



Metro Central Joint Development Assessment Panel Agenda

Meeting Date and Time: 11 September 2017; 2pm
Meeting Number: MCJDAP/255
Meeting Venue: City of South Perth
Cnr Sandgate and South Terrace
South Perth

Attendance

DAP Members

Mr Charles Johnson (Presiding Member)
Ms Sheryl Chaffer (Deputy Presiding Member)
Mr Michael Hardy (Specialist Member)
Cr Colin Cala (Local Government Member, City of South Perth) – *Item 8.1*
Cr Glenn Cridland (Local Government Member, City of South Perth) – *Item 8.1*
Cr Keith Hayes (Local Government Member, Town of Victoria Park) – *Item 8.2 & 10.1*
Cr Vicki Potter (Local Government Member, Town of Victoria Park) – *Item 8.2 & 10.1*
Cr Gerry Pule (Local Government Member, Town of Bassendean) – *Item 9.1*
Cr Renee McLennan (Local Government Member, Town of Bassendean) – *Item 9.1*

Officers in attendance

Mr Stevan Rodic (City of South Perth)
Ms Vicki Lummer (City of South Perth)
Mr Erik Dybdahl (City of South Perth)
Mr Robert Cruickshank (Town of Victoria Park)
Ms Rochelle Lavery (Town of Victoria Park)
Mr Julio Gonzalez (Town of Victoria Park)
Mr Dylan Stokes (Town of Bassendean)

Local Government Minute Secretary

Ms Narelle Cecchi (City of South Perth)

Applicants and Submitters

Ms Belinda Moharich (Moharich and More) – *Item 8.1*
Mr Ross Underwood (Planning Solutions) – *Item 8.1*
Mr Aidan Gorjy (Yaran) – *Item 8.1*
Mr Faryar Gorjy (Yaran) – *Item 8.1*
Ms Alison Healey (TPG and Place Match) – *Item 8.2*
Mr Brad Quartermaine (T&Z Architects) – *Item 8.2*
Mr Behnam Bordbar (Transcore) – *Item 9.1*
Mr Scott Vincent (Planning Solutions) – *Item 9.1*
Mr Andrew Peirce (Celsius Developments) – *Item 10.1*
Mr David Caddy (TPG and Place Match) – *Item 10.1*
Mr Tom Letherbarrow (Hillam Architects) – *Item 10.1*



Members of the Public / Media

Nil

1. Declaration of Opening

The Presiding Member declares the meeting open and acknowledges the past and present traditional owners and custodians of the land on which the meeting is being held.

2. Apologies

Nil

3. Members on Leave of Absence

Nil

4. Noting of Minutes

The Minutes of Metro Central JDAP meeting No. 254 held on 8 September 2017 were not available at time of Agenda preparation.

5. Declarations of Due Consideration

Any member who is not familiar with the substance of any report or other information provided for consideration at the DAP meeting must declare that fact before the meeting considers the matter.

6. Disclosure of Interests

Member/Officer	Report Item	Nature of Interest
Cr Gerry Pule (Town of Bassendean)	Item 9.1	Impartiality Interest

Cr Pule participated in a prior Council decision in accordance with his functions as a member of a local government.

7. Deputations and Presentations

- 7.1** Ms Belinda Moharich (Moharich and More) presenting in support of the application at Item 8.1. The presentation will request approval be granted subject to the conditions recommended by the City of South Perth and respond to any matters that may be raised.
- 7.2** Mr Ross Underwood (Planning Solutions) presenting in support of the application at Item 8.1. The presentation will request approval be granted subject to the conditions recommended by the City of South Perth and respond to any matters that may be raised.
- 7.3** Mr Aidan Gorjy (Yaran) presenting in support of the application at Item 8.1. The presentation will request approval be granted subject to the conditions recommended by the City of South Perth and respond to any matters that may be raised.



- 7.4** Ms Alison Healey (TPG and Place Match) presenting against the application at Item 8.2. The presentation will address reasons why the proposal should not be supported based on the significant intensification of a non-residential land use within a residential zone.
- 7.5** Mr Brad Quatermaine (T&Z Architects) presenting in support of the application at Item 8.2. The presentation will comment on the traffic management provisions and impacts of the proposed recreation deck.
- 7.6** Mr Behnam Bordbar (Transcore) presenting in support of the application at Item 9.1. The presentation will support the removal of Condition 6.
- 7.7** Mr Scott Vincent (Planning Solutions) presenting in support of the application at Item 9.1. The presentation will support the removal of Condition 6.
- 7.8** Mr Andrew Peirce (Celsius Developments) presenting in support of the application at Item 10.1. The presentation will provide background information and reasons to support the approval of this development.
- 7.9** Mr David Caddy (TPG and Place Match) presenting in support of the application at Item 10.1. The presentation will address the appropriateness of the additional development in the context of the Albany Highway streetscape and the proposed planning framework.
- 7.10** Mr Tom Letherbarrow (Hillam Architects) presenting in support of the application at Item 10.1. The presentation will provide a summary of and reasons for the proposed design revisions to the approved scheme including how this will improve the development.

8. Form 1 – Responsible Authority Reports – DAP Applications

- 8.1** Property Location: Lot 413 (No. 47) Clydesdale Street, Como
Application Details: 21 Multiple Dwellings within a 5 Level Development
Applicant: Aidan Gorjy (47 Clydesdale Pty Ltd)
Owner: Ruben and Lois Lane
Responsible Authority: City of South Perth
DAP File No: DAP/17/01235
- 8.2** Property Location: Lot: 1961 Plan: 67423, 28 Colombo Street
VICTORIA PARK
Application Details: ADDITIONS & ALTERATIONS TO EDUCATIONAL ESTABLISHMENT
Applicant: T & Z Architects
Owner: Regent College Inc
Responsible Authority: Town of Victoria Park
DAP File No: DAP/17/01219



9. Form 2 – Responsible Authority Reports – Amending or cancelling DAP development approval

9.1	Property Location:	Lot 25 (No. 300) Collier Road, Bassendean
	Application Details:	Convenience Store
	Applicant:	Planning Solutions
	Owner:	HICON (WA) PTY LTD
	Responsible Authority:	Town of Bassendean
	DAP File No:	DAP/17/01187

10. Appeals to the State Administrative Tribunal

10.1	Property Location:	646 - 660 Albany Highway and 1-3 Miller Street, Victoria Park
	Application Details:	Amendment to Development Approval – Additional Partial Seventh Storey with 4 Multiple Dwellings, to approved Mixed Use Development Comprising Shops, Restaurants, Offices, Tavern, 101 Multiple Dwellings & One (1) Grouped Dwelling
	Applicant:	Hillam Architects
	Owner:	FowlJeff Holdings Pty Ltd and Fowler Group Holdings Pty Ltd
	Responsible Authority:	Town of Victoria Park
	DAP File No:	DAP/16/01046

As invited by the State Administrative Tribunal under Section 31 of the *State Administrative Act 2004*, the Metro Central JDAP will reconsider Lot 552 (25) Willcock Street, Ardross on the 12 September 2017.

11. General Business / Meeting Closure

In accordance with Section 7.3 of the DAP Standing Orders 2017 only the Presiding Member may publicly comment on the operations or determinations of a DAP and other DAP members should not be approached to make comment.



Form 1 - Responsible Authority Report

(Regulation 12)

Property Location:	Lot 413 (No. 47) Clydesdale Street, Como
Development Description:	21 Multiple Dwellings within a 5 Level Development
DAP Name:	Metro Central JDAP
Applicant:	Aidan Gorjy (47 Clydesdale Pty Ltd)
Owner:	Ruben and Lois Lane
Value of Development:	\$5.5 million
LG Reference:	11.2017.211.1
Responsible Authority:	City of South Perth
Authorising Officer:	Erik Dybdahl, Senior Statutory Planning Officer Stevan Rodic, Manager Development Services
Department of Planning File No:	DAP/17/01235
Report Due Date:	30 August 2017
Application Receipt Date:	7 June 2017
Application Process Days:	90
Attachment(s):	<ol style="list-style-type: none">1. Latest Development Plans: A001, A102, A106, A030 (dated 2 June 2017), A103, A104, A105 (dated 11 July 2017), A010, A012, A100 & A101 (dated 31 July 2017) and A200 & A201(dated 10 August 2017);2. Development Application Report (dated June 2017);3. Final Design Review Panel Comment (3 May 2017);4. Summary of Neighbour Submissions5. Applicant Responses to Further Information Request, Referral Comments and Neighbour Consultation Submissions (dated 4 August 2017);6. Initial Environmental Health Comments (dated 5 July 2017);7. Final Environmental Health Comment (16 August 2017)8. Initial Infrastructure Services Comment (29 June 2017);9. Secondary Infrastructure Services Comment (3 August 2017);10. Waste Management Plan (Planning Solutions – 14 August 2017)11. City Environment Comment (dated 19

	<p>June 2017)</p> <p>12. Meeting Agenda – City of Melville – 31 January 2017;</p> <p>13. Meeting Minutes – City of Melville – 31 January 2017 REMOVED</p>
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Officer Recommendation:

That the Metro Central JDAP resolves to:

1. **Approve** DAP Application reference DAP/17/01235 and accompanying plans : A001, A102, A106, A030 (dated 2 June 2017), A103, A104, A105 (dated 11 July 2017), A010, A012, A100 & A101 (dated 31 July 2017) and A200 & A201 (dated 10 August 2017) in accordance with Clause 68 of the *Planning and Development (Local Planning Schemes) Regulations 2015* and the provisions of Clause 7.9 of the City of South Perth Town Planning Scheme No. 6 subject to the following conditions:

Conditions

1. The applicant is required to pay an amount of **\$55,000.00** to the City to upgrade the seal and drainage-of the right-of-way which services the rear of the development site.
2. Prior to the submission of a Building Permit, provision shall be made in the design of the floor and walls of the building for adequate protection against subsoil water seepage, and the applicant shall:
 - (i) Provide the City with certification from a consulting engineer that adequate water-proofing has been achieved; and
 - (ii) Satisfy the City that the proposed levels are acceptable, having regard to the 100 year flood levels applicable to the lot;

As required by Clause 6.9(3) of Town Planning Scheme No. 6

3. Prior to the submission of a Building Permit, A Construction Management Plan shall be submitted and approved by the City. The management plan shall include but not limited to dilapidation survey report of adjoining buildings, protection of public & adjoining buildings and traffic management, noise & vibration from demolition and construction activities, dust from demolition & construction works, stormwater runoff, removal of hazardous materials, waste water and construction traffic. The approved plan shall be implemented, unless otherwise approved by the City.
4. In accordance with the requirements of clause 6.14 of Town Planning Scheme No. 6, no person shall occupy or use the land or any building the subject of this approval for the purpose for which this approval is given unless and until the approved landscaping plan has been implemented. The landscaping shall be maintained in good order and condition in perpetuity.

5. No street trees shall be removed, pruned or disturbed in any way without prior approval from the City.
6. *Prior to the issue of a building permit*, the applicant shall prepare and submit a Parking Management Plan for the development, with a focus on the mechanical vehicle stackers, to the satisfaction of the City.
7. Prior to the occupation of the approved development, a public art concept for the subject development, or elsewhere in the Canning Bridge Activity Centre, with a minimum value of 1.0% of the total capital cost of development, be submitted to the City for endorsement. The approved public art concept shall be implemented to the satisfaction of the City prior to the occupation of the building.
8. The development is to achieve a 5 Star Green Star rating or the equivalent under another formally recognised ecologically sustainable rating system. At the building permit stage, the applicant is to submit a sustainability report confirming the final green star strategy that will guide the construction stage of the development and beyond; this report shall clearly demonstrate that an equivalent sustainable design rating is to be achieved for the development. Where relevant, elements of the sustainability report and strategy should clearly be reflected in documentation and plans submitted with the building permit application.
9. Unless otherwise approved by the City, waste management shall occur in accordance with the Waste Management Plan prepared by Planning Solutions (Rev 2) which has been endorsed by the City and is to be implemented accordingly.
9. Prior to the submission of a building permit, should dewatering be required for the placement of footings or on-site storage tanks, the applicant will be required to prepare a Dewatering Management Plan to the satisfaction of the City. Special attention will need to be made in relation to the disposal of dewatering effluent.
10. In accordance with the provisions of Clause 6.8(2) of *Town Planning Scheme No. 6*, all subsoil water and stormwater from the property shall be discharged into soak wells or sumps located on the site unless special arrangements can be made to the satisfaction of the City for discharge into the street drainage system.
11. The comprehensive new development shall incorporate illumination in accordance with the following Australian Standards:
 - (a) AS 1680 regarding safe movement;
 - (b) AS 1158 regarding lighting of roads and public spaces; and
 - (c) AS 4282 Control of obtrusive effects of outdoor lighting.
12. To meet the intent of Clause 6.4.6 of the R-Codes, external fixtures such as air conditioning infrastructure, shall be integrated into the design of the building so as to not be visually obtrusive when viewed from the street and to protect the visual amenity of residents in neighbouring properties.

13. The applicant shall construct a crossover between the road and the property boundary. The crossover shall be constructed in accordance with the approved drawings, associated conditions and the requirements contained within Management Practice M353, which is available at the City's website. The existing verge levels at the front property boundary shall not be altered.
14. The car parking bays shall be marked on site as indicated on the approved site plan, in order to comply with the requirements of clause 6.3(10)(c) of Town Planning Scheme No. 6 and such marking shall be subsequently maintained so that the delineation of parking bays remains clearly visible at all times.
15. Hard standing areas approved for the purpose of car parking or vehicle access shall be maintained in good condition at all times, free of potholes and dust and shall be adequately drained in accordance with the requirements of Clause 6.3 (10) of Town Planning Scheme No. 6.
16. Prior to construction the applicant is to submit a statement from a qualified traffic engineer that demonstrates that all car parking bays within the basement, the width and grade of access ways are designed in accordance with AS/NZS 2890.1:2004.
17. The height of any letterbox, electricity installation, bin enclosure, or other structure, fence, wall or hedge within 1.5 metres of any vehicle driveway where it meets a street alignment or within the street corner truncation shall not exceed 0.75 metres, in accordance with clause 6.3(6) of Town Planning Scheme No. 6.
18. All plumbing fittings on external walls shall be concealed from external view as required by Clause 7.5(k) of Town Planning Scheme No. 6.
19. External clothes drying facilities shall be screened from view from the street or any other public place.
20. All fencing and blank walls at ground level are to be treated with a non-sacrificial anti-graffiti coating to discourage potential graffiti and/or be decorated in such a way to reduce the effect of blank facades.
21. The property shall not be used for the approval hereby granted until an inspection has been carried out by a City Officer and the City is satisfied that the conditions of planning approval have been complied with.
22. The validity of this approval shall cease if construction is not substantially commenced within 24 months of the date of determination.

Advice Notes

1. Prior to lodging a building permit, the owner is required to satisfactorily address the outstanding planning matters identified in the Conditions of approval. A planning condition matrix is to be submitted to the City outlining how each condition has been addressed.

The applicant / owner are advised that prior to submitting a building permit application, written confirmation is to be obtained from the City's Planning Services that all outstanding requirements relating to the submission of additional information have been met. A copy of this confirmation is to be submitted along with the building permit application. If associated actions are incomplete, Building Services will not accept the associated building permit application.

Therefore, to avoid delays in obtaining a building permit and a certificate of occupancy, it is important for the owner to commence the related processes at the earliest.

2. Any dewatering at the site will require approval from the Department of Water through a water abstraction permit.
3. The applicant is advised of the need to comply with any relevant requirements of the City's Infrastructure Services, including but not limited to those detailed in the memorandums, dated 29 June 2017 & 3 August 2017, attached to this approval.
4. The applicant is advised of the need to comply with any relevant requirements of the City's Environmental Health Services, including but not limited to those detailed in the memorandums, dated 5 July 2017 & 16 August 2017, attached to this approval.
5. Planning Approval or the subsequent issuing of a Building Permit by the City is not consent for the construction of a crossing. As described in Management Practice M353 a 'Crossing Application' form must be formally submitted to Infrastructure Services for approval prior to any works being undertaken within the road reserve.
6. In relation to Condition 7, the City will be required to give final consent for the proposed public art, including any art fund contribution arrangement. The public art contribution must be in line with the guidelines as indicated in the City's Developer's Toolkit. Once the developer has sourced an artist, determined the design and artwork they are to lodge an 'Artwork Concept Application' form and supporting material to the City for assessment. See Appendix 1 of City Policy P316 – 'Developer Contribution for Public Art and Public Art Spaces' for the full Public Art Toolkit document
7. The applicant/developer and the owners are to comply with the requirements set out in Council Policy P352 "Final Clearance Requirements for Completed Buildings". As detailed in the policy, the applicant is to engage a licensed land surveyor to undertake survey measurements and to submit progress reports and the final report to the City for approval. The City will only issue the final clearance letter when all relevant requirements have been met.
8. Car park ventilation to be designed to ensure that the carbon monoxide build up in the parking area does not exceed 50 ppm per hour in accordance with the *Health Act (Carbon Monoxide) Regulations 1975*.
9. Please ensure that all service and other equipment are compliant with the *Environmental Protection Act 1986* and *Environmental Protection (Noise) Regulations 1997* in relation to other premises.

10. Any required filling or excavation of the site shall be retained by embankments or walls, details of which are to be incorporated in the working drawings submitted in support of a building permit application.
11. Any required retaining walls along lot boundaries shall be constructed immediately after excavation or filling has been carried out.
12. With regard to the fee required to upgrade the right-of-way, the costing was prepared by the City's Infrastructure Services and agreed upon by the applicant.

Details: outline of development application

Zoning	MRS:	Urban
	TPS:	Centre Zone
		Canning Bridge Activity Centre Plan (CBACP) Quarter: Davilak (Q4) CBACP Zone: H4 (Residential Development 4 Storeys or 16.0 metre maximum height)
Use Class:		Multiple Dwellings
Strategy Policy:		Canning Bridge Activity Centre Plan (CBACP)
Development Scheme:		City of South Perth Town Planning Scheme No. 6
Lot Size:		1012m ²
Existing Land Use:		Single House

The subject site is situated at 47 Clydesdale Street in Como, approximately 300 metres north of Manning Road and approximately 480 metres east of the Canning Bridge Train Station and Bus Transfer.

The site has frontage to Clydesdale Street and vehicular access to the site is one way with vehicles entering from the Clydesdale frontage and exiting via the existing right-of-way which services the rear of the site and exits onto Davilak Street.

The subject proposal is for the construction of a twenty-one (21) Multiple Dwellings (one and two-bedroom) within a four-storey (5 Level) development plus a basement which provides for storage, services and accommodates mechanical car stacking infrastructure.

The ground floor level provides the primary pedestrian entry and lobby from the Clydesdale street frontage, three (3) single bedroom residential dwellings and accommodates the mechanical vehicle stackers concealed behind the lobby and dwellings.

The mezzanine level provides the upper mezzanine level for the three (3) ground floor single bedroom dwellings mentioned above and further accommodates the overrun for the mechanical vehicle stackers.

Floor levels one through to three have a typical floor plate each with six (6) residential dwellings, one single-bedroom dwelling and five two-bedroom dwellings, on each floor.

The roof top of the development provides an accessible roof garden and communal amenity/outdoor living area for the residents of the development including planting, a BBQ and seating area, light-weight shade structures and the lift and stair overrun.

See the final revised plans (latest revisions 10 August 2017) as part of **Attachment 1** and section 3 of **Attachment 2** for the applicants' description of the proposal.

Background:

The subject application was received by the City on the 7 June 2017, proposing 21 multiple dwellings within a 4 storey (5 level) development. The applicant had already attained approval for a virtually identical development that was proposed in the City of Melville (21 Kishorn Street – see JDAP agenda and meeting minutes from 31 January 2017). Once lodged, the proposal was reviewed by the DRP and thoroughly assessed by City officers in accordance with the *Canning Bridge Activity Centre Design Guidelines* contained within the CBACP document.

The subject site is located within the Davilak Quarter (Q4) of the CBACP and is zoned for residential development up to 4 storeys or 16 metres maximum height (H4) and therefore, the elements of the CBACP design guidelines pertaining to this quarter and zoning apply specifically and have been evaluated below as well as any other relevant considerations.

Legislation & policy:

Legislation

- *Planning and Development Act 2005.*
- *Planning and Development (Local Planning Schemes) Regulations 2015, specifically Schedule 2 [Regulations].*
- *City of South Perth Town Planning Scheme No. 6 -- Canning Bridge Activity Centre Plan (Version 3 approved by WAPC April 2016):*

On the 10th of February 2017, Amendment No. 47 and the Canning Bridge Activity Centre Plan (CBACP) were gazetted and became fully operative, replacing all effective development controls for developments on all sites within the CBACP with the controls contained in the Canning Bridge Activity Centre Plan (CBACP) document.

The Canning Bridge Activity Centre Plan (CBACP) area is less than 8km from the Perth CBD, with direct road, public transport, walking and cycling access.

The Activity Centre plan has been prepared to provide a guide to development of the CBACP area, an area recognised as an 'activity centre' under the Western Australian Planning Commission's State Planning Policy 4.2: Activity Centres for Perth and Peel. The study area comprised the area generally considered a convenient walkable distance from the Canning Bridge bus and rail interchange which is located at the junction of the Canning Highway and Kwinana Freeway.

It is proposed that the CBACP area will comprise a mix of residential, civic, office, retail and entertainment uses against the backdrop of the Swan and Canning Rivers and the adjacent open space. The CBACP area comprises land within both the City of Melville and the City of South Perth and includes a substantial area of the river.

The CBACP establishes a foundation for the future of the area including objectives and goals for its ongoing development, guidelines for the style of built form which is expected, and an implementation framework for orderly improvements to infrastructure and land over time.

This Activity Centre plan was prepared by the Western Australian Planning Commission, Department of Planning, City of Melville, City of South Perth, Department of Transport, Public Transport Authority and Main Roads WA as a joint initiative to progress long term planning for the Canning Bridge Activity Centre Plan area.

- *State Planning Policy 4.2: Activity Centres for Perth and Peel*

Local Policies

- City Policy P316 'Developer Contribution for Public Art'
- City Policy P350.01 'Environmentally Sustainable Building Design'
- City Policy P350.03 'Car Parking Access, Siting, and Design'
- City Policy P350.05 'Trees on Development Sites and Street Verges'
- City Policy P350.07 'Fencing and Retaining Walls'

Consultation:

Public Consultation

Public Consultation has been undertaken for this proposal, to the extent and in the manner required by Council Policy P301 'Community Engagement Planning Proposals'. Under the "Area 2" consultation method, individual property owners and occupiers were invited by letter to inspect the proposal and provide comments during a minimum 21 day period. All relevant materials were placed on the City's website for viewing by those interested. In order to give a clear indication of the development's scale the consultation letter described the height of the development as a 5 level building.

A total of 75 consultation letters were issued to nearby landowners and occupiers and 39 formal submissions were received in objection to aspects of the proposal. A summary of the submissions and formal responses to the comments from the applicant, are contained within **Attachments 4 & 5** respectively.

The responses provided by the applicant are largely supported by City officers. The primary objection to the proposal based on submissions, relates to a perceived lack of on-site parking for the development with all dwellings being provided with only a single occupier bay and five visitor bays within the whole development. However, the proposal is completely compliant with parking the requirements of the CBAC Design Guidelines, as is demonstrated in the assessment section below. An overarching objective of the CBACP is to promote a cultural shift, a move away from the reliance and use of private motor vehicles for transport, particularly where in proximity to

public transport train stations and high-frequency bus routes. The development satisfies the parking requirements of the CBACP and promotes this key objective.

Other recurrent submissions spoke to the height of the development, yet the development is compliant in terms of the maximum building height (16.0m) which will be discussed further in the following sections of the report. It should be noted that some comments related to areas of non-compliance have since been resolved via amendments to the proposal, all of which are discussed in detail below.

Consultation with other Agencies or Consultants

City's Engineering Infrastructure Department

The City's Engineering Infrastructure department has provided comments relating to parking, stormwater, and other general aspects of the development.

The Engineering comments are provided in **Attachments 8 & 9** (dated 29 June and 3 August 2017 respectively).

The applicant has also provided responses to the comments of Infrastructure Services, actioning such requirements by way of amended plans and written responses, as detailed in **Attachment 5**.

It should be noted that the final comment from Infrastructure relates to a developer contribution for public works, however as there is no developer contribution plan in place for the CBAC area, there is no ability to request such funds at this time. A developer contribution plan will be formulated following the requirements of State Planning Policy 3.6 in due course.

In order to service the development, the rear right of way must be upgraded by the applicant. The applicant has agreed to upgrade the entire right-of-way which services the rear of the site and ensure their driveway can accommodate heavy vehicles for waste servicing at a cost to the developer of \$55,000; see **Attachment 5** and the recommended condition above.

All requirements of Infrastructure Services are to be complied with and it is considered that any outstanding items are able to be addressed via recommended conditions or advice notes as outlined above.

City's Environmental Health Services Department

The comments from City Environmental Health Services are provided as part of **Attachment 6 & 7**.

After a number of revisions, City Environmental Health Officers have endorsed the Waste Management Plan for the development (contained in **Attachment 10**) (Rev 2 dated March 2017).

