The model shows that many of these congestion issues would be overcome with the introduction of the planned improvements as shown on Figure 21 to Figure 24. With these improvements, Kwinana Freeway is expected to continue to experience congestion with the road operating at over 95% capacity during both peaks. This is despite the planned upgrade to three lanes in each direction north of Russell Road. Table 16 and Figure 19 shows other roads on the network that are expected to operate at over 95% capacity.

Additionally, based on the Do Nothing results of roads with VCR over 85% for roads which are expected to be upgraded (see Table 18) it was indicated that all improvements planned to be implemented before year 2021 are required.

This is a large suite of upgrade options, most of which are understood to be unfunded and there is therefore no guarantee that all upgrades will be implemented within the year 2021 timeframe. Additionally, the analysis also highlights that some of the options planned post year 2021, are warranted at an earlier stage.

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Table 16 - 2021 Do nothing roads with a volume capacity exceeding 100% in both peak periods.

Reference Number	Road Type	Road Name
1	Primary Distributor	Kwinana Freeway
2	Primary Distributor	Cockburn Road
3	Primary Distributor	Armadale Road
4	Primary Distributor	Farrington Road
5	Regional Distributor	Jandakot Road
6	Regional Distributor	Rowley Road
7	Distributor A	Cockburn Road
8	Distributor A	Russell Road
9	Distributor A	Beeliar Drive
10	Distributor A	Karel Avenue
11	Distributor A	Spearwood Avenue
12	Distributor A	Berrigan Drive
13	Distributor B	Hammond Road
14	Distributor B	Midgegooroo Avenue
15	Local Distributor	Gibbs Road
16	Local Distributor	Lyon Road
17	Local Distributor	Liddelow Road
18	Local Distributor	Wentworth Parade
19	Local Distributor	Tapper Road

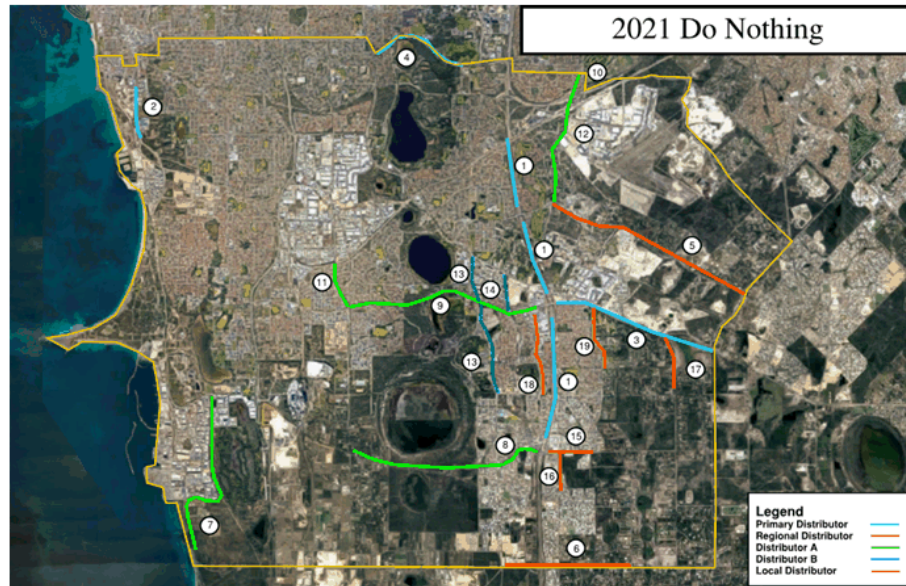


Figure 19 - Heat map of 2031 do nothing scenario of major roads with volume capacity ratios exceeding 100%

Table 17 - 2021 Do something roads with a volume capacity exceeding 100% in both peak periods.

Reference Number	Road Type	Road Name
1	Primary Distributor	Kwinana Freeway
2	Primary Distributor	Cockburn Road
3	Primary Distributor	Farrington Road
4	Regional Distributor	Rowley Road
5	Distributor A	Cockburn Road
6	Distributor A	Russell Road
7	Distributor A	Beeliar Drive
8	Distributor B	Hammond Road
9	Distributor B	Midgegooroo Avenue
10	Local Distributor	Lyon Road
11	Local Distributor	Liddelow Road
12	Local Distributor	Wentworth Parade
13	Local Distributor	Tapper Road

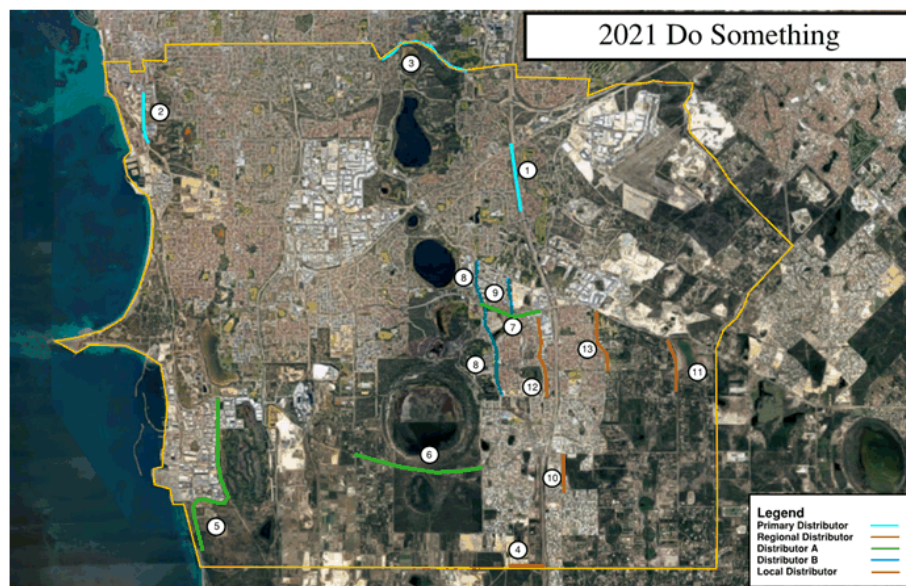


Figure 20 - 2021 Do something roads with a volume capacity exceeding 100%

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Table 18 - Roads with Volume Capacity Ratio above 85% in Do Nothing (Year 2021) in both peak periods.

Implementation Plan	Planned Upgrade				Sections	Direction	Planned Upgrades Based on Modelling Results by 2021
	City of Cockburn	Main Roads					
Road Network Upgrade	2021	2031	2021	2031			
Spearwood Avenue - Barrington Street to Beelias Drive (bridge / 2 nd c/w)	✓	✓			Beelias Drive to Mainsail Terrace	Northbound	upgrade
					Mainsail Terrace to Yankeup Road	Northbound	upgrade
					Yankeup Road to Barrington Street	Southbound	upgrade
Henderson Road - Fancote Avenue to Russell Road (widen and upgrade 1 c/w)		✓			Russell Road to Holmes Road	Northbound	upgrade
					Beelias Drive to Signal Terrace	Southbound	not required
Midgegooroo Avenue - Beelias Drive to North Lake Road (reduce to 2 lanes)		✓			Signal Terrace to North Lake Road	Northbound	upgrade
					Beelias Drive to Cooper Road	Southbound	not required
Poletti Road - Beelias Drive to North Lake Road (construct 2 nd c/w & traffic signals)	✓	✓			Cooper Road to Davison Road	Northbound	upgrade
					Davison Road to North Lake Road	Southbound	upgrade
					North Lake Road to Muriel Court	Northbound	upgrade
Seiple Court - North Lake Road to Jindabyne Heights (land / construct & re-align c/w)		✓			Seiple Court to North Lake Road	Southbound	upgrade
Hammond Road - Branch Circus to Bartram Road (construct 2 nd c/w & upgrade verge)	✓	✓			Bartram Road to Branch Circus	Northbound	upgrade
Hammond Road - Frankland Avenue to Rowley Road (construct 1 c/w)	✓	✓			Rowley Road to Wattieup Road	Southbound	upgrade
Hammond Road - Beelias Drive to North Lake Road (construct second c/w)	✓	✓		✓	Beelias Drive to Blackly Row	Northbound	upgrade
					Blackly Row to North Lake Road	Southbound	upgrade
Jandakot Road - Berrigan Drive to Solomon Road (land & construct 2 c/w)	✓	✓	✓	✓	Solomon Road to Berrigan Drive	Eastbound	upgrade
Jandakot Road - Solomon Road to Fraser Road (construct 2 nd c/w)	✓	✓	✓	✓	Fraser Road to Solomon Road	Westbound	upgrade
Jandakot Road - Fraser Road to Warton Road (land & construct 2 c/w)		✓	✓	✓	Warton Road to Fraser Road	Eastbound	upgrade
Russell Road - Hammond Road to Henderson Road (land & construct 2 c/w)		✓			Henderson Road to Pearse Road	Westbound	upgrade
					Perse Road to Hammond Road	Eastbound	upgrade
Rowley Road - Hammond Road to Kwinana Freeway (land & construct 1 c/w)	✓	✓		✓	Hammond Road to Kwinana Freeway	Westbound	upgrade
Karel Avenue - Berrigan Drive to Farrington Street (construct 2 nd c/w)		✓	✓	✓	Berrigan Drive to Roe Highway	Northbound	upgrade
					Roe Highway Bridge	Southbound	upgrade
					Roe Highway to Farrington Street	Northbound	upgrade
Cockburn Road - Rockingham Road South to Rockingham Road North	✓	✓			Rockingham Road South to Nautical Drive	Southbound	upgrade
					Nautical Drive to Russell Road	Northbound	upgrade
					Mayor Road to Spearwood Avenue	Southbound	not required
					Spearwood Avenue to Rockingham Road North	Northbound	upgrade
Stock Road - Rockingham Road to Garling Street	✓	✓			Rockingham Road to Beelias Drive	Southbound	not required
					Barrington Street to Spearwood Avenue	Northbound	upgrade
					Spearwood Avenue to Phoenix Road	Southbound	upgrade
					Phoenix Road to Rockingham Road	Northbound	not required

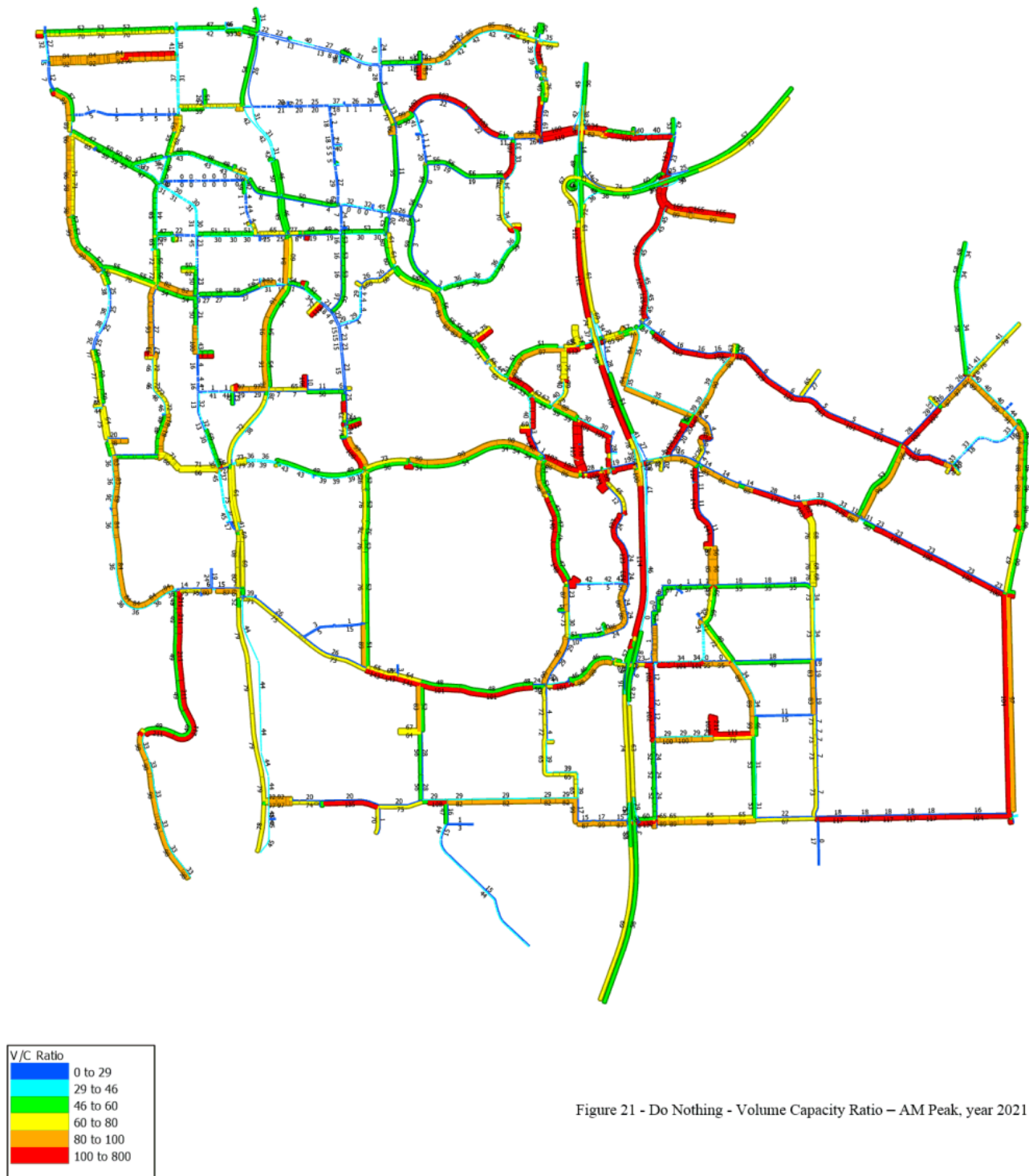


Figure 21 - Do Nothing - Volume Capacity Ratio – AM Peak, year 2021

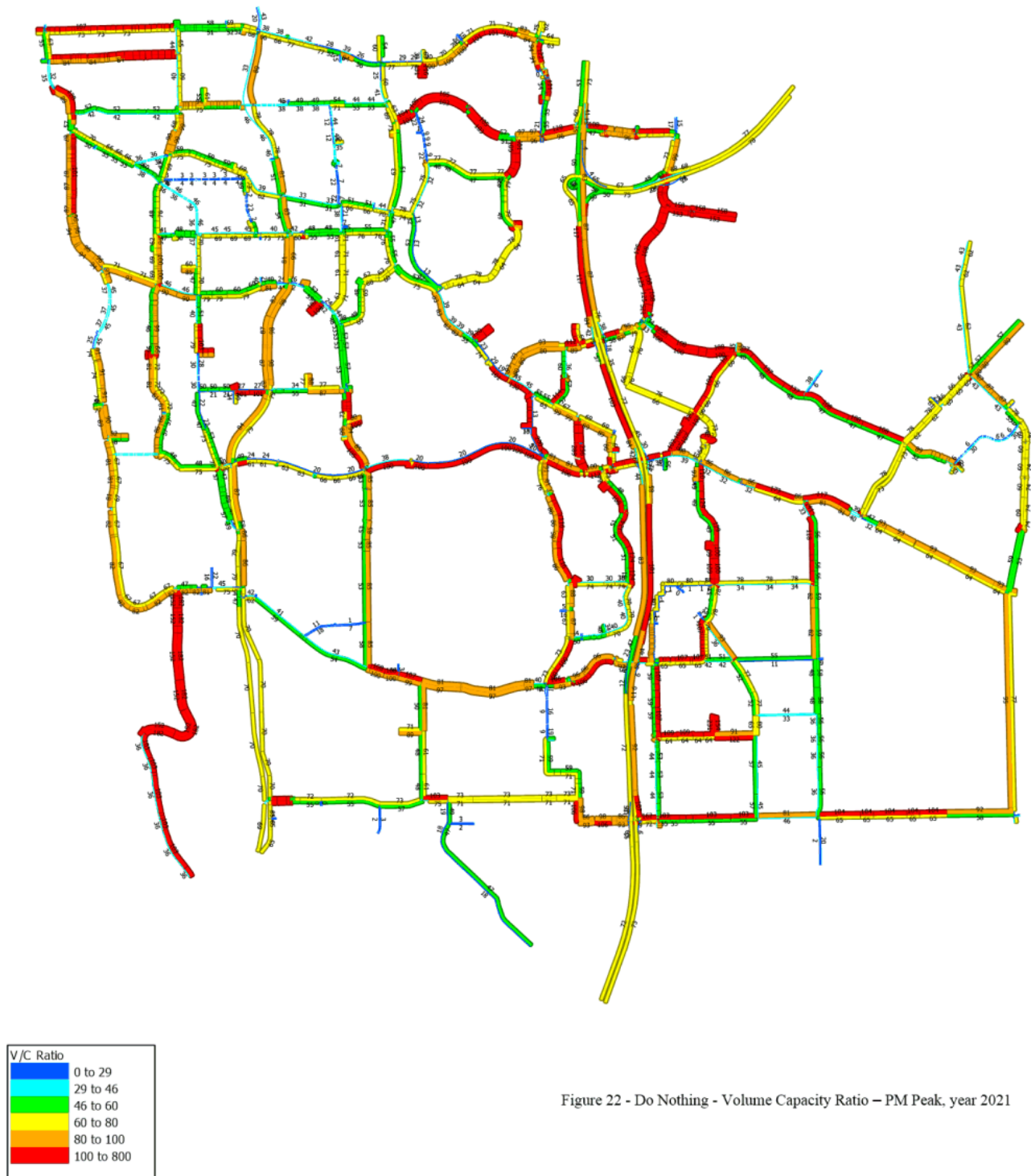


Figure 22 - Do Nothing - Volume Capacity Ratio – PM Peak, year 2021

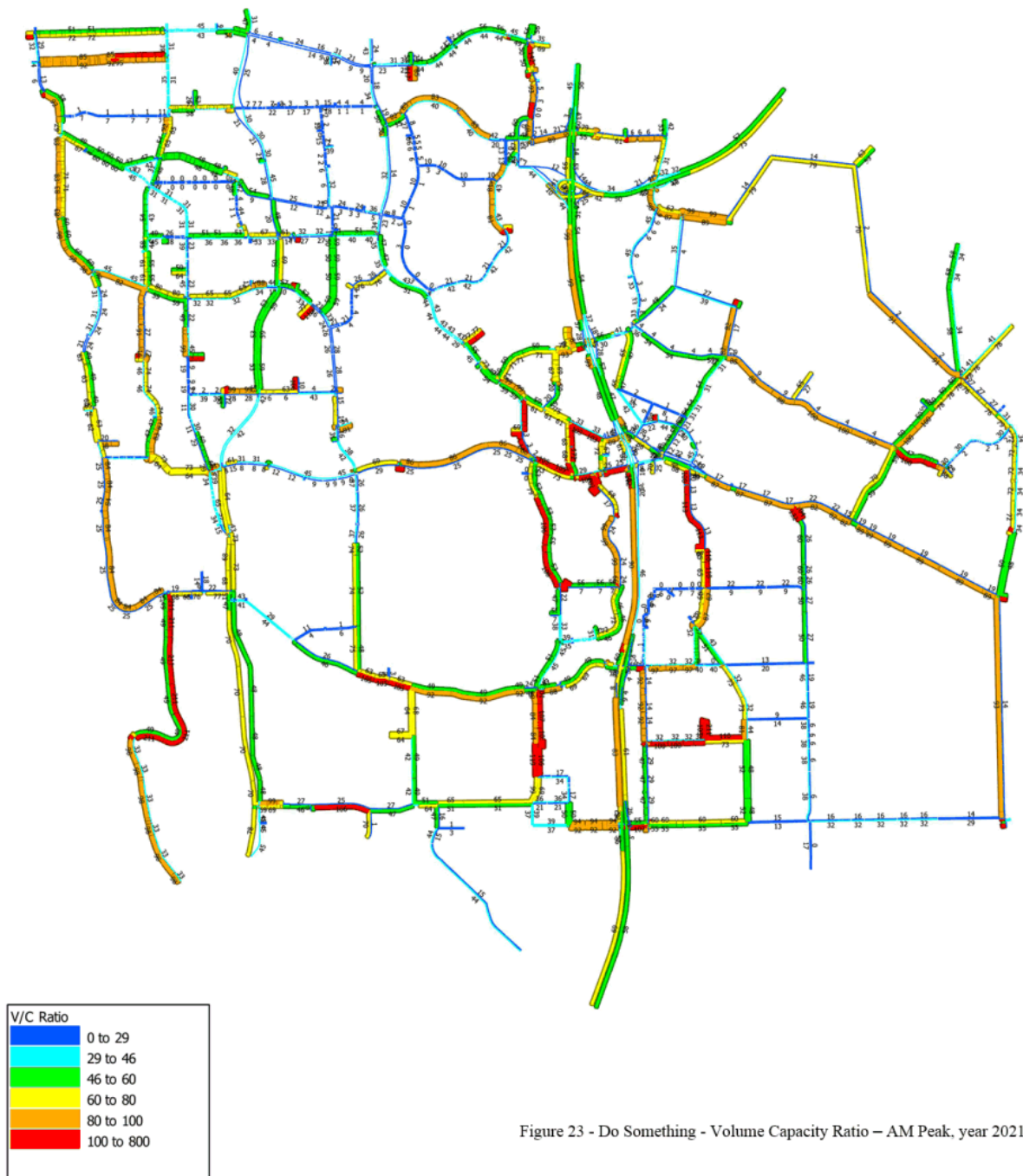


Figure 23 - Do Something - Volume Capacity Ratio – AM Peak, year 2021

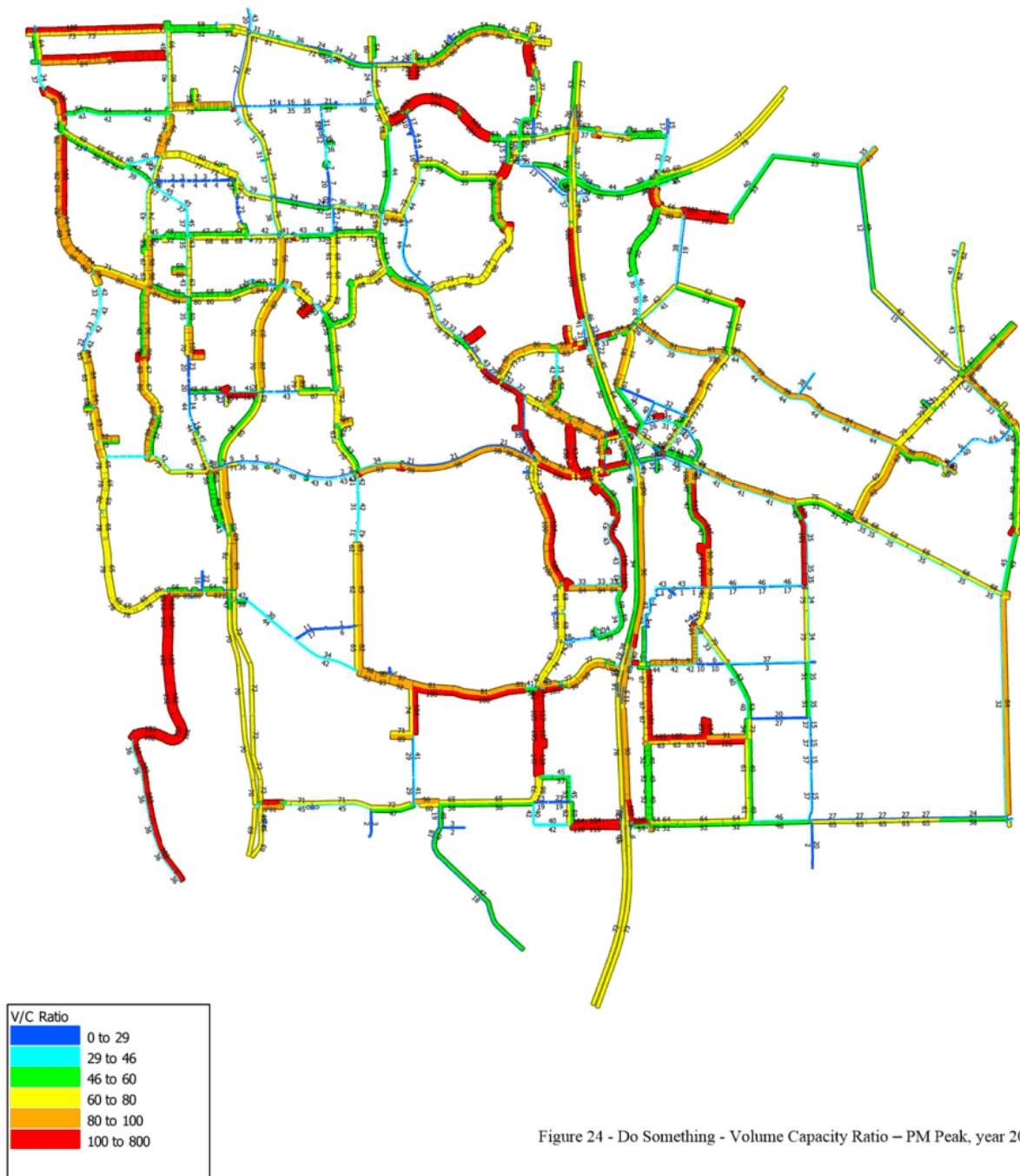


Figure 24 - Do Something - Volume Capacity Ratio – PM Peak, year 2021

A comparison of 2016 results and 2021 results (assuming upgrades are in place as per the Road Improvements Plan), shows that some locations will experience capacity issues well into the future.

6.3 Road capacity results – year 2031

A ‘do nothing’ scenario for 2031 year has shown widespread growth with more links expected to operate within 95% to 100% of their capacity in the PM peak compared to the AM peak as shown in Table 19 and Figure 25.

No further upgrades have been assumed for Kwinana Freeway between 2021 and 2031 and consequently, it remains a congestion issue at several locations throughout City of Cockburn. Approaches to the freeway at Farrington Road, Roe Highway, and Beeliar Drive are also expected to operate close to capacity.

Table 19 - 2031 Do nothing roads with a volume capacity exceeding 100% in both peak periods.

Reference Number	Road Type	Road Name
1	Primary Distributor	Kwinana Freeway
2	Primary Distributor	Cockburn Road
3	Primary Distributor	Rockingham Road
4	Primary Distributor	Armada Road
5	Primary Distributor	Stock Road
6	Primary Distributor	Farrington Road
7	Regional Distributor	Jandakot Road
8	Regional Distributor	Rowley Road
9	Regional Distributor	Wattleup Road
10	Distributor A	Cockburn Road
11	Distributor A	Russell Road
12	Distributor A	Beeliar Drive
13	Distributor A	Hope Road
14	Distributor A	Karel Avenue
15	Distributor A	Spearwood Avenue
16	Distributor A	Berrigan Drive
17	Distributor B	Spearwood Avenue
18	Distributor B	Hamilton Road
19	Distributor B	Hammond Road
20	Distributor B	Midgegooroo Avenue
21	Local Distributor	Henderson Road
22	Local Distributor	Gibbs Road
23	Local Distributor	Lyon Road
24	Local Distributor	Liddelow Road
25	Local Distributor	Wentworth Parade
26	Local Distributor	Tapper Road
27	Local Distributor	Prinsep Road

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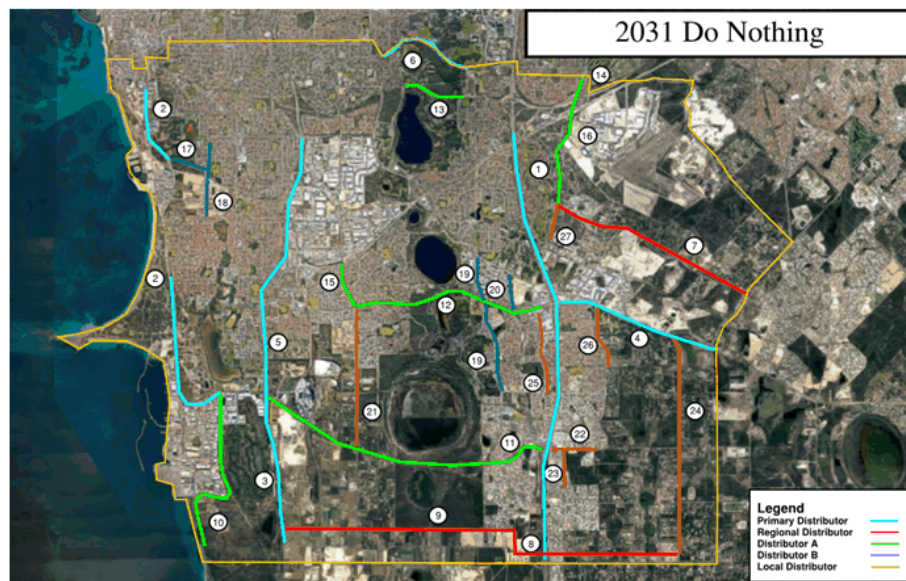


Figure 25 – Heat map of 2031 do nothing scenario of major roads with volume capacity ratios exceeding 100%

Modelling results with planned upgrades has indicated reduction in congestion in several locations. It can be seen in Table 20 and Figure 25 that the degree of congestion has reduced to smaller sections of each road identified in “do nothing” scenario as congestion issue. It was determined that all necessary upgrades listed in Table 21 are recommended to be implemented by 2031.

Table 20 - 2031 Do something major roads with volume capacity exceeding 100% in both peak periods.

Reference Number	Road Type	Road Name
1	Primary Distributor	Kwinana Freeway
2	Primary Distributor	Cockburn Road
3	Primary Distributor	Rockingham Road
4	Primary Distributor	Armada Road
5	Primary Distributor	Stock Road
6	Primary Distributor	Farrington Road
7	Regional Distributor	Jandakot Road
8	Regional Distributor	Rowley Road
9	Distributor A	Cockburn Road
10	Distributor A	Russell Road
11	Distributor A	Beeliar Drive
12	Distributor A	Hope Road
13	Distributor A	Karel Avenue
14	Distributor B	Spearwood Avenue
15	Distributor B	Hamilton Road
16	Distributor B	Hammond Road
17	Distributor B	Midgegooroo Avenue
18	Local Distributor	Henderson Road

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19	Local Distributor	Gibbs Road
20	Local Distributor	Lyon Road
21	Local Distributor	Liddelow Road
22	Local Distributor	Wentworth Parade
23	Local Distributor	Tapper Road
24	Local Distributor	Prinsep Road

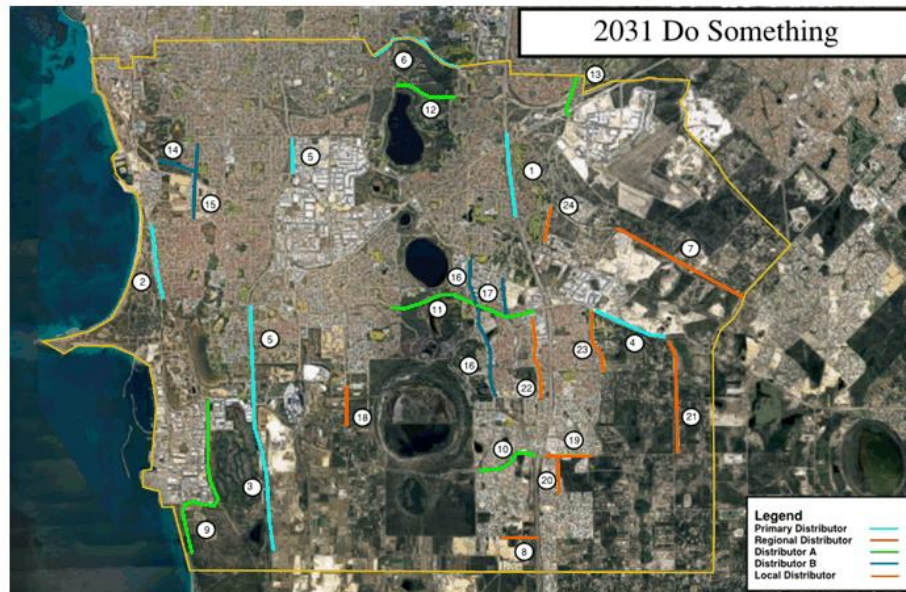


Figure 26 - Heat map of 2031 do something scenario of major roads with volume capacity ratios exceeding 100%

Other locations which were identified to have congestion issues in 2021, where no subsequent road network upgrades are planned, clearly continue to operate at close or over the capacity as shown in Figure 27 to Figure 30.

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Table 21 - Implications of planned road network upgrades (Year 2031) in both peak periods.

Implementation Plan	Planned Upgrade				Sections	Direction	Planned Upgrades Based on Modelling Results by 2031
	City of Cockburn		Main Roads				
Road Network Upgrade	2021	2031	2021	2031			
Rockingham Road – Phoenix Road to Spearwood Avenue reduction (1 lane each way)	✓	✓	✓	✓	Phoenix Road to Spearwood Ave	Northbound	not required
						Southbound	upgrade
Spearwood Avenue - Barrington Street to Beeliar Drive (bridge / 2 nd c/w)	✓	✓			Beeliar Drive to Mainsail Terrace	Northbound	upgrade
						Southbound	upgrade
					Mainsail Terrace to Yangebup Road	Northbound	upgrade
						Southbound	upgrade
Spearwood Avenue – Beeliar Drive to Fancote Avenue (construct 2 nd c/w)	✓	✓			Beeliar Drive to Fancote Avenue	Northbound	upgrade
						Southbound	upgrade
Henderson Road – Fancote Avenue to Russell Road (widen and upgrade 1 c/w)		✓			Russell Road to Holmes Road	Northbound	upgrade
						Southbound	upgrade
					Holmes Road to Fancote Avenue	Northbound	upgrade
						Southbound	upgrade
Beeliar Drive – Fawcett Road to Stock Road (reconstruction)	✓	✓			Fawcett Road to Rockingham Road	Eastbound	upgrade
						Westbound	upgrade
					Rockingham Road to Stock Road	Eastbound	upgrade
						Westbound	upgrade
Midgegooroo Avenue – Beeliar Drive to North Lake Road (reduce to 2 lanes)		✓			Beeliar Drive to Signal Terrace	Northbound	upgrade
						Southbound	not required
					Signal Terrace to North Lake Road	Northbound	upgrade
						Southbound	not required
Poletti Road – Beeliar Drive to North Lake Road (construct 2 nd c/w & traffic signals)	✓	✓			Beeliar Drive to Cooper Road	Northbound	upgrade
						Southbound	upgrade
					Cooper Road to Davison Road	Northbound	upgrade
						Southbound	upgrade
					Davison Road to North Lake Road	Northbound	upgrade
						Southbound	upgrade
Semple Court – North Lake Road to Jindabyne Heights (land / construct & re-align c/w)		✓			North Lake Road to Muriel Court	Northbound	upgrade
						Southbound	upgrade
					Muriel Court to Berrigan Drive	Northbound	upgrade
						Southbound	not required
Hammond Road – Branch Circus to Bartram Road (construct 2 nd c/w & upgrade verge)	✓	✓			Bartram Road to Branch Circus	Northbound	upgrade
						Southbound	upgrade
Hammond Road – Gaebler Road to Frankland Avenue (construct 1 c/w)	✓	✓	✓	✓	Frankland Avenue to Gaebler Road	Northbound	not required
						Southbound	upgrade
Hammond Road – Frankland Avenue to Rowley Road (construct 1 c/w)	✓	✓			Rowley Road to Wattleup Road	Northbound	upgrade
						Southbound	upgrade
					Wattleup Road to Frankland Avenue	Northbound	not required
						Southbound	upgrade
Hammond Road – Beeliar Drive to North Lake Road (construct second c/w)	✓	✓		✓	Beeliar Drive to Blackly Row	Northbound	upgrade
						Southbound	upgrade
					Blackly Row to North Lake Road	Northbound	upgrade
						Southbound	upgrade
Jandakot Road – Berrigan Drive to Solomon Road (land & construct 2 c/w)	✓	✓	✓	✓	Solomon Road to Berrigan Drive	Eastbound	upgrade
						Westbound	upgrade
Jandakot Road – Solomon Road to Fraser Road (construct 2 nd c/w)	✓	✓	✓	✓	Fraser Road to Solomon Road	Eastbound	upgrade
						Westbound	upgrade
Jandakot Road – Fraser Road to Warton Road (land & construct 2 c/w)		✓	✓	✓	Warton Road to Fraser Road	Eastbound	upgrade
						Westbound	upgrade
Russell Road - Hammond Road to Henderson Road (land & construct 2 c/w)		✓			Henderson Road to Pearse Road	Eastbound	upgrade
						Westbound	upgrade
					Pearse Road to Hammond Road	Eastbound	upgrade
						Westbound	upgrade

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Implementation Plan	Planned Upgrade				Sections	Direction	Planned Upgrades Based on Modelling Results by 2031
	City of Cockburn		Main Roads				
	2021	2031	2021	2031			
Road Network Upgrade							
Russell Road – Henderson Road to Rockingham Road (land & construct 2 c/w)		✓			Rockingham Road to Holmes Road	Eastbound	not required
					Holmes Road to Henderson Road	Westbound	upgrade
Rowley Road – Hammond Road to Kwinana Freeway (land & construct 1 c/w)	✓	✓		✓	Hammond Road to Kwinana Freeway	Westbound	upgrade
						Eastbound	upgrade
Karel Avenue – Berrigan Drive to Farrington Street (construct 2 nd c/w)		✓	✓	✓	Berrigan Drive to Roe Highway	Northbound	upgrade
					Roe Highway Bridge	Southbound	upgrade
						Northbound	upgrade
					Roe Highway to Farrington Street	Southbound	upgrade
						Northbound	upgrade
						Southbound	upgrade
Cockburn Road - Rockingham Road South to Rockingham Road North	✓	✓			Rockingham Road South to Nautical Drive	Northbound	upgrade
						Southbound	upgrade
	✓	✓			Nautical Drive to Russell Road	Northbound	upgrade
						Southbound	upgrade
	✓	✓			Russell Road to Mayor Road	Northbound	upgrade
						Southbound	upgrade
	✓	✓			Mayor Road to Spearwood Avenue	Northbound	upgrade
						Southbound	upgrade
Stock Road - Rockingham Road to Garling Street	✓	✓			Spearwood Avenue to Rockingham Road North	Northbound	upgrade
						Southbound	upgrade
	✓	✓			Rockingham Road to Beeliar Drive	Northbound	upgrade
						Southbound	upgrade
	✓	✓			Beeliar Drive to Barrington Street	Northbound	upgrade
						Southbound	upgrade
	✓	✓			Barrington Street to Spearwood Avenue	Northbound	upgrade
						Southbound	upgrade
	✓	✓			Spearwood Avenue to Phoenix Road	Northbound	upgrade
						Southbound	upgrade
	✓	✓			Phoenix Road to Forrest Road	Northbound	not required
						Southbound	upgrade
	✓	✓			Forrest Road to Winterfold Road	Northbound	upgrade
						Southbound	upgrade
	✓	✓			Winterfold Road to South Street	Northbound	not required
						Southbound	upgrade