Specific conditions and advice notes have been recommended as outlined above to ensure implementation of this management plan and other recommendations.

City Environment Comment

City Environment has advised that the crossover is to be constructed as proposed and that the tree within the City's verge is not to be removed or damaged during construction; see **Attachment 11** (dated 19 June 2017).

A recommended condition is outlined above to address this advice.

Design Review Panel

The Cities of Melville and South Perth have established the Design Review Panel (DRP), a panel of independent Architects, Urban Designers and/or Landscape Architects that reviews each proposed development within the CBACP providing comprehensive commentary on the design of proposed developments in terms of general design principles and the objectives of the CBACP design guidelines as well as recommendations for improvements.

This particular application was reviewed by the DRP on the 3 May 2017. The comments from the final DRP meeting are contained in full detail within **Attachment 3**. As mentioned above, this proposal is virtually identical to one that was proposed within the City of Melville by the same applicant at 21 Kishorn Street (see JDAP agenda and meeting minutes from 31 January 2017) which was previously extensively reviewed by the DRP prior to its determination and therefore the primary comment from the DRP was:

"Having reviewed almost the identical proposal for 21 Kishorn Street in Applecross, the only issue with the current proposal is southern facing apartments, which would benefit from flipping the design to maximise natural solar aspect".

Subsequently, the applicant complied with the request and the latest revisions of the plans see the ground floor apartments orientated northward to take advantage of winter sun.

As such, in the final revisions of the development plans (**Attachment 1**) the applicant has sufficiently addressed the recommendations of the DRP and the general design of the proposal is therefore supported. Any elements requiring further discussion will be addressed in greater detail below.

Planning assessment:

Canning Bridge Activity Centre Plan Design Guidelines (Version 3 approved by WAPC April 2016)

The CBACP Design Guidelines apply to all the land which is identified within the CBACP boundary. Each requirement within the guidelines represents the quantitative criteria against which a development will be designed and assessed. Each requirement is complemented by a desired outcome which represents the qualitative principles against which the decision maker exercises its judgment to determine the proposal.

The following table evaluates the compliance of the proposed development for the subject site in accordance with the provisions of the CBACP design guidelines. While the proposed development is considered generally compliant with the guidelines, aspects requiring further discussion will be addressed in greater detail in the following sections of the report.

Element	Requirement or Desired Outcome* (*where requirements not met)	Proposal & Comment
1. Land Use	<p>1.8.3 (Q4) H4 and H8 Zone –</p> <p><i>Multiple Dwelling, Grouped Dwelling, Single House, Aged or Dependant Person's Dwelling, Single Bedroom Dwelling, Corner Store, Recreation - Private, Recreation – Public, Residential Building, Home Occupation, Home Office</i></p> <p>1.13 Dwelling Diversity—</p> <p><i>Development that contains ten (10) or more dwellings shall provide a minimum of 20% and a maximum of 50% of the dwellings as one (1) bedroom or studio dwellings, and shall provide a minimum of 40% of the dwellings as two (2) bedroom dwellings.</i></p>	<p>Development consists of only Multiple Dwellings which are a preferred use in the respective zoning.</p> <p>Complies.</p> <p>Development contains 21 dwellings, 6 of which are one-bedroom or (28.6%) and 15 of which are two-bedroom or (71.4%).</p> <p>Complies.</p>
2. Form and Mass	<p><i>No provisions of this element are applicable in this zoning</i></p>	<p>Not provisions of this element are applicable in this zoning</p>
3. Heights	<p>3.5 –</p> <p><i>For building within the H8 zone, notwithstanding the 8 storey height limit, no building shall exceed 26 metres above NGL. For buildings in the H4 zone, notwithstanding the 4 storey height limit, no building shall exceed 16 metres above NGL.</i></p> <p>CBAC Height Definition:</p> <p><i>In relation to a building, means the distance measured from the mean natural level of that part of the land on which the building is erected to the highest point of any part of the building above it but does not include:</i></p> <p><i>(a) any lift plant, water tower or similar utility or services, not exceeding 3.0 metres in height; or</i></p> <p><i>(b) any architectural feature or decoration, other than a free-standing sign, not used for any form of accommodation, or any open roofed structures which may be developed to provide recreation and open space opportunities for building occupants</i></p>	<p>With regard to the matter of the definition of "Storey" and the proposed mezzanine level, this will be discussed in greater detail in the following section of the report.</p> <p>With regard to the overall height limit of 16.0, the latest revisions of plans (Attachment 1) as per City requests, the latest plans demonstrate the building measures exactly 16.0 metres from the NGL of the site, 15.25 (datum points: 15.19, 15.11, 15.21, 15.36, 15.5, 15.3, 15.24 & 15.07).</p> <p>Building height (AHD 31.25) – NGL (AHD 15.25) = 16.0 metres</p> <p>As per the CBAC height definition, it does allow for utilities and services and architectural features for recreation are permitted to extend a maximum of 3.0m above the building height limit. The proposed development provided amenity features and the lift and stair overrun to the communal roof</p>

	<p><i>which may be approved by the decision maker.</i></p>	<p>garden area on the rooftop which is limited to a maximum height of AHD 34.25 ensuring the maximum height of the structures above the building height limit is limited to 3.0 metres.</p> <p>Complies.</p>
<p>4. Street Setbacks</p>	<p>4.5—</p> <p><i>All development within H4 Zones in Q1 and Q2 shall have a minimum 3 metre and to street boundaries. All development within H8 Zones in Q3, Q4 and Q5 shall have a minimum 4 metre and maximum 6 metre front setback.</i></p> <p>DO 4:</p> <p>To ensure that the setback to buildings contributes to a distinct street character and that the form of multi-level development is sensitive to pedestrian scale. Podiums will provide an opportunity for creating a diversity of scale and form at lower levels, whilst taller elements are encouraged with setbacks comprising rooftop terraces and gardens at varying levels throughout development. Alternative means to reduce bulk and scale such as green walls and façade articulation are also encouraged. New buildings that are setback from the street boundary should not adversely affect the vibrancy and activity required to support the expected outcomes of the CBACP by creating unnecessary breaks in active frontages.</p> <p>4.8—</p> <p><i>Where a street setback is required, the setback area shall be activated and/or landscaped</i></p>	<p>Minor incursions; blade walls, feature walls and roofing encroach into front setback yet assist in articulating the frontage and defining the entry lobby.</p> <p>Considered to satisfy Desired Outcome 4; supported and to be discussed further below.</p> <p>High quality landscaping & mature trees to be provided to the front setback area and communal areas.</p> <p>Complies - condition recommended to ensure implementation and maintenance.</p>
<p>5. Side and Rear Setbacks</p>	<p>5.6—</p> <p><i>Side and rear setbacks for all development within the H8 and H4 Zones shall be 3 metres for any lot which is less than or equal to 14 metres in width or shall be 3.5 metres for any lot which is greater than 14 metres in width but less than 16 metres in width or 4</i></p>	<p>The subject lot width is greater than 16.0m in width; therefore the required rear and side setbacks are required to be no less than 4.0m.</p> <p>the majority of development achieves the required 4.0m setback</p>

	<p><i>metres for any lot which is equal to or greater than 16 metres in width. Setbacks do not apply to any eaves and sun shading devices.</i></p> <p><i>DO 5 –</i></p> <p><i>To provide a continuity of frontage at ground and podium levels to encourage activity whilst providing interest. To allow opportunities for tower elements to access sunlight, ventilation and view corridors throughout the area from and between multi-level developments. To ensure that development opportunities throughout the precinct are maximised. Developers should minimise overlooking and overshadowing of adjacent and adjoining properties through appropriate design response, supported by the setback provisions of this Element.</i></p>	<p>for all side and rear setbacks however there are small portions of the development, blade and feature walls and roofing materials do slightly encroach into the setback yet contribute to the articulation of the elevations and the requirements do state that setbacks do not apply to any eaves or shading devices such as the portions of roofing that encroach into the setback.</p> <p>Considered to satisfy Desired Outcome 5; supported and to be discussed further below.</p>
6. Linking Pathways	<i>Not Applicable to Site</i>	Not Applicable.
7. Canning Highway	<i>Not Applicable to Site</i>	Not Applicable.
8. Landmark Buildings	<i>Not Applicable to Site</i>	Not Applicable.
9. Facades	<p>9.1—</p> <p><i>Developments shall be sympathetic to the surrounding environment in composition, proportion, materials, colours and finishes.</i></p> <p>9.2—</p> <p><i>Proposed development shall incorporate substantial areas of glazing on street frontages. Glazing shall comprise no less than 50% of any façade at pedestrian/ground level and where opaque signage is proposed on glazing, unimpeded clear glazing shall still comprise greater than 50% of the frontage.</i></p> <p>9.3—</p> <p><i>Semi active frontages are required in all Residential Zones with a minimum of 35% of the frontage incorporating windows or doorways with passive visual surveillance of the adjacent street</i></p>	<p>Materials and colours considered appropriate and of high quality. Supported by DRP.</p> <p>Complies.</p> <p>Primarily applicable to mixed development yet majority of frontages to both streets contain substantial clear glazing to the lobby, major openings, balconies and courtyards to the apartments above providing interaction with street while being raised allows them some separation and privacy for residents – See elevation plans of Attachment 1.</p> <p>Complies.</p> <p>Majority of frontages (>>35%) to the street contain substantial clear glazing, major openings and/or balconies to apartments providing interaction and passive surveillance</p>

	<p>at ground level.</p> <p>9.4—</p> <p><i>Windows and balconies shall be incorporated into the design of developments above ground level. Balconies shall have a minimum 2.4 metre depth and a minimum area of 10m², to encourage use.</i></p> <p><i>Desired Outcome 9:</i></p> <p><i>Development of the centre should respond sensitively to the site and support a sense of place. Development should be pleasing to the eye, be interactive, and provide definition between public and private spaces. Maintaining a strong urban edge with the built form and providing a variety of high quality architectural forms and features will attract people to the centre and establish a sense of place.</i></p> <p>9.5—</p> <p><i>Developments shall be designed so as to discourage vandalism by use of materials such as sacrificial paint or architectural features to discourage inappropriate activity.</i></p> <p>9.6—</p> <p><i>Pedestrian links within development sites shall be of a design that incorporates visual interest and activity including retail and food and beverage activities or civic or community spaces.</i></p> <p>9.7—</p> <p><i>The internal floor level of any development shall, where possible, have a finished floor level no greater than 500mm below or above the adjoining</i></p>	<p>to the street (Attachment 1).</p> <p>Complies.</p> <p>Major openings and balconies provided to all apartments, all elevations and addressing the street frontage.</p> <p>All proposed dwellings are provided with balconies with minimum 2.4m depth and are considered useable and functional outdoor living spaces. Some balconies do not quite achieve 10 sqm. area but are only marginally short (facade apartments 9.8 sqm. and southern central apartments also 9.8 sqm.).</p> <p>To compliment the balconies, the residents are provided a generous roof terrace and garden (234m²) for the amenity of occupants providing a large shared outdoor living space for all.</p> <p>Considered to Satisfy Desired Outcome 9; further discussion not warranted.</p> <p>See ground floor and landscaping plans (Attachment 1), building separated from reach via landscaping and permeable fencing making difficult to vandalise – passive surveillance provided over all frontages.</p> <p>Complies.</p> <p>Not Applicable to Development.</p> <p>Footpath level at AHD 15.16 and the finished floor level of the lobby is AHD15.29 – 130mm difference.</p>
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	<i>footpath or verge level to ensure interaction between pedestrians and adjoining buildings. Development which fronts a street with differing levels should consider innovative design to meet this requirement.</i>	Complies
10. Open Space and Landscaping	<p><i>10.5—</i></p> <p><i>Development in the H4 Zone shall be provided with a minimum provision of 40% open space which shall be provided in shared common space at ground level and/or shared common space on areas such as the roof.</i></p> <p><i>10.6—</i></p> <p><i>Where development is not proposed to all boundaries of a site, landscaping design shall be incorporated providing that such landscaping maintains openness and visibility into the development site. Landscaping in the form of hard and soft landscaping can be utilised. Water sensitive design shall be implemented for all landscaped areas.</i></p> <p><i>10.7—</i></p> <p><i>Landscaping and/or low fencing below 1.2 metres on property boundaries, where buildings are setback from the boundary, shall reinforce the separation between public and private realm.</i></p>	<p>The communal roof garden alone provides 234m² of communal open space and an amenity area, already representing 23% of the subject site.</p> <p>Furthermore ground floor provides an additional 85m² (8.4%) of landscaped communal open space as well as additional open space in the form of private courtyard and vehicle access ways which brings open space calculation well to above 40% (additional 338m²)</p> <p>Complies.</p> <p>Please refer to landscaping plan contained within Attachment 1. As per the latest revised plans and at the request of City officers additional planting was implemented along the vehicle access way as previously it was all hard-stand. Landscaping of ground floors and rooftop considered to be high quality.</p> <p>Complies.</p> <p>Visually permeable fencing provided to frontage and entrance lobby.</p> <p>Complies.</p>
11. Sustainability	<p><i>11.5—</i></p> <p><i>All new development shall be designed to maximise passive solar principles for heating, cooling, ventilation and energy conservation. East and west facing glazing shall be minimised and shading devices shall be employed to reduce heat loads within buildings and reduce the need for air-conditioning systems. All buildings shall be designed to enable</i></p>	<p>A sustainability statement is provided by the applicant and can be found as part of Appendix 6 to Attachment 2. The statement indicates the development shall achieve the desired green star rating or equivalent measure and this requirement shall be upheld via a condition of development</p>

	<p>access to natural light and cross ventilation. At a minimum, all new development within the Casey, Davilak and Mt Henry Quarters (that is the Quarters within the City of South Perth) shall achieve a 5 Star Green Star design rating and within the Kintail and Ogilvie Quarters (that is the Quarters within the City of Melville) shall achieve a 4 Star Green Star design rating under Green Building Council of Australia. In the M10 and M15 areas, as evidence in support of compliance with the required rating, applicants shall submit as part of their development application either a Green Star Design Review Certificate or a qualified consultant's report supporting the developments achievement of the required level of performance. Under either approach any development approval granted will be conditional upon submission of a Green Star certificate, prior to commencement of the development, which confirms achievement of the required rating. In the H4 and H8 areas, as evidence in support of compliance with the required ratings, as a minimum applicants shall submit as part of their development application a report from a Green Building Council of Australia qualified consultant demonstrating that the proposal will achieve the required level of performance. In these areas (H4 and H8) any development approval granted will be conditional upon the development being designed and constructed to include the elements identified in the supporting consultant's report.</p>	<p>approval as outline above.</p> <p>Complies – recommended condition of approval to ensure compliance as outlined above.</p>
12. Acoustics	<p>12.1—</p> <p>All new development adjoining Canning Highway or Manning Road or adjacent to the Kwinana Freeway shall be designed to achieve appropriate acoustic protection from noise generated by traffic including utilising double glazing or acoustically protected window frames, walls and ceilings.</p> <p>12.2—</p> <p>All residential development in buildings adjoining Canning Highway or Manning Road or adjacent to the Kwinana Freeway shall have a notification applied to the title and any created strata title pursuant to section 70A of the Transfer of Land Act 1893, together with section</p>	<p>Not Applicable, development does not adjoin specified streets and areas.</p>

	<i>165 of the Planning and Development Act 2005 to inform prospective land owners and residents of the likelihood of higher noise levels associated within the inner city environment.</i>	Not Applicable, development does not adjoin specified streets and/or areas.
13. Adaptability	<i>Not applicable to development, no non-residential uses are proposed</i>	Not Applicable.
14. Street Edges	<i>Not applicable to development, no non-residential uses, alfresco areas or signage are proposed</i>	Not Applicable.
15. Level Changes	<p>15.1—</p> <p><i>All proposed retaining walls shall be treated with a non-sacrificial anti-graffiti coating to discourage potential graffiti and/or be decorated in such a way as to reduce the effect of blank facades. Landscaping in front of retaining, street furniture and articulation of the wall itself may be utilised as an alternative way of treating blank walls.</i></p> <p>15.2—</p> <p>All development shall provide universal access in accordance with relevant codes and standards. Innovative design features for ramps are encouraged to make universal access an integral part of design.</p>	<p>Blank walls minimised to frontage and separated by visually permeable fencing and landscaping</p> <p>Complies.</p> <p>Universal access is provided to the Clydesdale Street frontage; ramps not necessary as finished floor levels marginally greater than ground levels.</p> <p>Complies.</p>
16. Fencing	<p>16.1—</p> <p><i>All proposed fencing which is visible from a public place shall be treated in the same way as required in Clause 15.1. Fencing shall be of a high quality on both sides.</i></p>	<p>Minimal blank walls, primarily visually permeable steel fencing</p> <p>Complies. Standard fencing conditions also recommended as outline above.</p>
17. Public Art	<p>17.1—</p> <p><i>Artwork associated with all proposed development is encouraged.</i></p>	<p>As discussed in the applicants supporting report, Attachment 2, it is the applicant's intent to provide public art on the development site to a value of 1.0% of the total capital cost of development. A condition of approval is recommended as outline above to ensure compliance and implementation of the public art prior to occupation of the development.</p> <p>Complies</p>

	<p>17.2—</p> <p><i>All development which is greater than \$1 million in total capital cost of development shall contribute 1.0% of the total capital cost of development to a CBACP wide public art fund. The fund is to be used solely for the development of a strategy and acquisition of public art works to be displayed within the CBACP area. Alternatively the developer may propose to provide on-site public art works which are integrated into the design of the development. Any public art proposed shall form part of the development application to be considered by the Design Advisory Group.</i></p>	<p>As above.</p> <p>Complies – recommended condition of approval outline above to ensure compliance.</p>
18. Parking	<p>18.1—</p> <p><i>Basement car parking or parking sleaved by other uses is encouraged within the CBACP area. All parking areas shall be well lit and clearly signed. In the M10 and M15 Zones in Q3, Q4 and Q5, all parking areas other than for visitors or commercial deliveries shall preferably be provided in a basement, or if not, then shall be concealed within the building behind residential or non-residential floor space.</i></p> <p>18.3—</p> <p><i>Car parking for residential development in Q3, Q4 and Q5 shall be provided at a minimum ratio of 0.75 bays for each studio or single bedroom dwelling and a minimum ratio of 1.0 bay for each two or three bedroom dwelling and a minimum ratio of 1.25 bays for each dwelling with four bedrooms or greater.</i></p> <p>Parking Requirement:</p> <p><u>(0.75 x 6) + (1 x 15) = 19.5 (20) Bays</u></p>	<p>All occupier bays are concealed from view from any public areas, located behind the lobby and entrance</p> <p>Complies.</p> <p>The development provides a total of 20 occupier parking bays provided in mechanical stacker arrangements throughout the development, satisfying the parking requirements of the CBAC design guidelines.</p> <p>The development does also provide five visitor bays (a provision not required by CBAC).</p> <p>Many public submissions focused on a perceived lack of parking with the development only providing one bay per dwelling, despite compliance with the CBAC design guidelines. Given this compliance, and the underlying objectives of the CBAC the comments are not supported and further response is provided above in response to submissions.</p>

	<p>18.8—</p> <p><i>Bicycle storage/parking shall be provided for all residential development at a ratio of one bay for every dwelling within a development site, and can be comprised within storage areas required as per Clause 19.5 or in shared parking areas or both. (21 required)</i></p> <p>18.10—</p> <p><i>Where basement or multi-level car parks are proposed, effective screening techniques such as planting, semi-transparent fences or screens shall be used with a preference to sleeve car parking areas with active land uses as per Figure 15.</i></p>	<p>Complies.</p> <p>21 Bicycle bays provided within storage areas for each unit.</p> <p>Complies.</p> <p>As discussed above, all parking is concealed from view of the public realm toward the rear of the site.</p> <p>Complies.</p>
19. Servicing and Functionality	<p>19.3—</p> <p><i>Developments within the M15, M10 and H8 Zones shall provide for all management of waste wholly within the development site, including the ability for service vehicles to circulate within the development. No on-street waste collection areas are permitted within the M15, M10 and H8 Zones.</i></p> <p>19.4—</p> <p><i>Applicants within the M15, M10 and H8 Zones shall provide a Movement Summary in their written Statement of Support which provides the design intent behind the development of the site in relation to pedestrian access points, access to parking and cycling, pedestrian and cyclist pathways, loading areas and waste management.</i></p> <p>19.5—</p> <p><i>All residential developments shall comprise an enclosed, lockable storage area, with a minimum dimension of 1.5m with an internal area of at least 4m², for each grouped or multiple dwelling(s).</i></p>	<p>The latest revision of the Waste Management Plan (Rev 2), Attachment 10, has been endorsed by the City.</p> <p>The servicing vehicle is able to enter the site from the Clydesdale frontage and exit via the right-of-way onto Davilak Street in forward gear.</p> <p>Complies.</p> <p>Movement is relatively straight forward, legible and logical with vehicular and pedestrian entry points clearly defined and obvious throughout development.</p> <p>Complies.</p> <p>21 storerooms provided throughout basement level of development of compliant size and dimension.</p> <p>Complies.</p>
20. Safety	20.1—	

	<p><i>Access to and through a development shall be safe and efficient. Entrances shall be positioned so that all pedestrian movement is adequately lit and directly visible from a public space. Access to and from car parking areas and building entrances shall be adequately sign-posted with provision of good lighting to enable safe out of hours use.</i></p> <p>20.2—</p> <p><i>To maximise visibility and surveillance of the public environment, the incorporation of active edge uses, including those at ground level that spill out onto public space and those located at the front of a building on the first floor that enable overlooking into public space, are encouraged. Windows can be positioned to overlook pedestrian routes, provided that privacy concerns are met.</i></p> <p>20.3—</p> <p><i>Development shall clearly define private and public space responsibilities. The function and ownership of an area can be clarified by paving, lighting and planting. Planting shall not create concealed spaces near paths and lighting shall allow clear lines of visibility.</i></p> <p>20.4—</p> <p><i>Street furniture and lighting shall be made of durable materials to a vandal-resistant design. Graffiti resistant materials and surface finishes are appropriate at street level in all developments. Graffiti should be reduced by increased lighting and general design features which promote visibility and discourage crime.</i></p> <p>20.5—</p> <p><i>Lighting proposed for all development</i></p>	<p>Pedestrian entrance and lobby clearly defined, legible and clearly visible from the public street and footpath. Additionally, all apartments provide natural surveillance over the Clydesdale street frontage with balconies and openings passively overlooking these areas.</p> <p>All lighting will be in accordance with requirements, as per the above outlined recommended condition(s) of approval.</p> <p>Complies.</p> <p>No non-residential uses are proposed however, as discussed above; all residential apartments provided large balconies and major openings which overlook the Clydesdale frontage and setback areas.</p> <p>Complies.</p> <p>No public spaces are provided as not mixed use development. Communal areas for residents shall be clearly defined, namely the rooftop garden amenity area.</p> <p>Complies.</p> <p>As discussed above, landscaping has been used to create separation and deter graffiti, minimising blank walls forward of the permeable steel fencing.</p> <p>Complies.</p> <p>No public spaces provided as</p>
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	<i>shall be designed so as to limit the possibility of dark shadows in the adjacent private and public open spaces.</i>	residential development. Open spaces are to be sufficiently lit and a recommended condition of approval is outline above to meet all relevant Australian safety standards. Complies.
21. Development Bonus based on Design Considerations	<i>No development bonuses are available nor are being sought by this application</i>	Not Applicable.
22. Development Bonus based on Community Considerations	<i>No development bonuses are available nor being sought by this application</i>	Not Applicable.

As is demonstrated in the table above, the proposed development is largely compliant with all relevant CBACP Design Guidelines and/or alternatively, able to be adequately addressed through the satisfaction of recommended conditions as discussed in the table above and as outlined in the City's conditional recommendation above.

Items above requiring further discussion and all other aspects of relevant consideration, separate to the CBAC design guidelines, are discussed below.

Building Height (CBACP Element 3)

As per the CBACP design guidelines, this particular site is allocated a building height of 4 storeys and a maximum height of 16.0 metres. A number of the submissions argue the proposed development consists of 5 storeys and therefore could not be approved. This debate was also raised with the virtually identical development, now approved, for 21 Kishorn Street, Applecross following review by the State Administrative Tribunal (31 January 2017 – see **Attachments 12 & 13** for agenda and minutes of meeting). An extract from the responsible authority report reads:

“The development comprises a four storey structure which has been designed to accommodate car parking and car park stackers at the ground floor level, screened from the street by the main building entrance and ground floor apartments.

The double height car stackers result in a generous floor to ceiling height on the ground floor, which in turn enables the provision of a mezzanine level within those apartments, and an over height entrance feature. The generous entrance feature provides a high quality entry statement towards the street frontage.

The Design Review Panel consider the upper floor levels provide functional apartment layouts, appropriately sized outdoor living space, and adequate access to natural light and ventilation.

In relation to the external appearance the DRP consider the development is well considered, with appropriate levels of articulation achieved. The roof space is proposed to be utilised as a communal outdoor living space, with dedicated facilities for occupiers, and shade structures provided.

The four storey design of the development is consistent with the building height limitations imposed by the CBACP”.