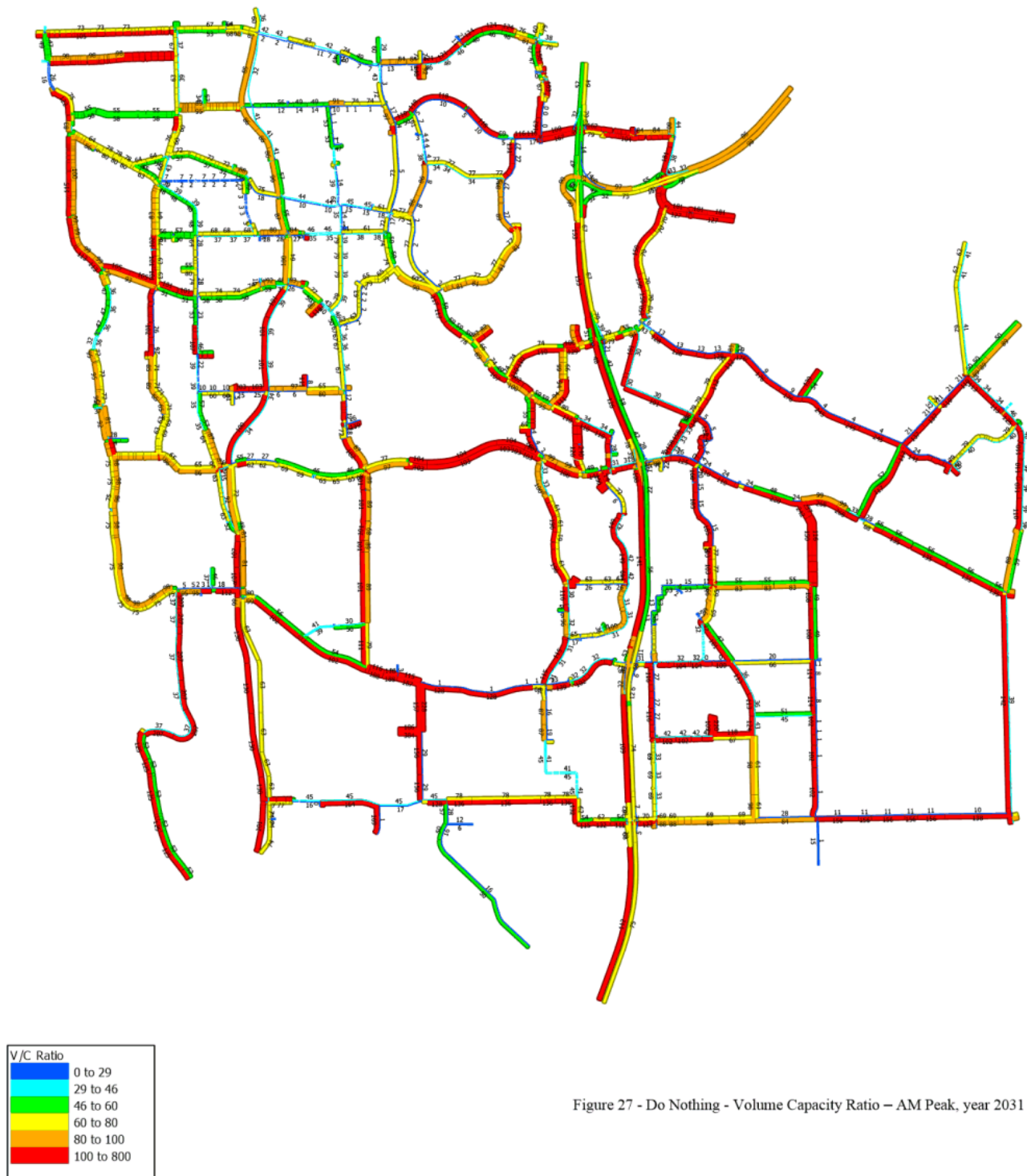


Figure 27 - Do Nothing - Volume Capacity Ratio – AM Peak, year 2031

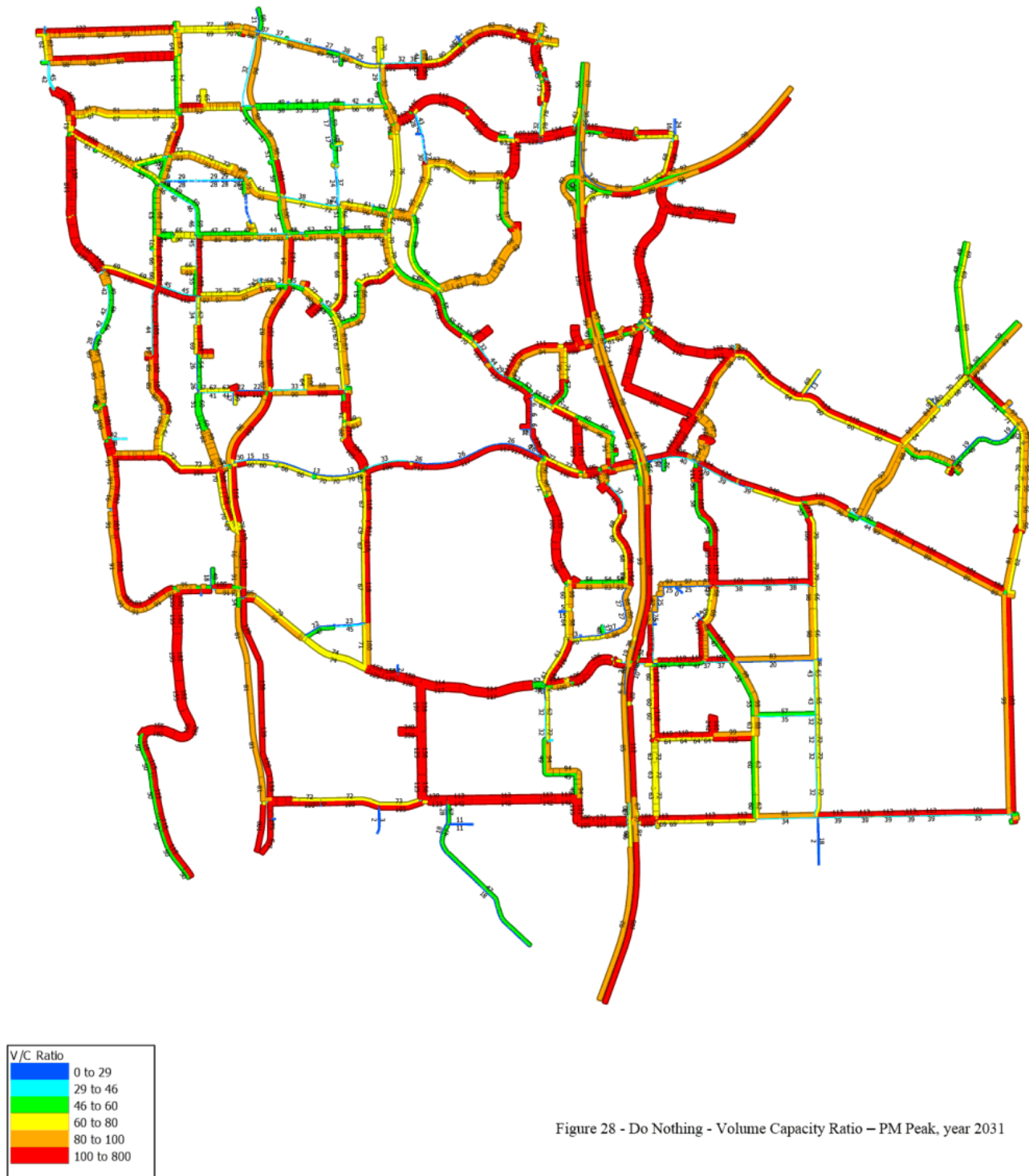


Figure 28 - Do Nothing - Volume Capacity Ratio – PM Peak, year 2031

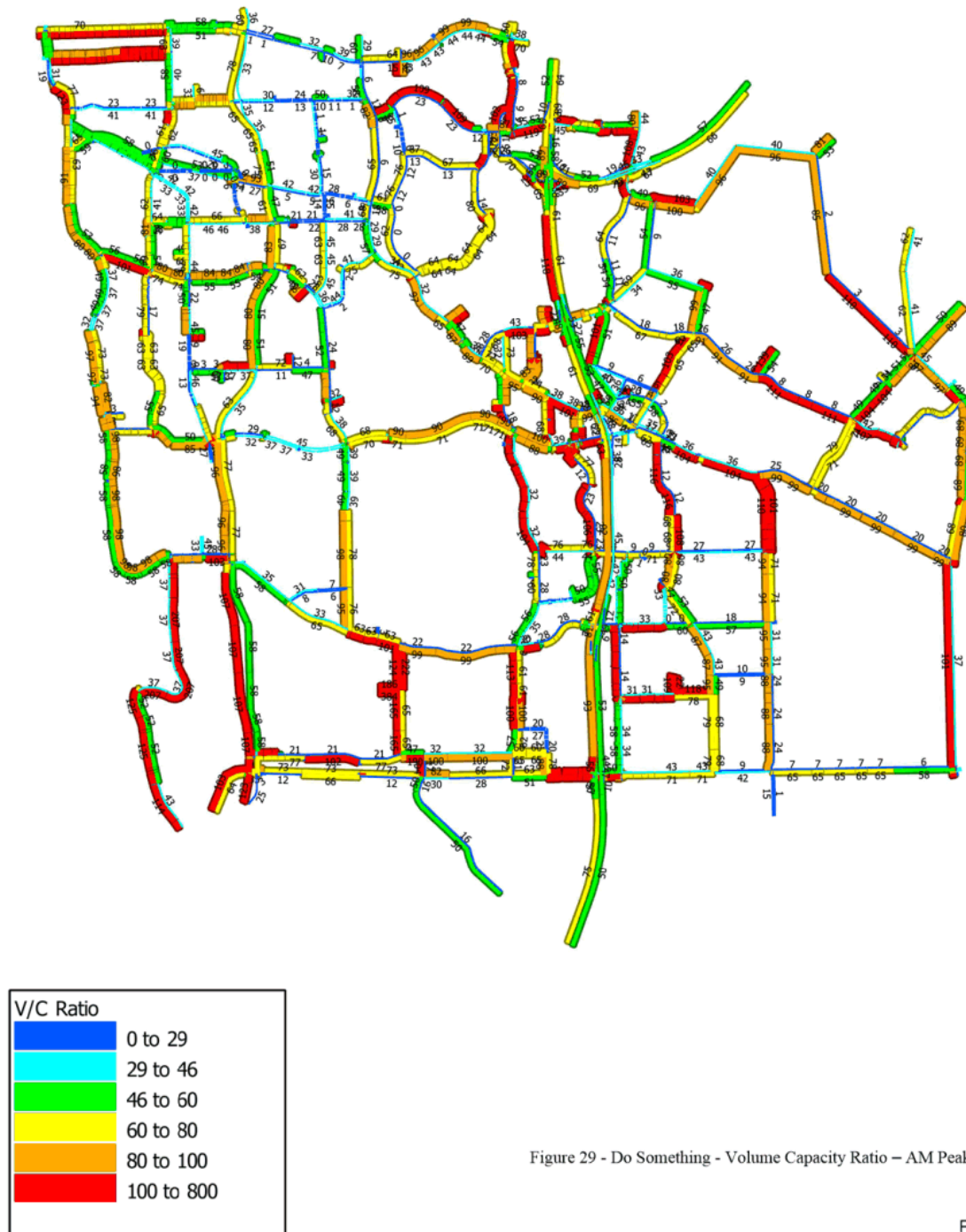
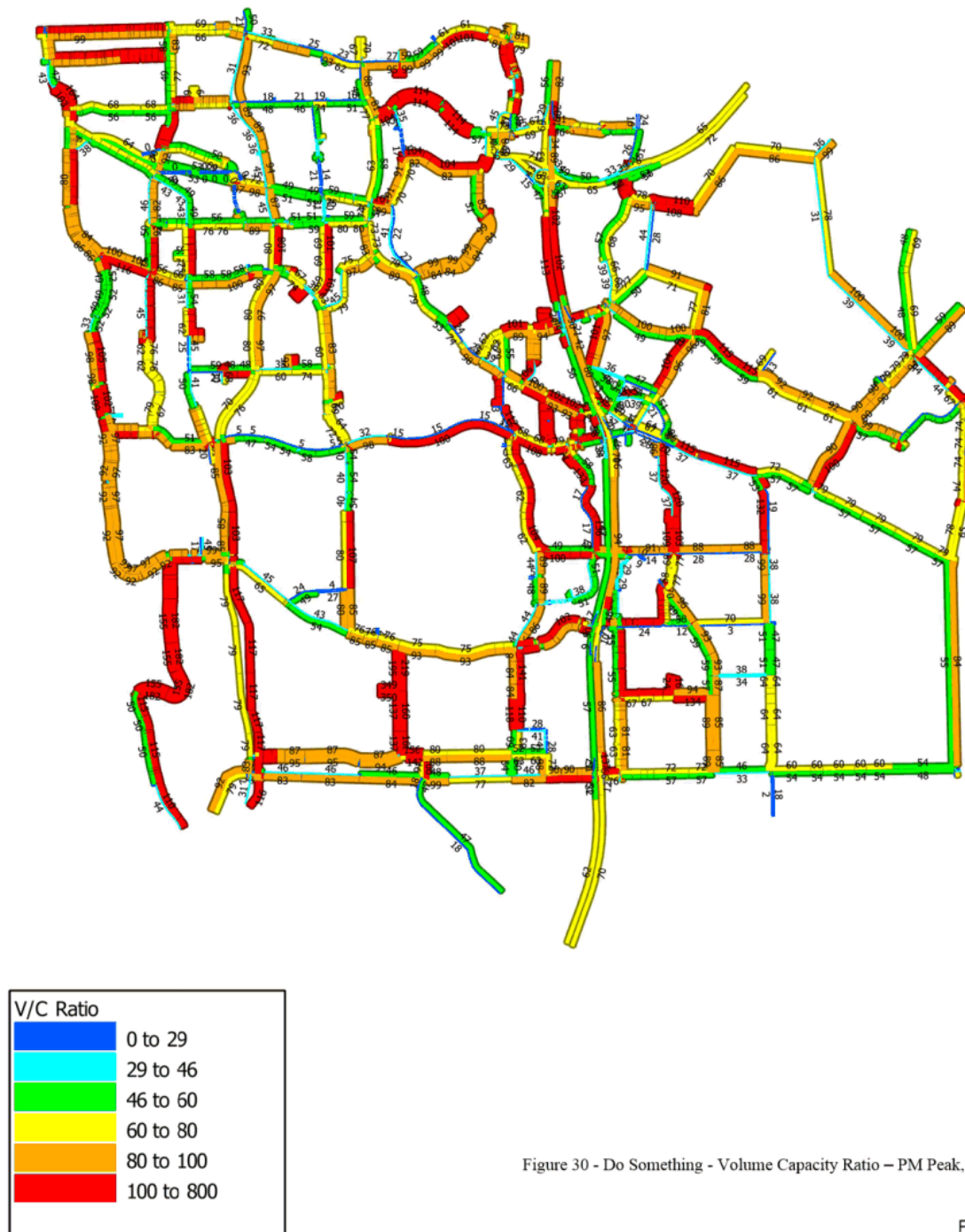


Figure 29 - Do Something - Volume Capacity Ratio – AM Peak, year 2031



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6.4 Average daily traffic

Average daily traffic has been calculated using AM and PM volumes. The peak hour analysis has been more meaningful in order to assess the impacts of the proposed road improvements. However, average daily traffic has been calculated for all corridors where significant improvements are planned in order to see the daily magnitude of traffic as shown in Table 22. The average daily traffic results have been shown for all modelled years and following scenarios:

1. Do Nothing scenario – network without any road upgrades, and
2. Do Something scenarios – network with planned upgrades.

Table 22 shows general increase in average daily traffic on several sections where upgrades are planned. However, roads such as Polletti Road shows much higher traffic volumes in the future, which are due to future demographic growth within that area.

Table 22 – Average 5-day daily traffic comparison between various scenarios between year 2016 and 2031

	Sections	Direction	AWDT				
			Do Nothing Average	Do Nothing Average	Do Nothing Average	Do Something Average	Do Something Average
Road Network Upgrade			2016	2021	2031	2021	2031
Rockingham Road – Phoenix Road to Spearwood Avenue reduction (1 lane each way)	Phoenix Road to Spearwood Ave	Northbound	10,300	11,900	16,900	10,700	9,400
		Southbound	9,300	12,100	18,600	11,300	9,800
Spearwood Avenue - Barrington Street to Beeliar Drive (bridge / 2nd c/w)	Beeliar Drive to Mainsail Terrace	Northbound	9,400	10,800	10,900	11,200	14,500
		Southbound	12,400	11,700	10,600	10,500	11,700
	Mainsail Terrace to Yangebup Road	Northbound	6,000	8,800	9,100	10,200	12,900
		Southbound	8,400	8,200	7,300	8,300	8,700
	Yangebup Road to Barrington Street	Northbound	12,800	12,200	15,000	13,200	16,900
		Southbound	14,000	9,100	7,200	9,600	10,400
Spearwood Avenue – Beeliar Drive to Fancote Avenue (construct 2nd c/w)	Beeliar Drive to Fancote Avenue	Northbound	2,400	6,300	8,700	6,300	8,300
		Southbound	2,100	6,300	11,700	6,900	9,400
Henderson Road – Fancote Avenue to Russell Road (widen and upgrade 1 c/w)	Russell Road to Holmes Road	Northbound	2,700	7,200	8,500	6,500	8,100
		Southbound	2,600	6,400	9,900	6,500	8,300
	Holmes Road to Fancote Avenue	Northbound	2,400	6,300	8,700	6,300	8,300
		Southbound	2,100	6,300	11,700	6,900	9,400
Beeliar Drive – Fawcett Road to Stock Road (reconstruction)	Fawcett Road to Rockingham Road	Eastbound	4,100	6,400	10,200	6,600	5,800
		Westbound	4,500	7,700	11,700	7,700	9,400
	Rockingham Road to Stock Road	Eastbound	6,200	6,200	7,200	6,300	7,600
		Westbound	6,500	5,600	7,600	6,700	11,100
North Lake Road – Kentucky Court to Kwinana Freeway (construct 2 c/ws)	Kentucky Court to Kwinana Freeway	Eastbound	Not in Model	Not in Model	Not in Model	14,500	15,400
		Westbound	Not in Model	Not in Model	Not in Model	20,700	22,700
North Lake Road – Extend from Kwinana Freeway to Armadale Road (land, bridge, construct 2 c/ws, & traffic signals)	Kwinana Freeway to Armadale Road	Eastbound	Not in Model	Not in Model	Not in Model	13,400	16,900
		Westbound	Not in Model	Not in Model	Not in Model	12,200	14,700
Verde Drive – Biscayne Way to Solomon Road (land & construct 1 c/w)	Biscayne Way to Solomon Road	Northbound	Not in Model	Not in Model	Not in Model	8,300	11,900
		Southbound	Not in Model	Not in Model	Not in Model	6,400	7,900
Verve Drive – Solomon Road to North Lake Road (land & construct 1 c/w)	Solomon Road to North Lake Road	Northbound	Not in Model	Not in Model	Not in Model	13,700	16,400
		Southbound	Not in Model	Not in Model	Not in Model	7,900	11,200

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	Sections	Direction	AWDT				
			Do Nothing Average	Do Nothing Average	Do Nothing Average	Do Something Average	Do Something Average
Road Network Upgrade			2016	2021	2031	2021	2031
Prinsep Road – Cutler Road to Verde Drive (construct 1 c/w)	Cutler Road to Verde Drive	Northbound	Not in Model	Not in Model	Not in Model	6,100	6,700
		Southbound	Not in Model	Not in Model	Not in Model	5,000	5,400
Midgegogoo Avenue – Beeliar Drive to North Lake Road (reduce to 2 lanes)	Beeliar Drive to Signal Terrace	Northbound	10,000	26,600	28,700	21,000	14,700
		Southbound	8,000	14,900	15,100	16,800	11,700
	Signal Terrace to North Lake Road	Northbound	8,900	22,700	24,800	19,100	12,800
		Southbound	7,600	13,100	13,000	17,000	12,100
Poletti Road – Beeliar Drive to North Lake Road (construct 2nd c/w & traffic signals)	Beeliar Drive to Cooper Road	Northbound	7,400	6,600	8,300	2,500	4,200
		Southbound	3,500	25,200	17,000	23,700	14,300
	Cooper Road to Davison Road	Northbound	4,200	19,300	15,000	20,500	17,600
		Southbound	2,800	41,200	29,300	41,300	30,900
	Davison Road to North Lake Road	Northbound	4,200	19,300	15,000	20,500	17,600
		Southbound	2,800	41,200	29,300	41,700	31,300
Semple Court – North Lake Road to Jindabyne Heights (land / construct & re-align c/w)	North Lake Road to Muriel Court	Northbound	3,800	6,900	10,400	5,000	8,300
		Southbound	3,600	6,600	8,300	5,200	5,600
	Muriel Court to Berrigan Drive	Northbound	4,800	5,200	8,400	4,800	8,000
		Southbound	1,100	4,500	5,500	4,800	5,000
Hammond Road – Branch Circus to Bartram Road (construct 2nd c/w & upgrade verge)	Bartram Road to Branch Circus	Northbound	6,000	10,300	12,100	9,200	13,500
		Southbound	4,800	6,500	9,000	7,300	11,100
Hammond Road – Gaebler Road to Frankland Avenue (construct 1 c/w)	Frankland Avenue to Gaebler Road	Northbound	1,500	4,700	3,000	11,000	9,000
		Southbound	700	4,100	4,500	2,300	2,100
Hammond Road – Frankland Avenue to Rowley Road (construct 1 c/w)	Rowley Road to Wattlup Road	Northbound	2,700	8,200	9,600	5,300	8,700
		Southbound	2,800	4,300	9,900	5,700	8,400
	Wattlup Road to Frankland Avenue	Northbound	1,500	4,700	3,000	3,800	2,900
		Southbound	700	4,100	4,500	2,300	2,100
Hammond Road – Beeliar Drive to North Lake Road (construct second c/w)	Beeliar Drive to Blackly Row	Northbound	5,600	3,600	4,500	4,000	5,900
		Southbound	6,300	4,900	5,300	6,000	9,400
	Blackly Row to North Lake Road	Northbound	7,200	9,800	12,000	12,900	19,300
		Southbound	7,600	8,700	8,900	11,100	16,300
Hammond Road – North Lake Road to Berrigan Drive (construct 1 c/w)	North Lake Road to Berrigan Drive	Northbound	Not in Model	Not in Model	Not in Model	Not in Model	6,300
		Southbound	Not in Model	Not in Model	Not in Model	Not in Model	7,500
Pilatus Street – Berrigan Drive to airport boundary (construct 2nd c/w)	Berrigan Drive to Airport Boundary	Northbound	Not in Model	Not in Model	Not in Model	13,700	17,700
		Southbound	Not in Model	Not in Model	Not in Model	7,200	9,400
Jandakot Road – Berrigan Drive to Solomon Road (land & construct 2 c/w)	Solomon Road to Berrigan Drive	Eastbound	8,100	6,700	14,000	6,500	10,400
		Westbound	9,300	11,400	14,800	9,500	11,800
Jandakot Road – Solomon Road to Fraser Road (construct 2nd c/w)	Fraser Road to Solomon Road	Eastbound	6,200	6,200	9,700	8,600	12,800
		Westbound	6,800	9,100	12,100	12,400	15,000
Jandakot Road – Fraser Road to Warton Road (land & construct 2 c/w)	Warton Road to Fraser Road	Eastbound	6,500	5,300	6,300	6,700	8,000
		Westbound	6,300	8,000	10,400	13,000	16,500
Russell Road - Hammond Road to Henderson Road (land & construct 2 c/w)	Henderson Road to Pearse Road	Eastbound	7,900	14,000	22,000	12,000	21,900
		Westbound	9,200	20,400	26,400	17,600	32,800

City of Cockburn

2018 District Traffic Study

Road Network Upgrade	Sections	Direction	AWDT				
			Do Nothing Average	Do Nothing Average	Do Nothing Average	Do Something Average	Do Something Average
			2016	2021	2031	2021	2031
Pearse Road to Hammond Road		Eastbound	6,500	10,900	8,300	9,500	12,000
		Westbound	9,200	18,200	22,700	18,200	34,800
Russell Road – Henderson Road to Rockingham Road (land & construct 2 c/w)	Rockingham Road to Holmes Road	Eastbound	5,600	7,000	11,200	4,800	12,300
		Westbound	6,000	10,900	17,700	8,100	23,500
	Holmes Road to Henderson Road	Eastbound	5,500	6,900	10,000	4,700	11,900
		Westbound	5,900	10,200	14,900	7,900	20,900
Rowley Road – Hammond Road to Kwinana Freeway (land & construct 1 c/w)	Hammond Road to Kwinana Freeway	Eastbound	2,800	4,400	10,000	10,700	23,000
		Westbound	3,200	9,700	11,400	11,300	28,000
Rowley Road – Hammond Road to ~1.2km west of Hammond Road	Hammond Road to Rockingham Road	Eastbound	Not in Model	Not in Model	Not in Model	4,900	14,600
		Westbound	Not in Model	Not in Model	Not in Model	4,900	15,200
Karel Avenue – Berrigan Drive to Farrington Street (construct 2nd c/w)	Berrigan Drive to Roe Highway	Northbound	14,700	13,900	17,600	21,500	27,400
		Southbound	6,400	19,100	20,700	14,100	17,800
	Roe Highway Bridge	Northbound	12,300	17,200	25,200	19,900	24,300
		Southbound	7,100	18,300	21,000	12,100	14,100
	Roe Highway to Farrington Street	Northbound	9,900	10,800	16,100	12,100	15,100
		Southbound	9,900	9,600	10,000	7,900	11,700
	Rockingham Road South to Rockingham Road North	Northbound	5,900	6,200	8,100	6,200	8,100
		Southbound	7,400	6,900	8,500	6,800	8,300
Cockburn Road - Rockingham Road South to Rockingham Road North	Nautical Drive to Russell Road	Northbound	4,700	9,500	14,200	9,600	9,200
		Southbound	5,400	19,500	24,800	19,500	19,300
	Russell Road to Mayor Road	Northbound	6,000	7,800	12,900	7,400	10,600
		Southbound	5,700	10,900	15,600	11,100	14,500
	Mayor Road to Spearwood Avenue	Northbound	8,500	10,700	12,800	9,000	13,800
		Southbound	7,500	10,600	13,100	9,900	13,300
	Spearwood Avenue to Rockingham Road North	Northbound	9,700	12,500	16,500	11,600	24,000
		Southbound	9,300	13,100	18,600	12,800	24,800
	Rockingham Road to Beeliar Drive	Northbound	13,400	20,200	24,700	19,000	25,400
		Southbound	13,800	23,400	32,900	23,000	27,100
Stock Road - Rockingham Road to Garling Street	Beeliar Drive to Barrington Street	Northbound	14,000	22,700	23,300	13,500	19,000
		Southbound	11,900	19,100	22,300	15,800	15,800
	Barrington Street to Spearwood Avenue	Northbound	16,900	24,400	23,000	17,900	22,700
		Southbound	14,900	22,700	23,800	21,600	21,300
	Spearwood Avenue to Phoenix Road	Northbound	16,300	22,300	24,000	16,700	23,000
		Southbound	14,800	26,500	29,900	24,500	25,700
	Phoenix Road to Forrest Road	Northbound	17,000	15,300	19,000	8,800	14,700
		Southbound	14,900	21,600	25,200	18,300	19,300
	Forrest Road to Winterfold Road	Northbound	16,300	13,100	19,200	7,700	13,700
		Southbound	13,200	18,900	23,600	14,400	17,300

City of Cookburn

2018 District Traffic Study

	Sections	Direction	AWDT				
			Do Nothing Average	Do Nothing Average	Do Nothing Average	Do Something Average	Do Something Average
Road Network Upgrade			2016	2021	2031	2021	2031
	Winterfold Road to South Street	Northbound	16,500	11,900	15,700	9,300	14,300
		Southbound	14,300	17,100	19,700	13,800	17,300
	South Street to Garling Street	Northbound	9,800	9,000	10,700	8,900	10,500
		Southbound	8,900	10,500	12,100	11,200	12,800

7 Implementation plan

The resulting implementation plan from the analysis combines the initial road network assumptions advice supplied by the City of Cockburn, outcomes of the modelling analysis and further work required to better understand the transport system. This chapter shows detailed analysis for each planned road improvement for all scenarios. The outcomes of the analysis have already been detailed in Section 6.2 and 6.3.

[illegible]

8 Additional modelling results

City of Cockburn has requested additional option testing to determine optimal Major Roadworks Plan. Initially, it was determined that two options need to be tested as part of first round of modelling, which are as follows:

1. Cockburn Road widening
2. Stock Road widening

Cockburn Road and Stock Road widening has been tested in order to investigate what potential impacts it may have on the City of Cockburn network. However, those two roads are under Main Road jurisdiction and therefore, this analysis has been done for information only. The results of the additional analysis have been explained in Appendix B.

Results of the first round of modelling was presented to Councillors at briefing meeting in August 2018.

As the result of the presentation, Councillors requested additional option testing which are as follows:

1. Network with/without Roe 9 link and Hammond Road extension
2. Network with/without Rockingham Road duplication
3. Network with/without Farrington Road duplication
4. Network with/without Roe 9 only
5. Network with/without Russell Road duplication
6. Network with Armadale Road widening by 2020
7. Bartram Road link analysis

The outcomes of this analysis have been explained and shown in Appendix C. A further briefing of those results was presented to Councillors in October 2018.

9 Conclusion

The 2018 City of Cockburn District Traffic Study has undertaken a comprehensive review of the traffic demand, current and forecast, in the City of Cockburn local government area. As part of the study the following key outcomes have been achieved:

- Development of AM and PM peak traffic models in Aimsun software for the City of Cockburn Local Government Area consistent with Main Roads ROM24 daily output for external movements. This will provide a valuable tool for future transport and land use planning in the City of Cockburn.
- Demographic data review undertaken to refine AM and PM peak models to provide more accurate forecasting for the local area.
- Validation of link-based traffic volumes to very good levels for peak periods within the City of Cockburn area. This offers the ability for modelling accurate traffic forecasts.
- Forecasts for 2021 (do nothing and City of Cockburn aligned upgrades) and 2031 (City of Cockburn aligned upgrades) forecast years.

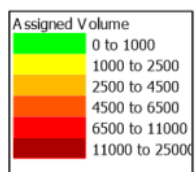
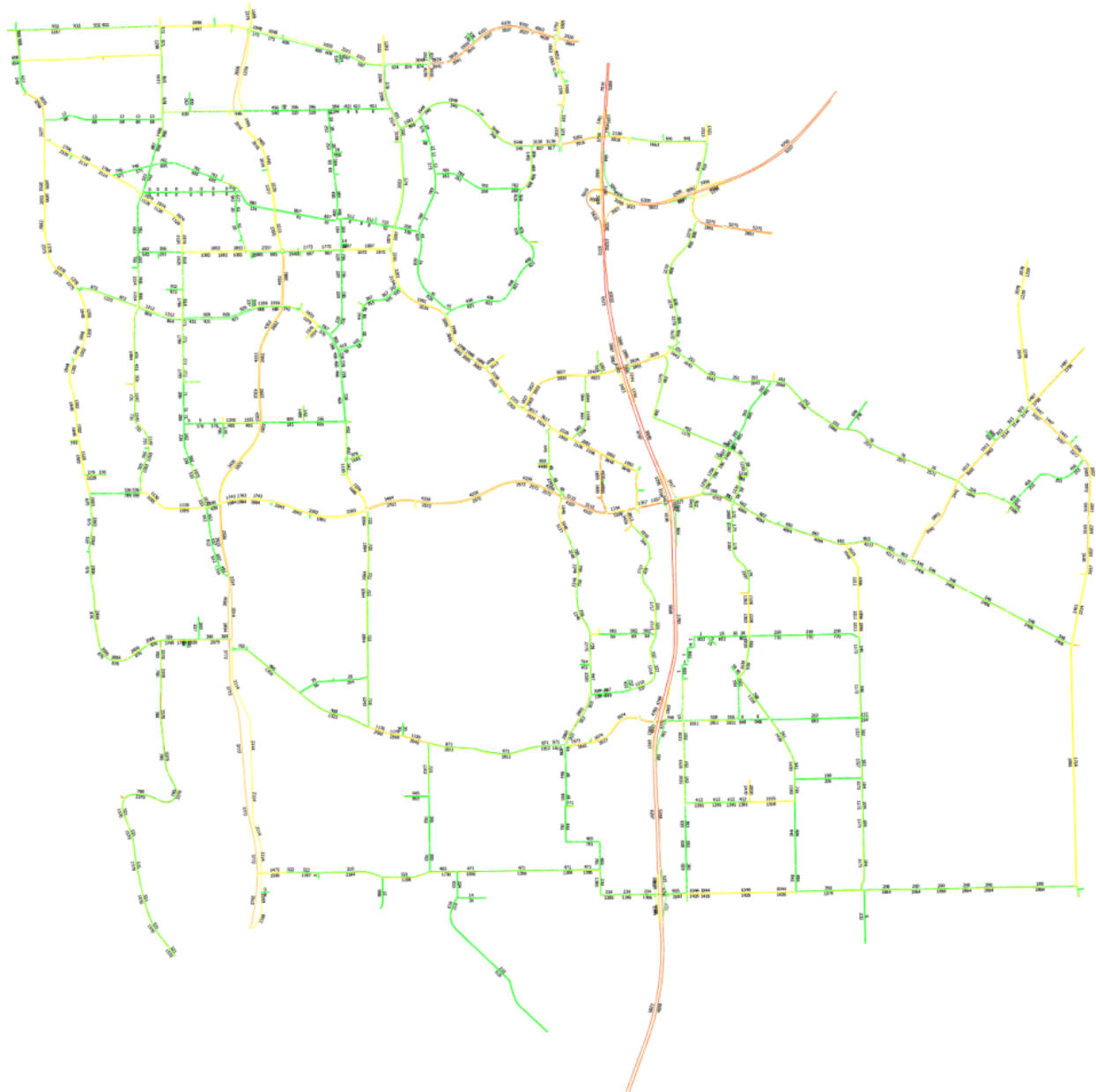
The analysis has shown significant increases in traffic demand and travel times without any road network upgrades. Even with the proposed upgrades there are sections which are forecast to operate over the available road network capacity as identified in Section 6. However, despite the increase in demand there will be insufficient capacity in upgrading the road network to fully solve congestion due to already constrained network.

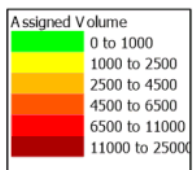
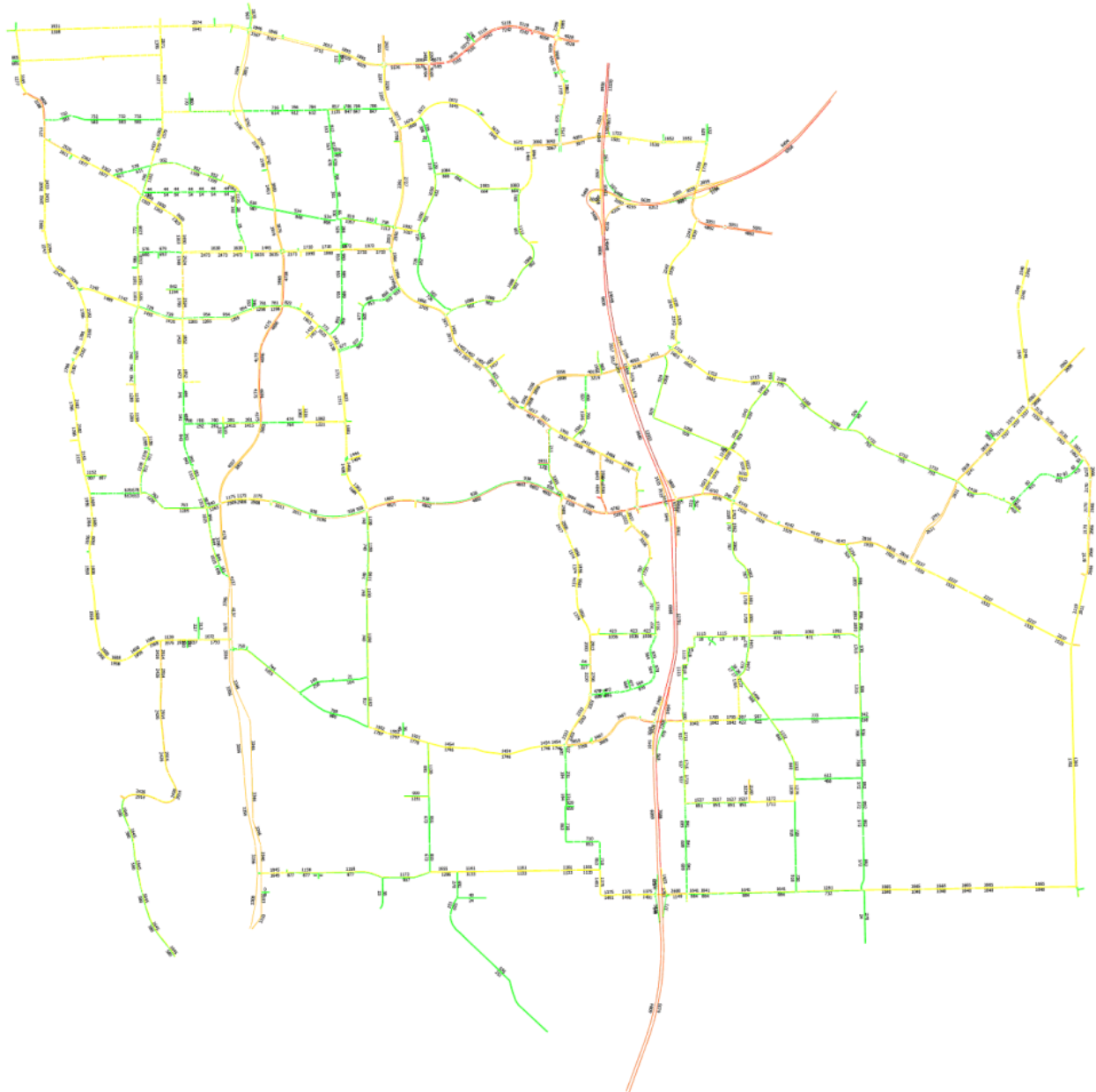
This indicates that additional road network demand management measures will be required beyond road network upgrades similar to what has been identified in the previous Integrated Transport Strategy for the city. These could include but not be limited to the following:

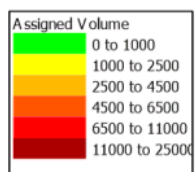
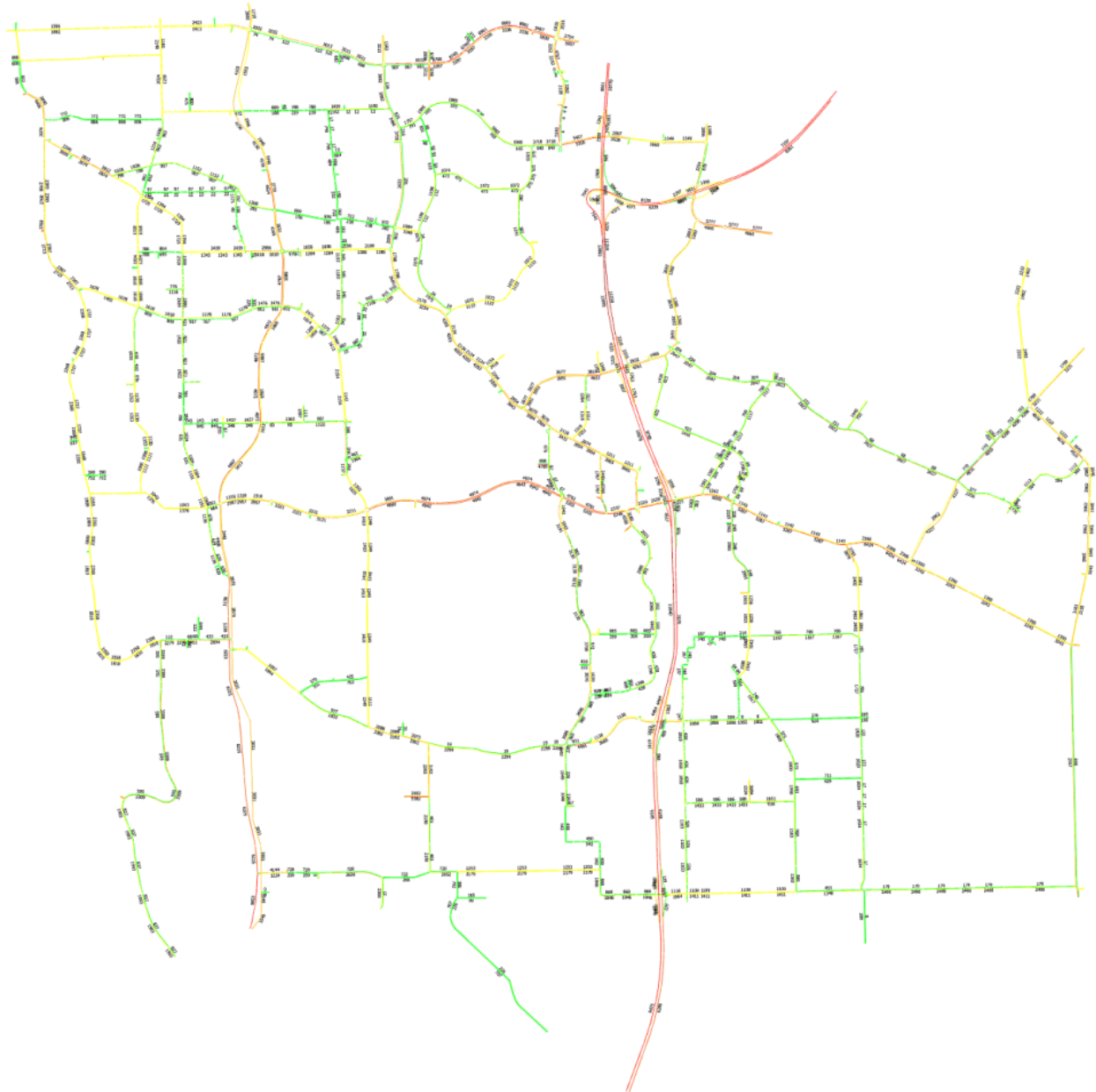
- Public transport improvements to rail and bus routes and infrastructure
- Further encouraging pedestrian and cycle transport modes
- Examining the impact of peak spreading on road infrastructure requirements
- Examining the timing and sequencing of development
- Increasing implementation of Intelligent Transport Systems

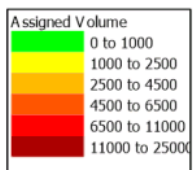
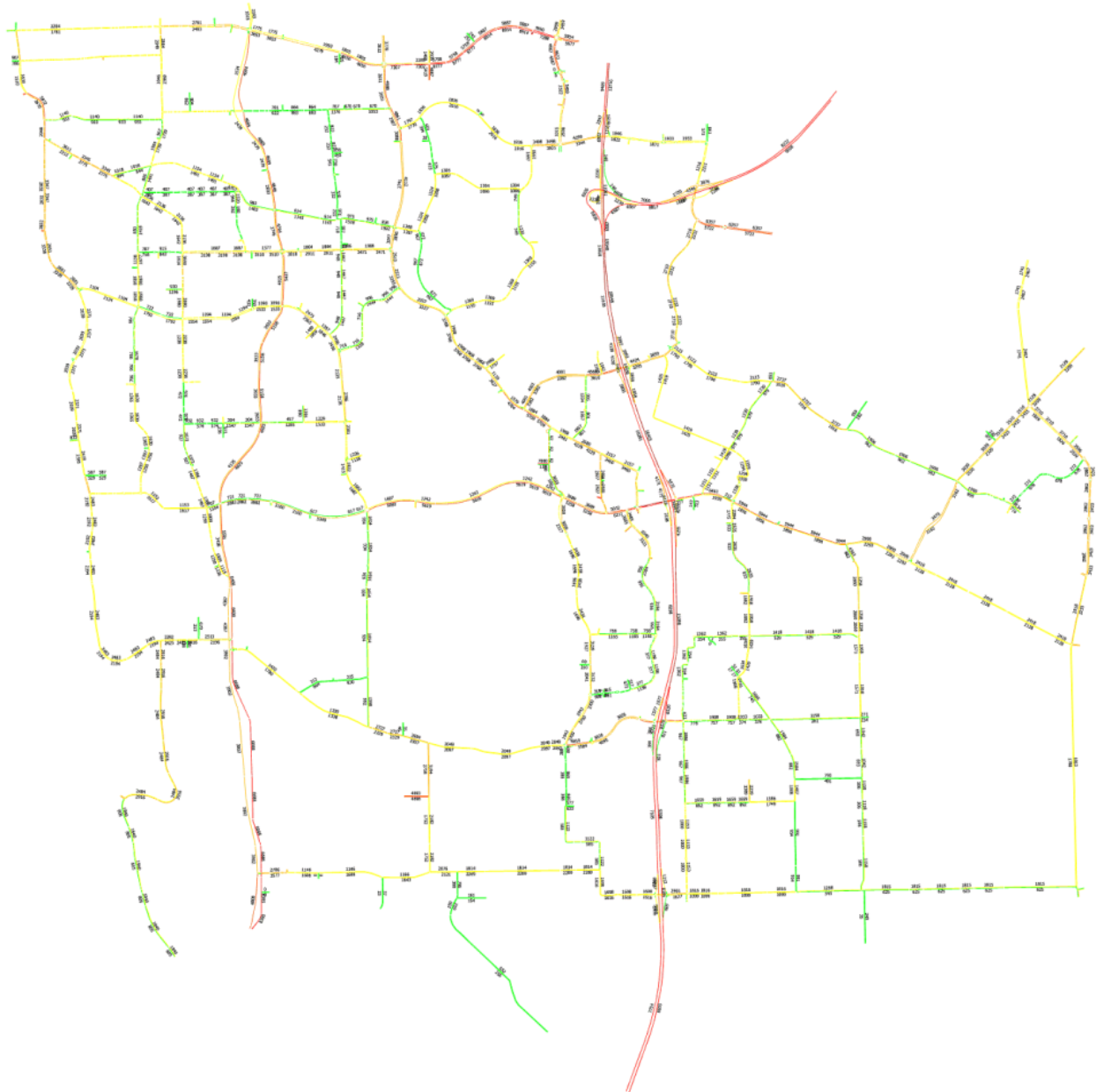
Appendix A

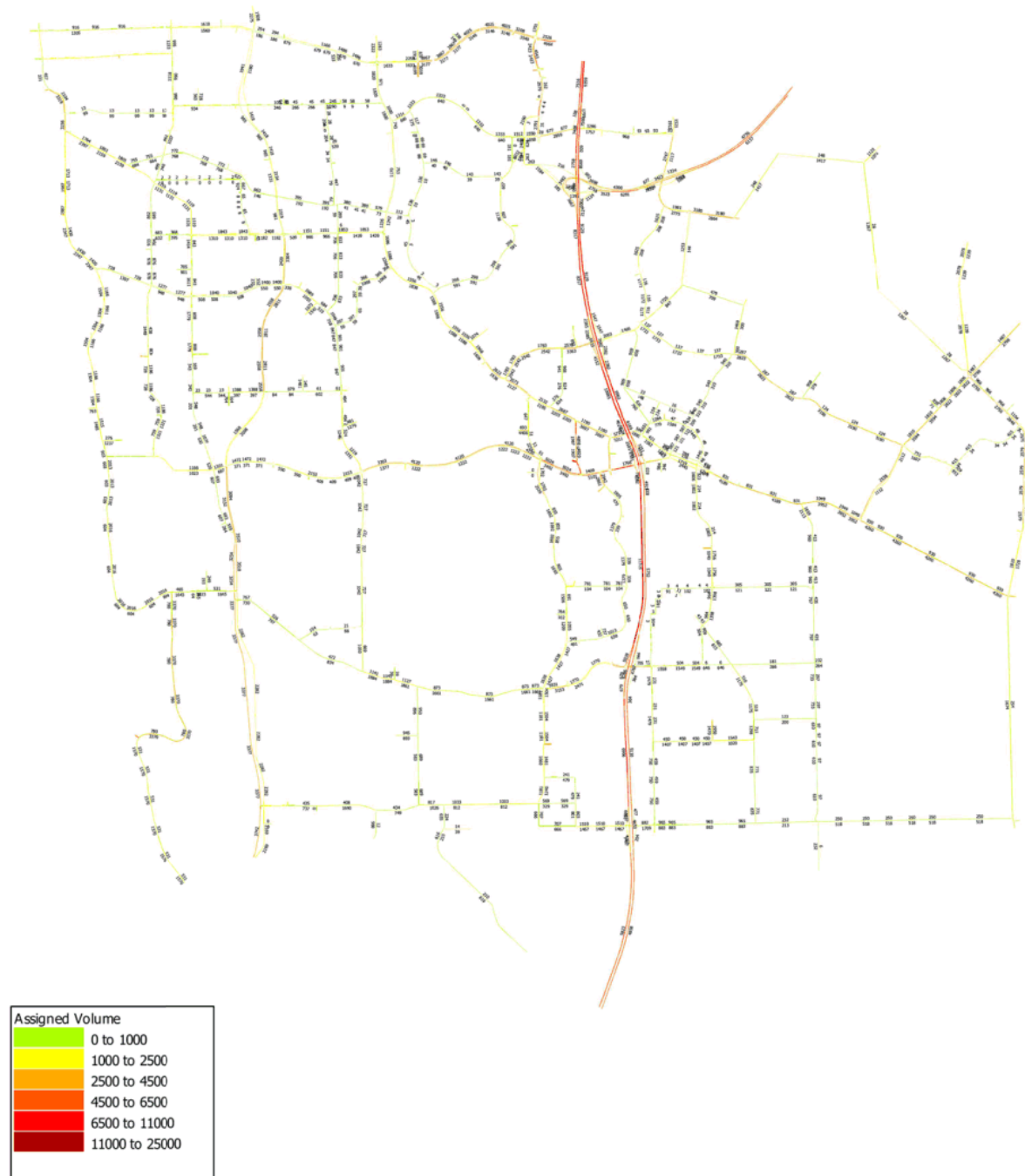
Assigned volumes

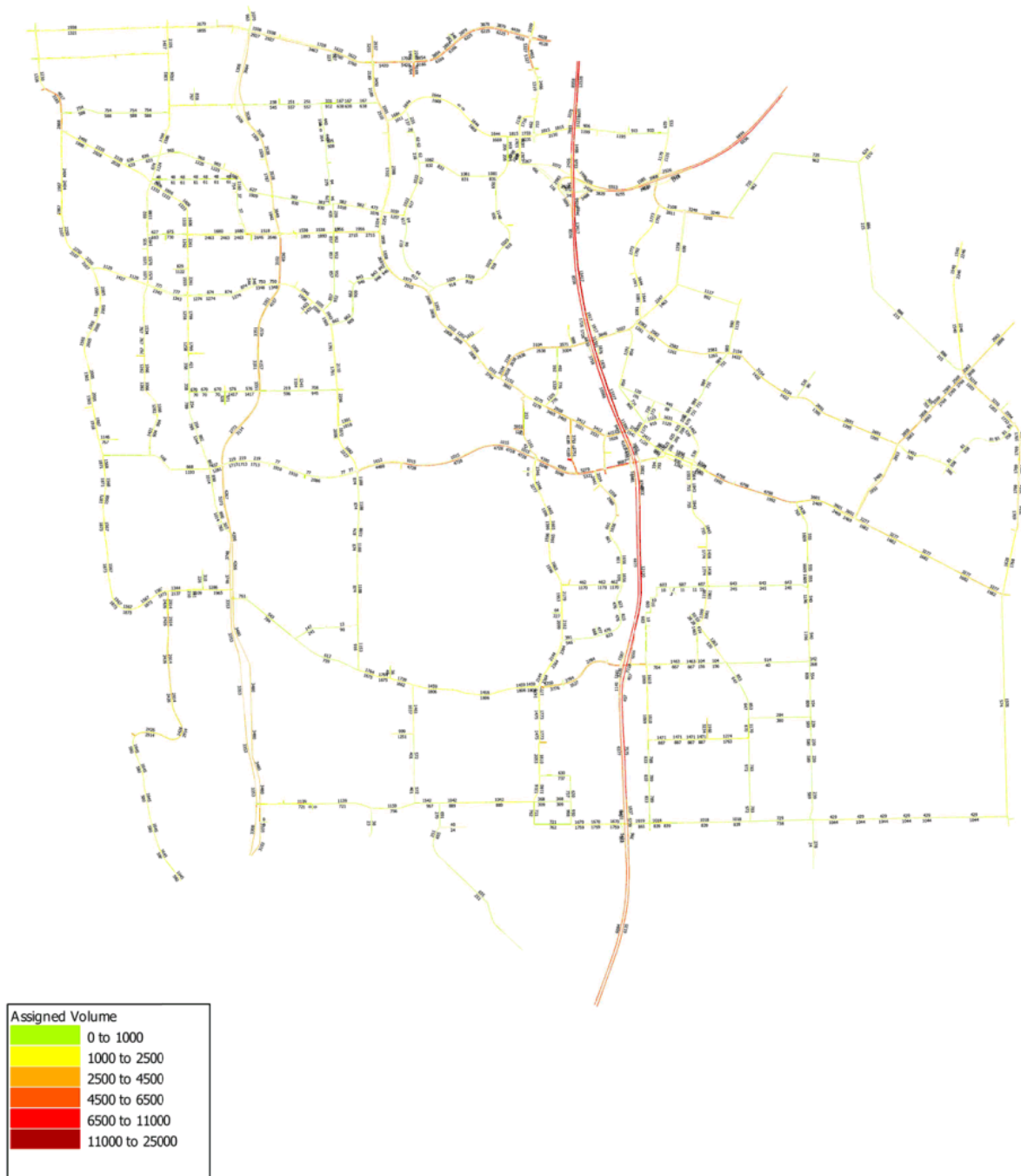
A1 2021 Do Nothing - AM Peak

A2 2021 Do Nothing - PM Peak

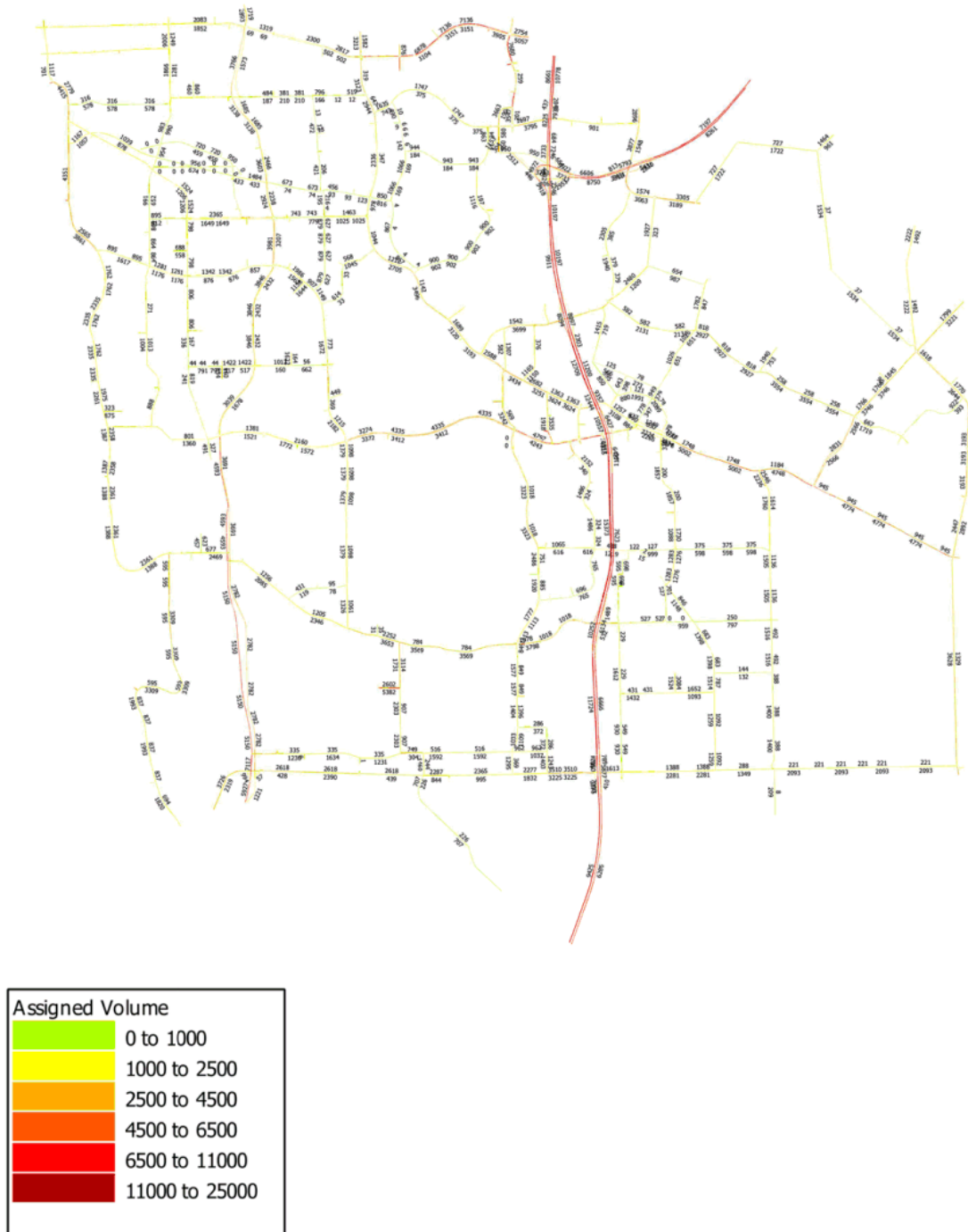
A3 2031 Do Nothing - AM Peak

A4 2031 Do Nothing - PM Peak

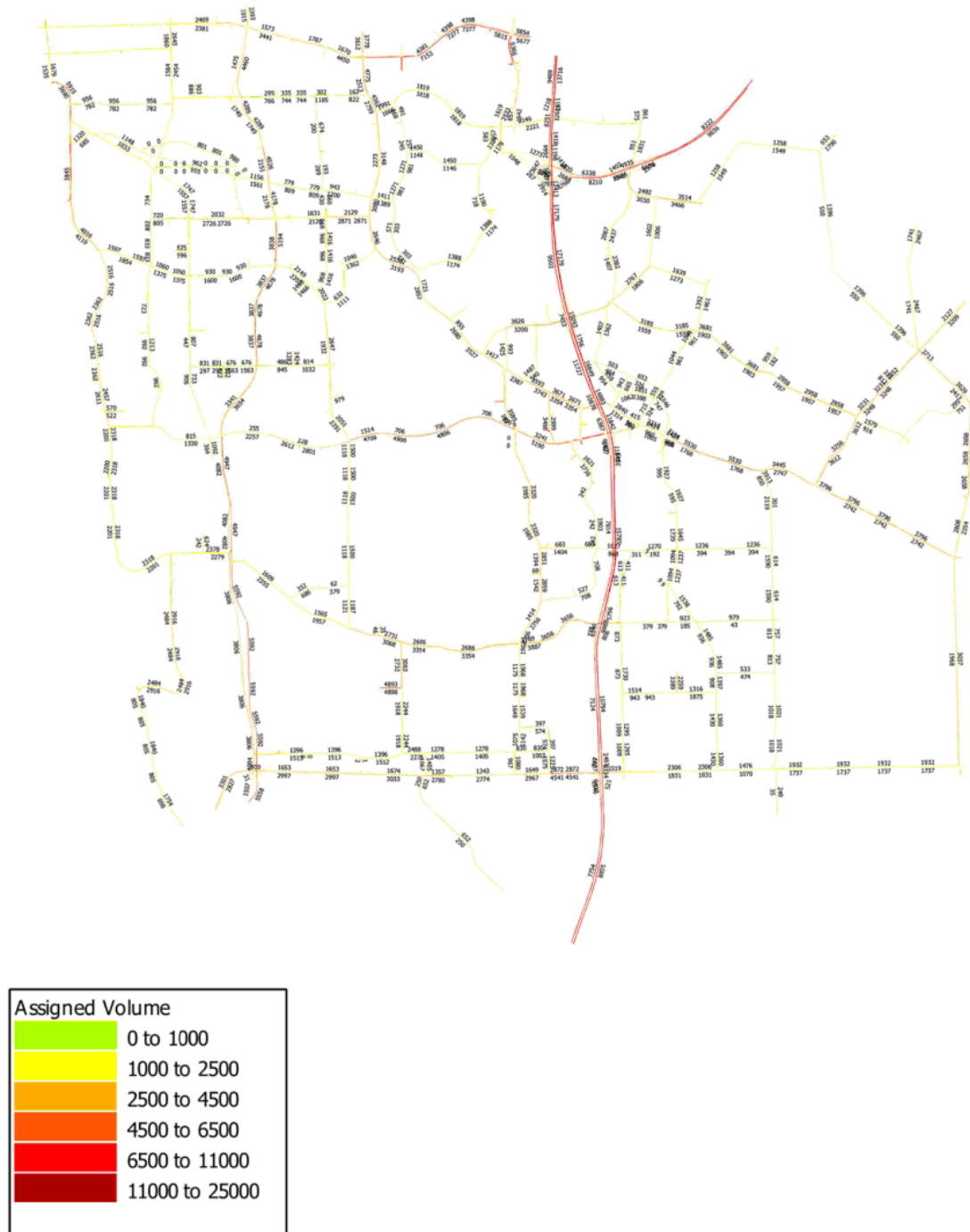
A5 2021 Do Something - AM Peak

A6 2021 Do Something - PM Peak

A7 2031 Do Something - AM Peak



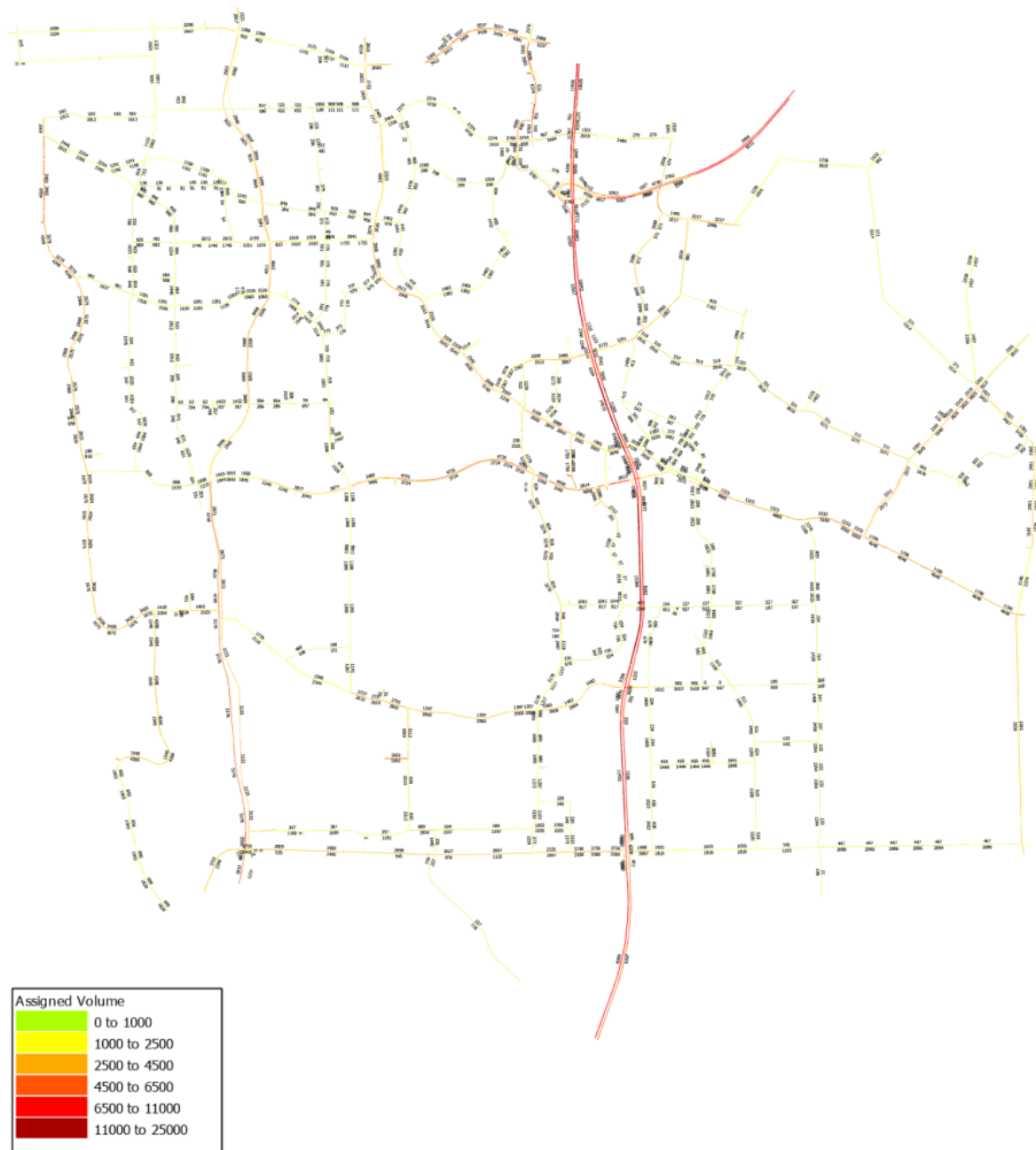
A8 2031 Do Something - PM Peak

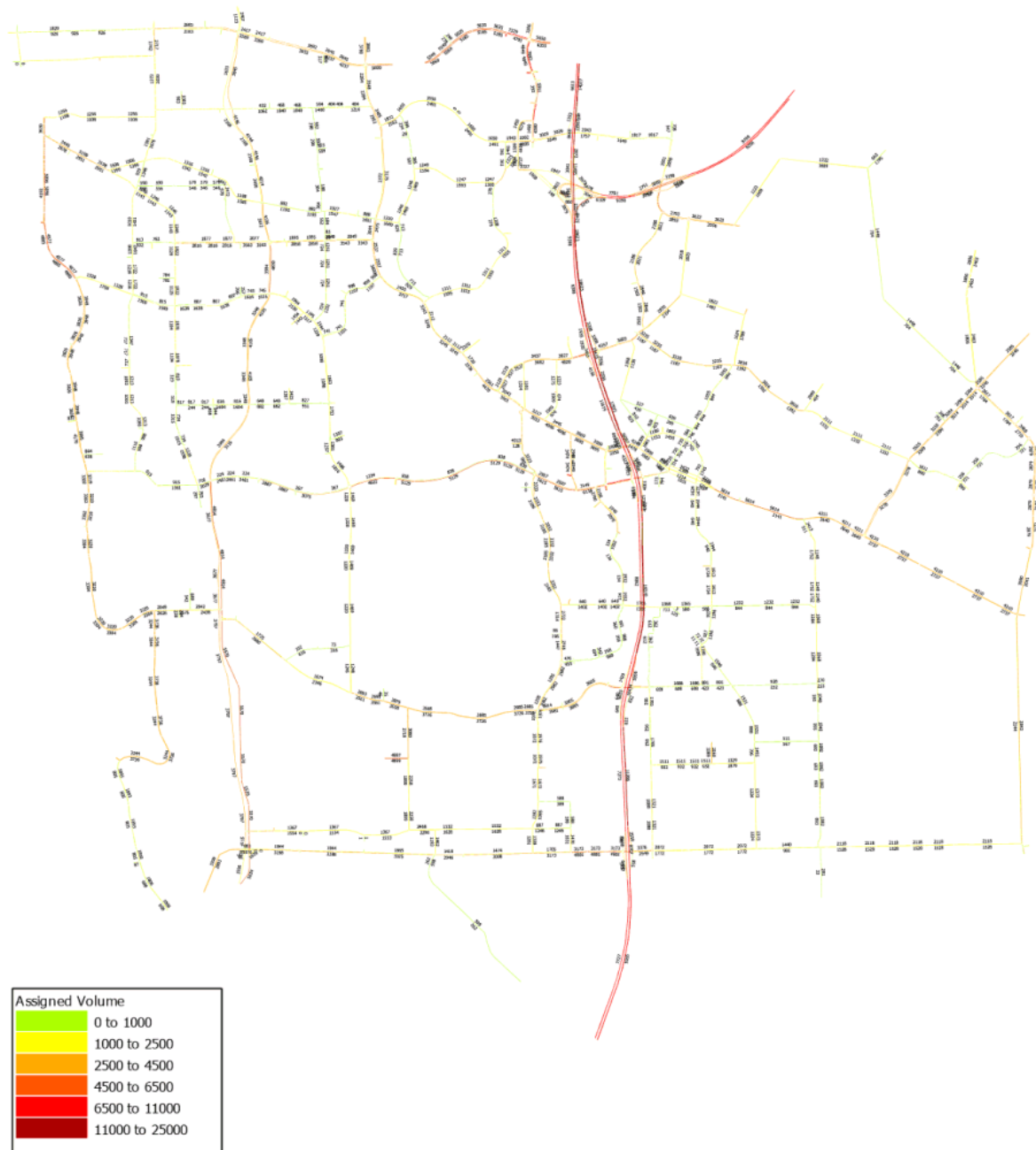


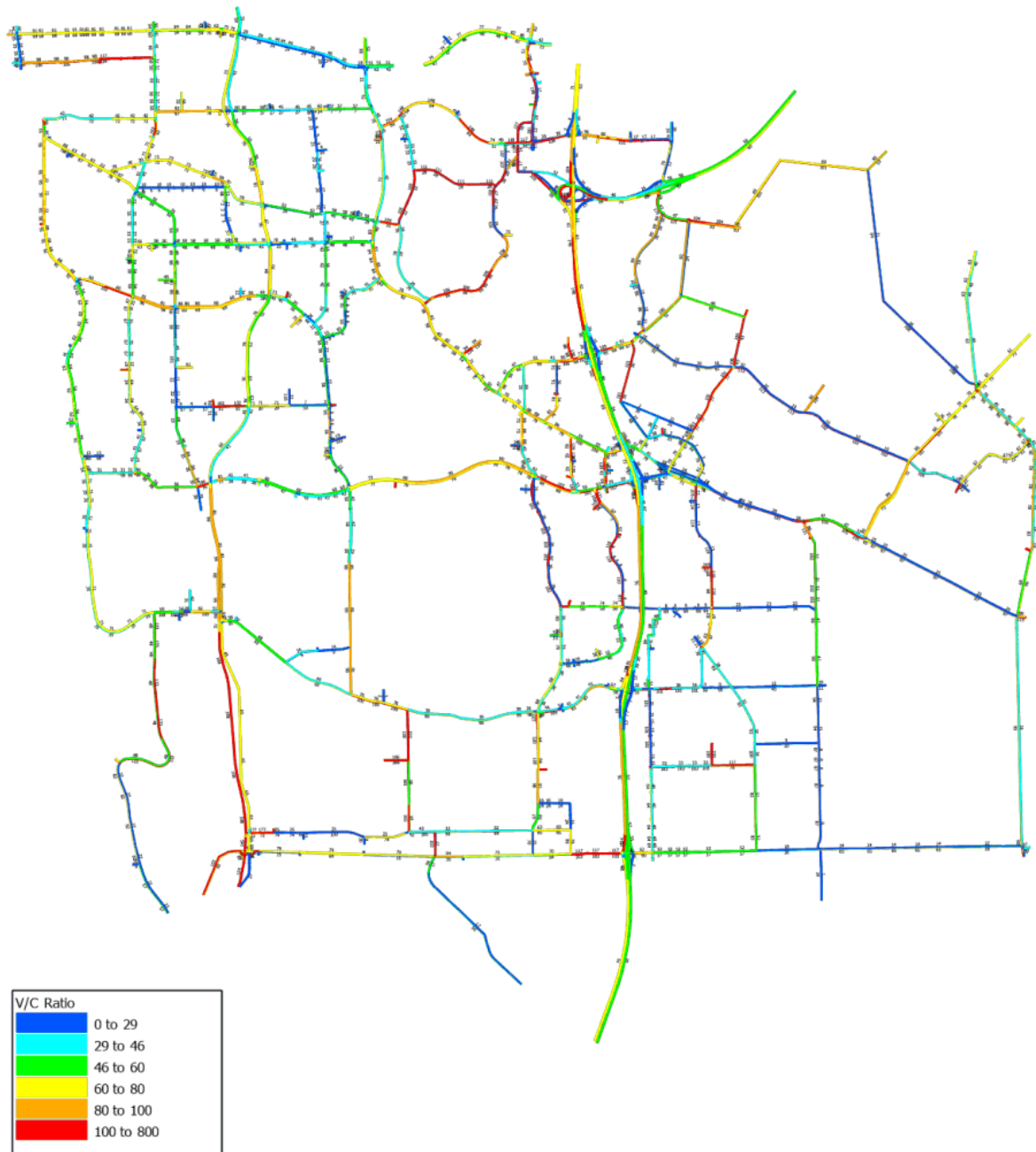
Appendix B

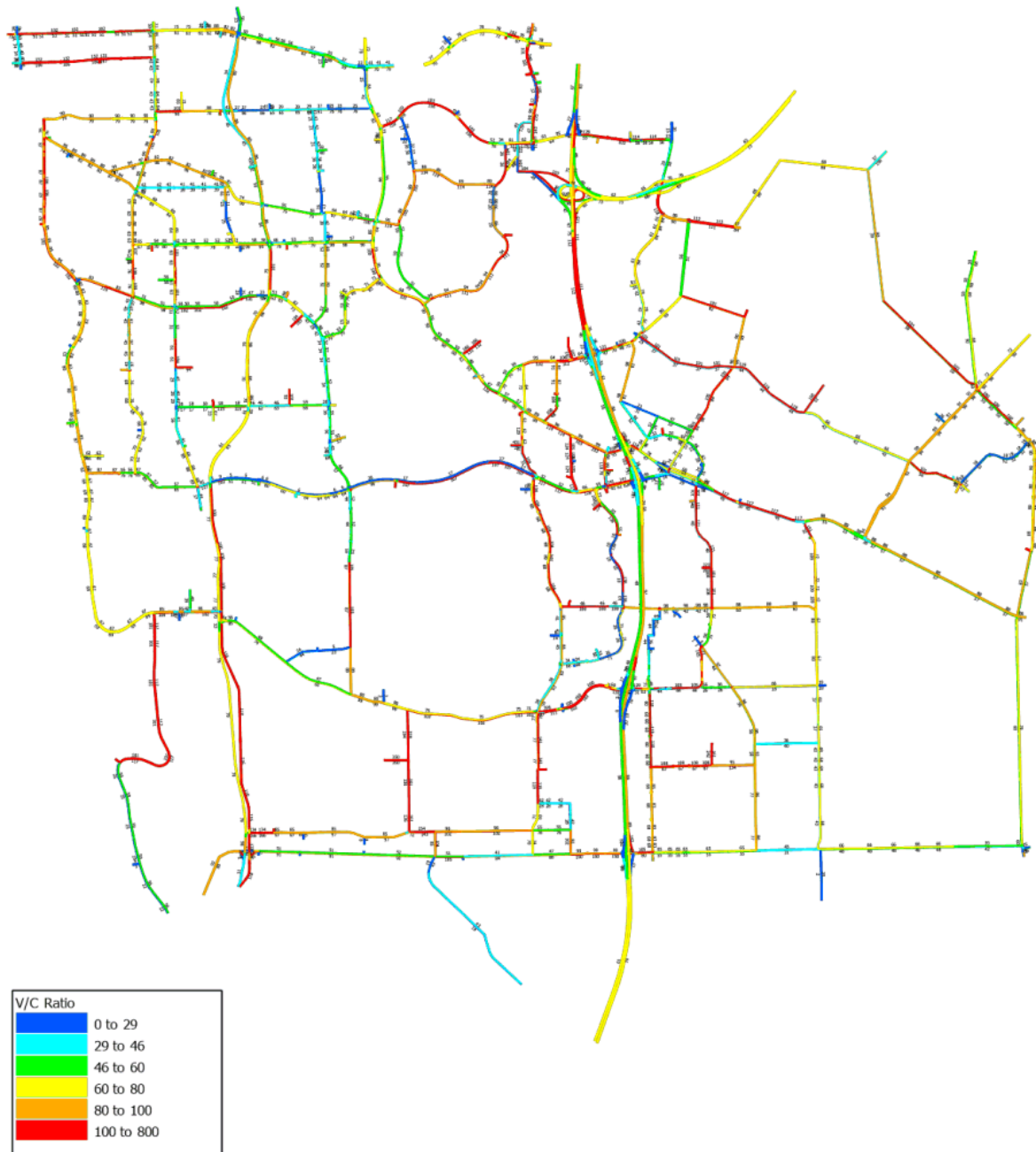
Stock Road and Cockburn Road Widening Scenarios

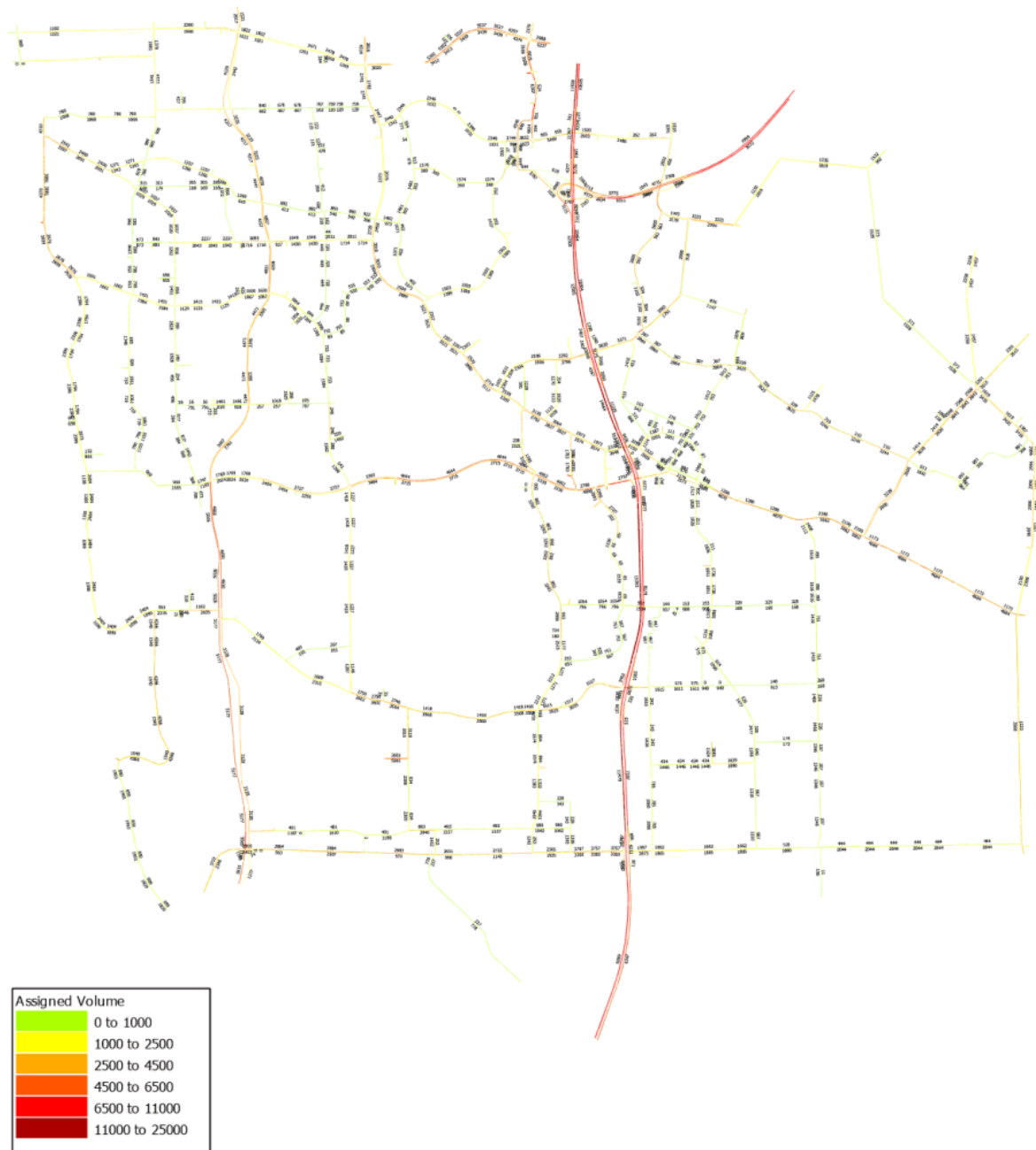
Two additional scenarios have been tested in order to investigate implication of Stock Road and Cockburn Road widening. Below are figures showing assigned volume and volume capacity ratio figures indicating isolated impact of those widening on the road network. As mentioned in section 8 this analysis has been produced for information only as both these roads are responsibility of the Main Roads WA.