The provision of a mezzanine within the ground floor apartments is enabled due to the generous floor to ceiling height of the ground floor as a result of the location of double height car stackers which are also sited on the ground floor of the development. The proposed mezzanines have been assessed in accordance with the definition contained within the CBACP:

A storey under the CBACP is defined as:

Has the same meaning as ‘Storey’ in the national Construction Code Series (building Code of Australia Class 2 to Class 9 Buildings), and means a space within a building which is situated between one floor and the floor level next above, or if there is no floor above, the ceiling or roof above, but not –

(a) A space that contains only –

- i. A lift shaft, stairway or meter room; or*
- ii. A bathroom shower room, laundry, water closet, or other sanitary compartment; or*
- iii. Accommodation intended for not more than 3 vehicles; or*
- iv. A combination of the above; or*

(b) A mezzanine

A mezzanine floor is defined by the Building Codes of Australia (BCA) as:

“An intermediate floor within a room”

The above definition specifically excludes a mezzanine from the definition of a ‘storey’. Legal advice was sought by the City of Melville and the applicant alike to determine whether its interpretation of the CBACP provisions and definitions, relative to the inclusion of mezzanines, is correct in this instance. (refer item 10.2 in the attached meeting agenda, **Attachment 12** and determination minutes **Attachment 13**)

Therefore, the City supports the findings of the SAT reconsideration and other legal advice to classify the upper level of the ground floor as a *mezzanine* level and not a *storey*.

It should be noted that this additional mezzanine level does not provide for additional dwelling numbers, the overall building height is compliant as demonstrated above and is largely a design response in accommodating the overrun of the mechanical car stackers.

Street Setbacks (CBACP Element 4)

As is illustrated in the development plans (**Attachment 1**), the entry and lobby is defined with an entry statement and canopy that does protrude into the front setback area at the lower levels (see perspective images in **Attachment 2**) and there are also other rather negligible incursions, largely of roofing materials for the levels above. The entry canopy serves an architectural and design related purpose by clearly defining the primary entry point and adding to the legibility of the development. The front elevation is also seen to be heavily articulated through the use of varying materials and the incorporation of openings and balconies into the façade of the development. These elements of the proposal were also supported by the Design Review Panel in their evaluation of the proposals design and they are seen by officers to satisfy the desired outcomes of the CBACP and are therefore supported.

Side and Rear Setbacks (CBACP Element 5)

As noted in the assessment table minor portions of the development encroach into the side and rear setback areas, largely roofing and blade wall projections, as highlighted in yellow in the below typical floor plan below:



It can be seen that a majority of the incursion is the roofing materials which is actually permitted under clause 5.6 of the CBAC provisions as: '*setbacks do not apply to any eaves or sun-shading devices*'. The minor nib wall projections are considered to be a negligible incursion creating no further amenity impacts and actually assist in articulating the elevations; therefore are supported via the desired outcomes of the CBACP.

Mechanical Car Stackers (Clause 8 of City Policy P350.3 'Car Parking Access, Siting and Design')

Initial plans and documentation submitted with the application contained little detail with regard to the proposed Car Stackers and therefore City Officers requested further information to ensure the plans reflected the requirements of the policy, which are as follows:

- 8.1 Where a car stacking system is proposed, the minimum internal dimensions of associated car parking bays are to be 2.1 metres in height, 5.5 metres in length, 2.5 metres in width, and having a minimum weight bearing capacity of 2,600 kilograms.
- 8.2 A minimum of 20% of the total onsite car parking bays provided shall be provided without requiring the use of a mechanical parking device.
- 8.3 Mechanical parking devices shall be for tenants/owners of a development and shall be maintained as operational for the life of the building, including in the event of a power failure. The City will apply conditions of development approval to all development applications involving mechanical parking devices to ensure:
 - (a) Ongoing compliance with operational specifications is achieved as outlined in a Parking Management Plan.
 - (b) Owners and prospective purchasers are aware of their obligations with respect to the use of mechanical parking devices.
- 8.4 Variations to clause 8.1 may be considered where the applicant can clearly demonstrate that site constraints prohibit compliance, and the City is satisfied that the mechanical parking device will not adversely affect the amenity of the locality nor be unduly impractical in use.

The applicant was asked to demonstrate the proposed stackers would satisfy the requirements of the policy and their further information responses (**Attachment 5**) and revised plans (**Attachment 1**) ensured compliance with the above. The lengths of the bays were increased and the applicant provided the specific type of mechanical stacker, the *Wöhr Parklift* (Premium Type 440-225/220) which achieves the required specifications of the policy. A video demonstration of the stackers can be viewed via:

<https://www.youtube.com/watch?v=TxEeimQSxaM>

The video demonstrates how the stackers will work and shows they accommodate a diverse range of vehicle types. Revisions to the plans also provided an additional 2 visitor bays to ensure that a minimum of 20% of the onsite car parking bays were provided on hard-stand.

A recommended condition of approval is outlined above which requires the applicant to submit a Car Parking Management Plan with a focus on the management of the stacker system as well as generally.

Conclusion:

As is outlined in the above report, the latest revisions of the development plans (**Attachment 1**) and supporting documentation demonstrate that the proposal is largely compliant with the CBACP design guidelines and all other Scheme (TPS6) and Local Policy requirements. All areas of non-compliance have been resolved or adequately justified and the City is confident any outstanding matters are able to be satisfied effectively through recommended conditions of planning approval, as outlined above.

It is noted that objections were received with respect to the amount of parking bays provided on site, despite the proposal demonstrating compliance with the parking requirements of the CBAC design guidelines. A key objective of the CBACP is to reduce the amount of vehicle trips, with a culture shift toward alternative transport methods, including promoting the use of the public transport nodes and corridors the CBAC is centred upon. The parking approach within the Centre area is to move away from the “predict and provide” approach to consider initiatives that focus on management and an “appropriate” supply of car parking promoting alternative transport methods.

As such, the City recommends that the application should be approved, subject to conditions of approval being subsequently satisfied.

DRAWING LIST			
Sheet Number	Sheet Name	Current Revision	Current Revision Date
A001	SURVEY	C	02.06.2017
A010	SITE PLAN - OVERALL	E	31.07.2017
A012	SITE PLAN - LANDSCAPE	E	31.07.2017
A030	SITE PLAN - OVERSHADOWING	B	02.06.2017
A100	FLOOR PLAN - BASEMENT	D	31.07.2017
A101	FLOOR PLAN - GROUND LEVEL	E	31.07.2017
A102	FLOOR PLAN - MEZZANINE LEVEL	C	02.06.2017
A103	FLOOR PLAN - LEVEL 1	D	11.07.2017
A104	FLOOR PLAN - LEVEL 2	D	11.07.2017
A105	FLOOR PLAN - LEVEL 3	D	11.07.2017
A106	FLOOR PLAN - ROOF GARDEN	C	02.06.2017
A200	ELEVATIONS	G	10.08.2017
A201	ELEVATIONS	G	10.08.2017

10.06.2017	G	ISSUED FOR DA - HEIGHT ALTERATIONS
31.07.2017	F	ISSUED FOR DA - COUNCIL AMENDMENTS
11.07.2017	E	ISSUED FOR DA - WINDOW AMENDMENTS
02.06.2017	D	ISSUED FOR DA
DATE	No.	DESCRIPTION
REVISION SCHEDULE		



Contractor to verify all dimensions on site before commencing work. MODUS Design Pty Ltd is to be notified of any discrepancies in the dimensions and setting out of work, for resolution. Copyright of designs shown herein retained by this office. Authority is required for any



l	9444 9511	SITE
f	9444 9522	127 HERDSMAN PI
e	info@vrodex.net.au	WEMBLEY 60
ABN	27 121 224 459	PO BOX 2
ACN	121 224 459	COMO WA 60

COVER SHEET & NOTES

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT # (#47) CLYDESDALE ST.
COMO

MODUS PROJECT	D17-102
DESIGN	5
DRAWN	1
CHECKED	5
SCALE	
DATE	MARCH 20

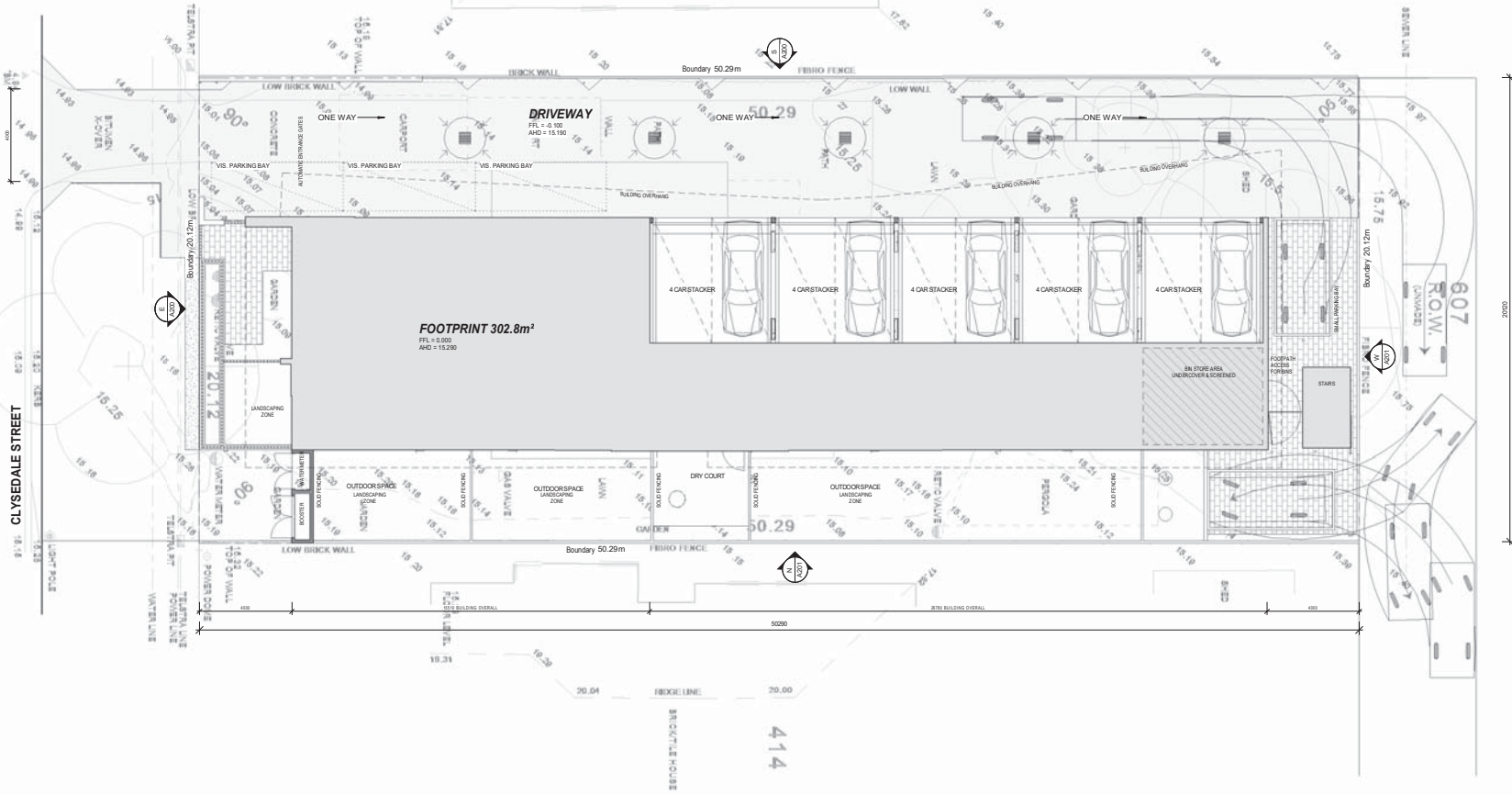


SITE & GENERAL NOTES:

- ALL LEVELS, DIMENSIONS, PORTIONS AND HEIGHTS TO BE SHOWN ON DRAWINGS ARE TO BE TAKEN FROM THE BUILDING WORK, DATA PROVIDED & AVAL.
- FIGURED DIMENSIONS ARE TO BE TAKEN AND NO SCALE OF DIMENSIONS, BE ALLOWED.
- ALL ARCHITECTURAL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH SPECIFICATIONS AND ALL OTHER RELEVANT DOCUMENTS FROM STRUCTURAL, ELECTRICAL, CIVIL, MECHANICAL AND MECHANICAL ENGINEERING.
- ANY DISCREPANCIES ARE TO BE REPORTED TO THE SUPERINTENDENT IMMEDIATELY.
- ALL SETOUT WORK TO BE COMPLETED BY THE CONTRACTOR FOR ELECTRICAL, PLUMBING, MECHANICAL AND CONCRETE LABOUR WORKS.
- REFER TO ENGINEERS DRAWINGS FOR ALL STRUCTURAL WORKS.
- LARGE SCALE DRAWINGS WILL SUPERSEDE SMALL SCALE DRAWINGS.
- CONTRACTOR TO CONFIRM LOCATION, DEPTH AND EXTENT OF ALL UNDER SERVICES AS SHOWN ON SURVEYED LAYOUT AND ADVISE TO THE SUPERINTENDENT OF ANY DISCREPANCIES TO BE RECTIFIED BEFORE COMMENCEMENT.
- CONTRACTOR TO CONFIRM GROUND WATER TABLE AND LEVELS PRIOR TO ANY WORK AND IF ANY DE WATERING IS REQUIRED.
- ALL NECESSARY APPROVALS FROM RELEVANT AUTHORITIES MUST BE OBTAINED PRIOR TO THE COMMENCEMENT OF ANY WORK.
- ALL CONSTRUCTED SURVEY TO BE PROVIDED BY LICENSED SURVEYOR.
- FOR CONSTRUCTION / MODIFICATION INFORMATION REFER TO GEOTECHNICAL REPORT.
- GEOTECHNICAL INVESTIGATIONS HAVE BEEN CARRIED OUT. THE INVESTIGATION CONCLUDES IN THE REPORT TO PROVIDE INFORMATION ON THE NATURE OF THE GROUND TO BE CONSIDERED FOR CONSTRUCTION ESTIMATING AND BUILDING GROUND LEVELS ACROSS THE SITE.
- FOR ALL SITE PREPARATION AND CONSTRUCTION REFER TO CIVIL ENGINEERS DRAWINGS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL PROVIDE COMPACTOR CERTIFICATES FOR CUT AND FILL AREAS CERTIFYING THAT THE AREAS HAVE BEEN ADEQUATELY COMPACTED.
- ALL EXISTING EXPOSED SERVICES INCLUDING UNDERGROUNDS AND ALL EXISTING SERVICES MANHOLES AND MANHOLES ARE TO BE PROTECTED BY CONTRACTOR.
- THE CONTRACTOR SHALL TAKE THE MOVEMENT OF EXISTING SERVICES INTO ACCOUNT AND PROVIDE PROTECTION AS REQUIRED.
- LANDWORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF AS 2980.001 AND SITE GEOTECHNICAL REPORT.
- THE CONTRACTOR SHALL ALLOW FOR DUST CONTROL MEASURES AS REQUIRED.
- SURFACE STABILISATION TO BE APPLIED TO THE EXISTING EXPOSED AREAS OF THE SITE AS SOON AS POSSIBLE AFTER COMPLETION OF SECTION OF WORK.

Lot No.	Addressable Lotting Area	Block Area	Block Area	Block Area
1	75.00m	65.00m	51.00m	45.00m
2	75.00m	65.00m	51.00m	45.00m
3	125.00m	112.00m	65.00m	45.00m
4	74.00m	65.00m	51.00m	45.00m
5	75.00m	65.00m	51.00m	45.00m
6	75.00m	65.00m	51.00m	45.00m
7	48.00m	41.00m	34.00m	30.00m
8	74.00m	65.00m	51.00m	45.00m
9	75.00m	65.00m	51.00m	45.00m
10	74.00m	65.00m	51.00m	45.00m
11	75.00m	65.00m	51.00m	45.00m
12	75.00m	65.00m	51.00m	45.00m
13	48.00m	41.00m	34.00m	30.00m
14	74.00m	65.00m	51.00m	45.00m
15	75.00m	65.00m	51.00m	45.00m
16	74.00m	65.00m	51.00m	45.00m
17	75.00m	65.00m	51.00m	45.00m
18	75.00m	65.00m	51.00m	45.00m
19	48.00m	41.00m	34.00m	30.00m
20	74.00m	65.00m	51.00m	45.00m
21	75.00m	65.00m	51.00m	45.00m

CLYDESDALE STREET



1 SITE PLAN
SCALE 1 : 100

DATE	REVISION	DESCRIPTION
11/01/2017	1	FOR SUBMITTAL TO SA - COUNCIL
11/01/2017	2	FOR SUBMITTAL TO SA - COUNCIL
11/01/2017	3	FOR SUBMITTAL TO SA - COUNCIL
11/01/2017	4	FOR SUBMITTAL TO SA - COUNCIL
11/01/2017	5	FOR SUBMITTAL TO SA - COUNCIL
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11/01/2017	96	FOR SUBMITTAL TO SA - COUNCIL
11/01/2017	97	FOR SUBMITTAL TO SA - COUNCIL
11/01/2017	98	FOR SUBMITTAL TO SA - COUNCIL
11/01/2017	99	FOR SUBMITTAL TO SA - COUNCIL
11/01/2017	100	FOR SUBMITTAL TO SA - COUNCIL



Contractor to verify all dimensions on site before commencing work. MODUS Design Pty Ltd is not liable for any discrepancies in the dimensions and setting out of the work, for re-orientation. Contractor of nature of work is not liable for any discrepancies in the dimensions and setting out of the work, for re-orientation. Authority is required for any re-orientation.



1	04/04/2017	04/04/2017
2	04/04/2017	04/04/2017
3	04/04/2017	04/04/2017
4	04/04/2017	04/04/2017
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95	04/04/2017	04/04/2017
96	04/04/2017	04/04/2017
97	04/04/2017	04/04/2017
98	04/04/2017	04/04/2017
99	04/04/2017	04/04/2017
100	04/04/2017	04/04/2017

SITE PLAN - OVERALL

PROPOSED APARTMENT DEVELOPMENT FOR YARAN GROUP LOT # (47) CLYDESDALE ST. COM3

DESIGN	MODUS	DIT-1028
DESIGN	MODUS	MODUS
CHECKED	MODUS	MODUS
SCALE	1:100	MODUS
DATE	MARCH 2017	MODUS
REVISION	E	MODUS
A1	MODUS	A010

LANDSCAPING NOTE

ALLOW TO CARRY OUT AUTOMATIC RETICULATION CONNECTION TO THE MAINLINE WATER SUPPLY IN ACCORDANCE WITH THE AUTOMATIC TRIGGER LOCATED INSIDE BUILDING MAIN SWITCH BOARD. DIVISION OF AREAS TO BE WATERED DETERMINED ON SITE.

UNDERSTAKE RETICULATION DESIGN BY AN APPROVED CONTRACTOR WHICH MUST BE APPROVED BY THE SUPERINTENDENT PRIOR TO INSTALLATION.

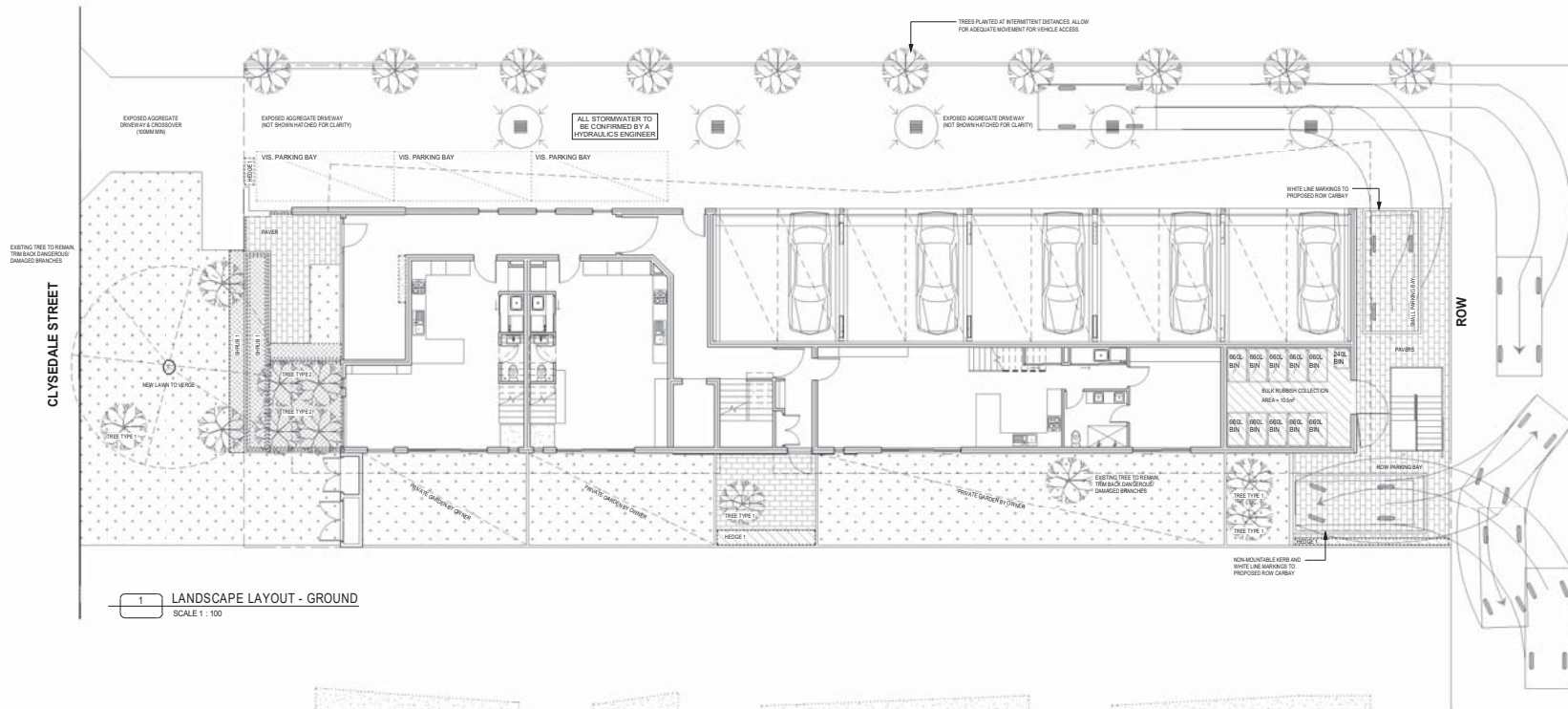
ALL LANDSCAPING/SEEDS TO BE MATCHED TO ACEPTH OF 35mm WITH RARE/COLOR MATCH.

PLANTING BEDS SHALL HAVE A MINIMUM DEPTH OF 100mm OF SUB SOIL. SOIL TYPE OF SUSTAINABLE/HORTICULTURAL QUALITY, FREE OF ALL CONTAMINANTS SUCH AS LIMESTONE, ROAD BASE MATERIAL, CEMENT, CONCRETE, ROCK AND SLURRIES/SLURRY.

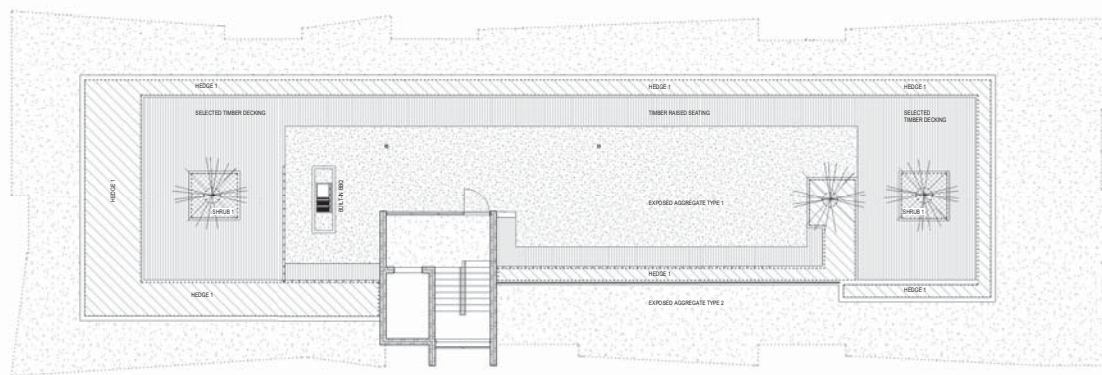
ALL PLANTS SHALL BE NURSERY GROWN DURING PLANTING WITH A SLOW RELEASE FERTILIZER TO BE APPLIED AT THE RATE OF 182-610.

REFER HYDRAULIC DRAWINGS FOR LOCATION OF HOSECOCKS.

LANDSCAPING TO ALLOW CONNECTING TO MAIN SUPPLY OF WATER AT 0.6



1 LANDSCAPE LAYOUT - GROUND
SCALE 1 : 100



2 LANDSCAPE LAYOUT - ROOF GARDEN
SCALE 1 : 100



31.07.2017	E	ISSUED FOR DA - COUNCIL AMENDMENTS
02.06.2017	D	ISSUED FOR DA
18.05.2017	C	ISSUED FOR DA COMMENT AS PER COUNCIL FEEDBACK
06.04.2017	B	ISSUED FOR DA COMMENT
27.03.2017	A	ISSUED FOR DA COMMENT
DATE	No.	DESCRIPTION
REVISION SCHEDULE		



Contractor to verify all dimensions on site before commencing work. MODUS Design Pty Ltd is to be notified of any discrepancies in the dimensions and setting out of work, for resolution. Copyright of designs shown herein is retained by this office. Authority is required for any reproduction.



t 9444 9511 SUITE 1
f 9444 9522 127 HERDSMAN RD
e info@erodie.net.au WEMBLEY 6011

ABN 27 121 224 459 PO BOX 22
ACN 121 224 459 COMO WA 6955

SITE PLAN - LANDSCAPE

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT # (#47) CLYDESDALE ST.
COMO

MODUS PROJECT	D17-1022
DESIGN	SK
DRAWN	M
CHECKED	SV
SCALE	1 : 10
DATE	MARCH 2011

A1



07.06.2017	B	REISSUED FOR GA
18.06.2017	A	REISSUED FOR GA COMMENT AS PER COUNCIL FEEDBACK
DATE	No.	DESCRIPTION
REVISION SCHEDULE		



Contractor to verify all dimensions on site before commencing work. MODUS Design Pty Ltd is to be notified of any discrepancies in the dimensions and setting out of work, for resolution. Copyright of designs shown herein is retained by this office. Authority is required for any reproduction.



t 9444 9511 SUITE 1
 f 9444 9532 127 HEROSMAN PO
 e info@vmoda.net.au WEMBLEY 601
 ABN 27 121 234 459 PO BOX 22

SITE PLAN - OVERSHADOWING

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT # (#47) CLYDESDALE ST.
COMO

MODUS PROJECT	D17-102
DESIGN	SH
DRAWN	M
CHECKED	SV
SCALE	1:20
DATE	MARCH 2011

A1

- [illegible]

[illegible]

* ALL COMMON AREAS INCLUDING CORRIDORS, ACCESSWAYS, TRUNCATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS1428.1-2009 SECTION 6 - CONTINUOUS ACCESSIBLE PATHS OF TRAVEL.



1 FFL (BASEMENT)
SCALE 1 : 100



31.07.2017	D	REDISSUED FOR DA - COUNCIL AMENDMENTS
02.08.2017	C	REDISSUED FOR DA
18.08.2017	B	REDISSUED FOR DA COMMENT AS TO COUNCIL FEEDBACK
27.03.2017	A	ISSUED FOR DA COMMENT
DATE	No.	DESCRIPTION
REVISION SCHEDULE		



Contractor to verify all dimensions on site before commencing work. MODUS Design Pty Ltd is to be notified of any discrepancies in the dimensions and setting out of work, for resolution. Copyright of designs shown herein is retained by this office. Authority is required for any reproduction.



t 9444 9511 SUITE 1
 f 9444 9522 127 HEROSMAN PO
 e info@vmodex.net.au WEMBLEY 601
 ABN 27 121 224 459 PO BOX 22
 A/CN 121 224 459 CORNO WA 600

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT # (#47) CLYDESDALE ST
COMO

MODUS PROJECT	D17-1028
DESIGN	SH
DRAWN	M
CHECKED	SWN
SCALE	1 : 10
DATE	MARCH 2011
REVISION	D
A1	A100
DWG	

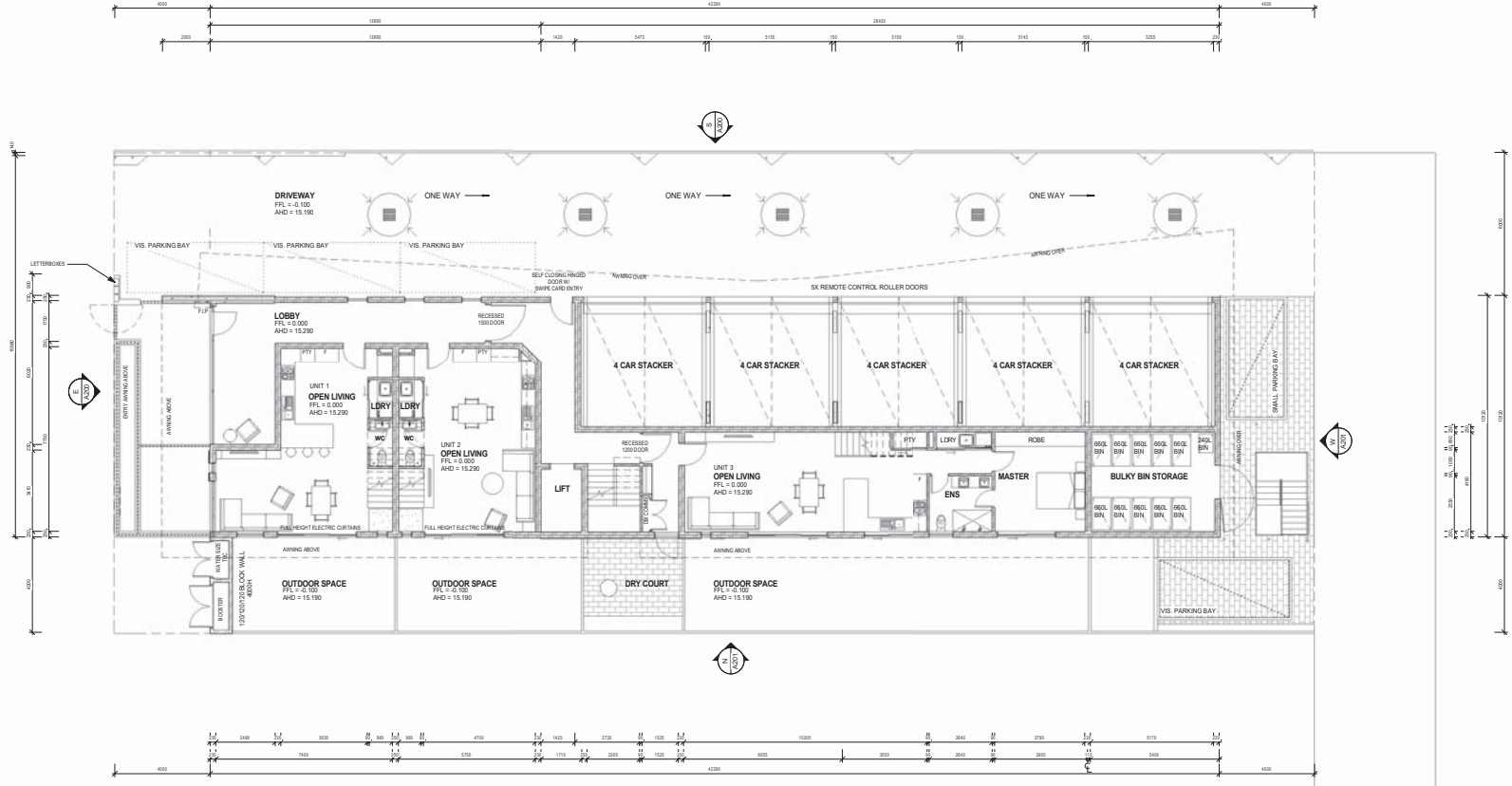
SITE & GENERAL NOTES:

- ALL LEVELS, DIMENSIONS, POSITIONS AND HEIGHTS TO BE VERIFIED ON SITE BEFORE COMMENCING ANY BUILDING WORK. DATA PROVIDED IS AS FOLLOWS:
- EXISTING DIMENSIONS TO BE CHECKED AND NO SOLING OF DIMENSIONS WILL BE ALLOWED.
- ALL MECHANICAL, ELECTRICAL AND PLUMBING WORK TO BE IN ACCORDANCE WITH SPECIFICATIONS AND ALL OTHER RELEVANT STANDARDS FOR STRUCTURAL, ELECTRICAL, CIVIL, HYDRAULICS AND MECHANICAL ENGINEERING.
- ANY DISCREPANCIES ARE TO BE REPORTED TO THE SUPERINTENDENT IMMEDIATELY.
- ALL SETOUT WORK TO BE COMPLETED BY THE CONTRACTOR FOR ELECTRICAL, PLUMBING, MECHANICAL AND CONCRETE LABOUR WORKS.
- REFER TO ENGINEERING DRAWINGS FOR ALL STRUCTURAL WORKS.
- ENGINEER'S DRAWINGS WILL SUPERSEDE SMALL SCALE DRAWINGS.
- CONTRACTOR TO CONFIRM LOCAL SETTING AND EXTENT OF ALL OTHER SERVICES AS SHOWN ON SERVICES LAYOUT PLANS PRIOR TO THE COMMENCEMENT OF ANY WORK. ENGINEER TO BE NOTIFIED OF ANY DISCREPANCIES.
- CONTRACTOR TO CONFIRM GROUND WATER TABLE AND LEVELS PRIOR TO ANY WORK AND IF ANY DR. WATERING IS REQUIRED.
- ALL NECESSARY APPROVALS FROM RELEVANT AUTHORITIES TO BE OBTAINED PRIOR TO THE COMMENCEMENT OF ANY WORK.
- AS CONSTRUCTED SURVEY TO BE PROVIDED BY LICENSED SURVEYOR.
- FOR CONSTRUCTION INFORMATION, INFORMATION REFER TO GEOTECHNICAL REPORT.
- GEOTECHNICAL INFORMATION HAS BEEN OBTAINED FROM THE INFORMATION CONTAINED IN THE REPORTS AND INFORMATION ON THE BASIS OF THE GEOTECHNICAL REPORT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A COMPLETE DESCRIPTION OF CONDITIONS EXISTING AT OR BELOW GROUND LEVEL, PRIOR TO THE SITE.
- FOR ALL SITE PREPARATION AND COMPACTING, REFER TO ENGINEERING DRAWINGS AND SPECIFICATION.
- THE CONTRACTOR SHALL PROVIDE INFORMATION TO THE LOCAL COUNCIL AND ALL RELEVANT AGENCIES THAT THE PROJECT WILL BE IN ACCORDANCE WITH ALL RELEVANT REGULATIONS AND STANDARDS.
- ALL EXISTING UTILITIES SHALL BE IDENTIFIED, MARKED AND ALL EXISTING SERVICES, MANHOLES, VALVES, ETC. AND SHALL BE PROTECTED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL LIMIT THE MOVEMENT OF EQUIPMENT AND MATERIALS TO THE WORK SITE ONLY.
- LANDSCAPING ARE TO BE COMPLETED IN ACCORDANCE WITH THE REQUIREMENTS OF AS 3700-2017 AND SITE GEOTECHNICAL REPORT.
- THE CONTRACTOR SHALL ALLOW FOR DUST CONTROL MEASURES AS REQUIRED.
- CONTRACTOR SHALL BE APPLIED TO THE TOTAL DISTURBED AREA OF THE SITE AS SOON AS POSSIBLE AFTER COMPLETION OF SECTION OF WORK.

- LEGEND**
- DOOR/FRAME - REFER TO ROOF PLAN FOR SIZE AND LOCATION
 - STRUCTURAL COLUMN - REFER TO STRUCTURAL ENGINEERS DRAWING FOR DETAIL
 - DISCREPANCY IN RELATION TO AND
 - AND CONSTRUCTION UNIT - REFER TO SPECIFICATION
 - TOILET PAN - REFER TO SPECIFICATION
 - UNIT - REFER TO SPECIFICATION
 - PROVIDE - REFER TO BUILDERS SPECIFICATION
 - UNDER BENCH OVERSINKER WITH PLATE & RAINWATER DRAIN - REFER TO BUILDERS SPECIFICATION
 - WASHING MACHINE WITH OVERSINKER - REFER TO SPECIFICATION
 - HOSE COCK - REFER TO HYDRAULIC SPECIFICATION
 - HOT WATER UNIT - REFER TO HYDRAULIC SPECIFICATION
 - DISH WASHER - REFER TO BUILDERS SPECIFICATION
 - DISH WASHER - REFER TO BUILDERS SPECIFICATION
 - LAUNDRY TROUGH - REFER TO BUILDERS SPECIFICATION
 - MECHANICAL - REFER TO BUILDERS SPECIFICATION
 - GAULS STEEL BOLDED - REFER TO DETAIL

DESIGN FOR ACCESS AND MOBILITY:

- ALL COMMON AREAS INCLUDING CORRIDORS, STAIRS, LIFTS, ELEVATORS, ENTRANCES AND EXITS SHALL BE DESIGNED TO BE ACCESSIBLE TO ALL PEOPLE INCLUDING THOSE WITH PHYSICAL DISABILITIES.



DATE	REVISION	DESCRIPTION
11.01.2017	1	ISSUED FOR CA - COUNCIL
11.01.2017	2	ISSUED FOR CA - COUNCIL
11.01.2017	3	ISSUED FOR CA - COUNCIL
11.01.2017	4	ISSUED FOR CA - COUNCIL
11.01.2017	5	ISSUED FOR CA - COUNCIL
11.01.2017	6	ISSUED FOR CA - COUNCIL
11.01.2017	7	ISSUED FOR CA - COUNCIL
11.01.2017	8	ISSUED FOR CA - COUNCIL
11.01.2017	9	ISSUED FOR CA - COUNCIL
11.01.2017	10	ISSUED FOR CA - COUNCIL



Consultant to verify all dimensions on site before commencing work. MODUS DESIGN PTY LTD is not responsible for any discrepancies in the dimensions and setting out of the work for construction. Consistent of nature shown hereafter. If a discrepancy is found, Authority is required for any modification.



1	0444 8011	0444 8011
2	0444 8012	0444 8012
3	0444 8013	0444 8013
4	0444 8014	0444 8014
5	0444 8015	0444 8015
6	0444 8016	0444 8016
7	0444 8017	0444 8017
8	0444 8018	0444 8018
9	0444 8019	0444 8019
10	0444 8020	0444 8020

FLOOR PLAN - GROUND LEVEL

PROPOSED APARTMENT DEVELOPMENT FOR YARAN GROUP LOT # (47) CLYDESDALE ST. COM3

DESIGN	MODUS
DRAWN	MODUS
CHECKED	MODUS
SCALE	1:100
DATE	MARCH 2017
REVISION	E
A1	AWG
A101	A101

- [illegible]

LEGEND

- | | |
|----------|--|
| REF | DOOR- REFER TO ROOF PLAN FOR SIZE AND LOCATION |
| 17.00 | STRUCTURAL COLUMN - REFER TO STRUCTURAL EGRESS AND |
| | DESIGN- IN RELATION TO HW |
| AC | ALL CONDITIONING UNIT - REFER TO SPECIFICATION |
| VC | TOLLET PAN - REFER TO SPECIFICATION |
| W | WATER - REFER TO SPECIFICATION |
| FR | FRIDGE - REFER TO BUILDERS SPECIFICATION |
| CH/EN/SP | UNDER BENCH/ON UNDER WITH HOT RATE & RANGEOOD - |
| | REFER TO BUILDERS SPECIFICATION |
| EMERY | EMERY - REFER TO SPECIFICATION |
| SHR | SHOWER - REFER TO SPECIFICATION |
| HW | HOSE COCK - REFER TO SPECIFICATION |
| HW | HOSE COCK - REFER TO HYDRAULIC DWG |
| DRU | DRY WASHINER - REFER TO BUILDERS SPECIFICATION |
| S | SINK - REFER TO BUILDERS SPECIFICATION |
| P | PAN - REFER TO BUILDERS SPECIFICATION |
| LA | LAUNDRY TROUGH - REFER TO BUILDERS SPECIFICATION |
| MC | MICROWAVE - REFER TO BUILDERS SPECIFICATION |
| B | GL.V. STE. BOLLARD - REFER TO DETAIL |

DESIGN FOR ACCESS AND MOBILITY:

- ALL COMMON AREAS INCLUDING CORRIDORS, ACCESSWAYS, TRUNCATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS 1428.1-20 SECTION 6 - CONTIGUOUS ACCESSIBLE PATHS OF TRAVEL.



1 FFL (MEZZANINE LEVEL)
SCALE 1 : 100



A1

SITE & GENERAL NOTES:

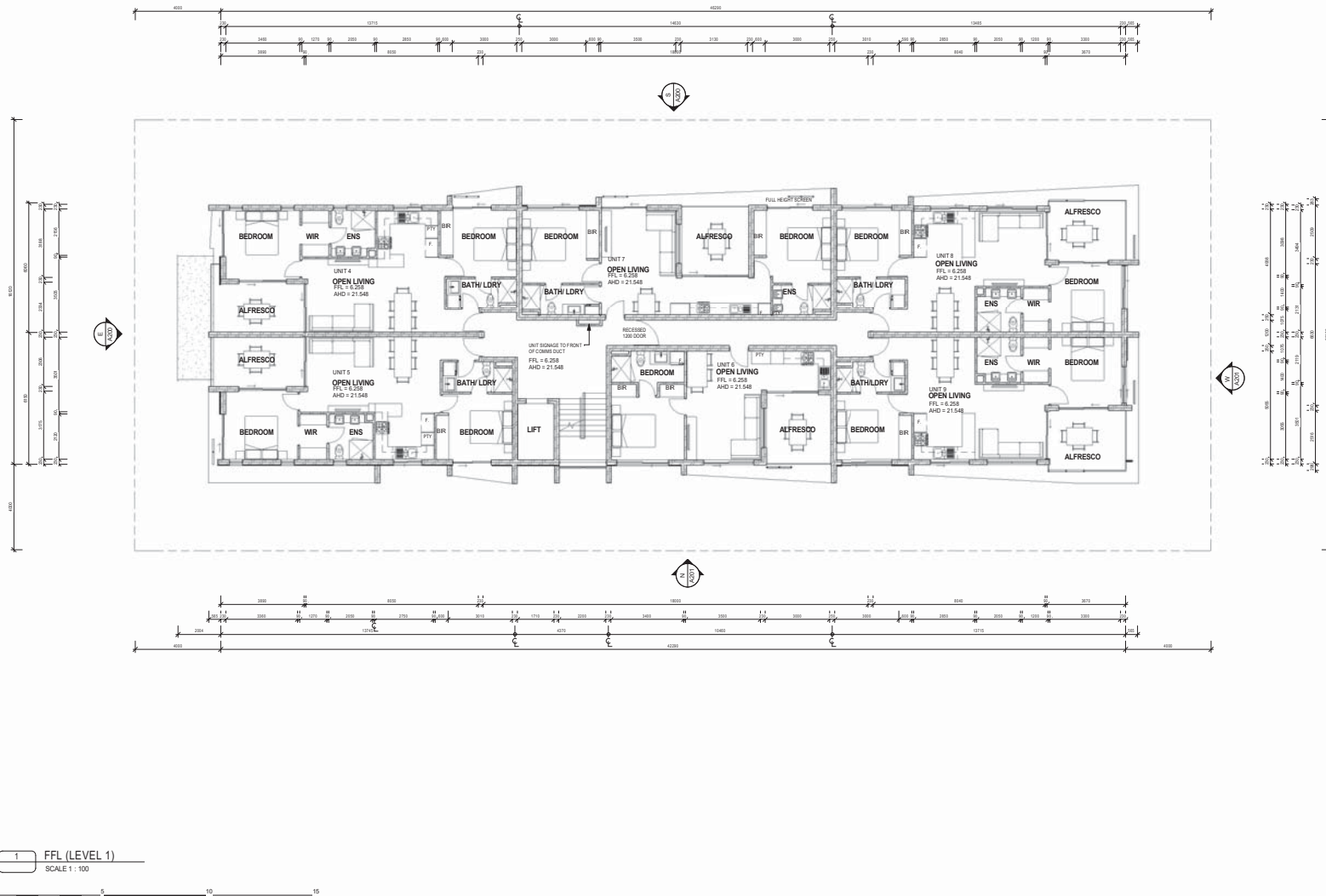
- ALL LEVELS, DIMENSIONS POSITIONS AND HEIGHTS TO BE VERIFIED ON SITE BEFORE COMMENCING ANY BUILDING WORK. DATA PROVIDED IS AID.
- FIXED DIMENSIONAL LINES TO BE SHOWN AND NO SINKING OF DRIVE RISE WILL BE ALLOWED.
- ALL MECHANICAL DRAINAGE ARE TO BE MADE IN CONJUNCTION WITH SPECIFICATIONS AND ALL OTHER RELEVANT DRAWINGS FROM STRUCTURAL, ELECTRICAL, CIVIL, HYDRAULICS AND MECHANICAL ENGINEERS.
- ANY DISCREPANCIES ARE TO BE REPORTED TO THE SUPERINTENDENT IMMEDIATELY.
- ALL SETOUT WORK TO BE COMPLETED BY THE CONTRACTOR FOR ELECTRICAL, PLUMBING, BETWEEN, EARTHWORKS AND CONCRETE LABOUR WORKS.
- REFER TO ENGINEERS DRAWINGS FOR ALL STRUCTURAL WORKS.
- LIKED SCALE DIMENSIONS WILL SUPERSEDE SMALL SCALE DRAWINGS.
- CONTRACTOR TO CONFIRM LOCAL SETTING AND EXTENT OF ALL OTHER SERVICES AS SHOWN ON SERVICES LAYOUT PLANS PRIOR TO THE COMMENCEMENT OF ANY WORK. ENGINEER TO BE NOTIFIED UPON DISCREPANCIES.
- CONTRACTOR TO CONFIRM GROUND WATER TABLE AND LEVELS PRIOR TO ANY WORK AND IF ANY DR. WATERING IS REQUIRED.
- ALL NECESSARY APPROVALS FROM RELEVANT AUTHORITIES TO BE OBTAINED PRIOR TO THE COMMENCEMENT OF ANY WORK.
- AS COMPLETED SURVEY TO BE PROVIDED BY LICENSED SURVEYOR.
- FOR CONSTRUCTION, IDENTIFICATION INFORMATION REFER TO GEOTECHNICAL REPORT.
- GEOTECHNICAL INVESTIGATION HAVE BEEN CARRIED OUT. THE INFORMATION CONTAINED IN THE REPORTS IS INFORMATION ON THE BASIS OF THE GEOTECHNICAL INVESTIGATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS FOR THE COMMENCEMENT OF ANY WORK.
- FOR ALL SITE PREPARATION AND CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE COMPARISON, IDENTIFICATION FOR CUT AND FILL AREAS, CERTIFYING THAT THE AREAS HAVE BEEN ADEQUATELY COMPLETED.
- ALL EXISTING DETACHED HOUSES, BUILDINGS, TREES AND ALL EXISTING SERVICES, MANHOLES, ALL SERVICES AND AREAS TO BE PROTECTED BY CONTRACTOR.
- THE CONTRACTOR SHALL LIMIT THE MOVEMENT OF EQUIPMENT AND MANPOWER TO THE WORK SITE ONLY.
- EARTHWORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF AS 3799-2007 AND SITE GEOTECHNICAL REPORT.
- THE CONTRACTOR SHALL ALLOW FOR DUST CONTROL MEASURES AS REQUIRED.
- SURFACE DRAINAGE TO BE APPLIED TO THE TOTAL DISTURBED AREA OF THE SITE AS SOON AS POSSIBLE AFTER COMPLETION OF SECTIONS OF WORK.

LEGEND

- REF: J/P - REFER TO J/P PLAN FOR SIZE AND LOCATION. STRUCTURAL COLUMN - REFER TO STRUCTURAL ENGINEERING DRAWING FOR DETAIL.
- LEVEL - REFER TO SPECIFICATION.
- AC - AIR CONDITIONING UNIT - REFER TO SPECIFICATION.
- TL - TOLL FREE - REFER TO SPECIFICATION.
- VB - VANITY BATH - REFER TO SPECIFICATION.
- F - FLOOR - REFER TO BUILDERS SPECIFICATION.
- UNDER BENCH DRAIN UNDER WASH HAND BASIN & SINK/DRAINAGE OVER - REFER TO BUILDERS SPECIFICATION.
- WASHING MACHINE WITH DRAIN OVER - REFER TO SPECIFICATION.
- WIR - WIRING - REFER TO SPECIFICATION.
- HC - HOSE COCK - REFER TO HYDRAULIC SPEC.
- NOT WATER UNIT - REFER TO HYDRAULIC SPECIFICATION.
- DISH WASHER - REFER TO BUILDERS SPECIFICATION.
- S - SINK - REFER TO BUILDERS SPECIFICATION.
- WASH - REFER TO BUILDERS SPECIFICATION.
- LAUNDRY TROUGH - REFER TO BUILDERS SPECIFICATION.
- MW - MECHANICAL - REFER TO BUILDERS SPECIFICATION.
- B - ONLY STEEL BOLLARD - REFER TO DETAIL.

DESIGN FOR ACCESS AND MOBILITY:

- ALL COMMON AREAS, WALKWAYS, DRIVEWAYS AND AREAS SHALL BE DESIGNED IN ACCORDANCE WITH AS/NZS 15939:2009 BUILDING - CONTINGENTS ACCESSIBLE PATHS OF TRAVEL.