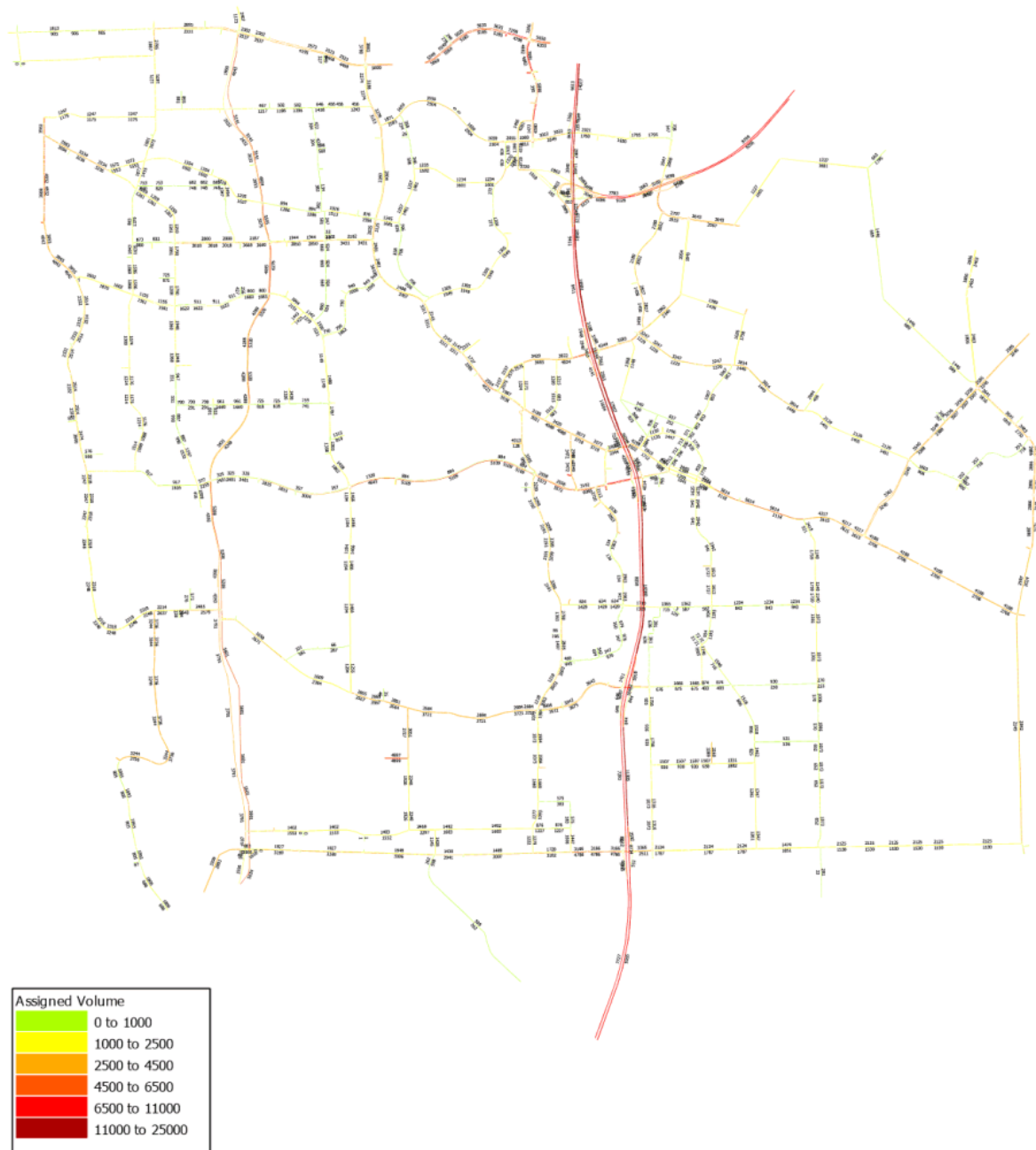
B1 2031 Do Something - Cockburn Road Widening - Assigned Volume - AM Peak

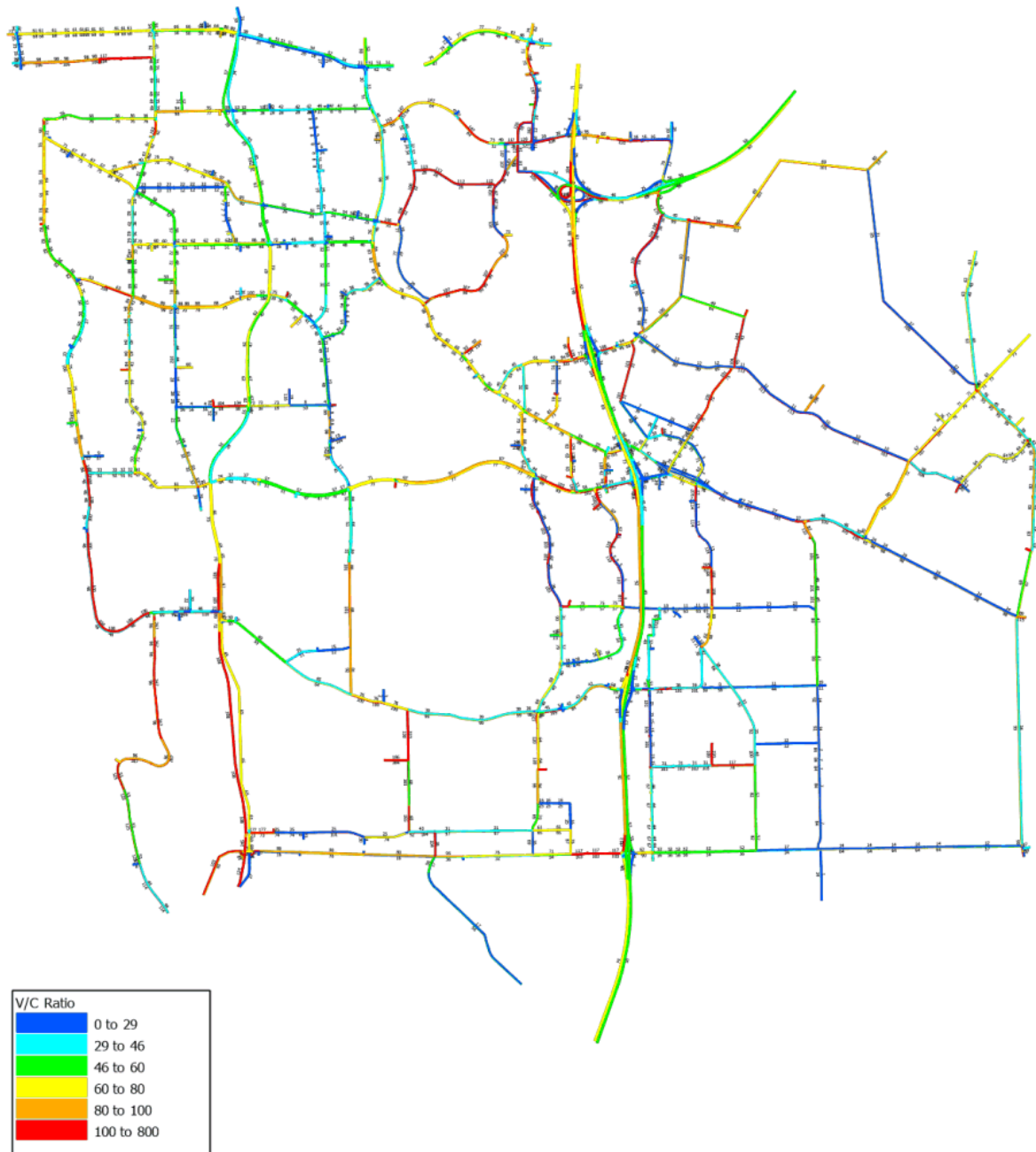
B2 2031 Do Something - Cockburn Road Widening - Assigned Volume - PM Peak

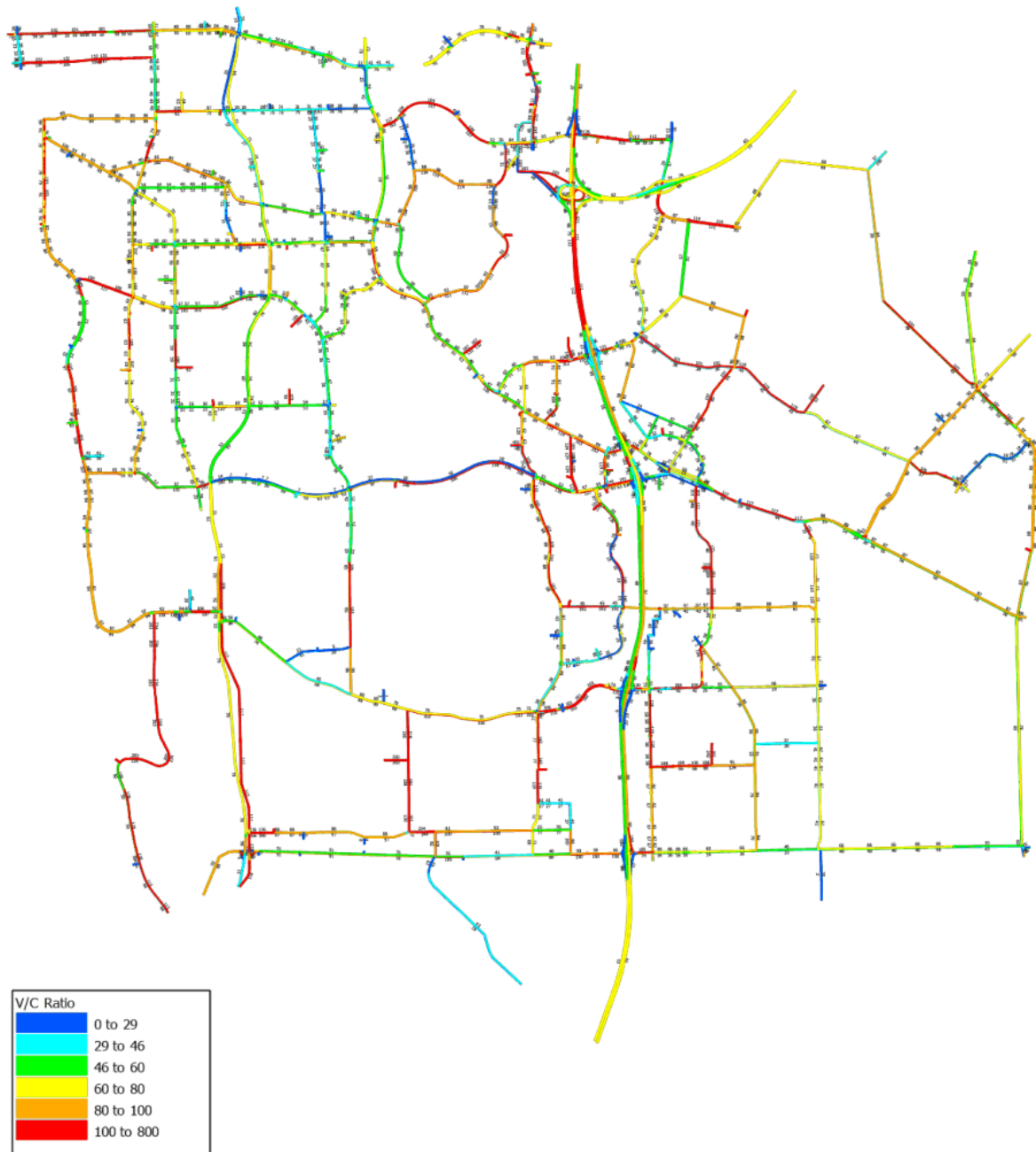
B3 2031 Do Something - Cockburn Road Widening - Volume Capacity - AM Peak

B4 2031 Do Something - Cockburn Road Widening - Volume Capacity - PM Peak

B5 2031 Do Something - Stock Road Widening - Assigned Volume - AM Peak

B6 2031 Do Something - Stock Road Widening - Assigned Volume - PM Peak

B7 2031 Do Something - Stock Road Widening - Volume Capacity - AM Peak

B8 2031 Do Something - Stock Road Widening - Volume Capacity - PM Peak

Appendix C

Additional Scenarios

Modelling results of Scenario 1 with Hammond Road extension (between North Lake Road and Berrigan Drive) and Roe 9 link indicated several findings:

1. Hammond Road extension shows it contributes to higher congestion at surrounding intersections and therefore degrades the overall performance of the network in the area
2. Hammond Road extension relieve some congestion around small sections of Berrigan Drive and North Lake Road
3. Roe 9 link reliefs some sections of Forrest Road from congestion
4. Roe 9 link increases congestion around Cockburn Road

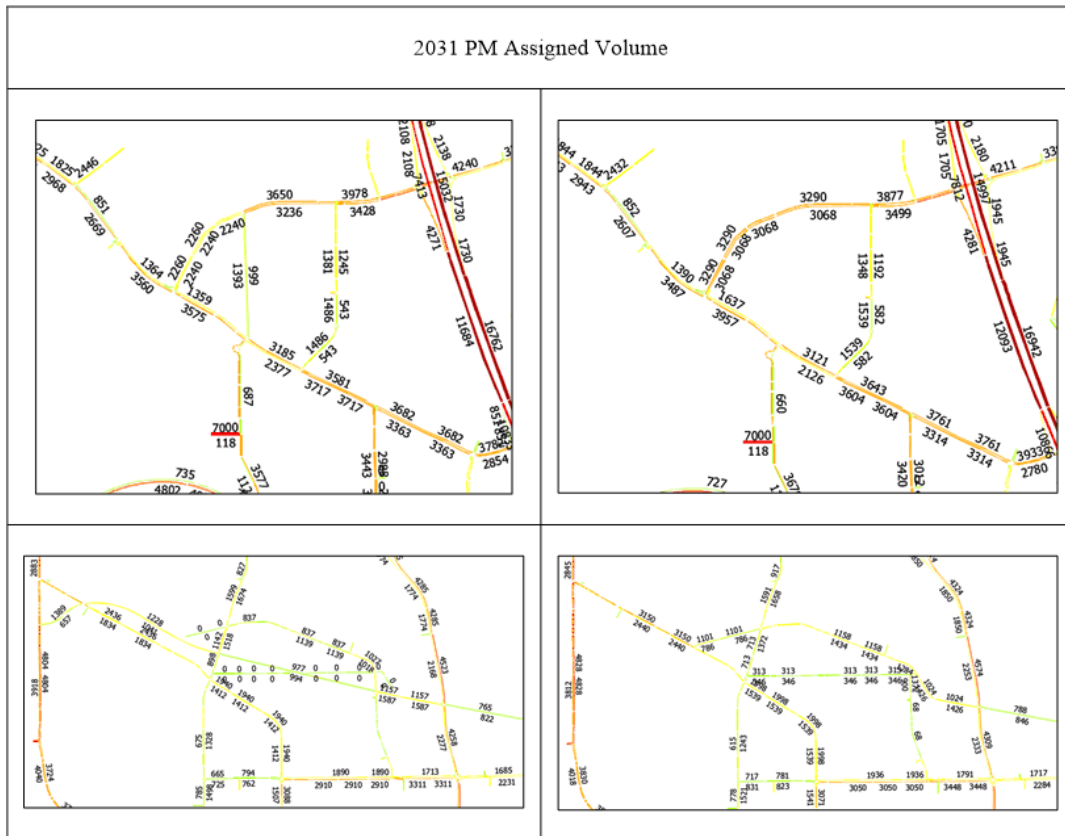
1. Network without Hammond Road extension still performs within acceptable limits
2. Without Roe 9 link network still operates at acceptable levels with many links still within capacity

With Hammond Road extension and Roe 9 link	Without Hammond Road extension and Roe 9 link
<p>2031 AM Volume Capacity</p>	

2031 AM Assigned Volume

2031 PM Volume Capacity

The figure consists of four maps showing the 2031 PM Volume Capacity for different scenarios. The maps are arranged in a 2x2 grid. The top-left map is labeled 'Base Case', the top-right map is labeled 'HOV 3+ Lanes', the bottom-left map is labeled 'HOV 3+ Lanes with 15' Median', and the bottom-right map is labeled 'HOV 3+ Lanes with 15' Median and 15' Median'. Each map shows a network of roads with color-coded segments (red, yellow, green, blue) representing different capacity levels. Numerical values are provided for many segments, indicating the volume capacity in vehicles per hour. The maps show that the capacity generally increases as more lanes are added and the median width is increased, with the bottom-right map showing the highest capacity values.



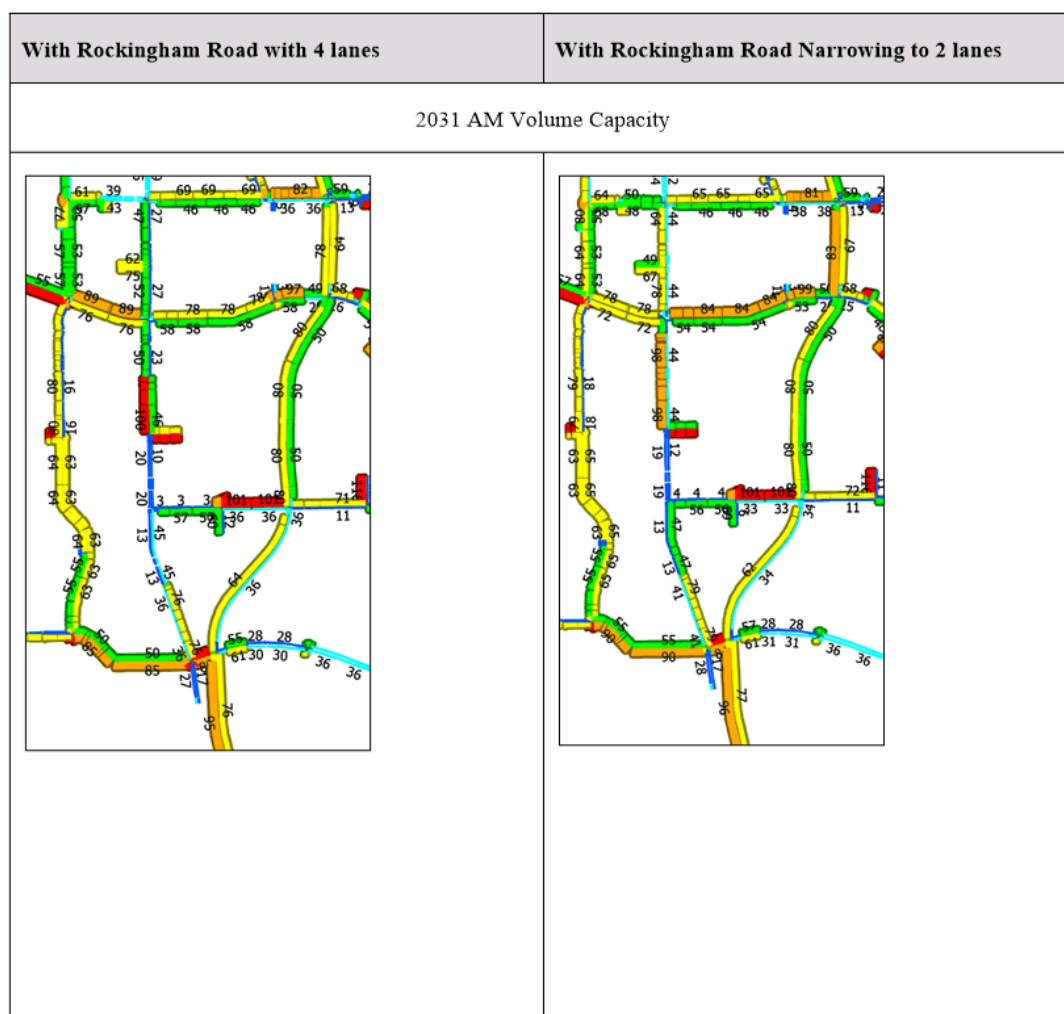
C2 Scenario 2 (year 2031) – network with Rockingham Road narrowed to 2 lanes

Modelling results of Scenario 2 with Rockingham Road as is with 4 lanes indicated several findings:

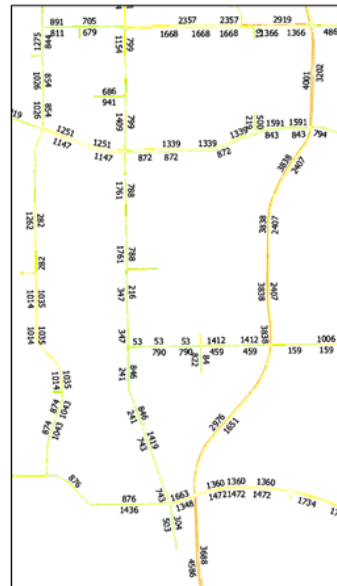
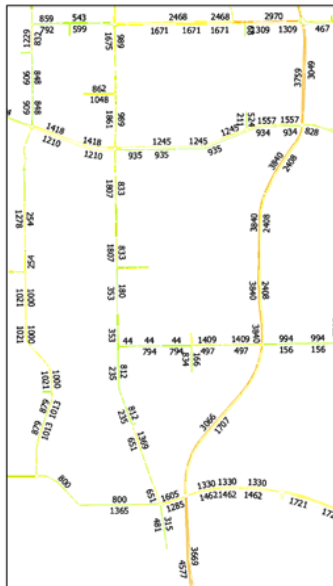
1. Rockingham Road with 4 lanes increases congestion around intersection between Spearwood Avenue and Rockingham Road,
2. Small sections of Stock Road between Spearwood Avenue and Phoenix Road reduces in congestion.
3. Small section of Spearwood Avenue performs marginally better

Modelling results of Scenario 2 with Rockingham Road narrowing to 2 lanes shows:

1. Spearwood Avenue still operates within capacity
2. Small section of Rockingham Road shows higher congestion
3. There is minor increase in congestion in surrounding network but generally volume capacity ration between scenarios very similar
4. Network still performs within road capacity

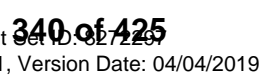


2031 AM Assigned Volume



2031 PM Volume Capacity

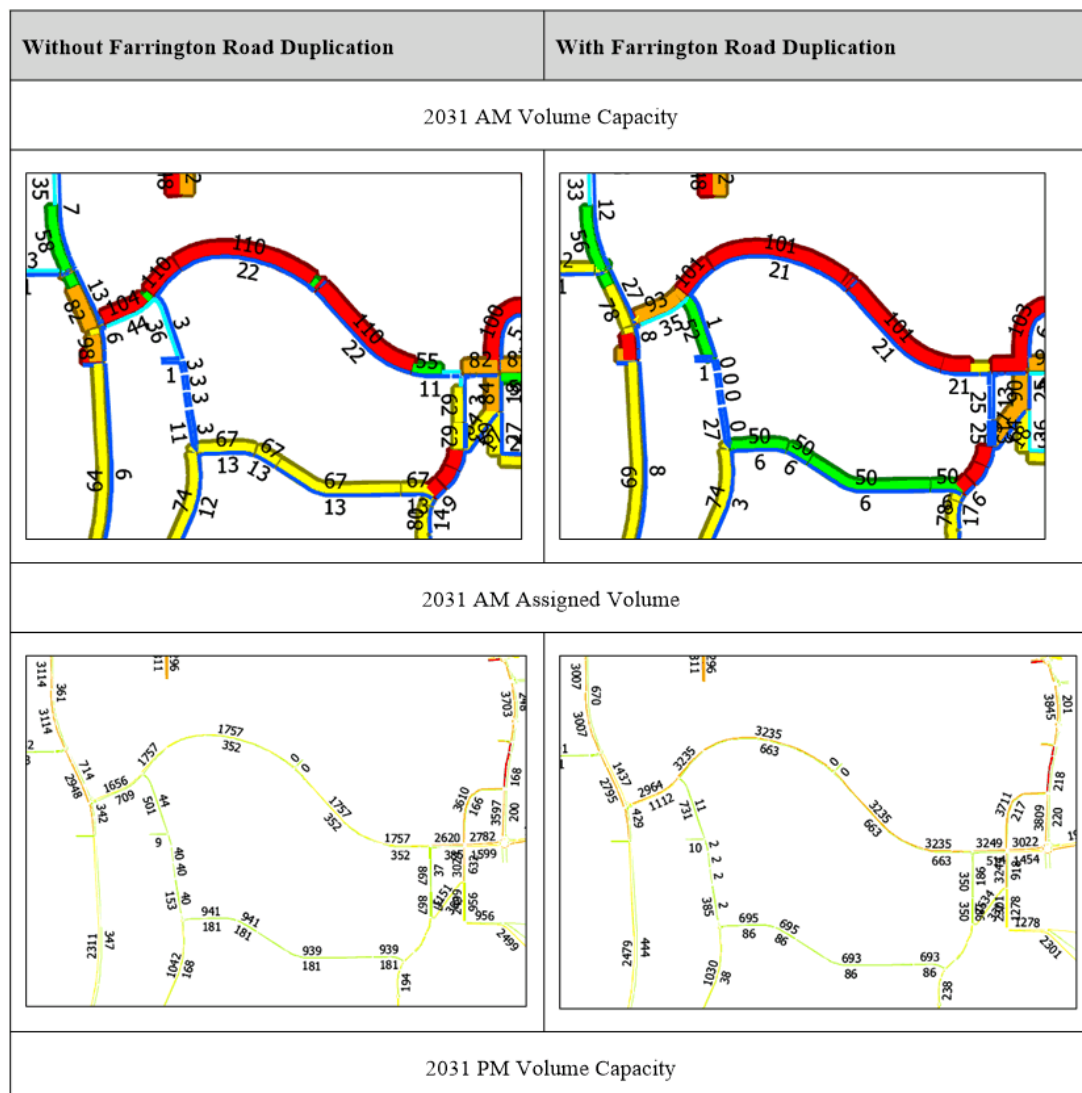


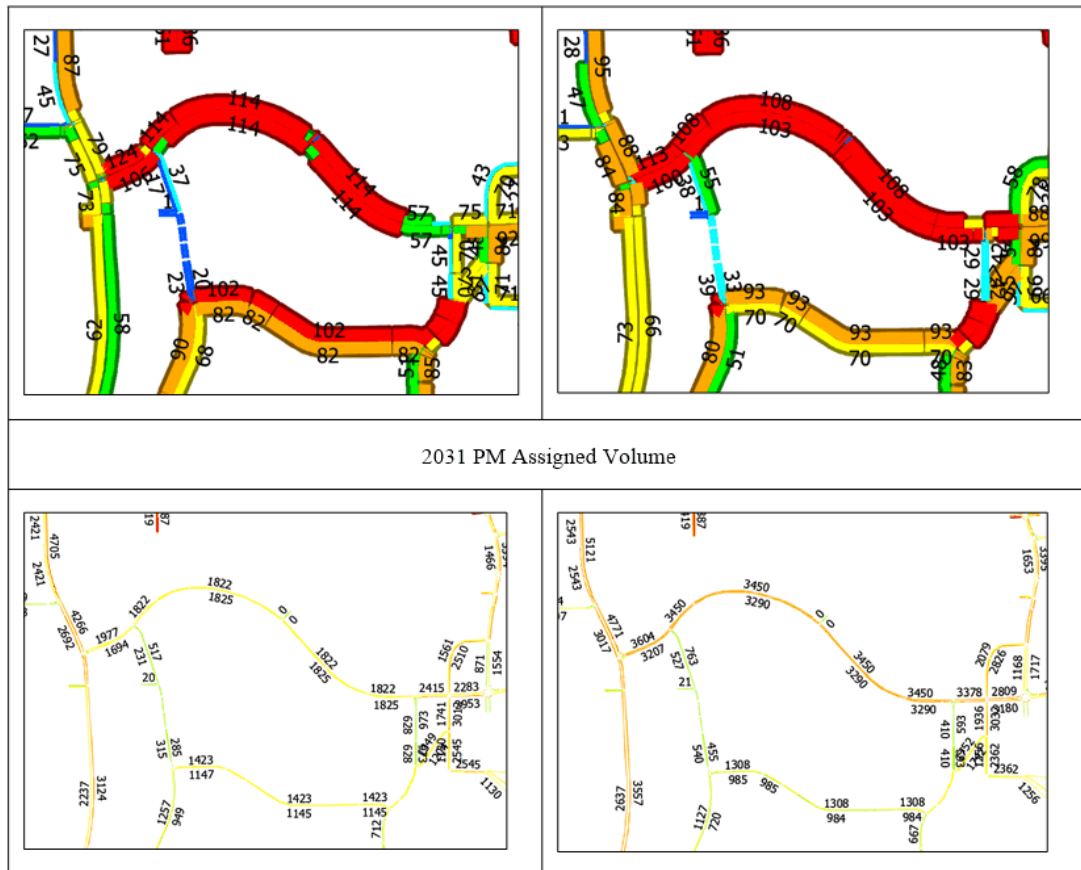


1. Farrington Road performance is still over capacity after duplication
2. Duplication attracts almost double volume to Farrington Road
3. North Lake Road and Farrington intersection, south arm is over capacity after duplication
4. Small reduction in congestion on Hope Road

Modelling results of Scenario 3 Without Farringdon Road Duplication shows:

1. Farrington Road over capacity without duplication
2. Overall performance between two scenarios is very similar because Farrington road is already congested and with increase of capacity Farrington Road attracts significantly more traffic which causes it to reach capacity again. Therefore, there is minimal benefit in duplication.





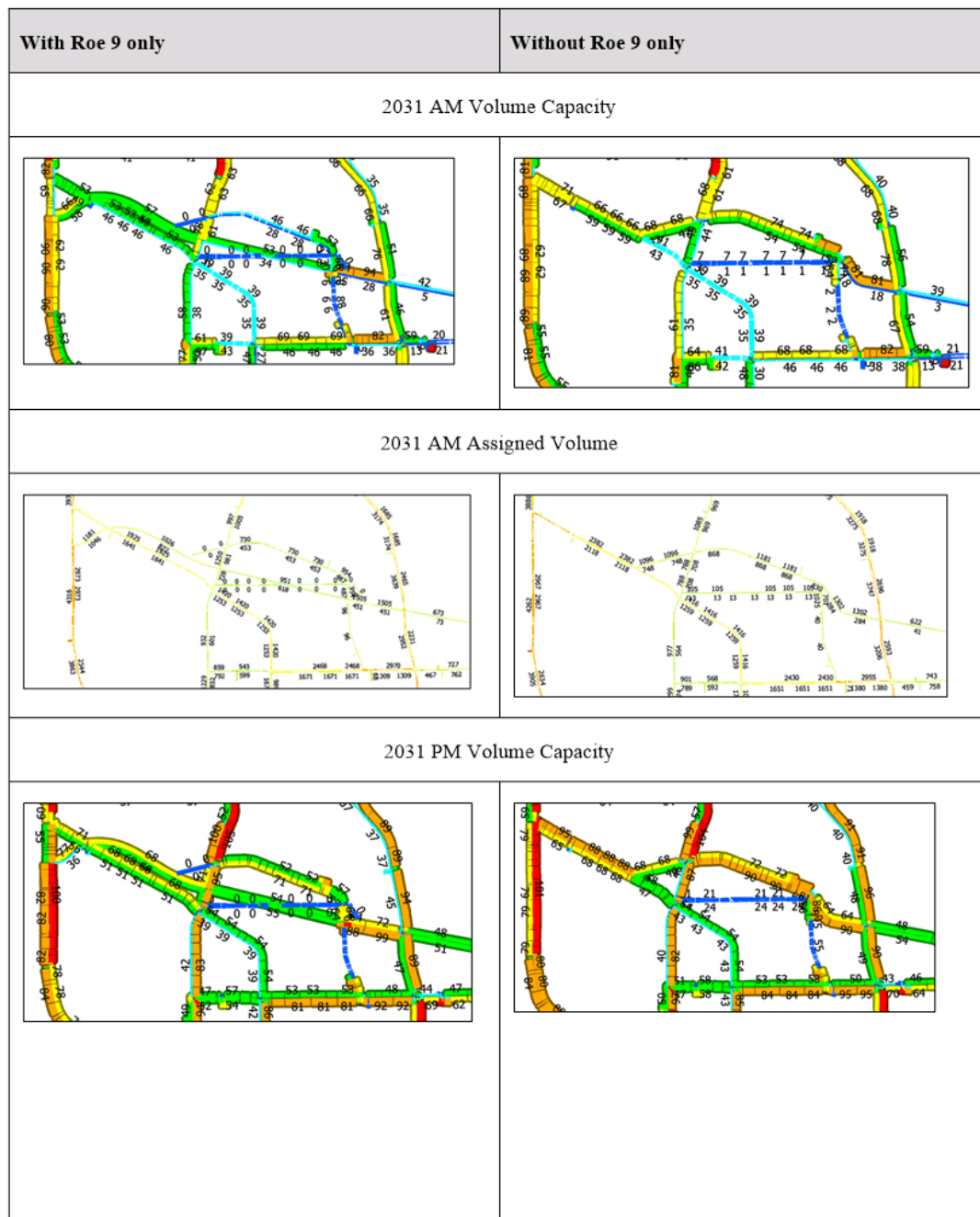
C4 Scenario 4 (year 2031) – network without Roe 9 link

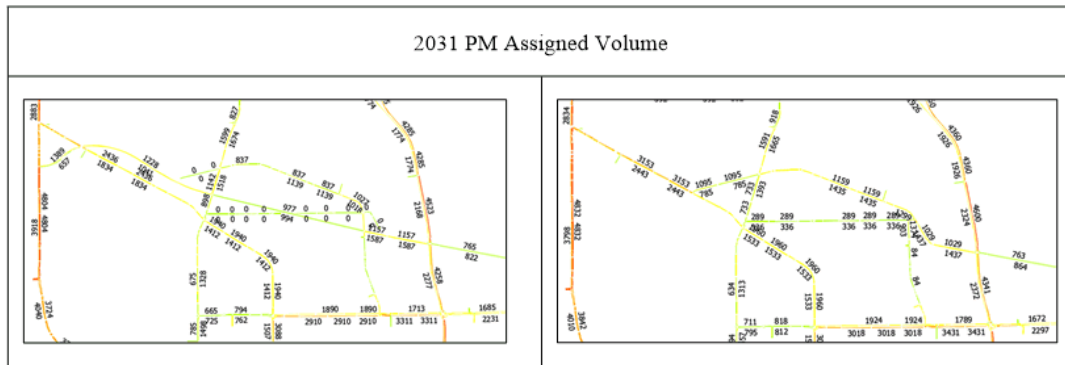
Modelling results of Scenario 4 indicated several findings:

1. Roe 9 link relieves some sections of Forrester Road from congestion
2. Roe 9 link increases congestion around Cockburn Road

Modelling results of Scenario 4 Without Roe 9 only shows:

1. Without Roe 9 link network still operates at acceptable levels with many links still within capacity





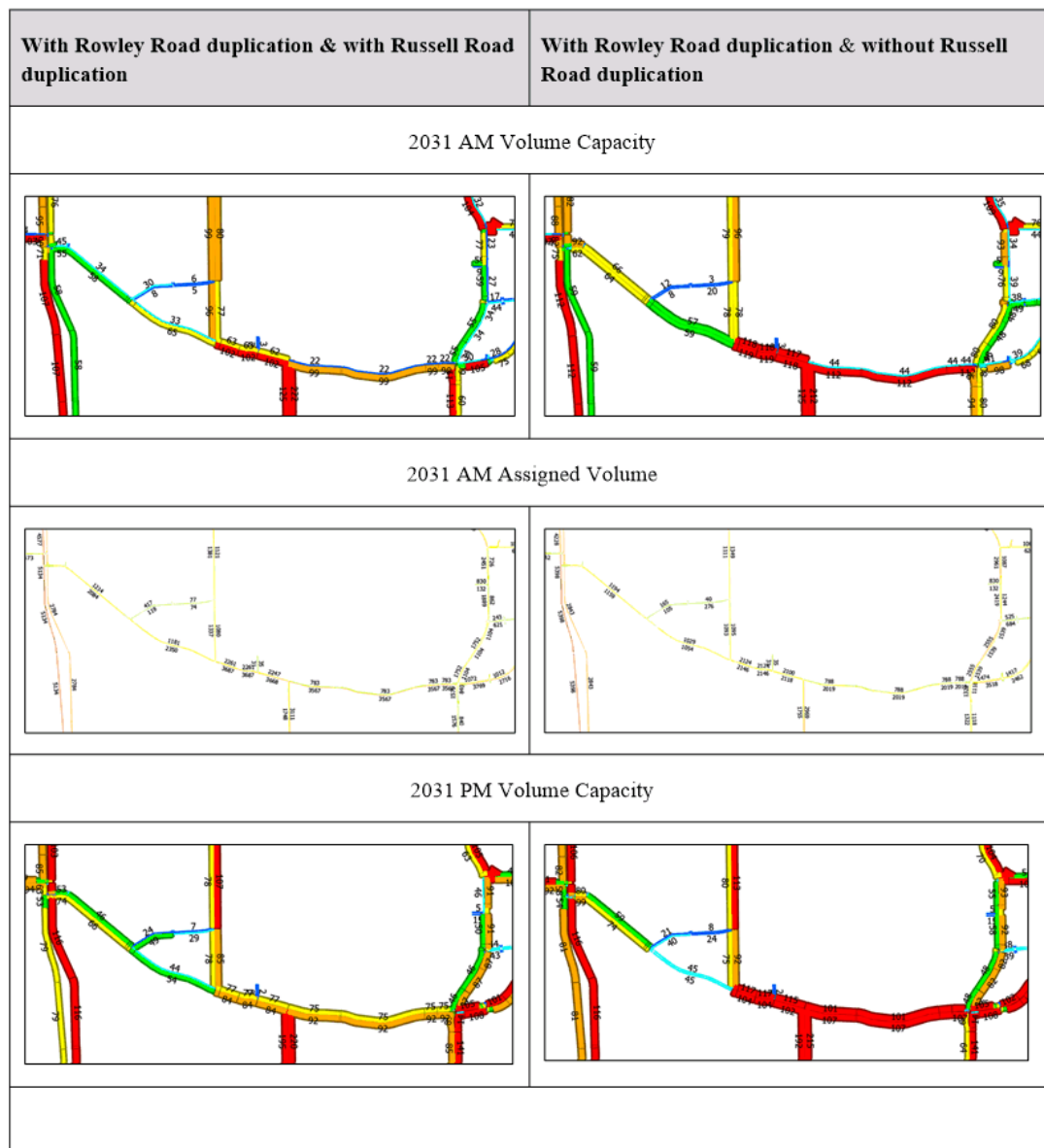
C5 Scenario 5 (year 2031) – network with Russell Road duplication

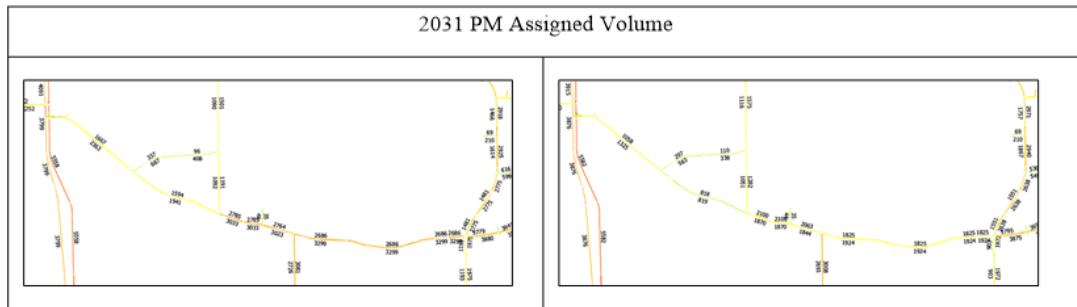
Modelling results of Scenario 5 With Rowley Road duplication & with Russell Road duplication indicated several findings:

1. Major decrease in congestion on Russell Road between Henderson Road and Rockingham Road
2. Major decrease in congestion on Russell Road between Frankland Avenue and Kwinana Freeway
3. Some additional congestion on south arm of Frankland Road

Modelling results of Scenario with Rowley Road duplication & Without Russell Road duplication shows:

1. Significant increase in congestion between Kwinana Freeway and Henderson Road
2. Frankland Road south arm is already over capacity





C6 Scenario 6 (year 2021) – network with Armadale Road duplication

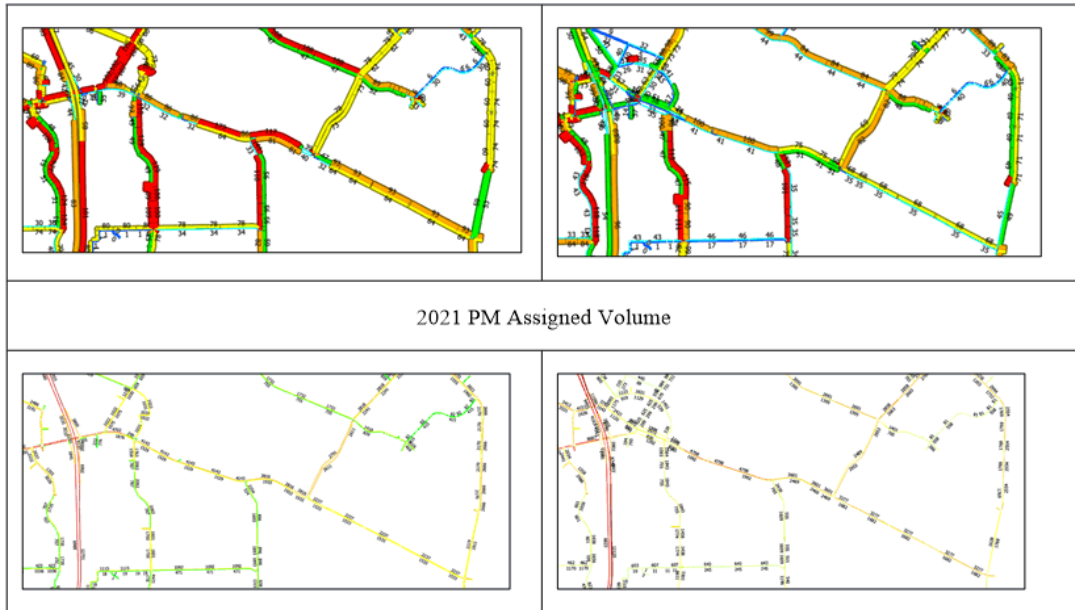
Modelling results of Scenario 6 with Armadale Road duplication of the entire length by 2021 indicated several findings:

1. Major decrease in congestion on Armadale Road
2. Some increase in congestion on Liddelow Road
3. Tapper Rodd northbound movement shows reduction in congestion
4. Tapper Road southbound remains congested
5. Significant reduction in congestion around Armadale Road and Kwinana Freeway interchange
6. Reduction in traffic volume on Bartram Road

Modelling results of Scenario 6 without Armadale Road duplication by 2021 shows:

1. Significant congestion on the whole stretch of Armadale Road
2. Tapper Road over capacity
3. Liddelow Road over capacity
4. Significant congestion around Armadale Road and Kwinana Freeway interchange

Without Armadale Road duplication	With Armadale Road duplication
2021 AM Volume Capacity	
2021 AM Assigned Volume	
2021 PM Volume Capacity	



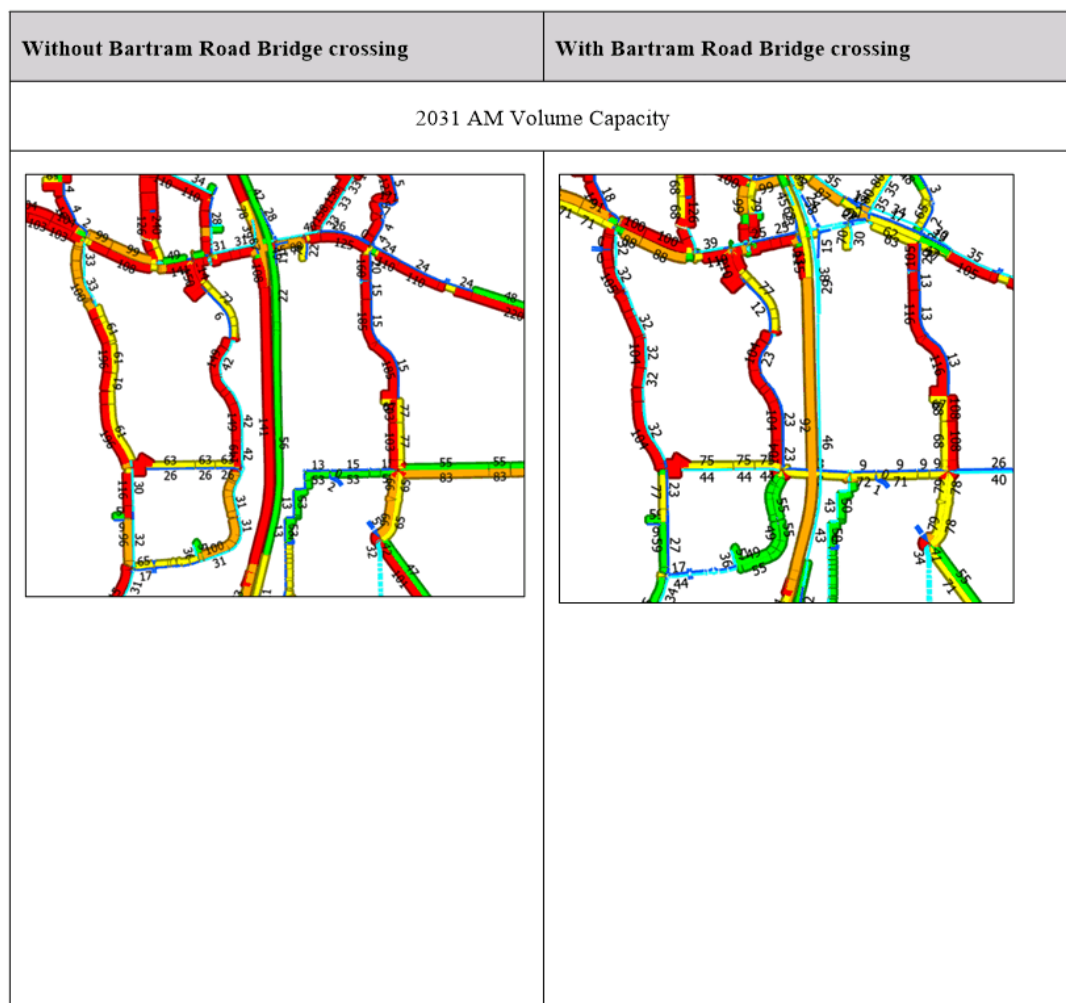
C7 Scenario 7 (year 2031) – network with Bartram Road Bridge crossing of the freeway

Modelling results of Scenario 7 with Bartram Road bridge crossing indicated several findings:

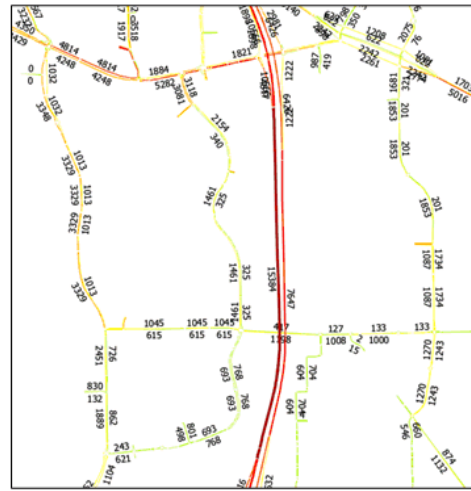
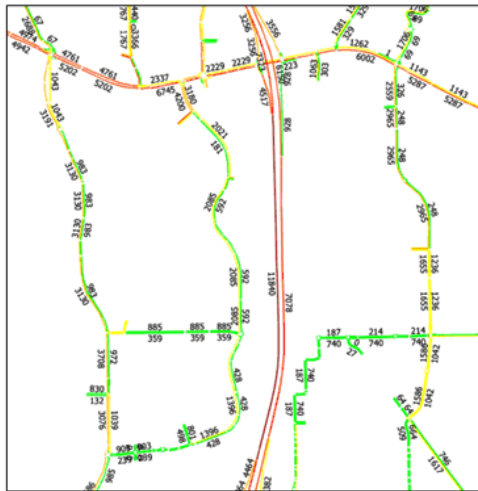
1. Major improvement on section of the Wentworth Parade between Bartram Road and Hammond Road
2. Reduction in congestion on Hammond Road
3. Reduction in congestion Tapper Road by around 10% but still just over capacity
4. Reduction in congestion on Wentworth Parade between Bartram Road and Beeliar Drive by around 40% but still just over capacity
5. Reduction in congestion on Hammond Road by around 90% but still just over capacity
6. Significant reduction in congestion on Kwinana Freeway

Modelling results of Scenario 7 without Bartram Road bridge crossing shows:

1. High congestion around whole Wentworth Parade, Hammond Road, Beeliar Drive, Tapper Road and Kwinana Freeway

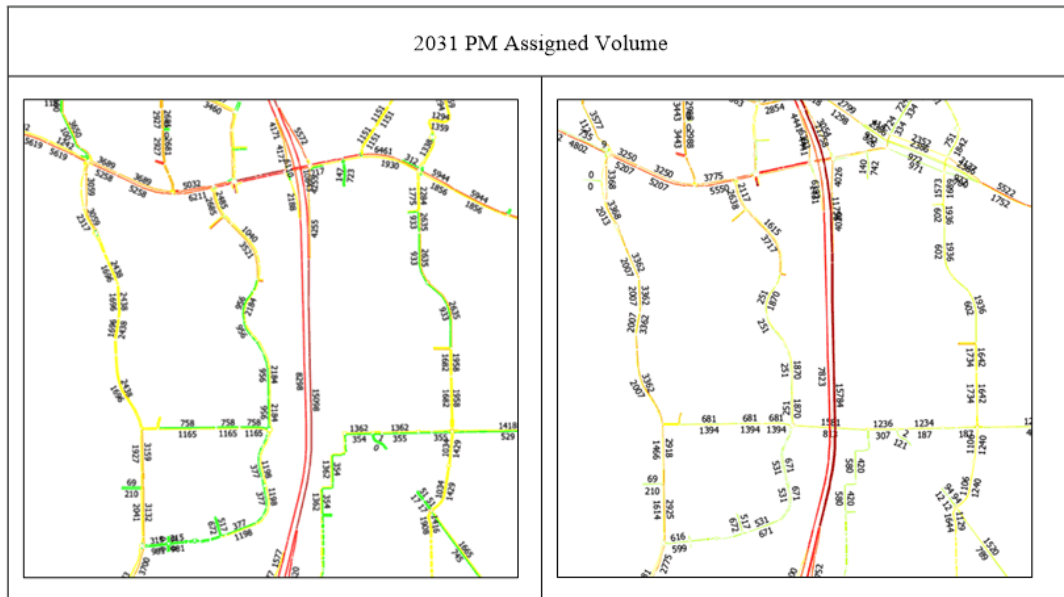


2031 AM Assigned Volume



2031 PM Volume Capacity





Appendix D

Demographic data

City of Cookburn

2018 District Traffic Study

Zone	Population											
	2016		2021					2031				
	Main Roads	CoC Adjusted to Main Roads Zones	Main Roads Growth Rate 2016-2021	Main Roads	CoC Data Split into Main Roads Zones	Forecast based on the Adjusted 2016 Base with CoC data and factored up with Main Roads growth factors	CoC Further Refined from Feedback	Main Roads Growth Rate 2016-2031	Main Roads	CoC Data Split into Main Roads Zones	Forecast based on the Adjusted 2016 Base with CoC data and factored up with Main Roads growth factors	CoC Further Refined from Feedback
666	2,922	2,207	0.98	2,877	2,160	2,173	2,160	0.88	2,570	2,212	1,941	2,212
667	909	909	0.55	499	499	499	499	0.55	500	500	500	500
690	1,745	1,745	1.04	1,812	1,812	1,812	1,812	0.90	1,563	1,563	1,563	1,563
727	3,413	3,413	1.10	3,756	3,756	3,756	3,756	1.23	4,191	4,191	4,191	4,191
728	2,132	2,132	1.01	2,158	2,158	2,158	2,158	1.05	2,236	2,236	2,236	2,236
729	3,180	3,180	1.08	3,448	3,448	3,448	3,448	1.26	4,017	4,017	4,017	4,017
733	629	584	8.26	5,198	4,338	4,828	2,503	15.90	10,000	9,036	9,288	7,499
734	1,569	1,457	1.28	2,016	1,682	1,872	2,048	1.59	2,496	2,255	2,318	2,644
735	3,246	3,496	1.08	3,515	3,948	3,785	3,948	1.29	4,180	4,751	4,501	4,751
736	2,450	2,638	1.09	2,678	3,008	2,884	3,008	1.28	3,124	3,551	3,364	3,551
737	1,640	1,757	1.05	1,730	1,932	1,854	1,932	1.40	2,298	2,550	2,462	2,550
738	3,073	3,309	1.04	3,204	3,598	3,450	3,598	1.25	3,834	4,358	4,129	4,358
739	1,444	1,516	1.01	1,458	1,591	1,530	1,591	1.07	1,549	1,551	1,626	1,551
740	1,903	1,997	1.05	1,998	2,181	2,097	2,181	1.43	2,727	2,731	2,862	2,731
741	3,174	2,948	1.20	3,812	3,181	3,541	4,089	1.31	4,160	3,759	3,864	4,482
742	6,395	6,712	1.11	7,067	7,713	7,417	7,713	1.23	7,876	7,886	8,266	7,886
743	2,446	2,272	1.06	2,598	2,168	2,413	2,730	1.16	2,847	2,573	2,644	2,997
744	3,101	3,182	1.04	3,238	3,590	3,322	3,590	1.06	3,274	3,418	3,359	3,418
745	7	7	1.00	7	6	7	6	1.00	7	6	7	6
746	1,230	1,262	1.24	1,529	1,695	1,569	1,695	1.89	2,319	2,421	2,379	2,421
747	1	1	1.00	1	1	1	1	1.00	1	1	1	1
748	10	8	1.00	10	9	8	9	1.50	15	19	11	19
749	199	152	1.02	203	178	155	178	0.82	163	210	124	210
750	426	325	0.90	384	338	293	2,395	1.16	496	639	378	4,812
751	53	54	0.94	50	55	51	55	0.96	51	53	52	53
752	-	-	-	-	-	-	-	-	-	-	-	-
753	72	74	0.99	71	79	73	79	0.97	70	73	72	73
754	4,728	5,336	0.98	4,655	5,357	5,253	5,357	0.94	4,466	5,306	5,040	5,306
755	1,848	2,086	1.17	2,165	2,492	2,443	2,492	1.23	2,270	2,697	2,562	2,697
756	1,802	1,978	1.05	1,887	2,509	2,071	2,509	1.02	1,834	2,846	2,013	2,846
757	4,483	4,921	1.01	4,548	6,047	4,993	6,047	0.95	4,250	6,596	4,665	6,596
758	866	951	0.99	859	1,142	943	1,142	0.97	841	1,305	923	1,305
759	-	-	-	-	-	-	-	-	-	-	-	-
760	-	-	-	-	-	-	-	-	-	-	-	-
761	-	-	-	-	-	-	-	-	-	-	-	-
762	1,065	1,003	1.09	1,161	1,131	1,094	1,131	1.07	1,143	1,243	1,077	1,243

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City of Cockburn

2018 District Traffic Study

Zone	Population											
	2016		2021					2031				
	Main Roads	CoC Adjusted to Main Roads Zones	Main Roads Growth Rate 2016-2021	Main Roads	CoC Data Split into Main Roads Zones	Forecast based on the Adjusted 2016 Base with CoC data and factored up with Main Roads growth factors	CoC Further Refined from Feedback	Main Roads Growth Rate 2016-2031	Main Roads	CoC Data Split into Main Roads Zones	Forecast based on the Adjusted 2016 Base with CoC data and factored up with Main Roads growth factors	CoC Further Refined from Feedback
763	-	-		-	-	-	-		-	-	-	-
764	2,626	2,731	1.05	2,749	3,203	2,859	3,203	1.15	3,018	3,476	3,139	3,476
765	879	690	1.01	891	709	700	709	1.02	896	906	704	906
766	2,632	2,737	1.03	2,705	3,152	2,813	3,152	1.12	2,950	3,398	3,068	3,398
767	1,273	1,098	1.00	1,277	1,148	1,101	1,148	0.96	1,218	1,272	1,050	1,272
768	959	827	1.02	978	879	843	879	0.96	918	959	792	959
769	-	-		-	-	-	-		-	-	-	-
770	834	655	0.95	792	630	622	630	0.87	728	737	572	737
771	4,090	3,527	0.99	4,047	3,638	3,490	3,638	1.00	4,093	4,276	3,530	4,276
772	4,756	4,913	1.00	4,747	5,070	4,904	5,070	0.96	4,578	8,071	4,729	8,071
773	2,174	2,246	1.16	2,529	2,701	2,612	2,701	1.29	2,812	4,957	2,904	4,957
774	263	272	3.42	901	963	931	963	2.45	644	1,135	665	1,135
775	2,779	9,403	0.97	2,693	9,680	9,114	9,680	0.86	2,384	9,282	8,068	9,282
776	5,384	10,548	1.00	5,394	12,151	10,569	12,151	1.04	5,592	15,173	10,957	15,173
777	6,613	5,038	1.27	8,407	7,391	6,405	5,334	1.22	8,052	10,372	6,135	6,200
778	5,489	6,548	1.20	6,568	11,304	7,835	8,035	1.22	6,687	14,321	7,977	8,127
779	2,864	1,708	0.30	848	730	506	730	0.10	296	317	177	317
780	35	38	1.49	52	58	57	58	3.06	107	134	118	134
781	2,310	2,540	0.99	2,296	2,540	2,524	2,540	0.94	2,169	2,720	2,385	2,720
782	570	664	0.88	503	773	586	4,041	0.89	509	954	593	7,148
891	3,103	4,181	0.53	1,651	3,361	2,225	3,361	0.66	2,060	1,984	2,776	1,984
892	3,647	4,914	1.26	4,596	9,356	6,193	9,356	2.02	7,360	7,087	9,917	7,087
893	313	422	5.02	1,571	3,198	2,117	3,198	9.92	3,105	2,990	4,184	2,990
939	60	60	1.58	95	95	95	95	2.12	127	127	127	127
940	84	84	0.95	80	80	80	80	0.99	83	83	83	83
941	1	1	38.00	38	38	38	38	5.00	5	5	5	5
Total ROM Area	115,899	129,456		127,000	156,649	141,010	156,649		141,759	181,292	157,089	181,292
Cockburn only area	97,312	108,415		107,296	128,848	118,590	128,848		116,512	156,510	127,490	156,510
City of Cockburn forecast	108,770	108,770		129,308	129,308	129,308	129,308		157,018	157,018	157,018	157,018
Difference	(11,458)	(355)		(22,012)	(460)	(10,718)	(460)		(40,506)	(508)	(29,528)	(508)
External Zones Total	18,587	21,041		19,704	27,801	22,420	27,801		25,247	24,782	29,599	24,782

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City of Cookburn

2018 District Traffic Study

Zone	Dwellings											
	2016		2021					2031				
	Main Roads	CoC Adjusted to Main Roads Zones	Main Roads Growth Rate 2016-2021	Main Roads	CoC Data Split into Main Roads Zones	Forecast based on the Adjusted 2016 Base with CoC data and factored up with Main Roads growth factors	CoC Further Refined from Feedback	Main Roads Growth Rate 2016-2031	Main Roads	CoC Data Split into Main Roads Zones	Forecast based on the Adjusted 2016 Base with CoC data and factored up with Main Roads growth factors	CoC Further Refined from Feedback
666	947	749	1.01	952	754	753	754	1.02	970	770	767	770
667	287	287	0.94	270	270	270	270	1.34	385	385	385	385
690	710	710	1.02	721	721	721	721	1.02	726	726	726	726
727	1,525	1,525	1.11	1,688	1,688	1,688	1,688	1.24	1,895	1,895	1,895	1,895
728	781	781	1.02	795	795	795	795	1.07	837	837	837	837
729	1,485	1,485	1.10	1,639	1,639	1,639	1,639	1.31	1,947	1,947	1,947	1,947
733	255	269	9.84	2,510	2,717	2,650	1,250	19.02	4,849	4,121	5,119	3,751
734	447	472	1.42	636	688	671	1,000	1.86	831	706	877	815
735	1,543	1,669	1.07	1,653	1,848	1,788	1,848	1.24	1,917	2,208	2,074	2,208
736	1,145	1,239	1.09	1,244	1,391	1,346	1,391	1.25	1,426	1,643	1,542	1,643
737	774	838	1.05	816	911	884	911	1.31	1,013	1,141	1,097	1,141
738	1,416	1,532	1.04	1,474	1,648	1,594	1,648	1.20	1,695	1,953	1,833	1,953
739	644	701	1.01	648	721	706	721	1.09	701	719	764	719
740	898	978	1.04	931	1,036	1,014	1,036	1.27	1,137	1,166	1,238	1,166
741	1,292	1,364	1.22	1,580	1,710	1,668	2,370	1.40	1,804	1,533	1,904	1,726
742	2,553	2,781	1.12	2,861	3,183	3,116	3,183	1.29	3,296	3,380	3,590	3,380
743	934	986	1.12	1,043	1,129	1,101	1,624	1.31	1,225	1,041	1,293	1,111
744	1,148	1,161	1.09	1,249	1,333	1,263	1,333	1.22	1,403	1,364	1,419	1,364
745	4	4	1.00	4	4	4	4	1.00	4	3	4	3
746	527	533	1.26	665	710	673	710	1.79	944	918	955	918
747	-	-	1.00	-	-	-	-	1.00	-	-	-	-
748	7	5	1.00	7	6	5	6	0.86	6	7	5	7
749	141	107	0.99	140	112	106	112	0.96	136	150	103	150
750	166	126	1.00	166	133	126	749	1.14	189	208	143	1,321
751	21	21	1.00	21	22	21	22	1.00	21	20	21	20
752	-	-	1.00	-	-	-	-	1.00	-	-	-	-
753	30	30	1.00	30	32	30	32	1.00	30	29	30	29
754	1,827	2,010	1.00	1,831	1,979	2,015	1,979	1.01	1,840	1,992	2,025	1,992
755	748	823	1.22	910	983	1,001	983	1.30	975	1,056	1,073	1,056
756	624	685	1.11	692	838	759	838	1.18	739	936	811	936
757	1,652	1,813	1.07	1,762	2,135	1,934	2,135	1.10	1,820	2,306	1,997	2,306
758	350	384	1.07	373	452	409	452	1.10	386	489	424	489
759	-	-	1.00	-	-	-	-	1.00	-	-	-	-
760	-	-	1.00	-	-	-	-	1.00	-	-	-	-
761	-	-	1.00	-	-	-	-	1.00	-	-	-	-

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City of Cockburn

2018 District Traffic Study

Zone	Dwellings											
	2016		2021					2031				
	Main Roads	CoC Adjusted to Main Roads Zones	Main Roads Growth Rate 2016-2021	Main Roads	CoC Data Split into Main Roads Zones	Forecast based on the Adjusted 2016 Base with CoC data and factored up with Main Roads growth factors	CoC Further Refined from Feedback	Main Roads Growth Rate 2016-2031	Main Roads	CoC Data Split into Main Roads Zones	Forecast based on the Adjusted 2016 Base with CoC data and factored up with Main Roads growth factors	CoC Further Refined from Feedback
762	429	413	1.15	494	472	475	472	1.20	514	524	494	524
763	-	-	1.00	-	-	-	-	1.00	-	-	-	-
764	1,296	1,382	1.03	1,339	1,569	1,428	1,569	1.09	1,414	1,630	1,508	1,630
765	334	272	1.03	344	283	281	283	1.13	378	359	308	359
766	1,161	1,238	1.03	1,194	1,399	1,273	1,399	1.13	1,314	1,514	1,401	1,514
767	470	424	1.04	491	443	443	443	1.07	503	500	454	500
768	328	296	1.09	356	321	321	321	1.15	376	374	339	374
769	-	-	1.00	-	-	-	-	1.00	-	-	-	-
770	263	215	1.06	279	229	228	229	1.10	288	273	235	273
771	1,647	1,486	1.01	1,662	1,498	1,500	1,498	1.03	1,703	1,692	1,537	1,692
772	1,827	2,129	1.01	1,841	2,120	2,145	2,120	1.03	1,880	3,390	2,191	3,390
773	819	954	1.27	1,040	1,198	1,212	1,198	1.41	1,157	2,086	1,348	2,086
774	123	144	3.36	414	476	482	476	2.85	352	634	410	634
775	950	3,140	1.02	970	3,293	3,203	3,293	1.05	995	3,308	3,286	3,308
776	2,002	3,920	1.05	2,111	4,464	4,134	4,464	1.16	2,319	5,444	4,541	5,444
777	2,339	1,776	1.34	3,140	2,513	2,384	1,897	1.38	3,227	3,554	2,450	2,442
778	2,188	2,283	1.21	2,650	3,934	2,765	2,606	1.31	2,873	5,175	2,997	2,747
779	1,120	584	0.26	289	215	151	215	0.10	108	97	56	97
780	12	13	1.58	19	20	21	20	3.42	41	45	45	45
781	822	895	1.05	860	897	937	897	1.10	906	987	987	987
782	143	151	1.37	196	265	207	1,593	1.39	198	314	209	2,743
891	1,227	1,416	0.52	632	1,090	729	1,090	0.62	756	1,100	872	1,100
892	1,459	1,684	1.18	1,724	2,972	1,989	2,972	1.85	2,700	3,929	3,116	3,929
893	120	138	4.81	577	995	666	995	9.49	1,139	1,658	1,314	1,658
939	22	22	1.64	36	36	36	36	2.41	53	53	53	53
940	34	34	1.03	35	35	35	35	1.03	35	35	35	35
941	2	2	2.00	4	4	4	4	2.00	4	4	4	4
Total ROM Area	46,018	51,080		52,007	62,327	57,801	62,327		60,378	74,330	67,090	74,330
Cockburn only area	38,366	42,998		43,886	52,082	49,228	52,082		49,901	61,761	55,906	61,761
City of Cockburn forecast	43,333	43,133		50,949	50,949	50,950	50,951		62,098	62,098	62,099	62,100
Difference	(4,967)	(337)		(7,063)	1,133	(1,722)	1,131		(12,197)	(337)	(6,193)	(339)
External Zones Total	7,652	8,084		8,121	10,245	8,573	10,245		10,477	12,569	11,184	12,569

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City of Cookburn

2018 District Traffic Study

Zone	Employment							
	2016		Growth 2016-2021	2021		Growth 2016-2031	2031	
	Main Roads	Adjusted	Main Roads	Main Roads	Forecast based on the Adjusted 2016 Base with CoC data and factored up with Main Roads growth factors	Main Roads	Main Roads	Forecast based on the Adjusted 2016 Base with CoC data and factored up with Main Roads growth factors
666	180	1,165	1.03	186	1,204	0.77	138	893
667	2,703	2,703	4.03	10,904	10,904	7.12	19,257	19,257
690	124	124	1.00	124	124	1.10	136	136
727	362	362	1.05	379	379	1.16	421	421
728	224	224	1.08	242	242	1.25	279	279
729	1,327	1,327	1.07	1,423	1,423	1.22	1,617	1,617
733	364	516	4.51	1,642	2,328	7.67	2,791	3,958
734	274	261	1.95	533	509	1.64	448	428
735	600	677	1.06	633	714	1.18	705	795
736	180	203	1.11	200	226	1.26	227	256
737	211	358	1.01	213	362	1.15	242	411
738	236	548	1.04	246	571	1.14	269	625
739	31	24	1.10	34	26	1.23	38	29
740	1,916	1,457	1.05	2,017	1,534	1.18	2,255	1,715
741	392	322	0.90	353	290	0.93	366	301
742	1,245	789	1.01	1,252	794	1.08	1,341	850
743	118	107	1.02	120	108	1.19	140	126
744	196	177	1.07	209	189	1.20	235	212
745	358	-	0.91	324	-	0.92	328	-
746	368	332	1.07	393	355	1.42	521	470
747	198	272	1.08	214	294	1.22	242	333
748	3,953	5,439	1.03	4,054	5,578	1.09	4,315	5,937
749	276	243	5.41	1,494	1,318	16.09	4,440	3,916
750	133	117	6.18	822	725	48.29	6,423	5,665
751	13	11	23.38	304	268	41.40	538	475
752	245	216	2.19	536	473	3.57	874	771
753	15	22	1.00	15	22	1.07	16	24
754	290	376	1.05	305	396	1.17	339	440
755	111	144	1.05	116	151	1.15	128	166
756	99	171	1.12	111	192	1.10	109	189
757	427	739	1.08	462	800	1.21	515	891
758	113	196	1.04	118	204	1.10	124	215
759	9	12	0.78	7	9	0.78	7	9
760	772	1,126	1.28	989	1,443	1.44	1,111	1,621
761	2,442	3,563	1.03	2,521	3,678	1.14	2,794	4,077

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City of Cockburn

2018 District Traffic Study

Zone	Employment							
	2016		Growth 2016-2021		2021		Growth 2016-2031	
	Main Roads	Adjusted	Main Roads	Main Roads	Forecast based on the Adjusted 2016 Base with CoC data and factored up with Main Roads growth factors	Main Roads	Main Roads	Forecast based on the Adjusted 2016 Base with CoC data and factored up with Main Roads growth factors
762	2,731	3,151	1.04	2,838	3,274	1.12	3,063	3,534
763	1,777	1,527	1.04	1,841	1,582	1.12	1,999	1,718
764	235	269	1.04	244	280	1.16	272	312
765	27	31	1.19	32	37	1.26	34	39
766	96	110	1.09	105	120	1.43	137	157
767	151	173	1.26	191	219	1.25	189	217
768	36	41	1.64	59	68	1.47	53	61
769	11	5	0.73	8	4	0.55	6	3
770	151	117	0.99	150	116	1.06	160	124
771	470	328	1.04	488	341	1.19	561	392
772	847	1,224	1.05	888	1,283	1.18	999	1,444
773	68	98	3.73	253	366	8.23	559	807
774	300	3,305	3.94	1,181	13,008	2.79	836	9,205
775	-	-	1.00	-	-	1.00	-	-
776	366	1,583	1.04	379	1,642	0.95	349	1,509
777	383	1,527	1.84	704	2,806	0.98	376	1,499
778	297	514	1.02	304	526	1.03	307	532
779	224	194	0.93	208	180	1.39	311	269
780	1,349	2,604	1.21	1,635	3,156	1.33	1,788	3,451
781	742	875	1.02	758	894	1.16	858	1,012
782	1,605	5,112	1.06	1,705	5,431	1.08	1,741	5,544
891	160	160	0.73	117	117	1.10	176	176
892	181	181	1.47	266	266	1.97	357	357
893	1	1	3.00	3	3	5.00	5	5
939	2	2	1.00	2	2	84.00	168	168
940	-	-	1.00	838	-	1.00	1,634	-
941	2	2	564.00	1,128	1,128	1,363.05	2,726	2,726
Total ROM Area	32,716	47,460		49,821	74,681		73,392	92,766
Cockburn only area	27,630	42,374		34,395	60,093		46,616	67,624
City of Cockburn forecast	54,575	54,575		54,577	54,578		54,580	54,581
Difference	(26,945)	(12,201)		(20,182)	5,515		(7,964)	13,043
External Zones Total	5,086	5,086		15,426	14,588		26,776	25,142