DATE	REVISION	DESCRIPTION
11/01/2017	0	ISSUED FOR CONSTRUCTION
11/01/2017	1	ISSUED FOR CONSTRUCTION
11/01/2017	2	ISSUED FOR CONSTRUCTION
11/01/2017	3	ISSUED FOR CONSTRUCTION
11/01/2017	4	ISSUED FOR CONSTRUCTION



Contractor to verify all dimensions on site before commencing work. MODUS DESIGN PTY LTD is not responsible for any discrepancies in the dimensions and setting out of the work for construction. Contractor to ensure all work is in accordance with the relevant standards and specifications.



1	0444 8011	0444 8011
2	0444 8012	0444 8012
3	0444 8013	0444 8013
4	0444 8014	0444 8014
5	0444 8015	0444 8015

FLOOR PLAN - LEVEL 1

PROPOSED APARTMENT DEVELOPMENT FOR YARAN GROUP LOT # (M47) CLYDESDALE ST. COMB

REVISION	DATE	DESCRIPTION
1	0444 8011	0444 8011
2	0444 8012	0444 8012
3	0444 8013	0444 8013
4	0444 8014	0444 8014
5	0444 8015	0444 8015

A1 DWG: A103

- LEGEND

- | | |
|-------|--|
| BRP | DOWP - REFER TO ROOF PLAN FOR SIZE AND LOCATION |
| CS | STRUCTURAL COLUMN - REFER TO STRUCTURAL ENGINEER'S DRAWING |
| TC | DESIGN LEVEL, IN RELATION TO AHD |
| AC | AIR CONDITIONING UNIT - REFER TO SPECIFICATION |
| NC | TOILET PAN - REFER TO SPECIFICATION |
| VB | VANITY BASIN - REFER TO SPECIFICATION |
| UB | UNDER BENCH - REFER TO BUILDERS SPECIFICATION |
| CHENP | UNDER BENCH CHEN UNDER WITH HOT PLATE & RANGE HOOD - REFER TO BUILDERS SPECIFICATION |
| CH | CHINA - REFER TO SPECIFICATION |
| SHB | SINK - REFER TO BUILDERS SPECIFICATION |
| HC | HOSE COCK - REFER TO HYDRAULIC DGN |
| NBW | NOT WATER UNIT - REFER TO HYDRAULIC SPECIFICATION |
| DSH | DISH WASH - REFER TO BUILDERS SPECIFICATION |
| S | SINK - REFER TO BUILDERS SPECIFICATION |
| P | PANTRY - REFER TO BUILDERS SPECIFICATION |
| SS | STOVE - REFER TO BUILDERS SPECIFICATION |
| MC | MICROWAVE - REFER TO BUILDERS SPECIFICATION |
| BV | B.V. ST. ST. BOLLARD - REFER TO DETAILS |

DESIGN FOR ACCESS AND MOBILITY:

- ALL COMMON AREAS INCLUDING
CORRIDORS, ACCESSWAYS,
TRUNCATIONS HAVE BEEN DESIGNED
IN ACCORDANCE WITH AS1428.1-2009
SECTION 5 - CONTINUOUS
ACCESSIBLE PATHS OF TRAVEL.



1 FFL (LEVEL 2)
SCALE 1 : 100



11.07.2017	D	ISSUED FOR DA - WINDO AMENDMENTS
02.06.2017	C	ISSUED FOR DA
18.05.2017	B	ISSUED FOR DA COMMENT COUNCIL FEEDBACK
27.03.2017	A	ISSUED FOR DA COMMENT
DATE	Ref	DESCRIPTION
REVISION SCHEDULE		



Contractor to verify all dimensions on site before commencing work. MODUS Design Pty Ltd is to be notified of any discrepancies in the dimensions and setting out of the work for resolution. Copyright of designs shown herein is retained by this office. Authority is required for any reproduction.



t 9444 9511 SUITE 13
 f 9444 9522 127 HERDSMAN POE
 e info@moda.net.au WEMBLEY 6014
 ABN 27 121 224 459 PO BOX 222

FLOOR PLAN - LEVEL 2

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT # (#47) CLYDESDALE ST
COMO

MODUS PROJECT	D17-1028
DESIGN	SW
DRAWN	MS
CHECKED	SWNH
SCALE	1: 100
DATE	MARCH 2017
REVISION	D
A1	A104

SITE & GENERAL NOTES:

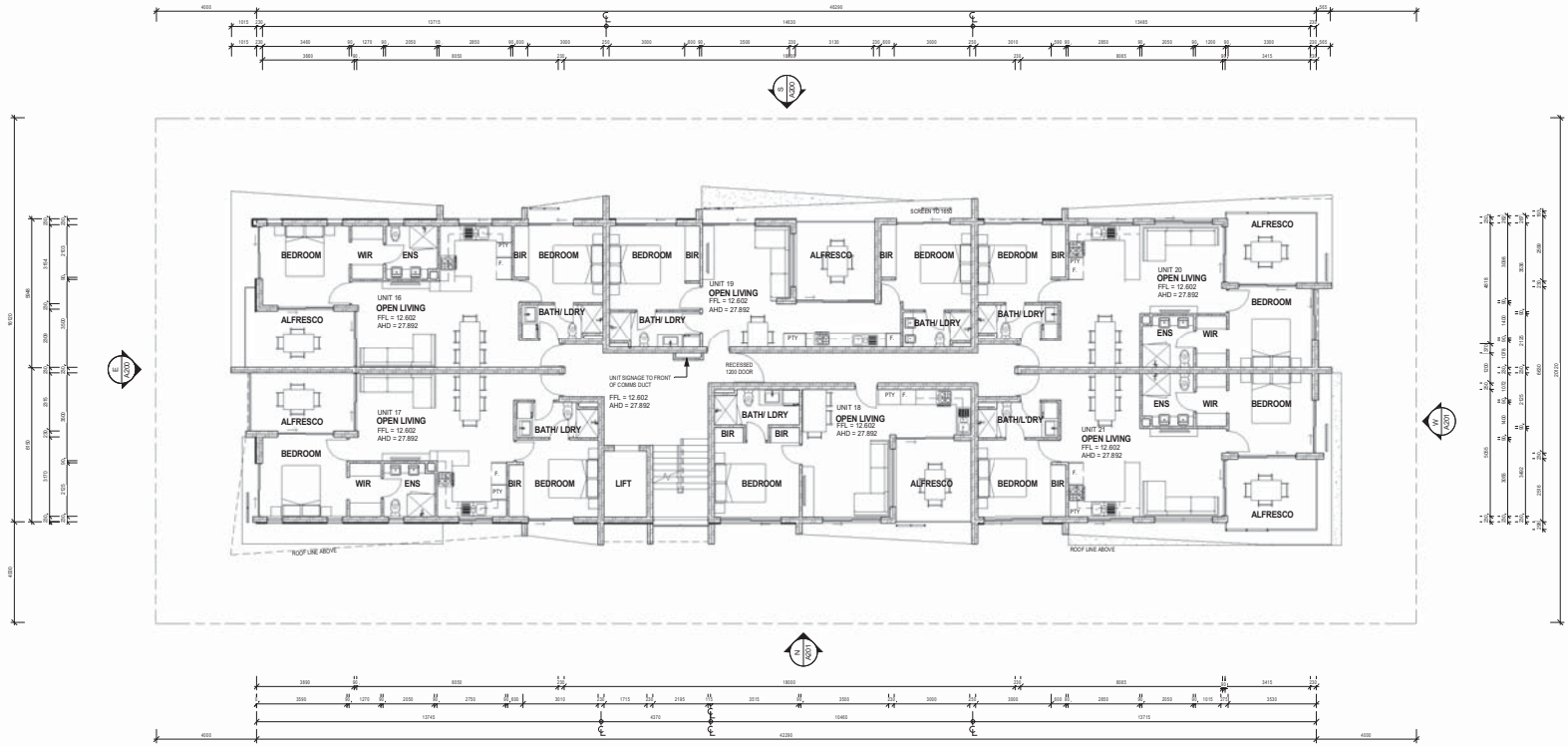
- ALL LEVELS, DIMENSIONS POSITIONS AND HEIGHTS TO BE VERIFIED ON SITE BEFORE COMMENCING ANY BUILDING WORK. DATA PROVIDED IS AS SHOWN.
- EXISTING DIMENSIONAL LINES TO BE SHOWN AND NO SOLID OF DIMENSIONS WILL BE ALLOWED.
- ALL MECHANICAL DRAWINGS ARE TO BE MADE IN CONJUNCTION WITH SPECIFICATIONS AND ALL OTHER MECHANICAL DRAWINGS FROM STRUCTURAL, ELECTRICAL, CIVIL, HYDRAULICS AND MECHANICAL ENGINEERS.
- ANY DISCREPANCIES ARE TO BE REPORTED TO THE SUPERINTENDENT IMMEDIATELY.
- ALL SETOUT WORK TO BE COMPLETED BY THE CONTRACTOR FOR ELECTRICAL, PLUMBING, BETWEEN, EARTHWORKS AND CONCRETE LAYOUT WORKS.
- REFER TO ENGINEERS DRAWINGS FOR ALL STRUCTURAL WORKS.
- UNDER NO CIRCUMSTANCES WILL SUPERVISOR SMALL SCALE DRAWINGS.
- CONTRACTOR TO CONFIRM LOCALITY, SETTING AND EXTENT OF ALL OTHER SERVICES AS SHOWN ON SERVICES LAYOUT PLANS PRIOR TO THE COMMENCEMENT OF ANY WORK. ENGINEER TO BE NOTIFIED OF ANY DISCREPANCIES.
- CONTRACTOR TO CONFIRM GROUND WATER TABLE AND LEVELS PRIOR TO ANY WORK AND IF ANY DR. WATERING IS REQUIRED.
- ALL NECESSARY APPROVALS FROM RELEVANT AUTHORITIES TO BE OBTAINED PRIOR TO THE COMMENCEMENT OF ANY WORK.
- AS COMPLETED SURVEY TO BE PROVIDED BY LICENSED SURVEYOR.
- FOR CONSTRUCTION, INVESTIGATION INFORMATION REFER TO GEOTECHNICAL REPORT.
- ALL INFORMATION, INVESTIGATION AND BEEN OBTAINED OUT THE INFORMATION CONTAINED IN THE REPORTS IS INFORMATION ON THE BASIS OF THE SURVEYING AND TEST DATA TEST LOCATION. A COMPLETE DESCRIPTION OF CONDITIONS EXISTING AT OR BELOW GROUND LEVEL, INSIDE THE SITE.
- FOR ALL SITE PREPARATION AND COMPACTION, REFER TO CIVIL ENGINEERS DRAWINGS AND SPECIFICATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS FOR THE WORKS TO BE COMPLETED.
- ALL EXISTING DETAILS AND/OR EXISTING BUILDINGS, TREES AND ALL EXISTING SERVICES, MANHOLES, IN, ON, UNDER AND AROUND TO BE PROTECTED BY CONTRACTOR.
- THE CONTRACTOR SHALL LIMIT THE MOVEMENT OF EQUIPMENT AND MANPOWER TO THE WORK SITE ONLY.
- EARTHWORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF AS 3799-2017 AND SITE GEOTECHNICAL REPORT.
- THE CONTRACTOR SHALL ALLOW FOR JUST CONTROL, MEASURES AS REQUIRED.
- SURFACE DEMARCATION TO BE APPLIED TO THE TOTAL ESTIMATED AREA OF THE SITE AS SOON AS POSSIBLE AFTER COMPLETION OF SETTING OF WORK.

LEGEND

- BSPP - REFER TO ROOF PLAN FOR SIZE AND LOCATION
- STRUCTURAL COLUMN - REFER TO STRUCTURAL ENGINEERS DRAWING FOR DETAIL
- DISCREPANCY - REFER TO SPECIFICATION
- TOILET PAN - REFER TO SPECIFICATION
- WIRY BATH - REFER TO SPECIFICATION
- FRIDGE - REFER TO BUILDERS SPECIFICATION
- UNDER BENCH COVEN UNDER WITH HOT PLATE & RANGEROOD COVEN - REFER TO SPECIFICATION
- WASHING MACHINE WITH DRYER OVER - REFER TO SPECIFICATION
- SHOWER - REFER TO SPECIFICATION
- HOSE COCK - REFER TO HYDRAULIC DRAWING
- HOT WATER UNIT - REFER TO HYDRAULIC DRAWING
- DRY - REFER TO BUILDERS SPECIFICATION
- SH - REFER TO BUILDERS SPECIFICATION
- P - REFER TO BUILDERS SPECIFICATION
- LAUNDRY TROUGH - REFER TO BUILDERS SPECIFICATION
- ACROBATH - REFER TO BUILDERS SPECIFICATION
- S - GALV STEEL ROOFING - REFER TO DETAIL

DESIGN FOR ACCESS AND MOBILITY:

- ALL COMMON AREAS INCLUDING CORRIDORS, LIFTS AND STAIRS HAVE BEEN DESIGNED TO BE ACCESSIBLE BY ALL PEOPLE WITH A PHYSICAL DISABILITY.
- ACCESSIBLE PATHS OF TRAVEL.



NORTH



DATE	REVISION	DESCRIPTION
11/07/2017	1	ISSUED FOR CONSTRUCTION
11/07/2017	2	ISSUED FOR CONSTRUCTION
11/07/2017	3	ISSUED FOR CONSTRUCTION
11/07/2017	4	ISSUED FOR CONSTRUCTION
11/07/2017	5	ISSUED FOR CONSTRUCTION



Contractor to verify all dimensions on site before commencing work. MODUS DESIGN PTY LTD is not responsible for any discrepancies in the dimensions and setting out of the work for construction. Contractor to ensure all work is in accordance with the relevant standards and specifications.



NO.	DATE	DESCRIPTION
1	04/04/2017	ISSUED FOR CONSTRUCTION
2	04/04/2017	ISSUED FOR CONSTRUCTION
3	04/04/2017	ISSUED FOR CONSTRUCTION
4	04/04/2017	ISSUED FOR CONSTRUCTION
5	04/04/2017	ISSUED FOR CONSTRUCTION

FLOOR PLAN - LEVEL 3

PROPOSED APARTMENT DEVELOPMENT FOR YARAN GROUP LOT # (847) CLYDESDALE ST. COMB

REVISION	DATE	DESCRIPTION
1	04/04/2017	ISSUED FOR CONSTRUCTION
2	04/04/2017	ISSUED FOR CONSTRUCTION
3	04/04/2017	ISSUED FOR CONSTRUCTION
4	04/04/2017	ISSUED FOR CONSTRUCTION
5	04/04/2017	ISSUED FOR CONSTRUCTION

REVISION	DATE	DESCRIPTION
1	04/04/2017	ISSUED FOR CONSTRUCTION
2	04/04/2017	ISSUED FOR CONSTRUCTION
3	04/04/2017	ISSUED FOR CONSTRUCTION
4	04/04/2017	ISSUED FOR CONSTRUCTION
5	04/04/2017	ISSUED FOR CONSTRUCTION

REVISION	DATE	DESCRIPTION
1	04/04/2017	ISSUED FOR CONSTRUCTION
2	04/04/2017	ISSUED FOR CONSTRUCTION
3	04/04/2017	ISSUED FOR CONSTRUCTION
4	04/04/2017	ISSUED FOR CONSTRUCTION
5	04/04/2017	ISSUED FOR CONSTRUCTION

SITE & GENERAL NOTES:

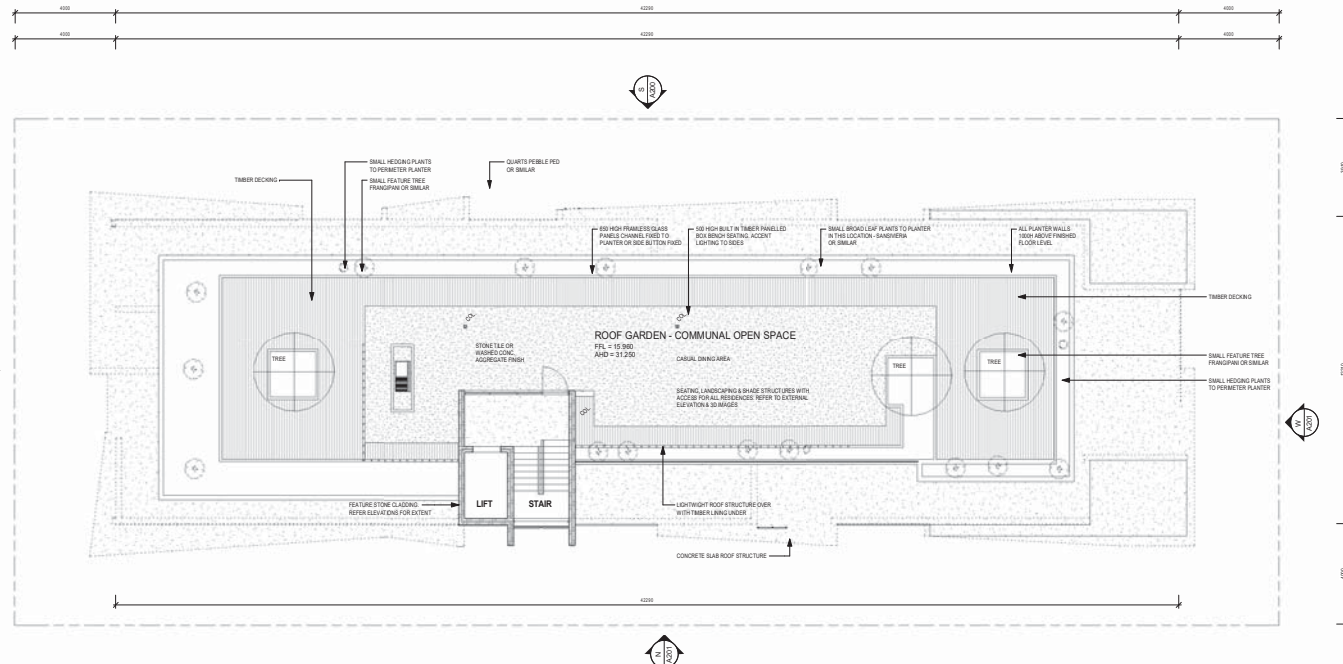
- ALL LEVELS, DIMENSIONS POSITIONS AND HEIGHTS TO BE VERIFIED ON SITE BEFORE COMMENCING ANY BUILDING WORK. DATA PROVIDED IS AS SHOWN.
- EXISTING DIMENSIONAL LINES TO BE SHOWN AND NO SOLING OF DIMENSIONS WILL BE ALLOWED.
- ALL MECHANICAL DRAWINGS ARE TO BE MADE IN CONJUNCTION WITH SPECIFICATIONS AND ALL OTHER RELEVANT DRAWINGS FROM STRUCTURAL, ELECTRICAL, CIVIL, HYDRAULICS AND MECHANICAL ENGINEERS.
- ANY DISCREPANCIES ARE TO BE REPORTED TO THE SUPERINTENDENT IMMEDIATELY.
- ALL SETOUT WORK TO BE COMPLETED BY THE CONTRACTOR FOR ELECTRICAL, PLUMBING, MECHANICAL, EARTHWORKS AND CONCRETE LAYOUT WORKS.
- REFER TO ENGINEERS DRAWINGS FOR ALL STRUCTURAL WORKS.
- LOWER SCALE DIMENSIONS WILL SUPERSEDE SMALL SCALE DRAWINGS.
- CONTRACTOR TO CONFIRM LOCAL SETTING AND EXTENT OF ALL OTHER SERVICES AS SHOWN ON SERVICES LAYOUT PLANS PRIOR TO THE COMMENCEMENT OF ANY WORK. ENGINEER TO BE NOTIFIED OF ANY DISCREPANCIES.
- CONTRACTOR TO CONFIRM GROUND WATER TABLE AND LEVELS PRIOR TO ANY WORK AND IF ANY DR. WATERING IS REQUIRED.
- ALL NECESSARY APPROVALS FROM RELEVANT AUTHORITIES TO BE OBTAINED PRIOR TO THE COMMENCEMENT OF ANY WORK.
- AS COMPLETED SURVEY TO BE PROVIDED BY LICENSED SURVEYOR.
- FOR CONSTRUCTION, IDENTIFICATION INFORMATION REFER TO GEOTECHNICAL REPORT.
- GEOTECHNICAL INVESTIGATION HAVE BEEN CARRIED OUT. THE INFORMATION CONTAINED IN THE REPORTS IS BASED ON THE RESULTS OF THE TESTING AND TESTING DATA TEST LOCATION. IN A COMPLETE DESCRIPTION OF CONDITIONS EXISTING AT OR BELOW GROUND LEVEL, INSIDE THE SITE.
- FOR ALL SITE PREPARATION AND COMPACTION, REFER TO ENGINEERS DRAWINGS AND SPECIFICATION.
- THE CONTRACTOR SHALL PROVIDE A COMMITMENT IDENTIFICATION FOR CUT AND FILL AREAS CERTIFYING THAT THE AREAS HAVE BEEN ADEQUATELY COMPACTED.
- ALL EXISTING ESTABLISHED TREES, INCLUDING TREES AND ALL EXISTING SERVICES, MANHOLES, VALVES, ETC. AND ARE TO BE PROTECTED BY CONTRACTOR.
- THE CONTRACTOR SHALL LIMIT THE MOVEMENT OF EQUIPMENT AND MANPOWER TO THE WORK SITE ONLY.
- EARTHWORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF AS 3799-2017 AND SITE GEOTECHNICAL REPORT.
- THE CONTRACTOR SHALL ALLOW FOR JUST CONTROL, REGRADING AS REQUIRED.
- SURFACE DRAINAGE TO BE APPLIED TO THE TOTAL ESTIMATED AREA OF THE SITE AS SOON AS POSSIBLE AFTER COMPLETION OF SECTION OF WORK.

LEGEND

- ROOF - REFER TO ROOF PLAN FOR SIZE AND LOCATION
- STRUCTURAL COLUMN - REFER TO STRUCTURAL ENGINEERS DRAWING FOR DETAIL
- DESIGNATION IN RELATION TO AND
- AN CONDITIONAL UNIT - REFER TO SPECIFICATION
- TOILET PAN - REFER TO SPECIFICATION
- UNITARY BASIN - REFER TO SPECIFICATION
- FRIDGE - REFER TO BUILDERS SPECIFICATION
- UNDER BENCH COVER UNDER WITH HOT PLATE & RANGEROOD OVER - REFER TO BUILDERS SPECIFICATION
- HANDING MACHINE WITH DRYER OVER - REFER TO SPECIFICATION
- SHOWER - REFER TO SPECIFICATION
- HOSE COCK - REFER TO HYDRAULIC JUNG
- HOT WATER UNIT - REFER TO HYDRAULIC SPECIFICATION
- DRINK MAKER - REFER TO BUILDERS SPECIFICATION
- DRINK - REFER TO BUILDERS SPECIFICATION
- PAINTER - REFER TO BUILDERS SPECIFICATION
- LAUNDRY TROUGH - REFER TO BUILDERS SPECIFICATION
- WATERING - REFER TO BUILDERS SPECIFICATION
- GALV STEEL ROILING - REFER TO DETAIL

DESIGN FOR ACCESS AND MOBILITY:

- ALL COMMON AREAS INCLUDING CORRIDORS, LIFTS AND TRAVELLERS HAVE BEEN DESIGNED TO BE ACCESSIBLE WITH A WALKER, WHEELCHAIR, CRUTCHES, ACCESSIBLE PATHS OF TRAVEL.



1 FFL (ROOF GARDEN)
SCALE 1 : 100



NO.	DATE	DESCRIPTION
1	10/01/2017	REVISION 1 - 10/01/2017
2	10/01/2017	REVISION 2 - 10/01/2017
3	10/01/2017	REVISION 3 - 10/01/2017
4	10/01/2017	REVISION 4 - 10/01/2017
5	10/01/2017	REVISION 5 - 10/01/2017
6	10/01/2017	REVISION 6 - 10/01/2017
7	10/01/2017	REVISION 7 - 10/01/2017
8	10/01/2017	REVISION 8 - 10/01/2017
9	10/01/2017	REVISION 9 - 10/01/2017
10	10/01/2017	REVISION 10 - 10/01/2017



Contractor to verify all dimensions on site before commencing work. MODUS DESIGN PTY LTD is not liable for any errors or omissions in the drawings and specifications of the work for completion. Contractor of nature of work is to be verified by the client. Authority is required for any reproduction.