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City of Cookburn

2018 District Traffic Study

Zone	Education							
	2016		Growth 2016-2021	2021		Growth 2016-2031	2031	
	Main Roads	Adjusted	Main Roads	Main Roads	Forecast based on the Adjusted 2016 Base with Department of Education data and factored up with Main Roads growth factors	Main Roads	Main Roads	Forecast based on the Adjusted 2016 Base with Department of Education data and factored up with Main Roads growth factors
666	-	-	1.00	-	-	1.00	-	-
667	1,311	1,311	1.01	1,318	1,318	1.01	1,326	1,326
690	613	613	1.04	635	635	1.09	671	671
727	583	583	1.03	602	602	1.06	620	620
728	1,193	1,193	1.01	1,205	1,205	1.02	1,222	1,222
729	1,601	1,601	1.02	1,639	1,639	1.05	1,681	1,681
733	-	-	1.00	250	-	1.00	500	-
734	-	-	1.00	-	-	1.00	-	-
735	1,173	1,173	1.00	1,175	1,175	1.01	1,179	1,179
736	18	18	1.00	18	18	1.00	18	18
737	41	41	1.00	41	41	0.85	35	35
738	450	450	1.00	451	451	0.98	443	443
739	-	-	1.00	-	-	1.00	-	-
740	366	366	1.00	367	367	1.00	366	366
741	-	-	1.00	-	-	1.00	-	-
742	746	746	1.00	747	747	0.97	723	723
743	439	439	1.06	466	466	1.09	479	479
744	843	843	1.01	848	848	1.00	842	842
745	-	-	1.00	-	-	1.00	-	-
746	524	524	1.05	551	551	1.13	591	591
747	-	-	1.00	-	-	1.00	-	-
748	-	-	1.00	-	-	1.00	-	-
749	138	138	0.98	135	135	0.98	135	135
750	-	-	1.00	-	-	1.00	-	-
751	-	-	1.00	-	-	1.00	-	-
752	-	-	1.00	-	-	1.00	-	-
753	-	-	1.00	-	-	1.00	-	-
754	1,358	1,358	1.01	1,371	1,371	1.01	1,374	1,374
755	-	-	1.00	-	-	1.00	-	-
756	-	461	1.00	-	461	1.00	-	461
757	714	714	1.12	799	799	1.18	846	846
758	546	546	1.00	547	547	0.99	540	540
759	-	-	1.00	-	-	1.00	-	-
760	-	-	1.00	-	-	1.00	-	-
761	-	-	1.00	-	-	1.00	-	-

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City of Cockburn

2018 District Traffic Study

Zone	Education							
	2016		Growth 2016-2021	2021		Growth 2016-2031	2031	
	Main Roads	Adjusted	Main Roads	Main Roads	Forecast based on the Adjusted 2016 Base with Department of Education data and factored up with Main Roads growth factors	Main Roads	Main Roads	Forecast based on the Adjusted 2016 Base with Department of Education data and factored up with Main Roads growth factors
762	165	165	1.00	165	165	0.92	151	151
763	-	-	1.00	-	-	1.00	-	-
764	286	286	1.00	287	287	1.00	286	286
765	-	-	1.00	-	-	1.00	-	-
766	74	-	1.00	74	-	0.93	69	-
767	-	-	1.00	-	-	1.00	-	-
768	-	-	1.00	-	-	1.00	-	-
769	-	-	1.00	-	-	1.00	-	-
770	-	-	1.00	-	-	1.00	-	-
771	918	918	1.00	920	920	0.99	913	913
772	1,208	1,208	1.00	1,210	1,210	0.99	1,199	1,199
773	-	-	1.00	-	-	1.00	-	-
774	-	-	1.00	-	-	1.00	-	-
775	445	445	1.07	478	478	1.11	493	493
776	760	760	1.08	822	822	1.09	825	825
777	-	629	1.00	-	629	1.00	-	629
778	-	1,083	1.00	-	1,083	1.00	-	1,083
779	769	-	0.96	741	-	0.98	751	-
780	-	-	1.00	-	-	1.00	-	-
781	-	-	1.00	-	-	1.00	-	-
782	-	-	1.00	-	-	1.00	-	-
891	126	-	1.45	183	-	1.98	250	-
892	88	927	2.56	225	2,370	5.11	450	4,740
893	-	-	1.00	100	-	1.00	200	-
939	-	-	1.00	-	-	1.00	-	-
940	-	-	1.00	-	-	1.00	-	-
941	-	-	1.00	-	-	1.00	-	-
Total ROM Area	17,496	19,539		18,370	21,340		19,178	23,871
Cockburn only area	11,981	13,311		12,463	13,571		12,758	13,611
City of Cockburn forecast	54,582	54,583		54,585	54,586		54,588	54,589
Difference	(42,601)	(41,272)		(42,122)	(41,015)		(41,830)	(40,978)
External Zones Total	5,515	6,228		5,907	7,769		6,420	10,260

City of Cockburn

2018 District Traffic Study

Zone Area	Population						Dwellings						Employment					
	2016		2021		2031		2016		2021		2031		2016		2021		2031	
	Main Roads	CoC Adjusted	Main Roads	CoC Adjusted	Main Roads	CoC Adjusted	Main Roads	CoC Adjusted	Main Roads	CoC Adjusted	Main Roads	CoC Adjusted	Main Roads	CoC Adjusted	Main Roads	CoC Adjusted	Main Roads	CoC Adjusted
Total ROM Area	115,899	129,456	127,000	156,649	141,759	181,292	46,018	51,080	52,007	62,327	60,378	74,330	32,716	47,460	49,821	74,681	73,392	92,766
Cockburn only area	97,312	108,415	107,296	128,848	116,512	156,510	38,366	42,996	43,886	52,082	49,901	61,761	27,630	42,374	34,395	60,093	46,616	67,624
City of Cockburn forecast	108,770	108,770	129,308	129,308	157,018	157,018	43,333	43,333	50,949	50,949	62,098	62,098	54,575	54,575	54,577	54,578	54,580	54,581
Difference	-11,458	-355	-22,012	-460	-40,506	-508	-4,967	-337	-7,063	1,133	-12,197	-337	-26,945	-12,201	-20,182	5,515	-7,964	13,043
External Zones Total	18,587	21,041	19,704	27,801	25,247	24,782	7,652	8,084	8,121	10,245	10,477	12,569	5,086	5,086	15,426	14,588	26,776	25,142

District Traffic Study

February 2018
Consultation Analysis

Table of Content

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1. Executive Summary

The City released its City of Cockburn District Traffic Study and draft Regional and Major Roadworks 2018-2031 VII for comment by the end of February 2019.

It gives specific attention to traffic at these locations - west of Stock Road, Cockburn Central, Fiona Stanley hospital precinct, Jandakot Airport development, Latitude 32, Australian Marine Complex and the Cockburn Coast.

It also looks at traffic changes likely as a result of the Main Roads WA upgrades underway on the Kwinana Freeway, Armadale Road and Murdoch Drive.

Engineers will report back to Council with feedback in April 2019.

2. Background

The District Traffic Study was developed in 2006 to help assess road priorities and timing for future road network planning. The City has reviewed it every five years, in 2013 and 2018. The latest review, by engineering consultants ARUP WA, was presented to the December 2018 Ordinary Meeting of Council and then released for comment. The aims of the latest review were to:

- Update the 2013 District Traffic Study
- Prepare traffic forecasts for 2021 and 2031 including the development plans for all areas.
- Give attention to specified areas (listed above).

Findings

It found that without any changes to the road network by 2021, there will be widespread congestion with many key roads operating at 80 % capacity or higher including:

- North Lake Road (various stretches)
- Phoenix Road
- Rockingham Road
- Cockburn Road (just south of Rockingham Road)
- Stock Road
- Berrigan Drive

The review recommends short, medium and long-term upgrades and actions for the City's road networks.

In particular, it says:

1. The Forest Road Link and Hammond Road extensions should be removed from the program, as they will not improve the traffic situation at surrounding intersections.

2. Narrowing Rockingham Road between Phoenix Road and Spearwood Avenue from four lanes to two lanes will have a minor increase in congestion but generally volume capacity ratios between scenarios are very similar.

3. Duplicating Farrington Road is not recommended as it will attract double the number of cars and remain congested.

5. Duplicating Rowley Road and Russell Road should proceed as they decrease congestion on Russell Road between Henderson Road and Rockingham Road, and on Russell Road between Frankland Avenue and Kwinana Freeway.

6. The Bartram Road Bridge crossing of the freeway should proceed to reduce congestion around Wentworth Parade, Hammond Road, Beeliar Drive, Tapper Road and Kwinana Freeway.

The review recommends:

- Public transport improvements to rail and bus routes and infrastructure.
- Further encouraging pedestrian and cycle transport modes.
- Examining the impact of peak spreading on road infrastructure requirements.
- Examining the timing and sequencing of development.
- Increasing implementation of Intelligent Transport Systems.

The timing for all future major road projects is dependent on external funding from State and Federal grants as well as City. There is also a requirement for land acquisition on most of the major road projects and this impacts on project delivery times.

3. Methodology

The City posted its draft District Traffic Study on Comment on Cockburn and called for public feedback by Friday 28 February. This was publicized by an email newsletter to 3,700 people.

Feedback could be provided by:

- Completing an online survey
- Sending an email to comment@cockburn.wa.gov.au
- Telephoning Engineering Services on 9411 3444

4. Engagement Summary

Engagement summary	
We asked for feedback on the District Traffic Study	<p>You said:</p> <p>“There are no current options on the table to relieve congestion on Farrington Road.”</p> <p>“The growth of traffic on Banjup’s roads must be prevented.”</p> <p>“Make the road that leads north out of Gateways tunnel under Beeliar Drive so that it connects to Midgegooroo Avenue.”</p>
Key points raised: <ul style="list-style-type: none"> • Concerns about Murdoch Drive connection and Farrington Road • Concern about Liddlelow road and nearby roads 	
	<p>You participated:</p> <p>Two residents’ groups</p> <p>12 Individuals</p>
Next steps	
We are now reviewing all community input.	

Web visits:

Highlights

TOTAL VISITS	MAX VISITORS PER DAY	NEW REGISTRATIONS
339	41	5
ENGAGED VISITORS	INFORMED VISITORS	AWARE VISITORS
13	110	287

5. Survey responses

Comments
<p>Aubin Grove resident</p> <p>I would like to suggest some additions/alterations to your plan. I write from the perspective of a family who resides in Aubin Grove and has work and school arrangements in Hammond Park and Murdoch.</p> <p>We also travel all around the City of Cockburn regularly and have a 'good feel' for the way the roads and traffic work! I hope that you will consider our perspective and ideas as you work towards finalising your roadworks and traffic plan for the coming years.</p> <p>Generally, I think you have done a very good job of identifying some of the major sticking points in our road system and have designed some sensible solutions to improve connectivity.</p> <p>Broadly, I believe there are two major problems with the current and proposed road systems in Cockburn: (1) an insufficient number of available alternative routes/pathways connecting nearby areas and (2) an unnecessary abundance of traffic signals, which decreases efficiency (and increases traffic congestion/driver frustration).</p> <p>1 Regarding point (1), providing more pathways between locations (a) gives motorists more options so that they don't always have to use a main road (i.e. which takes some pressure off main roads and reduces overall congestion) and (b) offers a much more efficient escape route when there is a vehicle accident or too much congestion around a main road.</p> <p>For point (2), swapping some sets of traffic signals for multi-lane roundabouts would be safer and much more effective at keeping traffic flowing.</p> <p>To illustrate, the two-lane roundabout recently constructed at the corner of Russell Rd and Frankland Ave in Hammond Park represents a positive step forward for our city's traffic situation (since traffic keeps moving), whereas the conversion of the Gibbs Rd/Lyon Rd intersection from a single-lane roundabout to now having traffic signals was, in my view, a terrible mistake.</p> <p>It would have been much better as a multi-lane roundabout and we could have kept that beautiful, mature tree. This set of signals often causes unnecessary chaos on adjoining roads in Aubin Grove and Harvest Lakes.</p> <p>To illustrate, this past Friday evening at 5:35, I sat on Lyon Rd, trying to escape Aubin Grove (via Gibbs Rd) for at least five minutes because there were cars backed up from Gibbs to nearly the Deakin Entrance, all because of that set of signals. This is not an unusual occurrence and it would never have happened</p>

(save for some sort of calamity, like a traffic accident) when we had the previous single roundabout.

In light of these types of issues, I would like to make four proposals that I hope you will consider as you refine your final plan.

Proposal 1: Just like Parry Ave connects Bateman with Bull Creek, please consider linking Aubin Grove with Hammond park by connecting Gaebler Road via a road bridge (i.e. flyover) over the Kwinana Freeway. Hammond Park High School is coming next year. Its catchment zone will include residents of Hammond Park, Wandi and Aubin Grove. Currently, the shortest path between Hammond Park and Aubin Grove are via Gibbs/Russell Rd (which requires passing through four sets of ill-timed traffic signals - a clear run is indeed rare during the day!) or via Rowley Rd (which, depending on where you live in Aubin Grove or Hammond Park, is an unreasonably long way around). The new school is only about 1.5km away (as the crows flies) from the centre of Aubin Grove (which I'll define as being the intersection of Gaebler Rd & Lyon Rd). However, the current journey (given the lack of alternative pathways) is at least 3.5km - not exactly walking distance. By connecting Gaebler over the Kwinana, students from Aubin Grove will be able to get to Hammond Park High School more quickly and directly. Students will be able to walk/cycle to school in less time (i.e. because they'll have to cover a much shorter distance) and those parents who drop their kids off near the school will then be more easily be able to head north from Hammond Park (e.g. via Frankland to either Russell->Stock, Russel->Henderson, Russell->Hammond, or Russell->Kwinana). Most people in our area work and/or shop/play north of Hammond Park/Aubin Grove. An added benefit of connecting Gaebler over the Kwinana is that motorists will also be able to get all the way to the following locations from Aubin Grove (or Wandi) before even having to encounter a traffic signal: • The corner of Hammond Rd and Beeliar Rd • The corner of Spearwood Ave and Barrington St • The corner of Russell Rd and Stock Rd • Cockburn Central Shopping Centre (via Gaebler-Frankland-Hammond-Bartram-Wentworth)

Proposal 2: Fix the mess that is Beeliar Drive between Hammond Road and Tapper Road. Traffic along this stretch of road is often diabolical during the day. It doesn't need to be like this. Unfortunately, the current and planned road system for this area does not appear to adequately address this problem. The North Lake-Armadale link will relieve some of this pressure, but the problem will persist if nothing else changes (because only a fraction of motorists are trying to travel to/from Piara Waters/Armadale!). The fact is, many people need to travel back and forth between the Cockburn Gateways/ARC area in Success and the Bunnings shopping area on the other side of the freeway in Jandakot. Vehicles are often backed up from the Freeway South right-turn signal all the way back to Poletti Road.

I wager that the traffic problems in this area are caused primarily by two factors:

(1) Too many sets of traffic signals positioned too closely together (i.e. at Wentworth, then immediately Midgegooroo, then soon after the Freeway bridge signals) and

(2) Not enough lanes, especially on the Cockburn Central traffic bridge (i.e. flyover) - sometimes there's only one lane that goes straight when travelling east because both right turn lanes going south are occupied!).

I would therefore like to propose several changes to improve traffic along this stretch:

- Regarding Point 26 on your plan, please do not install traffic signals at either end of Poletti (i.e. at North Lake Rd and Beeliar Rd). This will worsen the situation. Please consider converting these intersections to two-lane roundabouts instead. Do you notice how North Lake Rd currently runs very smoothly between Berrigan and Midgegooroo? The reason? There are no traffic signals!

- Convert the intersection of Beeliar & Wentworth to a two-lane roundabout instead.

- If I am understanding your Point 25 correctly, why is Midgegooroo being reduced to 2 lanes between Beeliar and North Lake when it was just widened in 2014? The 2014 widening greatly improved the flow of this road. Please cancel Point 25 and do not narrow this road.

I will give you another important reason below for keeping Midgegooroo as two lanes aside.

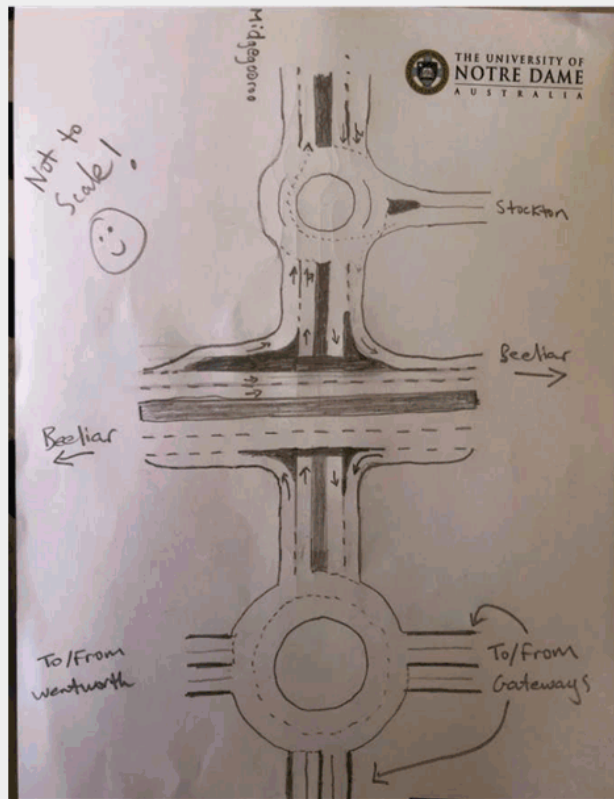
- Cockburn Gateways Shopping Centre contributes significantly to traffic woes in the area. As such, you can encourage traffic to drain away from Cockburn Gateways using pathways that do not involve Beeliar Drive. Here are some ideas:

- o Widen Wentworth Parade (to two lanes aside) from Gateways to at least to Bartram Road (to encourage more vehicles south). Once at Bartram, people can either go west towards Hammond, or east over the Kwinana via the new bridge into Atwell.

- o Connect Alabaster Drive (in Success) to Hammond Road (to encourage vehicles west). Once at Hammond, drivers can go north or south. Hammond Road really needs to be two lanes aside from end-to-end (i.e. North Lake through to Russell). There needs to be a new back road constructed behind Emmanuel Catholic College to (a) reduce congestion on Hammond Rd around the College and (b) take motorists further west before they enter Beeliar Drive.
- o Make the road that leads north out of Gateways tunnel under Beeliar Drive so that it connects to Midgegooroo Avenue. The bus lane between Gateways and the Bus Station does exactly this! This way, Beeliar remains free flowing at Gateways and people can escape Gateways (which is currently usually backed-

up) by not having to wait for a signal.

I have drawn a diagram of this newly proposed intersection for your kind consideration.



You will notice that my design does not include direct right-hand turns (yet they are still provided for!). The reasons for this are many and I would be happy to explain these to you another time, perhaps via a follow-up email, phone conversation, or face-to-face meeting. Please let me know whether you would like further details.

- Completely redesign the Cockburn Central traffic bridge over the Kwinana Freeway. I presume that there will still need to be a northbound on-ramp at the Cockburn Central fly-over, even if Kentucky Court also leads to the Kwinana Freeway further north (Point 19 on your plan, if I'm understanding it correctly).

Surely we can generate something more creative and functional than the standard current T-Junction arrangement. I have an idea for an elevated/floating roundabout interchange that I think would do the trick. I'd be happy to draw up a diagram for you, if you wish. Please let me know.

- Convert the intersection of Beeliar Drive & Soloman Rd to a two-lane roundabout. This would make it much easier to get in and out of Soloman Rd (which regularly becomes severely backed-up).

- Convert the intersection of Beeliar Drive and Tapper Rd to a two-lane roundabout and widen Tapper Road to two lanes aside until at least Bartram Rd. Remember, widening Wentworth Pde and Tapper Rd facilitates flow between Success and Atwell and provides an alternative pathway that encourages vehicles away from Beeliar Drive.

Proposal 3: Create a situation where Hammond Road connects seamlessly with North Lake Road. The current roundabout joining Hammond Rd with Parkes St and Merino Ent before it connects with North Lake Rd often causes a long back-up of vehicles on Hammond Rd who are trying to go north on North Lake Rd. I propose redesigning this area so that traffic can flow onto North Lake Rd going either direction from Hammond Rd. I have a few ideas, but much depends on what you are planning to do with Parkes St (if anything). I'd like to see Hammond Rd turn into a third lane going north on North Lake Rd. If you would like to discuss this further, please let me know.

Proposal 4: Convert some other key intersections to two-lane roundabouts. There are a few intersections around town that I think would be better off as a roundabout instead of traffic lights or nothing at all.

Here are a few suggestions.

- The intersection of Stock Rd and Russell Rd - this intersection is particularly painful because the wait time is so long when turning right from Russell onto Stock (i.e. 2 or 3 sets of long, poorly-timed lights)
- The intersection of Russell Rd and Henderson Rd - turning right from Russell to Henderson and turning left from Henderson to Russell is difficult and dangerous because cars come around the nearby corner quickly. A roundabout would promote better and safer traffic flow (also, Henderson Rd tends to back up a lot, currently!)
- The intersection of Berrigan Dr and North Lake Rd (i.e. make it just like the intersection of North Lake Rd and Bibra Dr - works a treat!)
- Connect Yangebup Rd together south of Yangebup Lake and connect this road to Beeliar Dr via a roundabout (i.e. it provides a helpful alternative pathway!)
- The intersection of North Lake Rd and Osprey Dr (depending on my Proposal 3 and what happens with Parkes St, this intersection as we currently know it might not be necessary at all. Again, I have a few ideas.
- The intersection of North Lake Rd and Discovery Dr (that turn right out of Discover Dr can be tricky. A set of traffic lights would be awful. A roundabout would help!
- In concert with the other traffic changes I've suggested, the intersection of Hammond Rd and Beeliar Dr would probably also be better served by a two-

	<p>lane roundabout. Either that, or the current T-junction can be kept, but have with one lane (in each direction) of Hammond Rd tunnel under Beeliar. Currently, vehicles on Hammond have to wait a long time to cross Beeliar (because Beeliar is so busy...partially because there are no other alternative routes!).</p> <p>I'd like to thank you very much for your time and consideration in reading this feedback. Once again, thank you for providing me with the opportunity to comment and, should you wish like to discuss any of these ideas further, please feel welcome to contact me.</p> <p>Kindest regards, Scott Dickson 24 Heidelberg Street, Aubin Grove WA 6164 0421 889 340</p>
2	<p>The Murdoch Chase Residents Association has reviewed the study and has a number of concerns regarding the access in and around our community, located at Farrington Road and Murdoch Drive.</p> <p>Murdoch Activity Centre</p> <p>The study introduction suggests that significant developments were assessed for traffic impacts. One of the developments noted is the Murdoch Activity Centre (MAC) and related connections.</p> <p>Throughout the report there is no mention of the changes in the MAC traffic. According to page 10 of the report, the MAC ("Fiona Stanley Precinct") is forecasted to rise another ~12000 in demographics, yet this rise has not been addressed by any of the recommendations?</p> <p>Murdoch Drive Connection</p> <p>The Murdoch Drive Connection project is only a minor reference in the report, but only as far as traffic volume modelling in Appendix A in the "Do Something" scenarios starting on page 69. We are unable to find any meaningful reference to the \$100 million project that is under construction? The <i>Regional and Major Roadworks (2018-2031)</i> plan on page 29 of the report (dated August 2018) does not include the MDC, yet we know modelling and information were publically available at those times. The November 2018 version of the same document (attached separately to the consultation Web page) also does not include the MDC.</p> <p>Farrington Road</p> <p>According to the report there are no current options on the table to relieve congestion on Farrington Road. Whether people agree or disagree with Roe 8, the road was going to remove 6900 heavy vehicles a day off Farrington Road. But no solution has been offered to reduce this traffic. With the redesign of the MDC, traffic will still need to travel east of Bibra Drive to access the Freeway and Roe Highway and there is no congestion relief for Murdoch Chase or Leeming residents. The feasibility of running public transport on a very congested road also raises concerns.</p> <p>With the recent construction works related to the MDC, this issue is top of mind for our community. The increased traffic highlights the challenges of being able to safely stop, drop off or pick up passengers and then reenter traffic without significant hold ups. Further, the congestion restricts the ability to run a reliable bus service. Safe pedestrian access to public transport is also impacted as a result.</p>

	<p>Access to Murdoch Chase</p> <p>The biggest concern is the effect that traffic is having on the egress and ingress at the roundabout at Farrington Road, Murdoch Drive and Allendale Entrance. According to Main Roads data, the intersection is currently failing at the Allendale Entrance leg. In a previous study, Cardno undertook SIDRA analysis on this roundabout, which showed that based on the existing traffic volumes and turning proportions, both the eastern approach and northern approaches are already operating above capacity during the PM peak hour. With the eastern side currently carrying 33,100 vehicles per day, and a projected rise to 35,800 vehicles per day by 2031, things are only going to get worse.</p> <p>The issue with our roundabout has been no secret over the years. Representatives from the City of Cockburn have come out to witness the spectacle of getting out of Allendale Entrance during peak hours, but to this day, they still show no further interest in remedying the problem. This report continues to ignore the problem affecting our residents.</p> <p>Murdoch Chase Residents are disappointed that there seems to be no solution for Farrington Road. We strongly believe that a "Do Nothing" approach will endanger the lives of local residents and road users. Late last year, two cyclists were run down at the Farrington Road/Murdoch Drive roundabout, which was witnessed by a local resident. Another resident also witnessed a rear end collision during the afternoon peak on Friday, 22 February. These issues are very evident to those of us who use the roads daily and we are disappointed that no solutions have been proposed.</p> <p>We would welcome a member of the Traffic Management team to address our members at a meeting and explain the study in more detail or offer additional insight.</p> <p>We are committed to working with the City of Cockburn to enact change and better understand the challenges and opportunities to improve safety and access for our residents.</p> <p>Sincerely, Jillian Reid</p> <p>Murdoch Chase Residents Association</p>
3	<p>Not sure if this has been brought up before and I don't see it on the plans, but it would be really beneficial to have a longer left turning lane from Bibra Drive into Farrington Road. A lot of cars are travelling west and are held up at the lights by the right turning traffic. Looks like there would be ample room on the surrounding verge.</p> <p>Also, the Discovery Drive/North Lake Road junction is very dangerous. I have witnessed many near-misses there as the build-up in traffic turning right causes impatience and risk-taking.</p>
4	<p>Cockburn has by far the worst congestion and road network of any local government that i've resided in. It's bizarre that the council opposes road developments that would resolve many of the congestion issues highlighted by this document.</p>

	As a vehicle owner, I have no interest in using public transport. It's getting to the point where you have to own an SUV to navigate the ridiculous traffic calming that is popping up everywhere to try and stop rat running. The rat running is the councils own fault because it refuses to fix the congestion issues.
5	Please under no circumstances duplicate Farrington Road, please do not duplicate Bibra Drive actually some traffic calming on Bibra Drive may deter the Rat Runners
6	90% of the congestion on the stretches of roads mentioned in your information would be solved if you stopped the political games and built Roe 8. This 1 single road provides a dedicated east west link through our city and prevents large volumes of traffic using minor arterial and residential roads. Stop spending our ratepayers money on baddaid teaffic solutions when there is state and federal funds available.
7	<p>Still no real way to transit from North Lake Road, Bibra Lake Industrial Area to Roe Highway. Have to transit through Residential Area on Farrington to reach the Roe. Farrington needs to be dual-carriageway if there is no connection direct to the, ludicrous waste of money, at Murdoch Drive</p> <p>Still a bottleneck at the bottom of Beeliar-Stock Intersection.</p> <p>The speed limit on Cockburn Road needs to be one speed along the length, not up and down like it is at the moment.</p>
8	Attention needs to be given in the short term to the intersection at Solomon Road and Armadale Road. A long term option may be available but the increase in traffic and accidents at that intersection poses significant risk in the short term. Additionally, the u-turn break in the median strip just up from this intersection needs attention.
9	In the draft plan for works planned by Council during the period 2018/31 there is nothing major at all for the western half of the city to improve congestion bar duplicating Russell Rd all the way to the south yet the Council was against the Roe 8 development. Why does the Council seem to constantly make decisions which have a negative impact on the western half of the city?? And what are it's plans to help those in these areas move around??
10	Mayor Road between Stock and Cockburn Road has become extremely busy over the past couple of years, since I have moved into the area. This becomes far worse during the weekend when many cars towing boats use this as a means to get to the boat ramp in Henderson. I believe this to be a dangerous situation for local residents trying to enter Mayor Road. I am request a traffic study of Mayor Road, especially over the weekend.

11	<p>There is a need to realign Lauderdale Drive through the train station to the controlled intersection of Russel Road and the Aubin Grove station car park. Currently there are unsafe rat running drivers and this will continue until it is appropriately aligned.</p> <p>From a regional transport perspective it is inappropriate to be pushing traffic from Atwell, Aubin Grove and Hanmond Park on to the freeway to access Cockburn Central. There are no houses fronting Lauderdale and this realigned access would create a safe and permeable road network.</p>
12	<p>Having read the report 2 things are particularly disappointing as a resident of the Murdoch Chase estate:</p> <p>1) when we met with Main Roads at the information session regarding Murdoch Connection we were advised that Murdoch Connection intended to reduce traffic numbers on Farmington Rd and duplication of Farmington Rd was not possible due to the nature reserves on the Murdoch Uni side;</p> <p>2) The research paper indicates that Farmington Rd is already over capacity and that duplication will not be considered due to the likelihood of attracting more vehicles. There is no alternate solution proposed and this is contrary to the intent of what Main Roads advised us as part of the community consultation about Murdoch Connection..</p> <p>I will note that once Murdoch Connection is complete we will only have the option of turning right or left on Farrington Rd. We have no other entry or egress points. This is unacceptable.</p> <p>The current traffic poses a danger to pedestrians trying to get across Farrington Rd from and to our estate.</p> <p>Why are there no road calming treatments or overpass/underpass footbridges proposed.?</p> <p>A secondary entry/exit road should be constructed at the back of the Spanish club to allow our residents safe exit/entry from/to our estate.</p>
13	<p>Gaebler Road and Monticola Gardens.</p> <p>We support the proposed traffic calming at the corner of the above and at the entrance to the Regents Garden Bugalows Retirement Village.</p> <p>Many of us have experienced some dangerous encounters when entering and exiting the village. Thank you all for the effort put in to date.</p>

Banjup Residents Group Submission

1. Summary

1.1. BRG Analysis

The DTS is a long and complex document. It is difficult to compare data for one year with that for another year so that residents can assess the implications of the forecast for their own local areas. To gain better insights into the effects of the forecasts on the Banjup, Jandakot, and Treeby rural areas, the BRG tabulated the data shown on various maps and represented Cockburn's forecasts in several graphs and tables. The BRG analysis showed these multiples of increases in traffic for:

Jandakot Road:

		vpd	Multiple
Actual	2017	12,300	
Forecast	2021	21,000	1.7
Forecast	2031	27,800	2.3

Liddelow Road:

		vpd	Multiple
Actual	2018	3,800	
Forecast	2021	10,000	2.6
Forecast	2031	16,000	4.2

Beenyup Road:

		vpd	Multiple
Actual	2015	1,800	
Forecast	2021	8,600	4.8
Forecast	2031	11,000	6.1

None of these large increases in traffic volumes is acceptable for any lifestyle rural area. According to the forecast weekday traffic volumes shown in the DTS, Jandakot Road will be almost as busy as Stock Road, Hilton, while Liddelow Road will be almost as busy as Spearwood Avenue in Beeliar, as is evident from this table:

	2021	2031
Stock Road	23,100	31,600
Jandakot Road	21,000	27,800
Spearwood Ave	13,200	17,700
Liddelow Road	10,000	16,000

The volumes of traffic forecast for Jandakot and Liddelow Roads is totally inconsistent with the rural zone through which they pass. Without resolute action by the City of Cockburn, the amenity of its rural areas will be destroyed by busy highways running through their hearts.

1.2. Banjup residents' recommendations to the City of Cockburn

Jandakot and Treeby

The DTS forecasts ever increasing traffic cutting through the heart of rural Jandakot and Treeby and further destroying the amenity of the area. Residents urge the City of Cockburn to promote vigorously to government the urgent need to change Jandakot and Treeby's rural zoning for urban development.

Banjup

The City of Cockburn says it wants to preserve Banjup's rural amenity so that the locality can "prosper", as the draft local planning policy puts it. It follows then, that the growth of traffic on Banjup's roads must be prevented and through traffic diverted to the Freeway, Nicholson, Rowley, and Armadale Roads for which those roads were designed.

In June 2015, Council resolved to implement several measures that discourage traffic from Banjup's roads. The 2018 District Traffic Study reinforces Council's reasoning in 2015. Banjup residents urge the City of Cockburn to assign resources urgently to implement Council's 2015 resolution fully.

2. BRG Understanding the Intent of the 2018 District Traffic Study and the Public Consultation

The City commissioned Arup Australia Pty Ltd to update the 2013 Cockburn District Traffic Study in the light of Main Roads WA updating its Regional Operations Model, Cockburn's updating of its major road plans, and of changes in local demographic data. Specifically, Cockburn wishes to forecast traffic flows on its significant roads in 2021 and in 2031. These forecasts will inform Cockburn's major road plans over the coming years. The City is now seeking comments from residents on the recommendations and the implications of the 2018 District Traffic Study.

3. Scope of the BRG Comments

Banjup, Jandakot, and Treeby rural residents make no comments on the DTS findings for west of the Kwinana Freeway. We make no comments on the techniques used in modelling the traffic flows described in the DTS. However, we do comment on the implications of the data presented in Cockburn's DTS insofar as it affects the rural areas of Banjup, Jandakot, and Treeby.

4. BRG Understanding of the Traffic Flow Data

The BRG found it difficult to assess the data presented without first tabulating it. Even for the few roads in Banjup, Jandakot, and Treeby, it took our members considerable time to transcribe the data shown on the schematics into spreadsheets so that useful comparisons and analyses could be made. We wonder how

respondents in other localities were able to make sense of the data presented for their much more complex road networks.

The BRG made several enquiries of the City's Engineering Services about some of the data shown for our rural area. Our understandings of Cockburn's and Arup's replies are:

1. Traffic flows on the maps are for the 2 hour peaks on weekday mornings and on weekday afternoons.
2. The "Do Nothing" scenarios are to set baselines for the "Do Something" scenarios. We infer that the "Do Nothing" scenarios are not meaningful for Banjup, Jandakot, and Treeby because the major road improvements of Armadale Road, Jandakot Road, the Freeway, and the North Lake Road bridge will be mostly completed by 2021. Consequently, we make no comments on the "Do Nothing" scenarios.
3. The DTS requires "*centroids where traffic needs to enter or exit the network*" and that the traffic volumes shown on Fraser Road north "*represent an access location to a development area*". Further, the City of Canning plans for Fraser Road to be extended into its residential areas. Whether the extension is included in the Jandakot Airport 2019 Master Plan remains to be seen. However, we infer that by 2031, Fraser Road will be extended north.
4. Bartram Road is shown in the MRWA model as running through to Tapper Road and thence to a possible Bartram Road bridge across the Freeway. Arup suggests that if Bartram Road were to remain closed at Tapper Road, then the traffic predicted would, instead, flow along Gibbs Road which "*currently has low traffic volumes*".

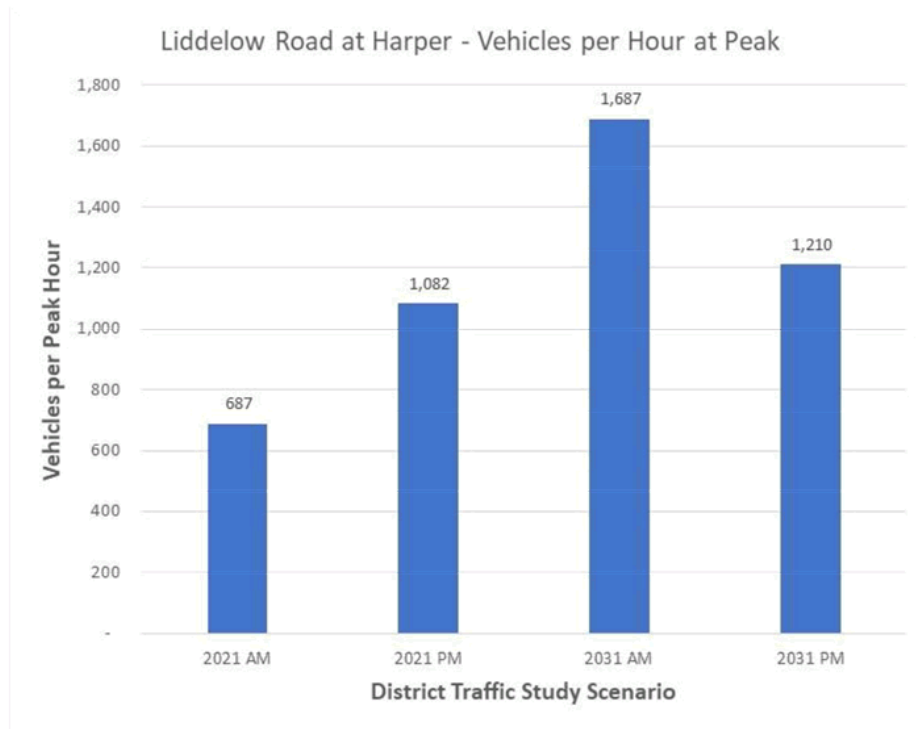
The BRG assumes, not unreasonably, that all of the actual traffic counts made by Cockburn in past years, as shown in a module in the City's IntraMaps, were available to Arup in the preparation of the base model of the DTS and, therefore, that the predicted traffic flows are firmly founded on past realities.

5. BRG Analysis of Traffic Volumes in Banjup, Jandakot, and Treeby

BRG members inspected each of the assigned volume maps and transcribed the volumes shown into a spreadsheet for analysis. To illustrate our approach, an extract of the data so transcribed is shown below:

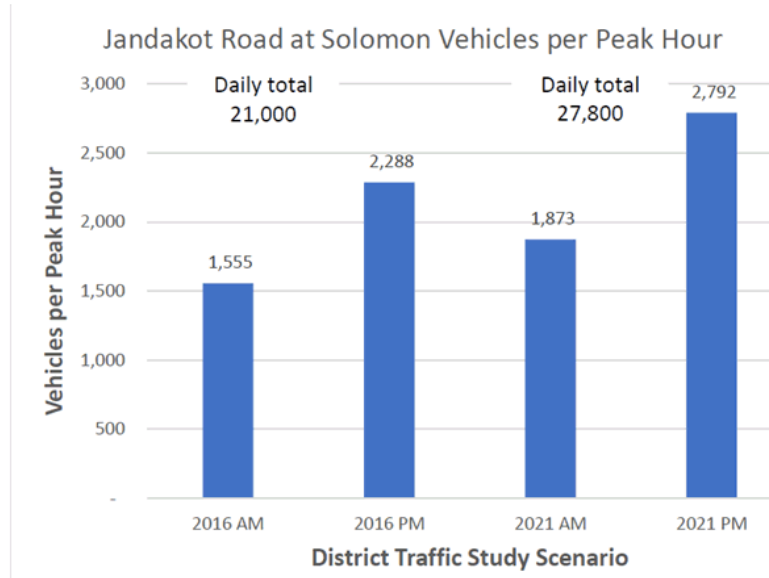
Assigned Volumes for 2 hours of each peak time		2016		2021 do something		Increase on 2016		2031 do something		Increase on 2016	
		AM peak	PM peak	AM peak	PM peak	AM peak	PM peak	AM peak	PM peak	AM peak	P
Jiddelow											
	north of Harper										
	northbound	800	1359	960	1609			1760	2119		
	southbound	434	931	413	555			1614	301		
	total	1234	2290	1373	2164	11%	-6%	3374	2420	173%	
	north of Gibbs										
	northbound	573	576	797	1196			1505	1590		
	southbound	339	556	435	540			1136	614		
	total	912	1132	1232	1736	35%	53%	2641	2204	190%	
	north of Coffey										
	northbound	559	122	733	809			1516	813		
	southbound	318	551	297	554			492	757		
	total	877	673	1030	1363	17%	103%	2008	1570	129%	
	north of Rowley										
	northbound	491	71	610	589			1400	1018		
	southbound	270	469	97	239			388	1021		
	total	761	540	707	828	-7%	53%	1788	2039	135%	
Jeenyup											
	north of Gibbs										
	northbound	515	406	815	530			1148	792		
	southbound	402	1060	685	1263			846	1538		
	total	917	1466	1500	1793	64%	22%	1994	2330	117%	
	north of Coffey										
	northbound	856	612	1175	647			1398	936		
	southbound	350	609	510	853			683	1485		
	total	1206	1221	1685	1500	40%	23%	2081	2421	73%	
	north of Gaebler										
	northbound	924	663	1298	870			1514	908		
	southbound	398	691	711	1170			787	1397		
	total	1322	1354	2009	2040	52%	51%	2301	2305	74%	

For Liddelow Road, for example, we added the northbound and southbound forecast volumes together and divided the result by 2 to determine the number of vehicles that a resident on Liddelow Road would see passing his property during each hour of the 2 hour peaks in the morning and the afternoon. For the “Do Something” scenarios, the DTS implies these peaks:

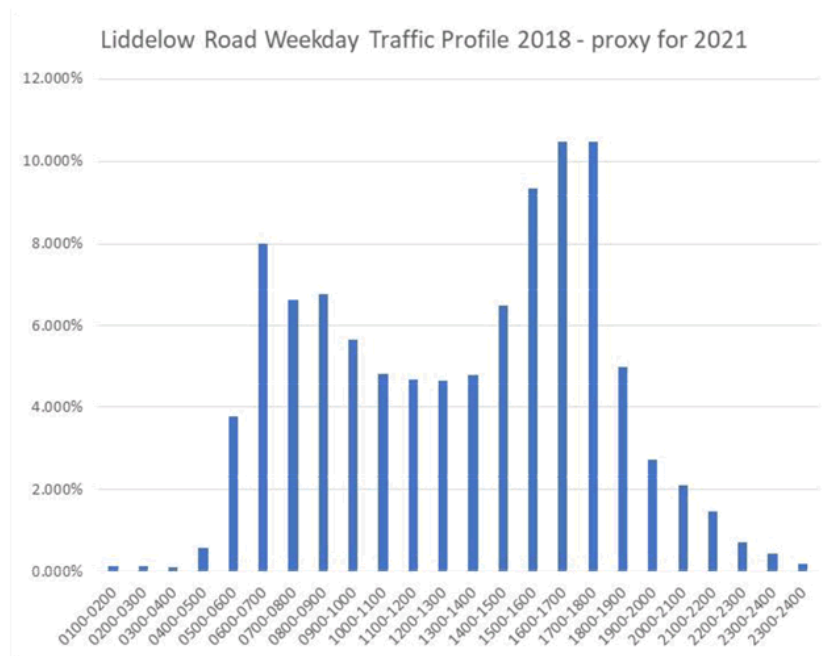


We prepared similar analyses for other roads in Banjup, Jandakot, and Treeby.

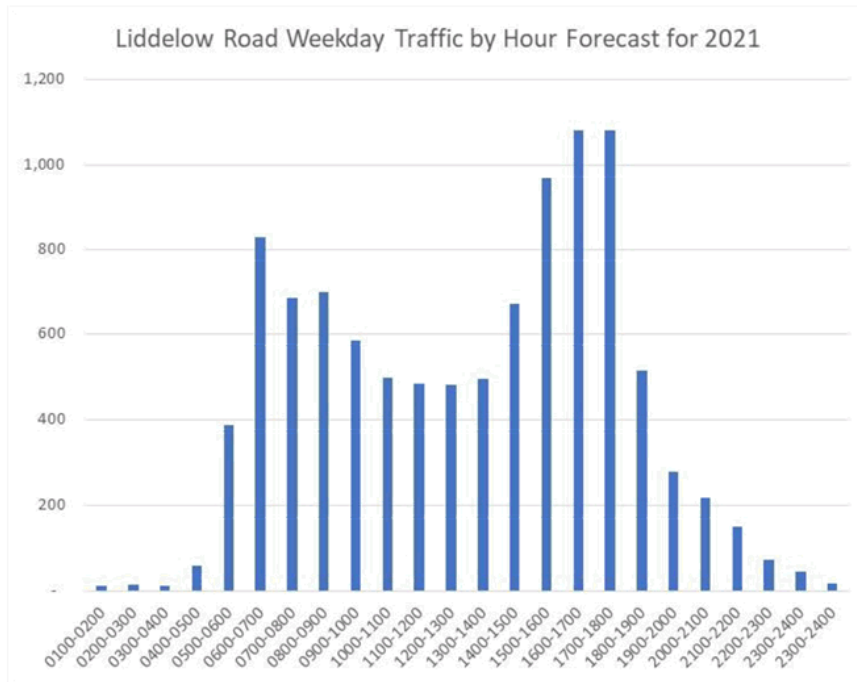
Within the DTS report there are specific forecasts of the total daily traffic volumes on Jandakot Road. We show the peaks and the total volumes below:



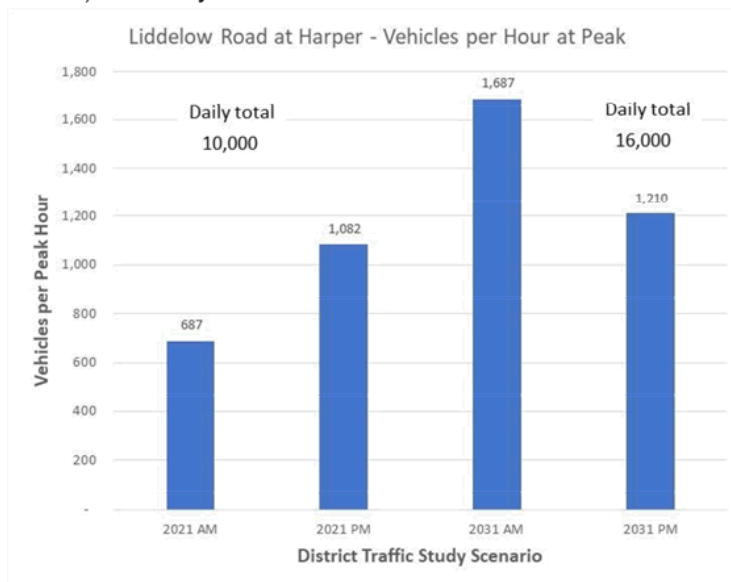
The DTS did not provide explicit forecasts of the total daily traffic volumes on other roads, so we extrapolated them from the March 2018 actual traffic counts on Liddelow Road. We prepared a profile of traffic by each hour on a weekday that could then be used as a proxy for future traffic flows, as below:



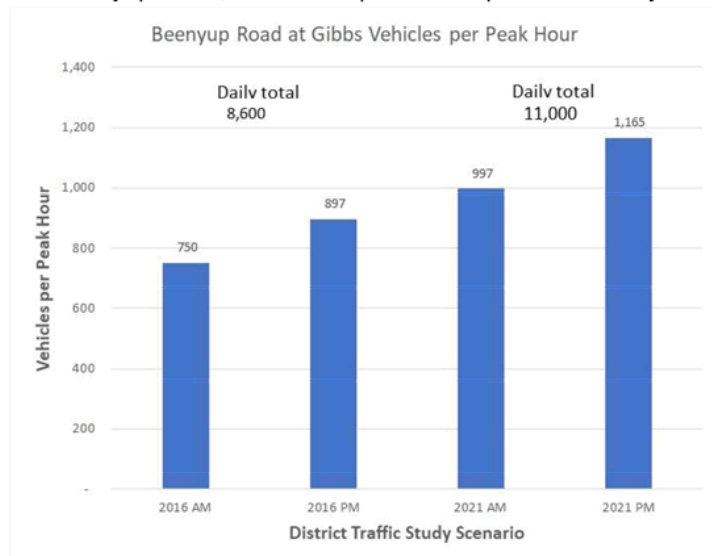
From this profile, we infer, for example, that over 20% of all traffic along Liddelow Road flows during the afternoon peak 2 hours. By extrapolating the DTS forecast data across the profile, we determined the combined northbound and southbound traffic flows by hour along Liddelow Road at Harper Road, as shown below:



Summing all 24 hours, the DTS implies that 10,000 vehicles each day will be using Liddelow Road in 2021 and 16,000 vpd by 2031. The forecast peaks (as shown before) and daily volumes are shown below:



For Beenyup Road, the DTS implies these peaks and daily volumes:



6. Traffic Volumes Due to Residents of Banjup, Jandakot, and Treeby

There are about 150 dwellings rural Jandakot and Treeby. In Banjup there are about 430 dwellings but 40 of them are in Gutteridge Road which is accessed only from Tapper Road. Therefore, those residents' traffic does not impact the rest of Banjup's roads. According to Arup's report, the WA Planning Commission estimates that each dwelling causes 7 traffic movements each day. Hence, in Jandakot and Treeby 1,000 traffic movements each weekday are due to residents while Banjup residents, excluding those in Gutteridge, cause about 2,700 movements each weekday.

7. Implications of DTS Forecast Volumes

In 2021, the DTS forecasts 21,000 vehicles per day will use Jandakot Road. Of those, only 1,000 movements are due to rural residents. Hence, 20,000 vehicles will be due to through traffic. Similarly, by 2031 nearly 27,000 vehicles will be through traffic.

In 2021, the DTS implies that 18,500 vehicles will use Banjup's through roads, Liddelow and Beenyup. If 2,700 are residents' traffic, then 15,800 vehicle movements of non-residents will pass through Banjup each day from outside the locality.

By 2031, the DTS implies that 27,000 vehicles will use Banjup's through roads. The WAPC does not envisage any further development of Banjup by then and so there will be 24,000 vehicle movements of non-residents through Banjup by 2031.

With these volumes, both Liddelow and Beenyup Roads will be at or near 100% capacity and will require to be upgraded to dual carriageway. Indeed, the DTS report shows this requirement for Liddelow Road in Figures 29 and 30 of the DTS.

8. Comparison with Other Roads in Cockburn

The DTS shows these forecasts at 6.4 *Average daily traffic* (Jandakot and Liddelow Road forecasts are shown for comparison):

		Do Something	
		2021	2031
Stock Road			
Winterfold Road to	northbound	9,300	14,300
South Street	southbound	13,800	17,300
	Total	23,100	31,600
Jandakot Road		21,000	27,800
Spearwood Ave			
Beeliar Drive to	northbound	6,300	8,300
Fancote Avenue	southbound	6,900	9,400
	Total	13,200	17,700
Liddelow Road		10,000	16,000

For decades, Stock Road and Spearwood Avenue have been main through roads in Cockburn. Meanwhile, Jandakot's and Banjup's roads served just the rural community, yet they are now forecast to be busy main roads.

9. Effects on Jandakot and Treeby Rural Amenity

We note that the actual traffic counts on Jandakot Road shown in IntraMaps over the past 22 years were:

Year	Daily
1997	2,000
2010	8,200
2017	12,300

The DTS forecasts that these volumes will grow to 21,000 vpd in 2021 and to 27,800 vpd by 2031. Rural residents' traffic is less than 5% of the total volumes.

As if the imminent duplicating of Jandakot Road, the encroachment of urban development, and the ever-growing Airport commercial precinct behind them were not enough to ruin the rural amenity of Jandakot and Treeby residents, the doubling and tripling of the traffic volumes along Jandakot Road, and the extension of Fraser Road north will wipe out any residual rural amenity over the coming few years.

Residents' Recommendation

The DTS forecasts ever increasing traffic cutting through the heart of rural Jandakot and Treeby and further destroying the amenity of the area. Residents urge the City of Cockburn to promote vigorously to government the urgent need to change Jandakot and Treeby's rural zoning for urban development.

10. Effects on Banjup Rural Amenity

By 2021, 15,800 non-residents' vehicles per day will be passing through Liddelow and Beenyup Roads in Banjup. This is substantially more than the 12,300 vpd that were utilizing Jandakot Road in 2017 and which ruined the rural amenity of Jandakot and Treeby. By 2031, the 27,000 vehicles using Banjup's roads will have destroyed Banjup's rural amenity.

Any opening of Bartram Road at its western end would cause even more traffic to pass through Banjup, causing even more devastating effects on rural amenity. Almost all of the traffic passing through Banjup on Liddelow and Beenyup Roads is clearly coming from places outside the City of Cockburn. The City should not facilitate traffic from other areas ruining the amenity of one of the few rural gems left in the metropolitan area.

Residents' Recommendation

The City of Cockburn says it wants to preserve Banjup's rural amenity so that the locality can "prosper", as the draft local planning policy puts it. If follows then, that the growth of traffic on Banjup's roads must be prevented and through traffic diverted to the Freeway, Nicholson, Rowley, and Armadale Roads for which those roads were designed.

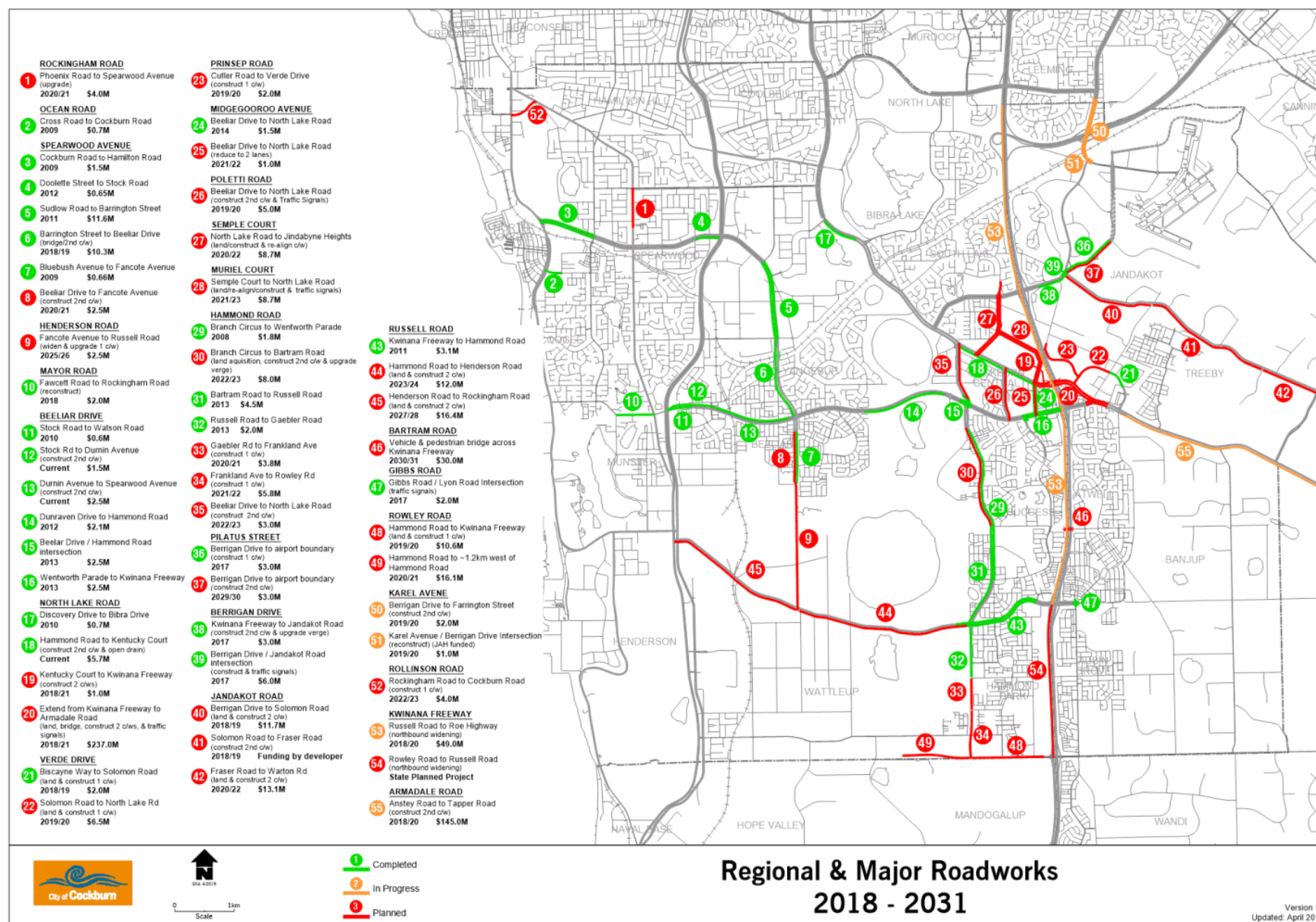
In June 2015, Council resolved to implement several measures that discourage traffic from Banjup's roads. The 2018 District Traffic Study reinforces Council's reasoning in 2015. Banjup residents urge the City of Cockburn to assign resources urgently to implement fully Council's 2015 resolution.

<---- End ---->

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17. COMMUNITY SERVICES DIVISION ISSUES

Nil

18. EXECUTIVE DIVISION ISSUES

18.1 MINUTES OF CHIEF EXECUTIVE OFFICER PERFORMANCE & SENIOR STAFF KEY PROJECTS APPRAISAL COMMITTEE MEETING - 19 MARCH 2019

Author(s) S Cain

Attachment 1. Minutes of Chief Executive Officer Performance & Senior Staff Key Projects Appraisal Committee Meeting - 19 March 2019 (**CONFIDENTIAL**)

RECOMMENDATION

That Council receive the Minutes of the Confidential Chief Executive Officer Performance & Senior Staff Key Projects Appraisal Committee Meeting held on Tuesday, 19 March 2019, and adopt the recommendations contained therein.

Background

The Chief Executive Officer Performance & Senior Staff Key Projects Appraisal Committee conducted a meeting on 19 March 2019. The Minutes of the meeting are required to be presented.

Submission

N/A

Report

The Committee recommendations are now presented for consideration by Council and if accepted, are endorsed as the decisions of Council. Any Elected Member may withdraw any item from the Committee meeting for discussion and propose an alternative recommendation for Council's consideration. Any such items will be dealt with separately, as provided for in Council's Standing Orders. The consultant's final summary report is also attached to the agenda item.

Strategic Plans/Policy Implications

Leading & Listening

Deliver sustainable governance through transparent and robust policy and processes.

Budget/Financial Implications

Nil

Legal Implications

The conduct of the appraisal is part of the contractual agreement with the CEO.

Community Consultation

Minutes of the Committee refer.

Risk Management Implications

The tri-annual meetings of the CEO Committee have been designed to ensure Council manages its employer obligations to the CEO and minimises any risks that could come from a breakdown in relationships.

Advice to Proponent(s)/Submissioners

The CEO has been advised that this matter will be presented to the April Ordinary Council Meeting.

Implications of Section 3.18(3) Local Government Act, 1995

Sections 5.38 and 5.39 LGA detail the reporting and contractual requirement for the CEO. The completion of this assessment is in accordance with these provisions.

19. MOTIONS OF WHICH PREVIOUS NOTICE HAS BEEN GIVEN

Nil

**20. NOTICES OF MOTION GIVEN AT THE MEETING FOR
CONSIDERATION AT NEXT MEETING**

**21. NEW BUSINESS OF AN URGENT NATURE INTRODUCED BY
MEMBERS OR OFFICERS**

22. MATTERS TO BE NOTED FOR INVESTIGATION, WITHOUT DEBATE

22.1 COCKBURN CENTRAL SHUTTLE BUS

Author(s)	C Sullivan
Attachments	1. Shuttle Bus Briefing Paper ↓ 2. Current PTA Bus Routes ↓

RECOMMENDATION

That Council receive the report

Background

At the Ordinary Council Meeting held on 9 July 2015 Mayor Howlett requested that the following matter be investigated:

“A report be provided on the introduction of a fare paying shuttle bus service being trialled in Cockburn Central and adjoining suburbs in 2016/17 during Monday to Friday morning and afternoon peak hours.”

At the Ordinary Council Meeting 8 October 2015, Mayor Howlett requested the following:

- (1) a ‘full and complete’ report on the ‘Matters for Investigation’ in relation to the July 2015 Council meeting when the Mayor asked that:

“A report be provided on the introduction of a fare paying shuttle bus service being trialled in Cockburn Central and adjoining suburbs in 2016/17 during Monday to Friday morning and afternoon peak hours.”

- (2) a briefing to be provided by the Public Transport Authority and the City’s Administration on how a fare paying shuttle bus service can be trialled in Cockburn Central and adjoining suburbs; and
- (3) that an on-line survey be conducted to ascertain interest, if any, from public transport users in the catchment zones identified.

Reason for Decision

The information provided in this report, three months after the request at the July 2015 Council meeting, provides a rudimentary glance at the request including a matrix of the Perth Transport Authority bus routes and little else. The report examined the legislative constraints associated with introducing a ‘fare paying shuttle bus service’ and focused on existing bus routes which while being an important consideration in assessing existing service cover, may not entirely cover

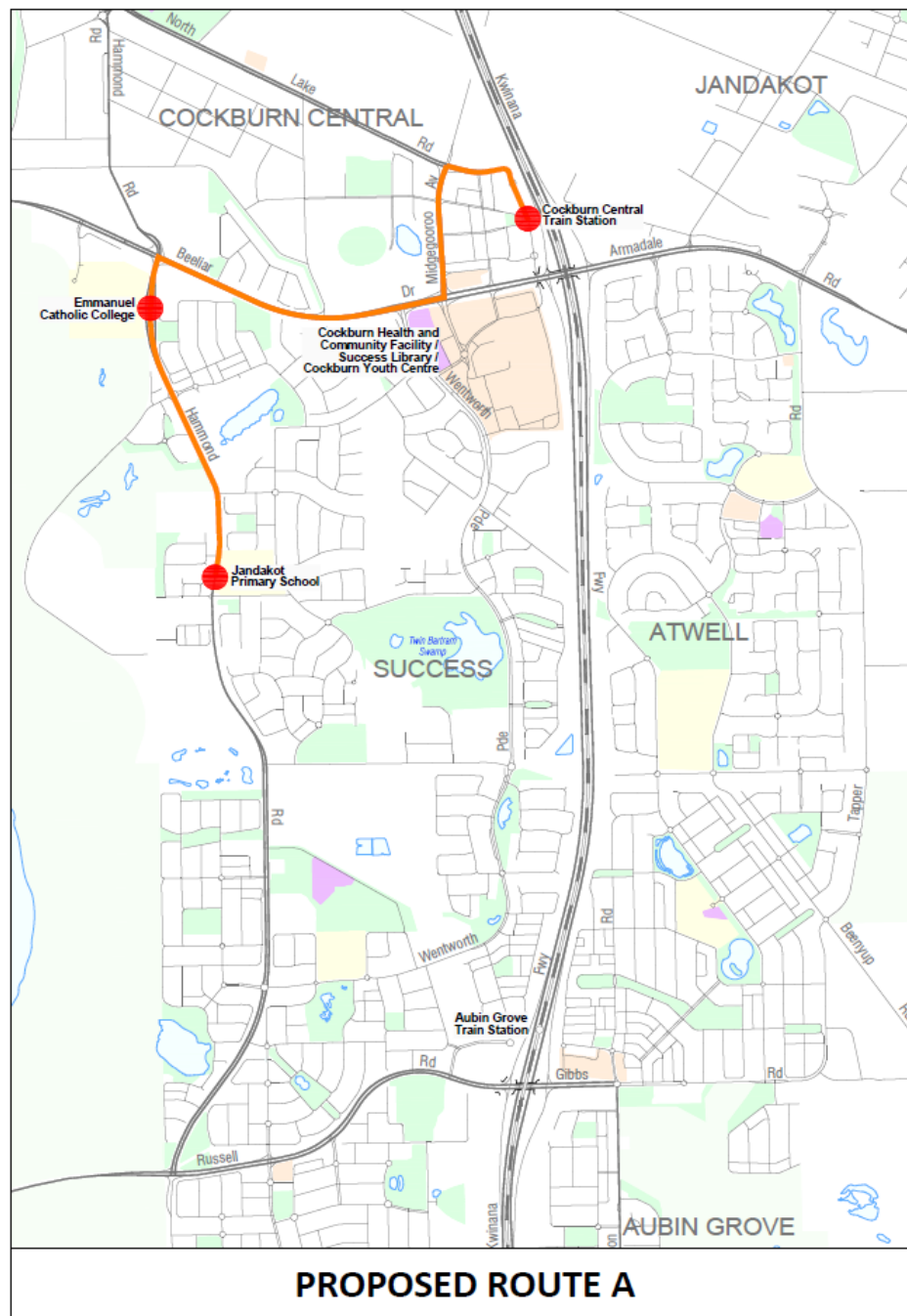
the user needs of the area. Further it refers Elected Members and other readers of the report to Section 3.18 of the Local Government Act 1995

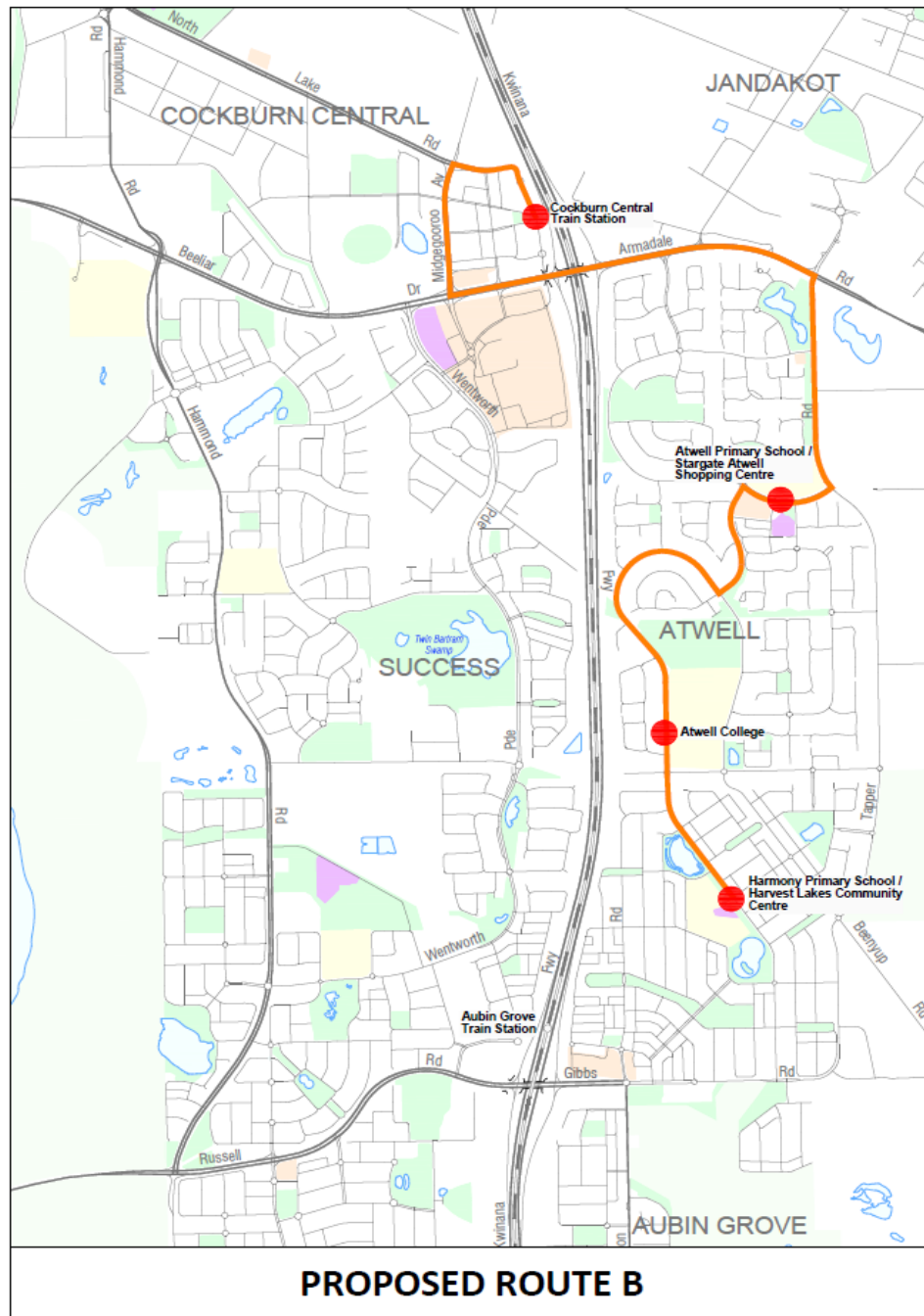
Submission

N/A

Report

The proposal was for a shuttle bus service to connect the major activity hubs on either side of the Kwinana Freeway to the Cockburn Central Rail Station and the Gateway Shopping Centre, during the morning and afternoon peak times on week days. Possible routes are shown below for information – refer also to Attachment 1.





The key difference between a fare paying and a free service is the need to obtain a licence from the Minister for Transport. No such licence is required for a free service. For either option, Council would need to fund the entire cost of service provision. The Public Transport Authority (PTA) has provided an assessment of fare structure and overall cost which is included in Attachment 1. The fares collected on the Transperth bus operations generally cover about 15% of the cost of service provision.

Following the opening of the Aubin Grove Rail Station, the PTA revised the bus routes serving the area between Cockburn Central and Aubin Grove. These bus routes are shown on the extract from the Transperth network in Attachment 2. These routes basically reflect the proposed shuttle bus routes shown above. The PTA has advised that the peak hour frequency of the Transperth routes is ten to fifteen minutes, depending on traffic conditions.

The matter was referred to the City's Road Safety and Travel Smart Reference Group in December 2018 and the briefing paper is included as Attachment 1 for reference. The item was on the agenda for the reference group meeting of 20 February 2019 and was discussed. The members wanted further time to consider the information and respond. No responses have been received subsequently.

Considering the cost to the Council if Council was to provide a shuttle bus service in addition to the existing PTA bus services and the close correlation between the proposed shuttle bus routes and the current PTA bus routes, the provision of a shuttle bus service by Council is not recommended.

Strategic Plans/Policy Implications

City Growth

Maintain service levels across all programs and areas.

Moving Around

Reduce traffic congestion, particularly around Cockburn Central and other activity centres.

Improve connectivity of transport infrastructure.

Community, Lifestyle & Security

Provide for community facilities and infrastructure in a planned and sustainable manner.

Budget/Financial Implications

No budget implication at this time as the recommendation is not to proceed with the shuttle bus proposal. Should Council wish to proceed with the shuttle bus proposal, all costs would have to be met by Council regardless of whether the service is free or fare paying. Approximate costs to provide a shuttle bus service are noted in Attachment 1. The PTA has estimated an approximate annual cost of \$426,000 for the eastern route and \$263,000 for the western route.

Legal Implications

Should Council wish to proceed with a fare paying shuttle bus service, a licence would have to be granted by the Minister for Transport. The PTA has stated that they would vigorously oppose this proposal. A free service would not require a licence.

Community Consultation

Community consultation has not been carried out as the recommendation is not to proceed with the shuttle bus proposal. Should Council wish to proceed with a public survey, a draft questionnaire and survey methodology is included in Attachment 1.

Risk Management Implications

The current traffic and transport situation in the subject area does not change if Council accepts the recommendation. Should Council decide to progress with the shuttle bus proposal, a number of risks including costs need to be assessed.

Advice to Proponent(s)/Submitters

N/A

Implications of Section 3.18(3) *Local Government Act, 1995*

Nil.

Road Safety and Travel Smart Reference Group

November 2018

Briefing Paper – Shuttle Bus Service Cockburn Central and Adjoining Suburbs

In 2015, a report was considered by Council at the October 2015 Ordinary Council Meeting. A copy is attached for reference which outlines the original proposal for a fare paying shuttle bus service to be considered for the area of Cockburn Central and adjoining suburbs. A briefing was provided to Elected Members by two senior staff from Transperth in early 2016 on this proposal.

The proposal was for a shuttle bus in the peak morning and afternoon times during week days to connect the major activity locations on either side of the Kwinana Freeway to the Cockburn Central Railway Station and the adjacent Gateway Shopping Centre. A proposed shuttle bus route was envisaged and is attached for information.

The PTA provided further information in relation to the cost of providing such a service which is reproduced in the two e-mails from the Transperth Contracts Manager and the A/Service Development Manager. The key issue with a fare paying service is the requirement to obtain a licence from the Transport Minister to provide such a service which the PTA would strongly oppose.

The PTA also proposed alterations to the bus routes in the study areas as a result of the opening of the Aubin Grove Rail Station. The new bus routes are shown on the attached extract from the Transperth bus route network drawing. As can be noted, the new bus routes on either side of the Freeway basically mirror the routes that were considered as shuttle bus routes. The peak hour frequency is 10 to 15 minutes for the Transperth bus routes depending on traffic conditions.

The CEO requested that the matter be considered by the Reference Group before any report is presented to Council. A survey brief and questionnaire was developed at the time but was not implemented and both are attached for information. The survey can still be conducted bearing in mind the PTA experience with similar surveys on proposed bus routes.

Email from Transperth - Ian Vinicombe

Simon asked me to provide a bit more context for you with regard to a possible future commercial arrangement.

In simple terms, Simon has provided you with the 'Gross Cost' of providing the planned services where CoC would pay 100% of the cost – unfortunately we are currently in a zero growth funding position so any additions to the network need to be funded from external sources. The costs provided are based on our contracted rates using official Transperth contractors that must operate the service.

I presume that you also want to understand what the impact of fares would be on the costs provided. Our average level of cost recovery for Transperth bus services is about 15% of total costs so given the more marginal nature of the proposed services we might initially expect a level of recovery in the order of say 7.5% and hopefully growing over time to the average of 15%. A funding agreement could be devised that facilitates the payment of the 'net cost' of the service (ie net of fare revenue). For initial budgeting purposes you could reasonably assume 92.5% of the costs indicated by Simon would be applicable from day one with any improvement being possibly available (but at your risk).

As to the actual fares charged, they would be in line with the standard Transperth fares. Typical fares to Cockburn Central would be a Zone 1. A fare to the City would be Zone 3. The actual amount charged varies in accordance with the actual distance travelled, the type of ticket used and the application of concessions if applicable – the following link provides details about Transperth's fare arrangements.

<http://www.transperth.wa.gov.au/Tickets-Fares>

I hope this information assists with your deliberations.

Regards

Ian Vinicombe

Contract Manager, Transperth Bus Services

(08) 9326 2469

Email from Transperth – Simon Cox

Please find below some indicative costs in the event Council wishes for these services to be provided as a part of the wider Transperth network. In summary it amounts to around 690K per annum including 3 new buses to provide a 20 min peak only service.

Eastern Route

- 6.2km route
- Walkable catchment (500m) comprising less than 800 dwellings-
 - Harmony Primary School – stop would capture approximately 370 dwellings, the majority of them within the catchment of our existing Route 527 service.
 - Atwell College – stop would capture approximately 160 dwellings, some of which are already within the walking distance of your proposed Harmony stop, and the majority of them within the catchment of our existing Route 527 service.
 - Atwell Primary School - stop would capture approximately 270 dwellings, the majority of them within the catchment of our existing Route 527 service.
- Has consideration been given on how student loadings would be managed to Atwell College? You are likely to overload given we operate a number of heavily loaded fare paying buses (with more in 2017) at school times. If you provide a free service you can expect students to flock to your service.
- Assuming two buses providing a 20 minute frequency, cost is *approximately \$426,997* which includes annualised cost of two buses plus around 72,000 service KM associated with 23 trips to Cockburn and 23 trips from Cockburn.

Western Route:

- 3.7km route, but for costing of a Transperth service, used 4.3km (see below).
- No suitable turnaround is available at Jandakot Primary School. Options include either extending further south along Hammond Rd to Wentworth (adding 1.7km to the route), extending east to Banning Av (adding 0.6km to the route) or circulating in smaller order residential streets likely to upset residents (not an option for Transperth).
- Walkable catchment (500m) comprising less than 430 dwellings-
 - Jandakot Primary – stop would capture approximately 190 dwellings, many of them within walkable catchment of our existing Route 525.
 - Emmanuel Catholic College - stop would capture approximately less than 50 dwellings, the majority of them within the catchment of our existing Route 525, 531 and 532 services.
 - Cockburn Community Facility – stop would capture approximately 190 dwellings, most of them within walkable catchment of our existing Route 514, 526, 530, 531 and 532 services.

- Has consideration been given on how student loadings would be managed to Emmanuel Catholic College? You are likely to overload given we operate a number of heavily loaded fare paying buses (with more in 2017) at school times. If you provide a free service you can expect students to flock to your service.
- Assuming one bus providing a 20 minute frequency, cost is *approximately \$263,406* which includes annualised cost of one bus plus around 52,000 service KM associated with 24 trips to Cockburn and 24 trips from Cockburn.

Should Council wish to proceed with Transperth providing the two routes, it should be noted that, given the fleet expansion / capital investment required, Transperth would require a minimum contract of 10 years to provide the service. This would necessitate a formal contract between the City and the PTA before the service could commence.

In order for any shuttle bus to operate into Cockburn Central Station, it must be operated by Transperth. This is to ensure no impact to our regular timetabled services and ensuring that only trained drivers and suitably insured vehicles operate within our facility. Access to our facilities during peak is highly restricted given many operators would love to access our purpose built facilities.