1	04/04/2017	04/04/2017
2	04/04/2017	04/04/2017
3	04/04/2017	04/04/2017
4	04/04/2017	04/04/2017
5	04/04/2017	04/04/2017
6	04/04/2017	04/04/2017
7	04/04/2017	04/04/2017
8	04/04/2017	04/04/2017
9	04/04/2017	04/04/2017
10	04/04/2017	04/04/2017

FLOOR PLAN - ROOF GARDEN

PROPOSED APARTMENT DEVELOPMENT FOR YARAN GROUP LOT # (M47) CLYDESDALE ST. COM3

DESIGN	MODUS	DATE	10/01/2017
DESIGNER	MODUS	DATE	10/01/2017
CHECKED	MODUS	DATE	10/01/2017
SCALE	1:100	DATE	10/01/2017
REVISION	C	DATE	10/01/2017
A1	MODUS	A106	

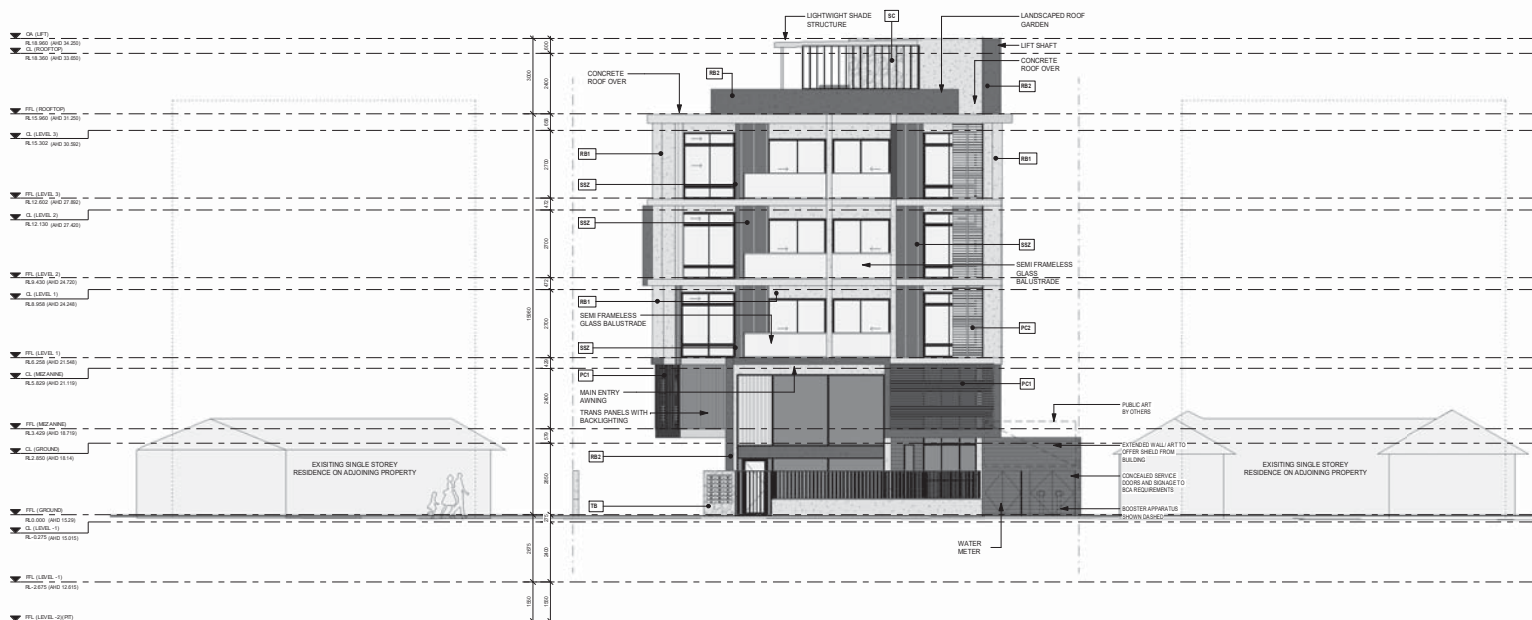
* SURFACE STABILISATION TO BE APPLIED TO THE TOTAL DISTRIBUTED AREA OF THE SITE AS SOON AS POSSIBLE AFTER COMPLETION OF SECTIONS OF WORK.

LEGEND

BRP	DOME - REFER TO ROOF PLAN FOR SIZE AND LOCATION
CS	STRUCTURAL COLUMN - REFER TO STRUCTURAL ENGINEERING DRAWINGS IN RELATION TO AHD
AC	AIR CONDITIONING UNIT - REFER TO SPECIFICATION
NC	TOILET PAN - REFER TO SPECIFICATION
VB	VANITY BASIN - REFER TO SPECIFICATION
CH	CHIMNEY - REFER TO BUILDERS SPECIFICATION
CH/MP	UNDER BENCH OVER UNDER WITH HOT PLATE & RANGEHOOD
CH	UNDER BENCH OVER UNDER SPECIFICATION
CH/MP	MACHINE WITH DRAINAGE - REFER TO SPECIFICATION
SH	SINK - REFER TO BUILDERS SPECIFICATION
HC	HOSE COCK - REFER TO HYDRAULIC DWG
HNB	HOT WATER UNIT - REFER TO HYDRAULIC SPECIFICATION
DW	DISH WASHER - REFER TO BUILDERS SPECIFICATION
S	SINK - REFER TO BUILDERS SPECIFICATION
P	PANTRY - REFER TO BUILDERS SPECIFICATION
L	LAUNDRY WASH - REFER TO BUILDERS SPECIFICATION
M	MICROWAVE - REFER TO BUILDERS SPECIFICATION
BW	G.V.S. SITE, BOLLARD - REFER TO DETAIL

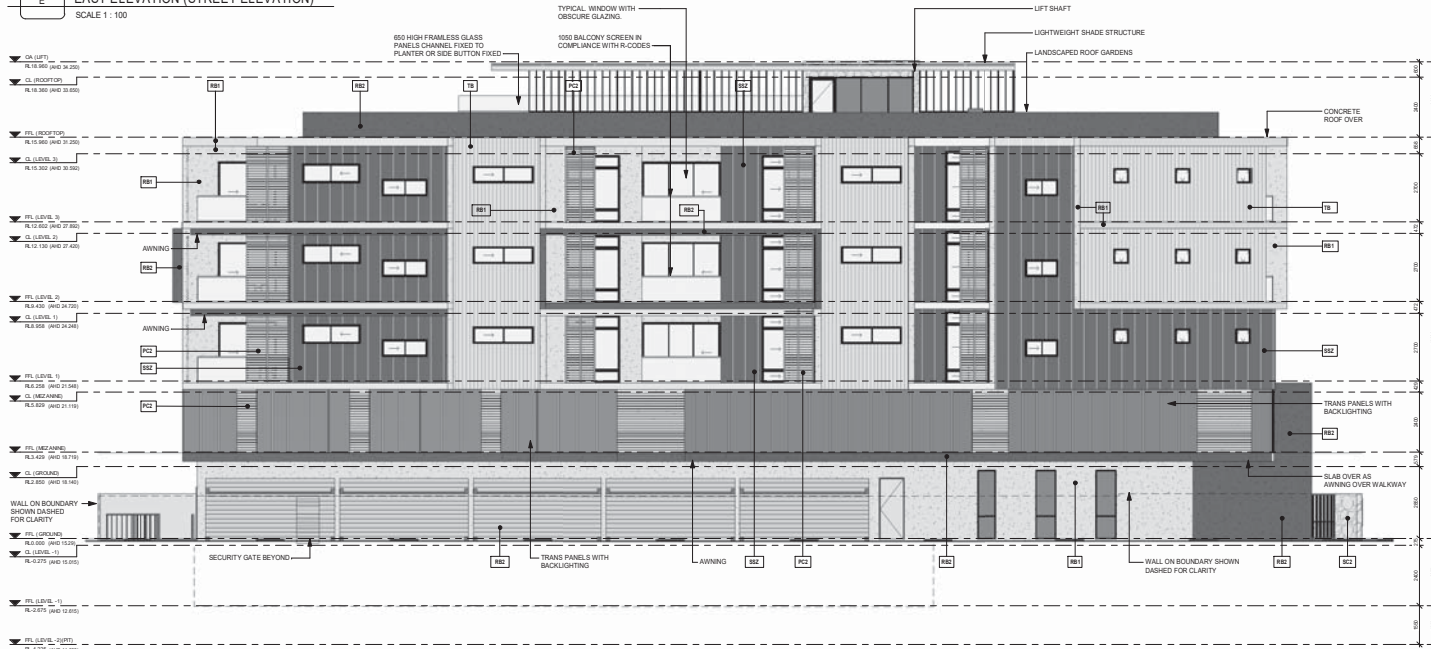
FINISHES SCHEDULE

- | | |
|------------|---|
| FB1 | RENDERED BRICKWORK TEXTURE FINISH 1 - WHITE |
| FB2 | RENDERED BRICKWORK TEXTURE FINISH 2 - DARK CONTRAST COLOUR |
| 3C | FEATURE STONE CLADDING - TRAVERTINE |
| TS | TIMBER LOOK CLADDING - WEATHERTECH
WEATHERGROOVE NATURAL 150 VERTICAL |
| SL2 | STANDING SEAM CLADDING - COLOURBOND DARK
BROWN, 38mm PROFILE |
| PC1 | DARK BROWN COLOUR - VARIOUS APPLICATIONS -
POWDERCOATED LOUVRES AND SCREENS DULUX
ELECTRO FLAT DARK BROWN - PAINTED SCREENS
WHERE SHOWN - AWARDING EDGES |
| PC2 | LIGHT SILVER OR GREY POWDERCOAT FINISH TO
LOUVRE SCREENS |
| SL3 | RENDERED FINISH - LIMESTONE LOOK - RANDOM
PATTERN |



F EAST ELEVATION (STREET ELEVATION)

SCALE 1 : 100



SOUTH ELEVATION

SCALE 1 : 100



10.06.2017	G	ISSUED FOR DA - HEIGHT ALTERATIONS
31.07.2017	F	ISSUED FOR DA - COUNCIL AMENDMENTS
11.07.2017	E	ISSUED FOR DA - WINDOW AMENDMENTS
02.06.2017	D	ISSUED FOR DA
DATE	No.	DESCRIPTION
REVISION SCHEDULE		



Contractor to verify all dimensions on site before commencing work. MODUS Design Pty Ltd is to be notified of any discrepancies in the dimensions and setting out of work for resolution. Copyright of designs shown herein retained by this office. Authority is required for any reproduction.



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ASN 27 121 224 459
ACN 121 224 459

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT # (#47) CLYDESDALE ST.
COMO

MODUS PROJECT D17-102
DESIGN
DRAWN
CHECKED
SCALE
DATE MARCH 20
REVISION
A1 DWG A20

SITE & GENERAL NOTES:

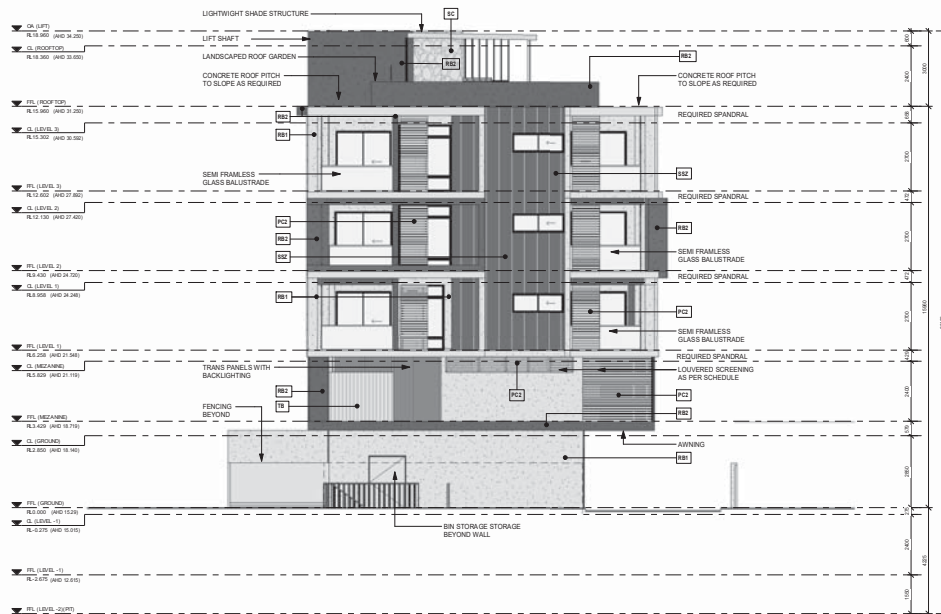
- [illegible]

LEGEND

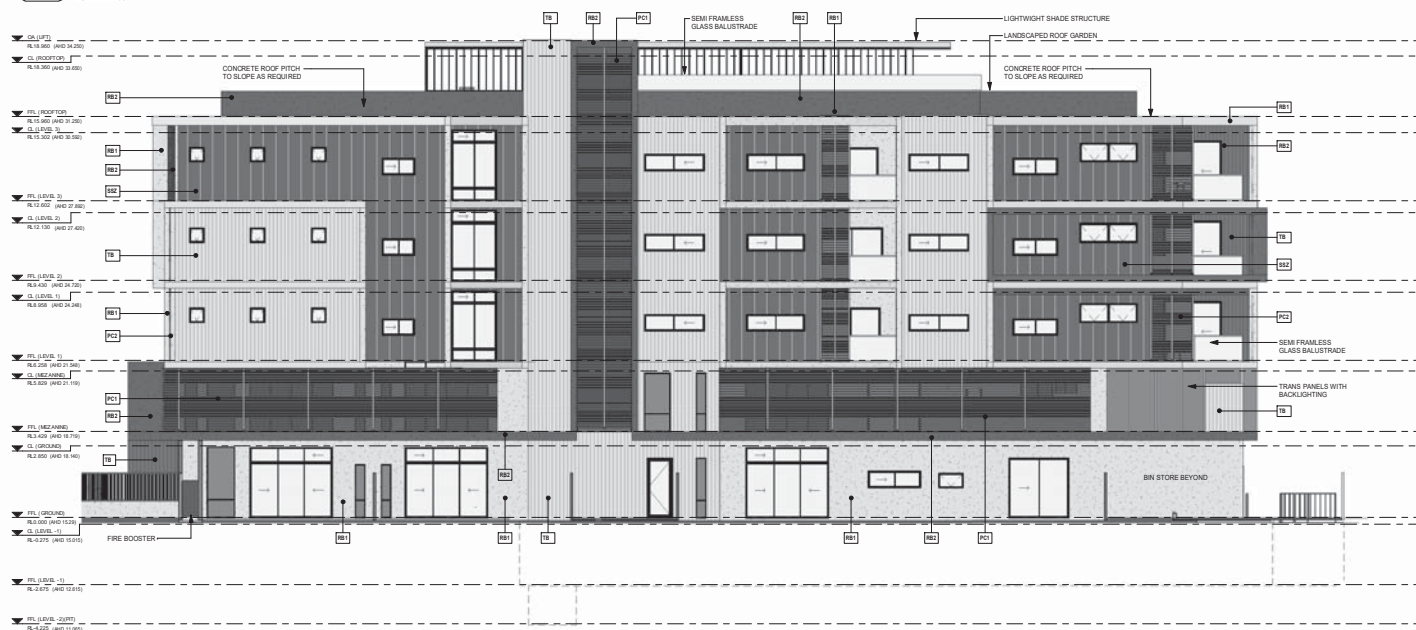
- | | |
|-------|--|
| SWP | DOOR - REFER TO ROOF PLAN FOR SIZE AND LOCATION |
| ST | STRUCTURAL COLUMN - REFER TO STRUCTURAL ENGINEERS DRAWING |
| TR | DESIGN LEVEL - IN RELATION TO AHD |
| AC | AIR CONDITIONING UNIT - REFER TO SPECIFICATION |
| MC | TOILET PAN - REFER TO SPECIFICATION |
| WC | VANITY BASIN - REFER TO SPECIFICATION |
| WC | WATER CLOSET - REFER TO BUILDERS SPECIFICATION |
| CHAMP | UNDER BENCH OVER UNDER WITH HOT PLATE & RANGEHOOD OVER - REFER TO BUILDERS SPECIFICATION |
| WACMR | WATER CLOSET WITH OVER - REFER TO SPECIFICATION |
| WC | WATER CLOSET - REFER TO SPECIFICATION |
| SHR | HOSE COCK - REFER TO HYDRAULIC DWG |
| HW | HOT WATER UNIT - REFER TO HYDRAULIC SPECIFICATION |
| DW | DRAIN WASHIN - REFER TO BUILDERS SPECIFICATION |
| S | SKIN - REFER TO BUILDERS SPECIFICATION |
| P | PANTRY - REFER TO BUILDERS SPECIFICATION |
| W | WATER - REFER TO BUILDERS SPECIFICATION |
| MB | MECHANICAL - REFER TO BUILDERS SPECIFICATION |
| B | G.A.V. TITLES, SULLARD - REFER TO DETAILS |

FINISHES SCHEDULE

- | | |
|------------|--|
| BS1 | RENDERED BRICKWORK TEXTURE FINISH 1 - WHITE |
| BS2 | RENDERED BRICKWORK TEXTURE FINISH 2 - DARK CONTRAST COLOUR |
| SC | FEATURE STONE CLADDING - TRAVERTINE |
| TD | TIMBER LOOK CLADDING - WEATHERTEE
WEATHERGROOVE NATURAL 150 VERTICAL |
| SSE | STANDING SEAM CLADDING - COLORBOND DARK
BRONZE, 38mm PROFILE |
| PC1 | DARK BROWN COLOUR - VARIOUS APPLICATIONS -
POWDERCOATED LOUVRES AND SCREENS DULUX
PAINT DARK GRANGE - PAINTED SURFACES
WHERE SHOWN - AWWING EDGES |
| PC2 | LIGHT SILVER OR GREY POWDERCOAT FINISH TO
LOUVRED SCREENS |
| BS3 | RENDERED FINISH - LIMESTONE LOOK - RANDOM
PATTERN |



W WEST ELEVATION
SCALE 1 : 100



N NORTH ELEVATION
SCALE 1 : 100



10.06.2017	G	ISSUED FOR DA - HEIGHT ALTERATIONS
31.07.2017	F	ISSUED FOR DA - COUNCIL AMENDMENTS
11.07.2017	E	ISSUED FOR DA - WINDOW AMENDMENTS
02.06.2017	D	ISSUED FOR DA
DATE	No.	DESCRIPTION
REVISION SCHEDULE		



Contractor to verify all dimensions on site before commencing work. MODUS Design Pty Ltd is to be notified of any discrepancies in the dimensions and setting out of work, for resolution. Copyright of designs shown hereon retained by this office. Authority is required for any reproduction.



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ELEVATIONS

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT # (#47) CLYDESDALE ST.
COMO

D47402

DESIGN	5
DRAWN	1
CHECKED	SWT
SCALE	1 : 1

DATE: MARCH 20, 1964



A1 DWG A20

13. *Journal of the American Medical Association*, 2000; 284: 2689-2694.

Development Assessment Report

Lot 413 (37) Clydesdale Street,
Como

PLANNING SOLUTIONS
| URBAN & REGIONAL PLANNING

PS



Prepared for
Yaran Property Group Pty Ltd

June 2017

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Project details

Job number	5225	
Client	Yaran Property Group	
Prepared by	Planning Solutions	
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Appendices

Appendix 1:	Certificate of Title and Plan 3486
Appendix 2:	Development Plans
Appendix 3:	Transport Impact Statement
Appendix 4:	Waste Management Plan
Appendix 5:	Apartment Design Guidelines Assessment
Appendix 6:	Sustainability Statement of Compliance

1 Preliminary

1.1 Introduction

Planning Solutions acts on behalf of Yaran Property Group in relation to the proposed development of Lot 413 (47) Clydesdale Street, Como (**subject site**). Planning Solutions has prepared the following report in support of the development of a four storey, 21 multiple dwelling development on the subject site.

This report will discuss various issues pertinent to the proposal, including:

- Site details.
- Proposed development.
- Town planning considerations.

2 Site details

2.1 Land description

The subject site is legally described as Lot 413 on Plan 3486, being the whole of the land contained within Certificate of Title Volume 1116 and Folio 882. The subject site has an area of approximately 1,012m².

The subject site benefits from a s167A easement over the right-of-way (ROW) adjoining the rear boundary of the subject site, as shown on Plan 3486.

Refer **Appendix 1** for a copy of the Certificate of Title and Plan 3486.

2.2 Location

2.2.1 Regional context

The subject site is located approximately 6.5 kilometres south of the Perth city centre, within the local government area of the City of South Perth and in the locality of Como.

The subject site can be accessed from Manning Road at Ley Street and Canning Highway at Henley Street. Both Manning Road and Canning Highway provide access to the wider metropolitan region, and both roads link directly to Kwinana Freeway which links to the Perth city centre and the Perth metropolitan region to the Peel and Greater Bunbury regions to the south.

The subject site is approximately 650m from the Canning Bridge Station, with connections to commuter train services to Perth on the Mandurah Line and bus services along Canning Highway. The subject site is also less than 150m from bus stops on Davilak Street with Transperth bus route 30 linking to Perth and Curtin University.

2.2.2 Local context

The subject site fronts Clydesdale Street, midway between the intersection with Davilak Street and Woollana Street, and just north of the intersection with Philip Avenue. The subject site also has frontage to a 5.03m-wide trafficable ROW linking to Davilak Street.

The subject site is predominantly surrounded by single-storey and two-storey single houses. Neil McDougall Park is 100m to the north of the subject site. The subject site is approximately 350m from retail and food premises located at the corner of Manning Road and Ley Street.

2.3 Land use and topography

The subject site currently contains a single-storey single house. The house and all other improvements will be demolished.

The subject site is generally flat, with a slight rise of approximately 0.5m from the east (front) to west (rear).

3 Proposed development

The proposed development comprises a four-storey building with 21 multiple dwellings. Associated vehicle parking, services and amenities are located on the ground floor and basement, sleeved behind ground floor apartments. A roof garden is proposed on top of the fourth floor providing a communal outdoor area for the residents of the apartments.

Vehicular entry to the proposed development is from the existing crossover to Clydesdale Street, widened to 4.0m. A total of 24 car parking bays are provided on-site, with 20 bays in a car stacking system. The car stacker bays will be access from the ground floor and stacked in 5 separate car stackers. The stacking mechanism has clearance in the basement and the first floor to provide for the stacking of cars. There are also four car parking bays provided at-grade with one 90° bay accessed from the driveway at the rear of the site and three parallel bays adjacent to the building near the entrance.

A total of 21 multiple dwellings are proposed. The proposed development comprises the following breakdown of dwelling types:

- 6 x one-bedroom apartments ranging from 48m² to 128m²;
- 15 x two-bedroom apartments ranging from 70m² to 75m²;

The total plot ratio area of the development is 1,608m².

Refer to **Perspectives 1, 2 and 3** illustrating the proposed development.



Perspective 1 – View from street front



Perspective 2 – Perspective view

Basement

The basement comprises the car stackers and private 4m² storage rooms for each apartment. The basement is access via the communal lift or two separate staircases. The basement also includes facilities for cleaners of the building.

Ground floor

The ground floor consists of apartments, car parking and communal amenities, summarised as follows:

- Three apartments with a mezzanine level. Each apartment is provided with a private outdoor living space.
- Vehicle access along western side of the subject site accessing the vehicle parking sleeved along the side of the proposed apartment building.
- Pedestrian entrance providing access to the central elevator and stairs that provide access to the apartments above.
- Bin room.

1st – 3rd floors

The first to third floors comprise six apartments per floor with a central corridor linking the apartments to the lift and stairs. Each floor comprises 5 two bedroom apartments and 1 one bedroom apartment. Each apartment is provided with a balcony that provide external views.

Roof



Perspective 3 – Roof top garden and communal outdoor living area

The rooftop provides communal facilities including communal garden, barbeque and outdoor seating areas for the enjoyment of residents. The roof is accessed by the central lift and stairs. A semi permeable roof is provided centrally within the rooftop area to allow solar penetration and shading, depending on the environmental conditions.

Refer **Appendix 2** for a copy of the development plans.

4 Strategic planning framework

4.1 Directions 2031 and Beyond

Directions 2031 and Beyond (**Directions 2031**) is the high-level strategic planning framework for the Perth and Peel region. The Directions 2031 framework proposes five strategic themes for a liveable, prosperous, accessible, sustainable and responsible city. The framework sets out a hierarchy of activity centres across the metropolitan region to equitably distribute services, amenities and employment opportunities. Directions 2031 also sets a target for 47 percent of new residential development to be urban infill.

The proposed development is consistent with the strategic objectives of Directions 2031 insofar as it promotes higher density infill residential development in an inner urban area.

4.2 Central Metropolitan Perth Sub-regional Strategy

The (draft) Central Metropolitan Perth Sub-Regional Strategy (**Sub-Regional Strategy**) provides more in-depth strategic planning for the growth of the Central Metropolitan Perth Region to deliver the outcomes sought by Directions 2031.

Under the Sub-Regional Strategy, the City of South Perth (**City**) is required to increase its existing housing stock to achieve a target of an additional 6,000 dwellings by 2031. The Canning Bridge transit oriented development is identified in the Sub-Regional Strategy as a major growth area, with a projected dwelling yield of 1,600 (85% take-up) in the City of South Perth, with an additional 2,500 dwellings expected to be yielded in the City of Melville.

The Canning Bridge redevelopment area is acknowledged as a major road and public transport hub and a large employment centre with excellent regional accessibility. It is noted that much of the residential and commercial areas adjacent are under-developed, offering potential for more intense land use. The Sub-Regional Strategy identifies a crucial role for private sector developers to invest in higher density housing projects. Accordingly, the proposed higher density, four storey, 21 multiple dwelling development is clearly in line with the strategic vision of the Sub-Regional Strategy.

5 Statutory planning framework

5.1 Metropolitan Region Scheme

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

Pursuant to clause 26(1) of the MRS, an approval given by the City to develop land in a local planning scheme which has been zoned under the MRS shall be deemed to be an approval under the MRS. Accordingly, separate approval to commence development under the MRS is not required.

5.2 City of South Perth Town Planning Scheme No. 6

The provisions of the City of South Perth Town Planning Scheme No. 6 (TPS6) are read alongside the Deemed Provisions contained within Schedule 2 of the *Planning and Development (Local Planning Schemes) Regulations 2015*.

If a deemed provision is inconsistent with another provision of TPS6, the deemed provisions prevails and the other provision, to the extent of the inconsistency, is of no effect.

5.2.1 Scheme objectives

The objectives of TPS6 and the proposed development's response to the objectives are set out in Table 1.

Table 1 – General objectives of TPS6

General objective of TPS6	Response
(a) <i>Maintain the City's predominantly residential character and amenity;</i>	Not applicable – the proposed development is located in an activity centre, not a residential area.
(b) <i>Introduce performance-based controls supported by planning policies and Precinct Plans;</i>	The proposed development complies in all respects with the <i>Canning Bridge Activity Centre Plan (CBACP)</i> .
(c) <i>Facilitate a diversity of dwelling styles and densities in appropriate locations on the basis of achieving performance-based objectives which retain the desired streetscape character and, in the older areas of the district, the existing built form character;</i>	The proposed development provides a diversity of dwelling sizes.
(d) <i>Establish a community identity and 'sense of community' both at a City and precinct level and to encourage more community consultation in the decision-making process;</i>	The proposed development complies in all respects with the <i>Canning Bridge Activity Centre Plan (CBACP)</i> .
(e) <i>Ensure community aspirations and concerns are addressed through Scheme controls;</i>	The proposed development complies with TPS6.
(f) <i>Safeguard and enhance the amenity of residential areas and ensure that new development is in harmony with the character and scale of existing residential development;</i>	Not applicable – the proposed development is located in an activity centre, not a residential area.
(g) <i>Protect residential areas from the encroachment of inappropriate uses;</i>	No inappropriate land uses are proposed.

General objective of TPS6	Response
<i>(h) Utilise and build on existing community facilities and services and make more efficient and effective use of new services and facilities;</i>	Not applicable.
<i>(i) Create a hierarchy of commercial centres according to their respective designated functions, so as to meet the various shopping and other commercial needs of the community;</i>	Not applicable.
<i>(j) In all commercial centres, promote an appropriate range of land uses consistent with: (i) the designated function of each centre as set out in the Local Commercial Strategy; and (ii) the preservation of the amenity of the locality;</i>	Not applicable.
<i>(k) Recognise and preserve areas, buildings and sites of heritage value; and</i>	Not applicable.
<i>(l) Recognise and facilitate the continued presence of significant regional land uses within the City and minimise the conflict between such land use and local precinct planning.</i>	Not applicable.

5.2.2 Zoning and land use permissibility

The subject site is zoned Centre under the provisions of TPS6. The subject site is also located in Precinct 10 – McDougall Park pursuant to TPS6, and is located within Development Control Area No.2 (DCA2).

The TPS6 objectives for the Centre zone are:

- (a) To designate land for future development as a town centre or activity centre.*
- (b) To provide a basis for future detailed planning in accordance with the structure planning provisions of this Scheme and the Activity Centres State Planning Policy.*

Pursuant to Table 1 – Zoning – Land Use of TPS6, land use permissibility in the Centre zone is subject to an adopted and endorsed Structure Plan, unless otherwise agreed by Council. Table 1 of TPS6 does not prescribe land use permissibility in the Centre zone. In accordance with recent decisions of the State Administrative Tribunal (for example, *Amherst Developments Pty Ltd and City of Gosnells [2017] WASAT 16*), any provision of TPS6 which purports to provide structure plans (or activity centre plans) with the power to zone land and/or prescribe land use permissibility are considered to have no effect, and therefore TPS6 does not prescribe use class permissibility for the Centre zone. It follows that it is open for the decision-maker to contemplate and approve any use (including the proposed development) on the subject site.

5.2.3 Site and development standards

TPS6 contains various site and development standards which apply to the proposed development. The various standards, and the proposals' compliance with those standards, is set out in **Table 2**.

Table 2 – Proposed development response to the site and development standards of TPS6

Clause	Requirement	Proposed	Complies
6.1A Building Heights Limits and Method for Measuring Height			
(11)	<i>(b) For development in the Canning Bridge Activity Centre, the Building Height Limits are as prescribed in the Canning Bridge Activity Centre Plan.</i>	Refer Table 6.	✓
6.3 Car Parking			
Schedule 12	<i>(a) The car parking ratio for this development shall be as prescribed by the relevant provisions in the approved structure plan</i>	Refer Table 6.	✓
6.4 Bicycle Parking			
Schedule 12	<i>(b) Requirements relating to bicycle parking and end-of-trip facilities shall be as prescribed by the relevant provisions in the approved structure plan.</i>	Refer Table 6.	✓
6.8 Sewerage and drainage			
(1)	<i>A building having a bathroom, laundry, toilet, shower, sink, hand wash basin or the like shall not be erected in any zone unless: (a) it is connected; or (b) the Council is satisfied that adequate provision has been made for it to be connected, to the main sewer of the Water Corporation of Western Australia for the disposal of sewage and waste water.</i>	The development will be connected to the Water Corporation sewer.	✓
(2)	<i>A building shall not be erected in any zone unless adequate provision is made for the disposal of all storm water for the building and its site into soak wells or sumps located on the site or, by agreement with the Council, into the street drainage system.</i>	Soakwells are provided on-site for the disposal of stormwater.	✓
6.9 Minimum Ground and Floor Levels			
(1)	<i>Subject to sub-clause (3), a lot shall not be developed unless the ground level is, or is raised to, a level of at least 1.7 metres above Australian Height Datum.</i>	The subject site achieves the minimum ground level.	✓
(2)	<i>Subject to sub-clause (3), the following minimum levels for floors in buildings or additions to buildings erected in the Scheme area are prescribed: (a) the floors of habitable rooms shall be not less than 2.3 metres above Australian Height Datum; (b) the floors of non-habitable rooms shall be not less than 1.75 metres above Australian Height Datum; (c) the floors of any part of a building used for car parking shall be not less than 1.75 metres above Australian Height Datum.</i>	The proposed development achieves the minimum floor level.	✓
6.10 Maximum Ground and Floor Levels			
(1)	<i>The floor level of a building other than a parking structure shall be calculated to generally achieve equal cutting below and filling above the ground level at the perimeter of the building, subject to the following: (a) Such level may be raised by up to 100 millimetres;</i>	The ground floor of the proposed building is at the same level as the mean natural ground level of the building footprint (15.29m AHD).	✓

Clause	Requirement	Proposed	Complies
	<p>(b) <i>The Council may permit or require the floor level to be varied to the extent necessary to comply with the following:</i></p> <p>(i) <i>In no case shall the floor level be lower than required by clause 6.9.</i></p> <p>(ii) <i>The floor shall not be at a level which, in the Council's opinion, would cause the building to unreasonably adversely affect the amenity of neighbouring properties in relation to visual impact and overshadowing.</i></p> <p>(iii) <i>The Council may require the floor level to be varied where necessary in the Council's opinion to achieve a visually balanced streetscape, having regard to the floor levels of buildings on adjoining lots.</i></p>		
(2)	<i>The floor level of any parking structure and the pavement level of any unroofed parking bay shall be calculated to achieve a driveway gradient generally not exceeding 1 : 12 within 3.6 metres of the street alignment and 1 : 8 for the remainder of the driveway.</i>	The proposed driveway is flat, and will incorporate a 1 : 8 rise up to the ROW. The ROW will be reconstructed to match the level of the driveway, and the visitor parking bay adjacent to the ROW designed with a gradient no more than 1 : 12.	✓
(3)	<p><i>The finished ground level beyond the external walls of the building shall be calculated to generally achieve equal cutting below and filling above the natural ground level at the perimeter of the site, provided that the Council may permit or require the finished level to be varied to the extent necessary to comply with the following:</i></p> <p>(a) <i>The site shall not be filled to a level which, in the Council's opinion, would unreasonably adversely affect the amenity of neighbouring properties in relation to visual impact and overshadowing.</i></p> <p>(b) <i>Portions of the site beyond the external walls of the building shall be filled to a level which, in the Council's opinion, is necessary to maintain visual privacy for the occupiers of any adjoining lot, consistent with the provisions of any planning policy.</i></p>	<p>Works beyond the building footprint have been designed to match the finished floor level of the building. There will be no cutting in excess of 0.4m.</p> <p>Under the CBACP, provisions of overshadowing do not apply.</p>	✓
6.14 Landscaping Requirements			
(2)	<p><i>Subject to sub-clause (3), where planning approval has been granted and a minimum area of open space or landscaped area is required, a landscaping plan shall be submitted to the Council showing:</i></p> <p>(a) <i>the location of every building on the site;</i></p> <p>(b) <i>the layout and location of pedestrian spaces, pavements, grassed areas, areas covered with ground cover planting, organic or inorganic materials, shrubs and garden beds and the location of existing and proposed trees;</i></p> <p>(c) <i>the quantity of shrubs to be planted in each landscaped area and the types of existing and proposed trees, specifically identifying those trees recorded in the Register of Tree Preservation Orders;</i></p>	A landscape plan has been provided. Refer Appendix 2 (Plan A012).	✓

Clause	Requirement	Proposed	Complies
	<p>(d) compliance with any prerequisite performance criteria relating to vegetation or landscaping referred to in clause 4.2 and Schedule 3, or any requirement relating to landscaping prescribed in clause 5.4;</p> <p>(e) details of any alterations or proposed alterations to the natural contours of the landscaped areas; and</p> <p>(f) retention of any existing trees or other vegetation or any new planting or other site improvements required pursuant to a condition of planning approval.</p>		
(5)	<p>Where a landscaping plan is required to be submitted, a person shall not occupy or use any land or building for the approved purpose until:</p> <p>(a) the Council has approved the landscaping plan; and</p> <p>(b) the landscaping of the open space or landscaped areas has been completed in accordance with the approved plan.</p>	To be a condition of approval.	✓
(6)	<p>Every open space area or landscaped area shall be maintained in good order and condition and in accordance with the landscaping plan approved by the Council. No person shall alter the landscaping depicted on the approved plan without first having applied for and obtained written approval from the Council.</p>	To be a condition of approval.	✓

Clause 7.8 of TPS6 sets out the circumstances and requirements for variations to the site and development standards of TPS6. There are, however, no variations proposed to the site and development requirements of TPS6 which would warrant consideration being given to clause 7.8.

5.2.4 Development contribution areas

The subject site is located within DCA2 pursuant to TPS6; however, a development contribution plan has not been prepared for the DCA2 area. Pursuant to clause 69 of the Deemed Provisions:

- (1) *The local government must not refuse an application for development approval only because there is not a development contribution plan in place in relation to the development.*
- (2) *The local government must not grant development approval subject to a condition that future contributions to the provision of infrastructure related to the development may be required under a development contribution plan that is not in place at the time the application is determined.*

Accordingly, the proposed development warrants approval notwithstanding no development contribution plan has been prepared for DCA2.

5.2.5 Matters to be considered

Clause 67 of the Deemed Provisions sets out the matters which regard is to be given to in considering an application for development approval. These matters are addressed in **Table 3** below.

Table 3 – Matters to be considered under clause 67 of the Deemed Provisions

Matters to be considered	Response
<i>(a) the aims and provisions of this Scheme and any other local planning scheme operating within the Scheme area;</i>	All relevant matters identified by TPS6 have been addressed in this report.
<i>(b) the requirements of orderly and proper planning including any proposed local planning scheme or amendment to this Scheme that has been advertised under the Planning and Development (Local Planning Schemes) Regulations 2015 or any other proposed planning instrument that the local government is seriously considering adopting or approving;</i>	There is no proposed planning instrument that would affect the consideration of the proposed development.
<i>(c) any approved State planning policy;</i>	Refer to Section 5.3 and Section 5.4 of this report.
<i>(d) any environmental protection policy approved under the Environmental Protection Act 1986 section 31(d);</i>	There is no relevant environmental protection policy that applies to the proposed development.
<i>(e) any policy of the Commission;</i>	There is no other policy of the WAPC relevant to this development application.
<i>(f) any policy of the State;</i>	There is no state policy providing specific requirements for this proposed development.
<i>(g) any local planning policy for the Scheme area;</i>	The City's local planning policies relevant to the proposed development are addressed in Sections 5.7 through 5.12 (inclusive) of this report.
<i>(h) any structure plan, activity centre plan or local development plan that relates to the development;</i>	The CBACP is considered at Section 5.6 of this report.
<i>(i) any report of the review of the local planning scheme that has been published under the Planning and Development (Local Planning Schemes) Regulations 2015;</i>	Not relevant.
<i>(j) in the case of land reserved under this Scheme, the objectives for the reserve and the additional and permitted uses identified in this Scheme for the reserve;</i>	Not relevant.
<i>(k) the built heritage conservation of any place that is of cultural significance;</i>	There are no buildings having cultural heritage significance on or adjacent to the subject site.
<i>(l) the effect of the proposal on the cultural heritage significance of the area in which the development is located;</i>	There are no places having cultural heritage significance on or adjacent to the subject site.
<i>(m) the compatibility of the development with its setting including the relationship of the development to development on adjoining land or on other land in the locality including, but not limited to, the likely effect of the height, bulk, scale, orientation and appearance of the development;</i>	The proposed development is entirely consistent with the CBACP, which sets the desired future character for the area. The CBACP contains built form provisions (which the proposed development complies with in all respects), and explicitly states provisions of privacy, overshadowing and solar access do not apply.
<i>(n) the amenity of the locality including the following — (i) environmental impacts of the development; (ii) the character of the locality; (iii) social impacts of the development;</i>	The proposed development does not negatively impact on the amenity of the locality. The development is envisaged by the CBACP, which sets out detailed standards for development on the subject site.
<i>(o) the likely effect of the development on the natural environment or water resources and any means that are proposed to protect or to mitigate impacts on the natural environment or the water resource;</i>	The proposed development will not impact the natural environment or water resources.

Matters to be considered	Response
<i>(p) whether adequate provision has been made for the landscaping of the land to which the application relates and whether any trees or other vegetation on the land should be preserved;</i>	A landscaping plan has been provided for the proposed development, in accordance with the requirements of TPS6.
<i>(q) the suitability of the land for the development taking into account the possible risk of flooding, tidal inundation, subsidence, landslip, bush fire, soil erosion, land degradation or any other risk;</i>	The subject site is not affected by any potential hazard.
<i>(r) the suitability of the land for the development taking into account the possible risk to human health or safety;</i>	The proposed development will not cause risk to any person within or near the development.
<i>(s) the adequacy of — (i) the proposed means of access to and egress from the site; and (ii) arrangements for the loading, unloading, manoeuvring and parking of vehicles;</i>	A transport impact statement has been prepared, demonstrating the proposed means of access and egress are suitable. Refer Appendix 3 for a copy of the transport impact statement.
<i>(t) the amount of traffic likely to be generated by the development, particularly in relation to the capacity of the road system in the locality and the probable effect on traffic flow and safety;</i>	A transport impact statement has been prepared, demonstrating the proposed means of access and egress are suitable. Refer Appendix 3 for a copy of the transport impact statement.
<i>(u) the availability and adequacy for the development of the following — (i) public transport services; (ii) public utility services; (iii) storage, management and collection of waste; (iv) access for pedestrians and cyclists (including end of trip storage, toilet and shower facilities); (v) access by older people and people with disability;</i>	<p>A waste management plan has been prepared for the proposed development. Refer Appendix 4 for a copy of the waste management plan.</p> <p>Access to public transport and for cyclists is considered in the CBACP.</p> <p>The proposed dwellings meet all universal access requirements.</p>
<i>(v) the potential loss of any community service or benefit resulting from the development other than potential loss that may result from economic competition between new and existing businesses;</i>	Not relevant.
<i>(w) the history of the site where the development is to be located;</i>	Not relevant.
<i>(x) the impact of the development on the community as a whole notwithstanding the impact of the development on particular individuals;</i>	The proposed development will assist the City to achieve its infill dwelling targets.
<i>(y) any submissions received on the application;</i>	Not applicable at the time of application.
<i>(za) the comments or submissions received from any authority consulted under clause 66;</i>	Not applicable at the time of application.
<i>(zb) any other planning consideration the local government considers appropriate.</i>	None.

5.3 State Planning Policy 4.2 Activity Centres for Perth and Peel

State Planning Policy 4.2 – Activity Centres for Perth and Peel (**SPP4.2**) is the state planning policy for the planning and development of activity centres throughout Perth and Peel. The main purpose of the policy is to specify broad planning requirements for the planning and development of new activity centres and the redevelopment and renewal of existing centres. It is mainly concerned with the distribution, function, broad land use and urban design criteria of activity centres, and with coordinating their land use and infrastructure planning.

SPP4.2 identifies Canning Bridge as a District Centre. SPP4.2 sets a performance target of a minimum 20 dwellings and desirable 30 dwellings per gross hectare within 400m of district centres. The proposed development will greatly assist in achieving the desirable dwelling target for the Canning Bridge District Centre. The proposal for a four-storey development comprising 21 multiple dwellings is also consistent with SPP4.2, which encourages mixed use development as it maximises efficient use of land.

5.4 State Planning Policy 3.1 Residential Design Codes

State Planning Policy 3.1 Residential Design Codes (**R-Codes**) provides a comprehensive basis for the control of residential development throughout Western Australia.

Pursuant to clause 4.1(3) of TPS6, residential development is required to conform to the provisions of the R-Codes; however, clause 4.3(1)(p) of TPS6 states:

For any dwellings within the Canning Bridge Activity Centre, the applicable development requirements are contained within the Canning Bridge Activity Centre Plan and provisions of the R-Codes do not apply, other than provisions relating to:

- (i) *Utilities and Facilities; and*
- (ii) *sight lines at vehicle access points and street corners.*

Pursuant to clause 7.3.1 of the R-Codes, local planning policies and activity centre plans may contain provisions which amend or replace deemed-to-comply provisions of the R-Codes.

Table 4 sets out the proposed development's compliance with the provisions of the R-Codes which apply to the proposed development pursuant to clause 4.3(1)(p) of TPS6, and notes provisions which have been amended or replaced by a local planning policy or activity centre plan.

Table 4 – Proposed development response to the applicable provisions of the R-Codes

Clause	Deemed-to-Comply Requirement	Proposed	Complies
6.2.3 Sight lines			
C3	This requirement is replaced by clause 2 of the City's <i>Policy P350/07 Fencing and Retaining Walls (Policy P350.07)</i> .	Refer Section 5.11 and Table 10 of this report.	n/a
6.4.6 Utilities and facilities			
C6.1	This requirement is replaced by design guideline 19.5 of the CBACP.	Refer Section 5.6.3 and Table 6 of this report.	n/a

Clause	Deemed-to-Comply Requirement	Proposed	Complies
C6.2	<i>Where rubbish bins are not collected from the street immediately adjoining a dwelling, there shall be provision of a communal pick-up area or areas which are:</i> i. <i>conveniently located for rubbish and recycling pick-up;</i> ii. <i>accessible to residents;</i> iii. <i>adequate in area to store all rubbish bins; and</i> iv. <i>fully screened from view from the primary or secondary street.</i>	Rubbish will be collected from the street immediately adjoining the dwellings.	✓
C6.3	<i>Clothes-drying areas screened from view from the primary or secondary street.</i>	A communal drying court is provided on the ground floor of the development. The drying court is screened from view of adjoining streets.	✓

5.5 Draft State Planning Policy 7.3 Design of the Built Environment

Draft State Planning Policy 7.3 – Design of the Built Environment (**Draft SPP7.3**) was released for public comment in October 2016. Draft SPP7.3 is included within a suite of reform documents pertaining to mixed use developments and apartments. The draft Apartment Design Guidelines included within the suite of documents is intended to provide planning and design standards for the development of apartments within Western Australia.

Draft SPP7.3 and the draft Apartment Design Guidelines together form a considerable body of work, which is not yet complete. The public consultation period would have generated a substantial number of submissions, and to date there has been no information provided on when the documents will be finalised or what changes will be made to them. Further, section 29(2) of the *Planning and Development Act 2005* explicitly states:

A State planning policy has no force or effect until it is approved by the Governor and published in the Gazette.

Further, a draft state planning policy is not listed as a relevant planning consideration in clause 67 of the Deemed Provisions. It follows that no weight should be given to the Draft SPP7.3 or the Apartment Design Guidelines in considering this application for development approval.

Notwithstanding, a high-level assessment has been undertaken of the proposed development against the draft Apartment Design Guidelines, which demonstrates the proposal is generally consistent with the design principles of the Apartment Design Guidelines.

Refer **Appendix 5** for the assessment against the Apartment Design Guidelines.

5.6 Canning Bridge Activity Centre Plan

5.6.1 Introduction

The CBACP has been prepared by the Western Australian Planning Commission, Department of Planning, City of Melville, City of South Perth, Department of Transport, Public Transport Authority and Main Roads WA as a joint initiative to progress long term planning for the Canning Bridge Structure Plan area.

Pursuant to clause 43(1) of the Deemed Provisions, a decision-maker for an application for development approval in an area that is covered by the CBACP is to have due regard to, but is not bound by, the CBACP when deciding the application.

Under the provisions of the CBACP, the subject site is situated within the Davilak Quarter (Q4) in the residential up to 4 storeys zone (H4) zone.

Q4 is envisaged to be a rejuvenated residential area with a vibrant local main street of local shops and employment. Uses within the Residential zone will remain as residential only to establish an appropriate buffer between the centre and the surrounding suburb.

5.6.2 Objectives

Table 5 sets out how the proposed development satisfies the objectives of the CBACP.

Table 5 – Proposed development response to CBACP Objectives.

Objectives	Response
<i>Meet district levels of community need and enable employment, goods and services to be accessed efficiently and equitably by the community.</i>	The proposed development provides a mix of one and one two bedroom apartments. No commercial uses are proposed as part of this development. The proposal will provide a population base to support the goods and services to be provided within the Canning Bridge area.
<i>Support the activity centre hierarchy as part of a long-term and integrated approach to the development of economic and social infrastructure.</i>	The proposed development is consistent with the H4 development requirements and will provide suitable residential development to support the Canning Bridge activity centre.
<i>Support a wide range of retail and commercial premises and promote a competitive retail and commercial market.</i>	The proposed development is in the residential portion of the structure plan area. No commercial and retail uses are proposed as part of this development.
<i>Increase the range of employment within the CBACP area and contribute to the achievement of sub-regional employment self-sufficiency targets</i>	The proposed development is in the residential portion of the structure plan area. No commercial and retail uses are proposed as part of this development.
<i>Increase the density and diversity of housing in and around the CBACP to improve land efficiency, housing variety and affordability and support the facilities in the area.</i>	The proposed development incorporates 21 apartments providing a diversity in housing options within the area. The development includes both one and two bedroom apartments of various sizes to cater for a diverse population.
<i>Ensure the CBACP area provides sufficient development intensity and land use mix to support and increase high frequency public transport.</i>	The four-storey, 21 multiple dwelling development is consistent with the design guidelines for the H4 area and will provide a population base to support the high frequency public transport within the locality.

<i>Maximise access to and through the CBACP area by walking, cycling and public transport while reducing private car trips.</i>	The proposed development is easily accessed by pedestrians and people with bicycles, and has good access to public transport.
<i>Plan development in the CBACP area around a legible street network and quality public spaces.</i>	The proposed development is interactive with the street and provides a suitable interface between the public and private realms.
<i>Concentrate activities, particularly those that generate steady pedestrian activation, within the CBACP area.</i>	The proposed development contains multiple dwellings on the fringe of the CBACP area, within walking distance of the mixed use areas of the CBACP area.

5.6.3 Design Guidelines

Part One – Statutory Section of the CBACP contains a set of Design Guidelines (**the Guidelines**). The Guidelines are statutory provisions and apply to the entirety of the area within the CBACP boundary. Development proposed within the CBACP area will be considered against the objectives, desired outcomes and requirements within the Guidelines, and in accordance with the process identified in Division One of the CBACP.

Each requirement within the Guidelines represents the quantitative criteria against which developments are to be designed and assessed. Each requirement is complemented by a Desired Outcome which represents the qualitative principles against which the decision maker exercises its judgement to determine the proposal. The Desired Outcomes are based upon the guiding principles, objectives and goals of the CBACP. As identified under **Section 5.6.2** of this report, the proposed development is consistent with the CBACP objectives.

An assessment is undertaken within **Table 6** which considers the specific requirements of the Guidelines which are applicable to the proposal. Elements which are not applicable to the subject site or the proposed development are not included in the assessment table.