With regards to the survey, I would strengthen the query concerning car access. Perhaps of those who would use the service, how many have access to a private car at the time they wish to travel (this draws out the people who are unlikely to use the bus).

On another matter, are you able to advise your progress in moving some routes out of Stockton Bend over to Cockburn Gateway?

I trust this information assists,

Kind regards,

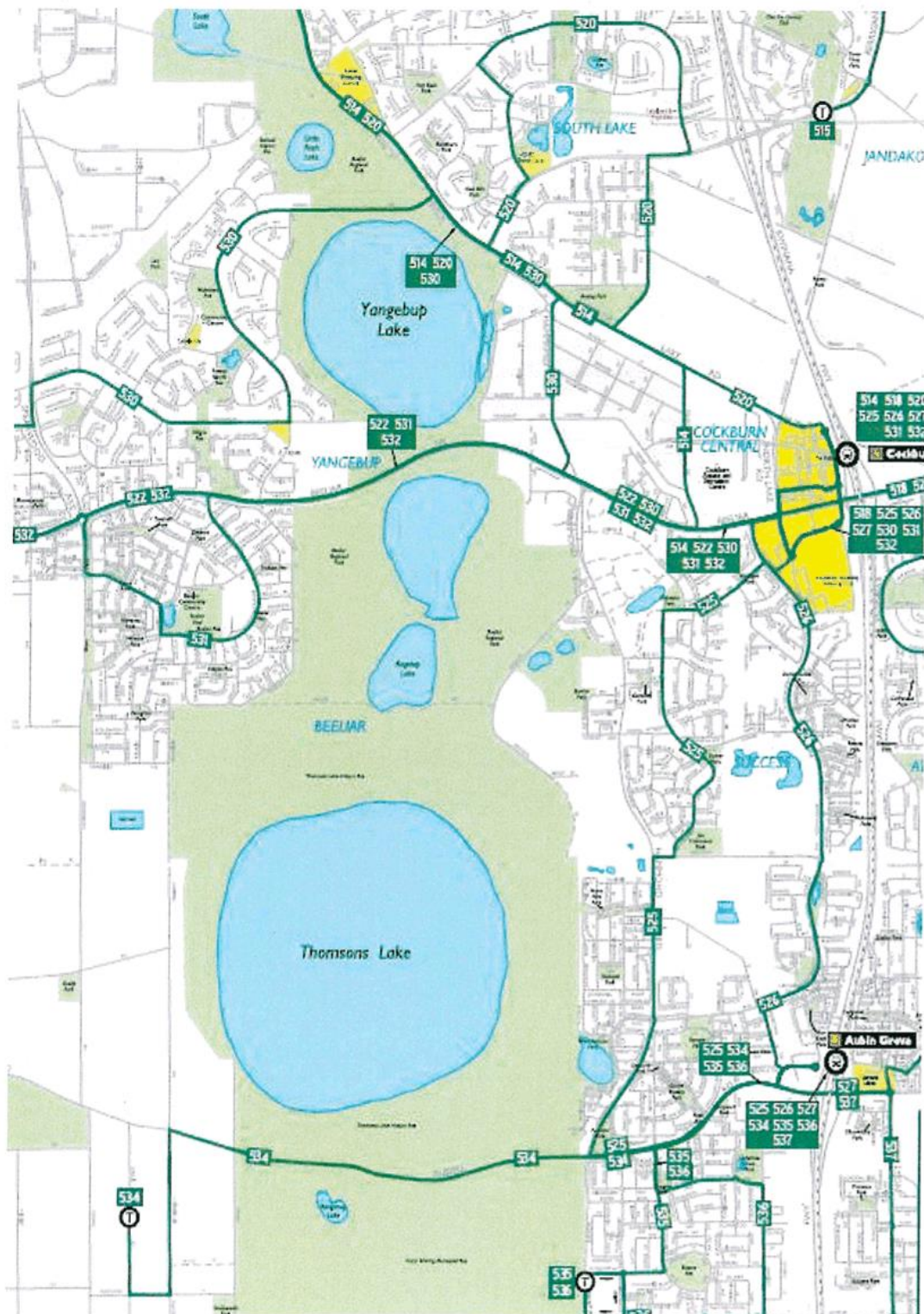
Simon Cox

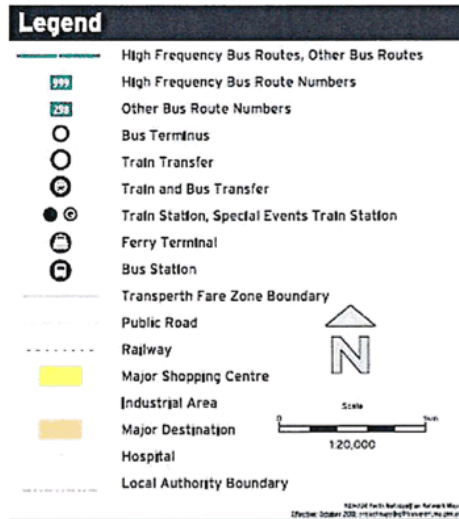
A/ Service Development Manager | Transperth Service Development

Level 1, Public Transport Centre, West Parade, Perth 6000

Tel: (08) 9326 3971 Mob: 044 887 0668

Email: simon.cox@pta.wa.gov.au | Web: www.transperth.wa.gov.au





16. ENGINEERING AND WORKS DIVISION ISSUES

16.1 **(MINUTE NO 5613)** (OCM 8/10/2015) - COCKBURN CENTRAL SHUTTLE BUS (163/002) (J MCDONALD) (ATTACH)**RECOMMENDATION**

That Council not pursue the trial of a fare paying shuttle bus in Cockburn Central and adjoining suburbs.

COUNCIL DECISION

MOVED Mayor L Howlett SECONDED Cllr S Pratt that **Council** request:

- (1) a 'full and complete' report on the 'Matters for Investigation' in relation to the July 2015 Council meeting when the Mayor asked that:

"A report be provided on the introduction of a fare paying shuttle bus service being trialled in Cockburn Central and adjoining suburbs in 2016/17 during Monday to Friday morning and afternoon peak hours.";
- (2) a briefing to be provided by the Public Transport Authority and the City's Administration on how a fare paying shuttle bus service **can** be trialled in Cockburn Central and adjoining suburbs; and
- (3) that an on-line survey be conducted to ascertain interest, if any, from public transport users in the catchment zones identified.

CARRIED 8/0

Reason for Decision

The information provided in this report, three months after the request at the July 2015 Council meeting, provides a rudimentary glance at the request including a matrix of the Perth Transport Authority bus routes and little else. The report examined the legislative constraints associated with introducing a 'fare paying shuttle bus service' and focused on existing bus routes which while being an important consideration in assessing existing service cover, may not entirely cover the user needs of the area. Further it refers Elected Members and other readers of the report to Section 3.18 of the Local Government Act 1995. That section of the Act states:

LOCAL GOVERNMENT ACT 1995 - SECT 3.18**3.18 . Performing executive functions**

- (1) *A local government is to administer its local laws and may do all other things that are necessary or convenient to be*

done for, or in connection with, performing its functions under this Act.

- (2) In performing its executive functions, a local government may provide services and facilities.*
- (3) A local government is to satisfy itself that services and facilities that it provides —*
 - (a) integrate and coordinate, so far as practicable, with any provided by the Commonwealth, the State or any public body; and*
 - (b) do not duplicate, to an extent that the local government considers inappropriate, services or facilities provided by the Commonwealth, the State or any other body or person, whether public or private; and*
 - (c) are managed efficiently and effectively.*

It is clear from this section of the Act that the Council can, if it considers it appropriate; provide a service of this nature to its community. The requirements of other Acts, if any, can be addressed when the 'full and complete' Report is produced.

It is easy to put a stop on an idea – it is harder to find a viable solution through reasoned investigation and engagement with the community.

Background

At the Ordinary Council Meeting held on 9 July 2015 Mayor Howlett requested that the following matter be investigated:

"A report be provided on the introduction of a fare paying shuttle bus service being trialled in Cockburn Central and adjoining suburbs in 2016/17 during Monday to Friday morning and afternoon peak hours."

Submission

N/A

Report

There are currently ten feeder bus routes beginning or terminating at the Cockburn Central Bus/Train Station and radiating out in all directions to service many of Cockburn's suburbs, including adjoining suburbs. These routes are shown on the Transperth Network Map 5 included as Attachment 1.

The ten bus routes operate a total of 575 buses on a weekday, with 60 buses during the 7.00 a.m. – 8.00 a.m. peak hour and 58 buses during the 5.00 – 6.00 p.m. peak hour. It is common practice for bus services to have a higher frequency during peak periods to service the increased demand and this can be as frequent as every ten minutes. The peak hour and total weekday bus volumes for each route are summarised in Attachment 2 – Weekday bus services in/out of Cockburn Central Bus Station.

When the proposed Aubin Grove Rail Station and car parking area becomes operational in early 2017, there will be additional Transperth bus services to that location which increases the overall service to the area.

To justify the need for a shuttle bus there would have to be a deficiency in either the coverage or frequency of a particular bus route(s). Considering that there are already ten bus routes servicing Cockburn Central and surrounding suburbs it is difficult to justify the need for any additional routes. Peak hour bus service frequency also appears to be adequate with up to 60 buses entering and exiting the Bus Station during the AM and PM peak hours.

If there are any perceived deficiencies in any of the routes the City can request the Public Transport Authority (PTA) to consider increasing bus frequencies and/or modify the route alignment. It is known that the PTA's service planners monitor the level of patronage on bus routes and actively plan for future route extensions or new routes by monitoring the progressive development of residential suburbs.

As an example, this will result in the extension of bus services further south into Hammond Park as residential development continues and eventually the realignment of an existing route, or the creation of a new route, to service the new Calleya Estate at Banjup, to the east of Cockburn Central.

It is also not recommended that the City establish a shuttle bus service because that is not a core function of the City's business and such a service would unnecessarily duplicate established bus services operated by the Public Transport Authority. This would be a direct contravention of Section 3.18(3) of the Local Government Act.

Furthermore, the City would have to seek permission from the State Minister of Transport to operate a fare paying bus service, as specified in the Transport Co-ordination Act 1966. The following extract from that Act applies in this case:

26. Matters Minister may consider before deciding applications

The Minister may, before granting or refusing a licence for an omnibus, take into account any one or more of the following matters —

- a) the necessity for the service proposed to be provided and the convenience that would be afforded to the public by the provision of the proposed service; and*
- b) the existing service for the conveyance of passengers upon the routes, or within the area, proposed to be served in relation to —*
 - (i) its present adequacy and possibilities for improvement to meet all reasonable public demands; and*
 - (ii) the effect upon the existing service of the service proposed to be provided; and*
- c) the condition of the roads to be included in any proposed route or area; and*
- d) the character, qualifications and financial stability of the applicant; and*
- e) the interest of persons requiring transport to be provided, and of the community generally, but shall not be obliged, in relation to any particular licence application, to take into account all of these matters.*

Informal discussions with PTA officers, who the Minister would defer to for advice, confirm that they would strongly oppose the introduction of any fee paying bus services that duplicate their services or may attract some of their current customers. Operating in such a scenario would not be economically wise for any service operator, and would not be in the rate payer's or tax payer's interest.

Strategic Plan/Policy Implications

Growing City

- Investment in industrial and commercial areas, provide employment, careers and increase economic capacity in the City.

Moving Around

- An integrated transport system which balances environmental impacts and community needs.
- Facilitate and promote healthy transport opportunities.
- A safe and efficient transport system.
- Infrastructure that supports the uptake of public transport and pedestrian movement.

Budget/Financial Implications

The initial and ongoing costs of establishing a bus service are substantial. Initial costs would include the purchase price of buses, in the order of \$550,000 each, and operating costs of approximately \$55,000 per year per bus for regular services. As a result, the most and only viable economic model for the City to operate a fee paying bus service would be to contract that service out to an existing bus operator.

Legal Implications

The provision of fare paying public transport services in Western Australia is controlled by the State Government under the Transport Co-ordination Act 1966, which is the responsibility of the Minister for Transport.

Any fee paying public transport service must be licenced by the Minister, in accordance with the requirements of Division 2 – Omnibuses, of the above Act.

Community Consultation

N/A

Attachment(s)

1. Transperth Network Map 5.
2. Weekday bus services in/out of Cockburn Central Bus Station

Advice to Proponent(s)/Submissioners

N/A

Implications of Section 3.18(3) Local Government Act, 1995

Section 3.18(3) requires Local Government to ensure that service and facilities it provides integrate and coordinate with services and facilities provided by the Commonwealth or State, and do not duplicate them.

The operation of a fare paying shuttle bus in Cockburn Central and surrounding and adjoining suburbs would duplicate and compete with existing bus services operated by the State Government and therefore would contravene the Local Government Act.

Project Scoping Notes

City of Cockburn Survey to Determine Residents' Interest in Proposed Atwell-Success Bus Service

By email and telephone calls – between Beth Dungey (RS) and Deanie Carbon (CoC)

1. The objectives of the study and the City of Cockburn's expectations

The Councillors have requested a survey to evaluate residents' interest in and likely uptake of a proposed bus service through the suburbs of Atwell and Success, connecting key locations within the two suburbs.

This is a non-budgeted item.

Transperth are not particularly supportive of the proposed service. There are already bus services in the area, although these appear to be mostly focused on getting passengers to and from the train station during morning and afternoon peak transit times:

- #527 servicing Atwell (along Beenyup Road, Brenchley Drive, Waters Avenue, Lydon Boulevard, Tapper Road, through to Gateway Shopping Centre then Cockburn Central Train Station), running every 10 minutes during peak and around once an hour off peak
- #526 servicing Success (along Hammond Road, Wentworth Parade through to Cockburn Central Train Station) running every 15 minutes during peak and around twice an hour off peak
- #525 servicing Success (along Hammond Road, Banning Avenue and Alabaster Drive through to Gateway Shopping Centre then Cockburn Central Train Station), running every 10 minutes during peak and around once an hour off peak.

Charles' wish list:

- Where do you travel within this area during peak hour?
- What mode of transport do you use to get to school/work now – car, bus, walking etc
- What would you prevent you from using a bus – cost, frequency and timing of service, walking distance from home to bus stop, route.
- Burrow down into these barriers to see what makes it an attractive service
- Suggested bus route – would you use it
- Can you suggest a better route?

Narrowed down to:

- How often travel to the key points on the bus route during peak hour
- Usual mode of transport
- Interest in using proposed new bus service
- Payment will be via a 3% levy on annual rates as a Special Area Rate. Are residents prepared to pay this? Interest in proposed new bus service given this.
 - Question: does that mean that renters will be able to access it for free?? **yes**
 - As this is impossible to measure, Beth has asked for average rates for Success and Atwell and for the value of this percentage to be worked out. This will be the question asked.
 - Beth has also asked for how pensioners (who usually get a discount on their rates) will see this treated.

- the average rate for Atwell – **average improved residential council rates only including concession = \$1,508**
- The average rate for Atwell plus three percent – **average improved residential council rates only including concession = \$1,553**

- The average rate for Success – average improved residential council rates only including concession = \$1,457
- The average rate for Success plus three percent – average improved residential council rates only including concession = \$1,501
- The average rate for pensioners in Atwell – average improved residential council rates only before rebate \$1,472, after rebate (194 full pensioners) = \$764
- The average rate for pensioners in Atwell plus three percent – average improved residential council rates only before rebate \$1,517, after rebate (194 full pensioners) = \$787
- The average rate for pensioners in Success – average improved residential council rates only before rebate \$1,487, after rebate (214 full pensioners) = \$783
- The average rate for pensioners in Success plus three percent – average improved residential council rates only before rebate \$1,531, after rebate (214 full pensioners) = \$806

- Barriers to using proposed new bus service

2. How the City of Cockburn proposes to use the results of this study

To determine if the bus service will go ahead.

Any other purposes???? no

3. Logistical issues such as identification of population group(s) to be researched and research methodology

Research methodology is door to door.

The geographic area is:

- Atwell, west of Tapper Road
- Success, east of Hammond Road

Materials available to use in the research

- Route map showing the end to end service and stops. The bus will basically drive from one end to another, turn around and drive the reverse route. It will do this on a continual basis.
- No times are available, except it is proposed to run peak hours (6.30am-9am & 3pm-7.15pm). Beth will work out what is feasible (via Google maps) and advise.

Internal communications

- Advise call centre and front counter of dates survey is being conducted and provide them with an FAQ should residents ring to confirm the bona fides of the survey

Approvals, testing and signoff

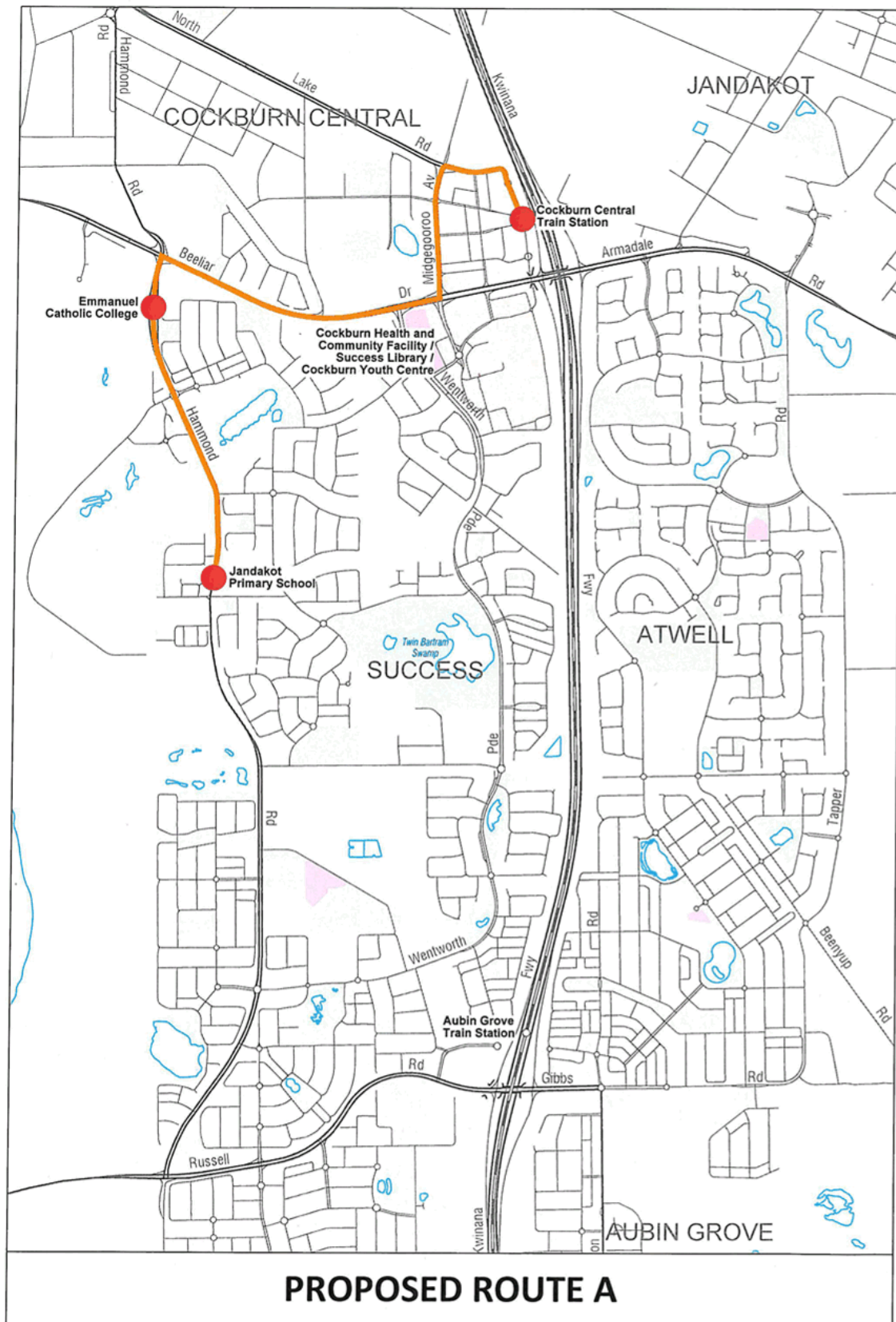
- Approvals will be required for the questionnaire. Deanie will coordinate sign-off of the questionnaire

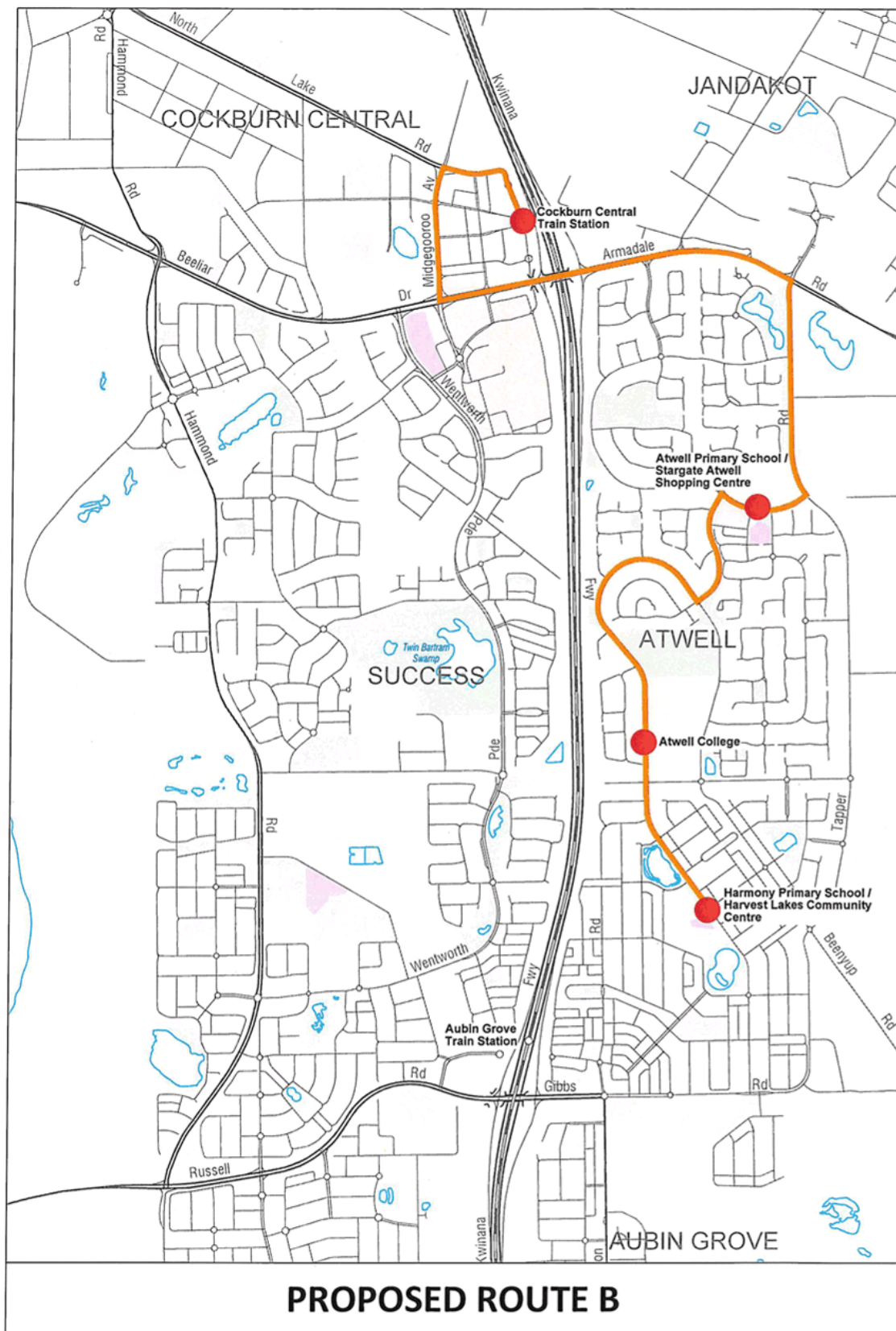
4. Timing

The study needs to be finished by Christmas

5. The report format

PowerPoint





Atwell-Success Bus Survey

PAGE 1

Good morning / afternoon / evening. My name is _____ from Thinkfield. We are doing a survey of people living in Atwell and Success to determine their level of interest in a new service for the area planned by the City of Cockburn. The survey will only take 5 minutes. *Hand out privacy blurb.*

1. I'm going to read out some places in Success and Atwell. Using the answers on this card, could you please tell me how often you or anyone in your household travel to these places in a typical week during peak hour ... that is between 6.30 and 9 in the morning or between 3 in the afternoon and 7.15 in the evening? *Show card Q1*

RANDOMISE	5 or more days a week	3 – 4 days a week	1 – 2 days a week	Less often than weekly	Never
Jandakot Primary School	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Emmanuel Catholic College	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cockburn Central Train Station	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Atwell Primary School	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stargate Atwell Shopping Centre	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Atwell College	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Harmony Primary School	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Harvest Lakes Community Centre	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gateways Shopping Centre	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

PAGE 2

ASK FOR ALL 1+ DAYS A WEEK IN Q1. ALLOW MULTIPLES TO ACCOUNT FOR DIFFERENT PEOPLE IN THE HOUSEHOLD USING DIFFERENT FORMS OF TRANSPORT

2. How do you or they usually travel to <insert name of place> during peak hour? *Show card Q2.*

RANDOMISE	By car	Bus	Bicycle	Walk	Other:
Jandakot Primary School	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Emmanuel Catholic College	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Cockburn Central Train Station	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Atwell Primary School	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Stargate Atwell Shopping Centre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Atwell College	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Harmony Primary School	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Harvest Lakes Community Centre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Gateways Shopping Centre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

PAGE 3

ASK ALL

Show card Q3

3. The City of Cockburn is looking at the level of interest in a shuttle bus that would run along the red route on this map, stopping at these stops. The bus would during the morning and afternoon peak periods. It would take around 20 – 25 minutes to do the full trip from Jandakot Primary through to the Harvest Lakes Community Centre. How likely would you or someone in your household be to use this bus service during the morning or afternoon peak?

- | | | |
|----------------------|-----------------------|----------------|
| Definitely would | <input type="radio"/> | CONTINUE TO Q4 |
| Probably would | <input type="radio"/> | CONTINUE TO Q4 |
| Might or might not | <input type="radio"/> | SKIP TO Q6 |
| Probably would not | <input type="radio"/> | SKIP TO Q6 |
| Definitely would not | <input type="radio"/> | SKIP TO Q6 |

PAGE 4

ASK IF Q3 = DEFINITELY WOULD, PROBABLY WOULD

4. How many people in total from your household, including yourself, <insert scale response from Q3> use this peak hours bus service in your household?

5. Where would they be travelling to? Show card Q5

- | | |
|---------------------------------|--------------------------|
| Jandakot Primary School | <input type="checkbox"/> |
| Emmanuel Catholic College | <input type="checkbox"/> |
| Cockburn Central Train Station | <input type="checkbox"/> |
| Atwell Primary School | <input type="checkbox"/> |
| Stargate Atwell Shopping Centre | <input type="checkbox"/> |
| Atwell College | <input type="checkbox"/> |
| Harmony Primary School | <input type="checkbox"/> |
| Harvest Lakes Community Centre | <input type="checkbox"/> |
| Gateways Shopping Centre | <input type="checkbox"/> |

PAGE 5

ASK IF Q3=MIGHT, PROBABLY WOULD NOT, DEFINITELY WOULD NOT

6. You said you <INSERT RESPONSE FROM Q3> use the proposed bus service. Why is that?

PAGE 6

ASK ALL

7. The bus would be paid for via an extra 3% charge on the rates people in Atwell and Success pay each year. Rates are different for each property, but this shows the average rates for your area. *Show card Q7.* How supportive are you, personally, of the City of Cockburn providing this service to Atwell and Success residents?

Extremely supportive / the City of Cockburn should definitely provide the bus service	<input type="radio"/>
Very supportive	<input type="radio"/>
Moderately supportive	<input type="radio"/>
Not very supportive	<input type="radio"/>
Not at all supportive / the City of Cockburn should not provide the bus service	<input type="radio"/>

8. Lastly, do you own or rent the house you are living in?

Own / ratepayer ☐

Rent ☐

Other: *please describe:* _____

SHOW CARD Q1**In a typical week****Me or anyone in my household****During 6.30am-9am OR 3pm-7.15pm****5 or more days a week****3 – 4 days a week****1 – 2 days a week****Less often than weekly****Never**

SHOW CARD Q2

You and/or other people in your household usually travel there during morning or afternoon peak hour ...

By car or motor bike

Bus

Bicycle or scooter or skateboard

Walk

Some other way

SHOW CARD Q3

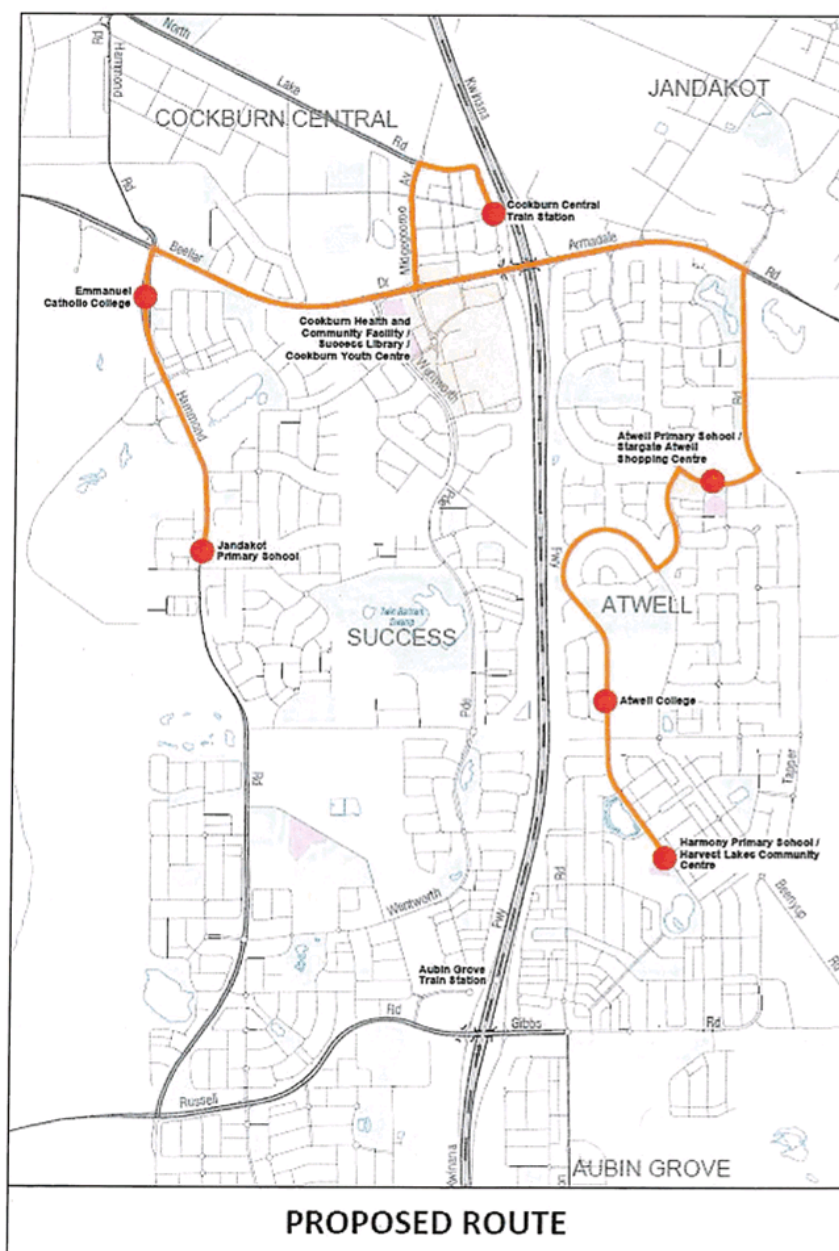
PEAK HOURS BUS SERVICE

RUNS 6am – 9am AND 3pm – 7.15pm

Route and stops shown in red

Fare \$0.00

Runs every 20-25 minutes



SHOW CARD Q5

Jandakot Primary School

Emmanuel Catholic College

Cockburn Central Train Station

Atwell Primary School

Stargate Atwell Shopping Centre

Atwell College

Harmony Primary School

Harvest Lakes Community Centre

Gateways Shopping Centre

SHOW CARD Q7 – Success

Average rates paid in Success	\$1457
Average rates with a 3% levy for this bus service	\$1501
Average cost of this bus service for a ratepayer in Success	\$44 a year

For pensioners:

Average rates paid in Success	\$783
Average rates with a 3% levy for this bus service	\$806
Average cost of this bus service for a ratepayer in Success	\$23 a year

Extremely supportive / the City of Cockburn should definitely provide the bus service

Very supportive

Moderately supportive

Not very supportive

Not at all supportive / the City of Cockburn should not provide the bus service

SHOW CARD Q7 – Atwell

Average rates paid in Atwell	\$1508
Average rates with a 3% levy for this bus service	\$1553
Average cost of this bus service for a ratepayer in Atwell	\$45 a year

<u>For pensioners:</u>	
Average rates paid in Atwell	\$764
Average rates with a 3% levy for this bus service	\$787
Average cost of this bus service for a ratepayer in Atwell	\$23 a year

Extremely supportive / the City of Cockburn should definitely provide the bus service

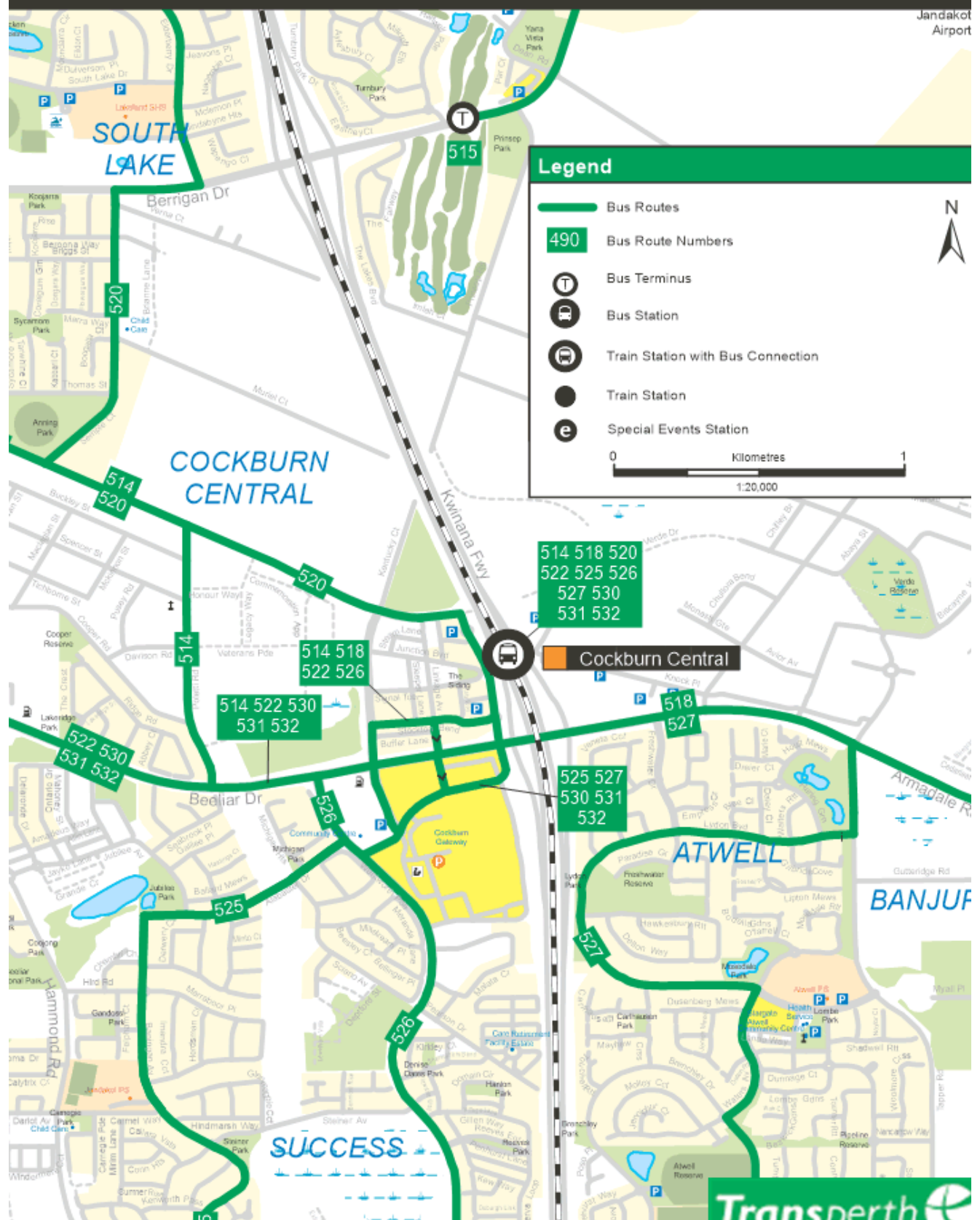
Very supportive

Moderately supportive

Not very supportive

Not at all supportive / the City of Cockburn should not provide the bus service

Cockburn Central Station



22.2 REMOVAL OF THE VERGE TREE LOCATED AT 2 DU MAURIER ROAD, NORTH LAKE.

Author(s) C Sullivan

Mayor Howlett has requested a report be provided to a future Council meeting on the removal of the verge tree located at 2 Du Maurier Road, North Lake following a request from residents who are adversely impacted by the leaf and berries litter that are constantly dropping onto their properties.

22.3 VIABILITY OF REPLACING HOUSEHOLD JUNK VERGE COLLECTIONS.

Author(s) C Sullivan

Councillor Kirkwood has requested a report be prepared for a future Council meeting to look at the viability of replacing household junk verge collections with 2 annual skip bins and 4 tip passes per year.

The City of Stirling has already successfully succeeded in this switch. By removing household junk collections it will eliminate the ongoing issues that junk verge collections bring to the suburbs and reduce collection times.

23. CONFIDENTIAL BUSINESS

Nil

24. RESOLUTION OF COMPLIANCE

RECOMMENDATION

That Council is satisfied that resolutions carried at this Meeting and applicable to items concerning Council provided services and facilities, are:-

- (1) integrated and co-ordinated, so far as practicable, with any provided by the Commonwealth, the State or any public body;
- (2) not duplicated, to an extent Council considers inappropriate, services or facilities as provided by the Commonwealth, the State or any other body or person, whether public or private; and
- (3) managed efficiently and effectively.

25. CLOSURE OF MEETING