Table 6 – CBACP Design Guidelines requirements applicable to entire proposal

Clause	Requirement	Proposed	Complies
1. Land Use			
1.8.3 H4 and H8 Zone	Multiple Dwelling, Grouped Dwelling, Single House, Aged or Dependant Person's Dwelling, Single Bedroom Dwelling, Corner Store, Recreation – private, Recreation – Public, Residential Building, Home Occupation, Home Office	Multiple Dwelling	✓
1.13 Dwelling Diversity	Minimum 20% and maximum 50% one bedroom or studio dwellings.	6 (29%) one bedroom	✓
	Minimum 40% two bedroom dwellings.	15 (71%) two bedroom	✓
2. Form and Mass			
2.5 Active uses	Development is encouraged which comprises active uses at podium levels or roof top spaces such as food and beverage outlets and open spaces which are accessible to the public	Rooftop garden and communal activity area provided for the residents of the apartments.	✓

Clause	Requirement	Proposed	Complies
3. Heights			
3.5 Building height	For buildings in the H4 Zone, notwithstanding the 4 storey height limit, no building shall exceed 16 metres above NGL.	Proposed development is 4 storeys and 16.0m in height.	✓
Interpretations : Height	<p><i>1. In metres</i> <i>In relation to a building, means the distance measured from the mean natural level of that part of the land on which the building is erected to the highest point of any part of the building above it but does not include:</i></p> <p><i>(a) any lift plant, water tower or similar utility or services, not exceeding 3.0 metres in height; or</i></p> <p><i>(b) any architectural feature or decoration, other than a free-standing sign, not used for any form of accommodation, or any open roofed structures which may be developed to provide recreation and open space opportunities for building occupants which may be approved by the decision maker.</i></p> <p><i>2. In storeys</i> <i>Does not include a basement.</i></p>	<p>The mean natural level of the building's footprint is 15.29m AHD – this has been calculated on the average of the natural ground level at the four corners of the building footprint.</p> <p>This lift shaft is 3.0m in height above the roof, which complies with the allowable exemption.</p> <p>The open-roofed shade structure on the roof of the building complies with the CBACP definition of 'height'.</p>	✓
Interpretations : Storey	<p><i>Storey</i> <i>Has the same meaning as 'Storey' in the National Construction Code Series (Building Code of Australia Class 2 to Class 9 Buildings), and means a space within a building which is situated between one floor level and the floor level next above, or if there is no floor above, the ceiling or roof above, but not-</i></p> <p><i>(a) A space that contains only –</i></p> <p><i>(i) A lift shaft, stairway or meter room; or</i></p> <p><i>(ii) A bathroom, shower room, laundry, water closet, or other sanitary compartment; or</i></p> <p><i>(iii) Accommodation intended for not more than 3 vehicles; or</i></p> <p><i>(iv) A combination of the above; or</i></p> <p><i>(b) a mezzanine.</i></p> <p><i>(c) any part of a building between two floors that is 50% or more below ground level.</i></p>	The ground floor dwellings each contain a mezzanine, which are unenclosed and meet the definition of a 'mezzanine' under the Building Code of Australia (refer also Figure A1.1(ME) of Volume One). The mezzanines are not a 'storey' under the CBACP.	✓
4. Street Setbacks			
4.5 Street setbacks	Minimum 4 metre and maximum 6 metre setback to street boundaries.	4.0m	✓
4.8 active and landscape street frontages	Where a street setback is required, the setback area shall be activated and/or landscaped.	Street setback includes landscaping and attractive pedestrian and vehicle entrance to the proposed development.	✓
5. Side and Rear Setbacks			
5.6 Side and rear setbacks	Side and rear setbacks for all development shall be 4 metres for any lot which is equal to or greater than 16 metres in width. Setbacks do not apply to any eaves and sun shading devices.	A 4.0m setback is provided to the northern, southern and western (rear) boundaries of the subject site.	✓

Clause	Requirement	Proposed	Complies
5.7 Privacy, solar access and overshadowing	Provisions of privacy and solar access and overshadowing do not apply within the CBACP area.	n/a	✓
9. Facades			
9.1 Street environment	Developments shall be sympathetic to the surrounding environment in composition, proportion, materials, colours and finishes. This includes responding to (not replicating) vertical and horizontal fenestration of adjoining developments and providing responses to elements within the street verge such as bus stops, parking and service infrastructure or service entrances.	The proposed development comprises feature stone and wood cladding providing horizontal and vertical treatment to the façade. The use of materials and articulation ensure an attractive entrance statement.	✓
9.2 Gazing	Proposed development shall incorporate substantial areas of glazing on street frontages. Glazing shall comprise no less than 50% of any façade at pedestrian/ground level and where opaque signage is proposed on glazing, unimpeded clear glazing shall still comprise greater than 50% of the frontage.	The ground floor is provided with more than 50% glazing.	✓
9.3 Semi active frontages	Semi active frontages are required in all Residential Zones with a minimum of 35% of the frontage incorporating windows or doorways with passive visual surveillance of the adjacent street at ground level.	The ground floor is provided with a residential lobby with visually permeable screening. The floors above are provided with balconies that provide passive surveillance to the street.	✓
9.4 Balconies	Windows and balconies shall be incorporated into the design of developments above ground level. Balconies shall have a minimum 2.4 metre depth and a minimum area of 10m ² , to encourage use.	All balconies are 10m ² or greater with a minimum dimension of 2.4m.	✓
9.5 Vandalism	Developments shall be designed so as to discourage vandalism by use of materials such as sacrificial paint or architectural features to discourage inappropriate activity.	The proposed development includes permeable screening, landscaping and articulation using different building materials to assist in discouraging vandalism.	✓
9.6 Pedestrian links	Pedestrian links within development sites shall be of a design that incorporates visual interest and activity including retail and food and beverage activities or civic or community spaces.	The pedestrian entrance is located fronting Clydesdale Street, providing direct pedestrian access from the street into the building.	✓
9.7 Floor level	The internal floor level of any development shall, where possible, have a finished floor level no greater than 500 mm below or above the adjoining footpath or verge level to ensure interaction between pedestrians and the adjoining buildings. Development which fronts a street with differing levels should consider innovative design to meet this requirement.	The finished floor level is consistent with the natural ground level of Clydesdale Street.	✓
10. Open Space and Landscaping			

Clause	Requirement	Proposed	Complies
10.5 Open space	Development in the H4 Zone shall be provided with a minimum provision of 40% open space which shall be provided in shared common space at ground levels and/or shared common space on areas such as the roof.	The roof garden and communal open space is approx. 274m ² (27%). In addition, the communal driveway provides a large expansive paved surface providing informal communal open space.	✓
10.6 Landscaping	Where development is not proposed to all boundaries of a site, landscaping design shall be incorporated providing that such landscaping maintains openness and visibility into the development site. Landscaping in the form of hard and soft landscaping can be utilised. Water sensitive design shall be implemented for all landscaped areas	Low level landscaping and paving to the residential lobby is provided within the street setback area to ensure openness and visual permeability.	✓
10.7 Fencing	Landscaping and/or low fencing below 1.2 metres on property boundaries, where buildings are setback from the boundary, shall reinforce the separation between public and private realm.	Low level landscaping and visually permeable fencing is provided on the property boundary to provide separation between the public and private realm.	✓
11. Sustainability			
11.5 Built form	<p>All new development shall be designed to maximise passive solar principles for heating, cooling, ventilation and energy conservation. East and west facing glazing shall be minimised and shading devices shall be employed to reduce heat loads within buildings and reduce the need for air-conditioning systems. All buildings shall be designed to enable access to natural light and cross ventilation.</p> <p>At a minimum, all new development within the Davilak Quarter shall achieve a 5 Star Green Star design rating. In the H4 and H8 areas, as evidence in support of compliance with the required ratings, as a minimum applicants shall submit as part of their development application a report from a Green Building Council of Australia qualified consultant demonstrating that the proposal will achieve the required level of performance. In these areas any development approval granted will be conditional upon the development being designed and constructed to include the elements identified in the supporting consultant's report.</p>	<p>The proposed development maximises solar penetration and cooling from summer sea breezes. All apartments have access to natural light for large periods of the day.</p> <p>A report has been prepared and included in the development application demonstrating how the design can achieve a 5 Star Green Star rating. Refer Appendix 6.</p>	✓
16. Fencing			
16.1 Fencing	All proposed fencing which is visible from a public place shall be treated in the same way as required in Clause 15.1. Fencing shall be of a high quality on both sides.	The proposed fencing is permeable and of high quality to allow activation of the street and interaction between the private and public realms.	✓

Clause	Requirement	Proposed	Complies
17. Public Art			
17.2 Public art contribution	All development which is greater than \$1 million in total capital cost of development shall contribute 1.0% of the total capital cost of development to a CBACP wide public art fund. The fund is to be used solely for the development of a strategy and acquisition of public art works to be displayed within the CBACP area. Alternatively the developer may propose to provide on-site public art works which are integrated into the design of the development. Any public art proposed shall form part of the development application to be considered by the Design Advisory Group.	The public art requirements and can be included as a condition of approval.	✓
18. Parking			
18.1 Car parking	Basement car parking or parking sleeved by other uses is encouraged within the CBACP area. All parking areas shall be lit and clearly signed.	Parallel car parking along the driveway is screened by a hedge and letterbox along the street alignment. Lighting and signage will be provided as a condition of approval.	✓
18.3 Car parking	A minimum ratio of 0.75 bays for each studio or single bedroom dwelling, and a minimum ratio of 1.0 bay for each two or three bedroom dwelling, and a minimum ratio of 1.25 bays for each dwelling with four bedrooms or greater. 6 one bedroom (x 0.75) plus 15 two bedroom (x 1.0) = 19.5 bays required	20 resident bays plus four visitor bays provided	✓
18.8 Bicycle parking	Bicycle storage/parking shall be provided for all residential development at a ratio of one bay for every dwelling within a development site, and can be comprised within storage areas required as per Clause 19.5 or in shared parking areas or both.	Bicycle parking is available in each of the 21 resident storerooms.	✓
19. Servicing and Functionality			
19.5 Storerooms	All residential developments shall comprise an enclosed, lockable storage area, with a minimum dimension of 1.5m with an internal area of at least 4m ² , for each grouped or multiple dwelling(s).	21 storerooms with a minimum dimension of 1.5m and area of 4m ² are provided within the basement.	✓
20. Safety			
20.1 Access	Access to and through a development shall be safe and efficient. Entrances shall be positioned so that all pedestrian movement is adequately lit and directly visible from a public space. Access to and from car parking areas and building entrances shall be adequately sign-posted with provision of good lighting to enable safe out of hours use.	Pedestrian access to the proposed development is directly from Clydesdale Street. The entrance includes an internal and external lobby area that is distinguishable to pedestrians that provides clear sightlines to the street. The lobby area is accessed by a side door that provides direct access to the car stacks.	✓

Clause	Requirement	Proposed	Complies
20.2 Active street frontages	To maximise visibility and surveillance of the public environment, the incorporation of active edge uses, including those at ground level that spill out onto public space and those located at the front of a building on the first floor that enable overlooking into public space, are encouraged. Windows can be positioned to overlook pedestrian routes, provided that privacy concerns are met.	The proposed development includes balconies on the first to third floor that front Clydesdale Street. These balconies provide passive surveillance. Windows are also used on the floors above the internal access way to provide passive surveillance over the car parking areas within the subject site.	✓
20.3 Public and private realm	Development shall clearly define private and public space responsibilities. The function and ownership of an area can be clarified by paving, lighting and planting. Planting shall not create concealed spaces near paths and lighting shall allow clear lines of visibility.	A visually permeable fence and low level landscaping is proposed along the street boundary on the subject site. This provides a clear separation between the public and private realms.	✓
20.5 Lighting	Lighting proposed for all development shall be designed so as to limit the possibility of dark shadows in adjacent private and public open spaces.	Any lighting used will not cause dark shadows in private or public open space.	✓

As demonstrated above the proposed development is entirely consistent with the provision of the CBACP. The proposed development is considered to meet the desired outcomes and objectives of the CBACP and should be approved accordingly.

5.7 Policy P302 General Design Guidelines for Residential Development

The City's *Policy P302 General Design Guidelines for Residential Development* (**Policy P302**) applies to all residential development; its objectives are:

- *To preserve or enhance desired streetscape character, and to promote strong design compatibility between existing and proposed residential buildings.*
- *To enhance residential amenity standards generally, and to provide specific guidance as to Council's expectations in relation to the objectives and provisions of the Residential Design Codes and the objectives as well as provisions of Town Planning Scheme No. 6, including Clause 1.6 "Scheme Objective" and Clause 7.5 "Matters to be Considered by Council".*

The Policy P302 provisions are addressed in **Table 7**.

Table 7 – Policy P302 requirements applicable to proposal

Clause	Requirement	Proposed	Complies
3. Streetscape Character			
	<i>All residential development shall be designed in a manner that will preserve or enhance desired streetscape character. In order to satisfy the Council in this respect, the drawings of any proposed development are required to demonstrate design compatibility between the proposed building and the existing buildings within the focus area. In assessing the design compatibility of a proposed development, the Council will have regard to the primary and secondary contributing elements as identified in the preceding definition of the term "design compatibility".</i>	This requirement is not applicable to the CBACP area. The CBACP sets the desired future character of the area. Accordingly, there will be development proposed, consistent with the objectives and requirements of the CBACP, which might not be consistent with the existing streetscape. In accordance with orderly and proper planning principles development should be in accordance with the CBACP.	n/a
6. Building Form and Site Planning			
(a) Scale	<i>Building bulk shall be generally distributed to ensure that a proposed building will not have an overpowering impact on neighbours and the street. Unless the Council is satisfied in this respect, approval will not be granted for any variation from the setback provisions of the Residential Design Codes.</i>	The R-Codes does not apply to the proposed development (refer clause 4.3(1)(p) of TPS6).	n/a
(b) Building Height and Site Filling	<i>(i) Building heights shall comply with the maximum permissible heights prescribed in Clause 6.1A of Town Planning Scheme No. 6. Higher buildings should generally be set back from the street frontage, behind lower buildings.</i> <i>(ii) Building siting and height shall relate to landform with minimum cut and fill. Where cut and fill is necessary, floor levels shall be established so as to equalise cut and fill as far as it is practicable.</i>	The proposal complies with building height requirements of CBACP. No substantial cut or fill is proposed.	✓
(c) Views	<i>Buildings shall be designed and located to enable the sharing of views with neighbours to the extent necessary to comply with the provisions of Council's Planning Policy P350.9 "Significant Views".</i>	There are no significant views affected by the proposed development.	✓
(d) Visual Privacy	<i>All development shall conform to Council's Planning Policy P350.08 "Visual Privacy".</i>	This policy does not exist. Further, under the CBACP provisions of privacy do not apply.	n/a
(e) Driveways	<i>In addition to the relevant provisions of the Residential Design Codes and Council Policy P350.03 "Car Parking Access, Siting and Design", driveways shall be designed in accordance with the following:</i> <i>(i) Wherever possible, the length of driveways or other extensive paved areas shall not exceed 20 metres.</i> <i>(ii) Where the length of a driveway exceeds 20 metres, deviations of alignment and perimeter landscaping at least 1.0 metre wide shall be incorporated in order to provide a landscaped vista when viewed from the street.</i>	The driveway length is required in order to provide access to on-site car parking. It is not possible to include any deviations to the driveway as it would impact on manoeuvring space for reversing vehicles.	✓

Clause	Requirement	Proposed	Complies
(f) Design of Carports, Garages and Outbuildings	<i>The design and materials of construction of carports, garages and habitable outbuildings shall be compatible with the existing or proposed dwelling. Where a proposed carport is designed with a pitched roof, either half-height or full-height brick piers are required to be used to support the roof.</i>	Carpark structures are integrated into the building design.	✓
7. Solar Orientation			
(a)	<i>Wherever possible, buildings shall be designed to take advantage of solar access principles with provision for north-facing private open space and solar access to living areas.</i>	The building has been oriented to maximise solar access for ground-floor units.	✓
(b)	<i>The protection of solar access to adjoining properties is required. Compliance with this requirement must be demonstrated in relation to the siting of building bulk where any variation from the setbacks prescribed in the Residential Planning Codes is proposed.</i>	The R-Codes does not apply to the proposed development (refer clause 4.3(1)(p) of TPS6).	n/a
8. Landscaping / Tree Preservation			
(a)	<i>Landscaping Plans are required to be submitted for all developments requiring Planning Consent, in accordance with the provisions of Clause 6.14 of the No. 6 Town Planning Scheme. All landscaping thus provided is required to be subsequently maintained to the satisfaction of Council, in accordance with the approved landscaping plans.</i>	A landscape plan has been submitted with the application.	✓
9. Communal Open Space			
	<i>Where communal open space is required, landscaping shall be designed having regard to:</i> <ul style="list-style-type: none"> <i>The type of activity permitted;</i> <i>Future maintenance requirements;</i> <i>The need to maintain privacy of nearby dwellings;</i> <i>Surveillance opportunities and security;</i> <i>The nature of the landscaping within the existing streetscape; and</i> <i>Traffic implications.</i> 	Landscaping of communal open space is in accordance with the CBACP.	✓
10. Water Sensitive Design for On-Site Drainage			
	<i>The incorporation of water sensitive design methods is encouraged in order to conserve and utilise water collected on-site, and to minimise the burden on the Council's street drainage system. Such methods may include, amongst others:</i> <ul style="list-style-type: none"> <i>Minimising sealed surfaces and using porous surfaces to reduce stormwater runoff;</i> <i>Retaining existing trees and planting native vegetation and ground cover; and</i> <i>Directing runoff to maximise on-site infiltration and detention.</i> 	The proposed development collects and disposes of drainage on-site.	✓
12. Garbage Collection			
	Where considered necessary in Council's opinion, garbage collection facilities shall be integrated with other built elements such as fences or buildings.	Bin storage has been incorporated into the design of the development.	✓

The proposed development complies with Policy P302 and warrants approval accordingly.

5.8 Policy P316 Developer Contribution for Public Art & Public Art Spaces

The City's *Policy P316 Developer Contribution for Public Art & Public Art Spaces (Policy P316)* requires developers to contribute towards public art.

The requirements of Policy P316 substantially overlaps with design guideline 17 of the CBACP. Given the CBACP applies specifically to the CBACP area, and Policy P316 applies broadly to the City, the more-specific requirements of the CBACP prevail.

5.9 Policy P350.03 Car Parking Access, Siting and Design

The City's *Policy P350.03 Car Parking Access, Siting and Design (Policy P350.03)* applies to any garage, carport or unroofed car parking bay associated with a proposed dwelling; its objectives are:

1. *To provide for parking and associated structures in a manner that contributes positively to the streetscape and is compatible with dwelling design and materials.*
2. *To have regard for the safety and welfare of pedestrians on public footpaths and other road users when designing vehicle access and parking.*

Policy P350.03 states:

Where there is an inconsistency between this Policy and provisions within a Precinct Policy relating to car parking, the provisions of the applicable Precinct Policy prevail.

Table 8 demonstrates how the requirements of Policy P350.03 are satisfied.

Table 8 – Policy P350.03 requirements applicable to proposal

Clause	Requirement	Proposed	Complies
1. Setback of Garages, Carports and Unroofed Car Bays			
1.3	<i>Where car bays are required to satisfy parking requirements under the R-Codes or TPS6 and are proposed to be unroofed, the minimum setback of unroofed car bays from the street boundary shall be:</i> (a) 4.5 metres from primary streets; (b) 1.5 metres from secondary streets; and (c) nil, with at least 6.0 metres reversing depth, from a right-of-way.	The car parking requirement of the CBACP is satisfied in full by the 20 car-stacker bays. The unroofed bays are not required by the CBACP.	✓
2. Building Design of Car Parking Structures			
2.1	At least one occupiers' car bay for each dwelling is to be provided with roof cover. Where a development requires less than one car bay for each dwelling, all occupier bays are to be provided with roof cover.	All resident bays are provided within the enclosed car stacker.	✓
4. Design and Location of Visitor Car Parking			
4.1	<i>All visitors' bays, other than those situated in tandem with a dwelling occupier's bay, shall be:</i> (a) Retained permanently for the exclusive use of visitors; and	To be a condition of approval.	✓

Clause	Requirement	Proposed	Complies
	<i>(b) Identified as common property on any strata plan relating to the development.</i>		
4.2	<i>Visitors' bays for Grouped Dwellings and Multiple Dwellings shall be unroofed if the bay is located within the front setback area.</i>	The visitor car parking bay within the street setback area is unroofed.	✓
6. Vehicle Crossovers			
6.1	<i>Where the development site adjoins an essential right-of-way, the City may approve residential development relying on primary vehicular access from a public street to one or more of the required car bays, subject to: (a) There being only one crossover from the public street</i>	Only one crossover is proposed to Clydesdale Street.	✓
6.2	<i>The City normally expects existing street trees to remain undisturbed by new developments. All new crossovers are to meet the following requirements: (a) Driveways and vehicle crossovers shall be setback a minimum distance of 3.0 metres from a street tree, measured from the centre of the tree trunk, unless the City Environment department permits a lesser distance or the removal of the tree.</i>	The crossover is at least 3m from the existing street tree.	✓
6.3	<i>All new crossovers are to meet the following requirements: (a) All crossovers are to be designed and constructed in accordance with the City's related specifications and guidelines included in Council Management Practice M353 Crossing (Crossover) Construction; (b) The required vehicle crossover may be either newly constructed or an existing crossover widened to the required minimum width;</i>	The widening of the existing crossover will be undertaken in accordance with the City's requirements.	✓
8. Mechanical Parking Devices (Car Stackers)			
8.1	<i>Where a car stacking system is proposed, the minimum internal dimensions of associated car parking bays are to be 2.1 metres in height, 5.5 metres in length, 2.5 metres in width, and having a minimum weight bearing capacity of 2,600 kilograms.</i>	The proposed car stackers comply with the minimum dimensions required.	✓
8.2	<i>A minimum of 20% of the total onsite car parking bays provided shall be provided without requiring the use of a mechanical parking device.</i> 24 x 0.2 = 4.8 (rounded down to 4)	Four at-grade car parking spaces are provided.	✓
8.3	<i>Mechanical parking devices shall be for tenants/owners of a development and shall be maintained as operational for the life of the building, including in the event of a power failure. The City will apply conditions of development approval to all development applications involving mechanical parking devices to ensure: (a) Ongoing compliance with operational specifications is achieved as outlined in a Parking Management Plan.</i>	To be a condition of approval.	✓

Clause	Requirement	Proposed	Complies
	<i>(b) Owners and prospective purchasers are aware of their obligations with respect to the use of mechanical parking devices.</i>		

The proposed development complies with Policy 350.03 in all respects.

5.10 Policy P350.5 Trees on Development Sites and Street Verges

The City's *Policy P350.5 Trees on Development Sites and Street Verges (Policy 350.5)* applies where new dwellings are proposed; the objectives of Policy 350.5 are:

- (a) To promote the designing of residential development in a manner that enables trees to be retained.*
- (b) To ensure that new trees are planted to preserve or enhance the City's desirable 'green' character.*
- (c) To preserve street trees.*

Table 9 demonstrates how the requirements of Policy P350.5 are satisfied.

Table 9 – Policy P350.5 requirements applicable to proposal

Clause	Requirement	Proposed	Complies
6. Development Site Plan to Show All Trees			
	<i>The site plan submitted as part of a development application is to accurately show:</i> <i>(a) any existing tree 3.0 metres or more in height;</i> <i>(b) which existing trees 3.0 metres or more in height the applicant intends to retain and which are proposed to be removed;</i> <i>(c) any trees to be planted on the development site; and</i> <i>(d) all trees on the street verge adjoining the development site.</i>	The development plans include a feature survey showing all trees on the subject site.	✓
7. Trees on Development Sites			
(f)	<i>Subject to clause 7(g), the City does not seek to reduce the number of dwellings on a development site below the normal entitlement, and will permit the removal of trees which would prevent the construction of a dwelling which could otherwise be built.</i>	The subject site contains a jacaranda tree in the rear yard. The tree is within the envelope for development as set out in the CBACP, and it is not possible to retain the tree (including necessary root protection zones) without reducing the development potential of the subject site.	✓
(g)	<i>Notwithstanding clause 7(f), where a development site contains a tree which is included in the City's Register of Tree Preservation Orders pursuant to clause 6.13 of TPS6, any proposed development is to be designed to ensure that the tree will be preserved without detriment to the tree or structural damage to any adjacent building.</i>	No tree on the subject site is listed in the City's Register of Tree Preservation Orders.	n/a

Clause	Requirement	Proposed	Complies
8. Street Trees			
(a)	<i>The City requires the retention of all street trees ...</i>	The existing street tree is to be retained.	✓
9. Protection of trees which are to be retained			
	<i>During construction of a development, every tree which is to be retained on a development site or within a road reserve must be protected from root, trunk and canopy damage.</i>	To be a condition of approval.	✓

The proposed development complies with the requirements of Policy 350.5.

5.11 Policy P350.07 Fencing and Retaining Walls

The City's *Policy P350.07* applies to any fencing and retaining walls on the street, side or rear boundary of the site of any residential development, and in relation to corner truncation areas adjacent to formed driveways and at the intersection of streets and rights-of-way, other obstructions which could obscure the sight-lines of motorists. The objectives of Policy 350.07 are:

- 1. To regulate the height of obstructions adjacent to formed driveways and at the corners of streets and rights-of-way in the interest of pedestrian and vehicular safety.*
- 2. To preserve or re-establish a desired 'open front garden' streetscape character.*
- 3. To promote casual surveillance of the public and private realm through appropriate fencing design, in order to increase on-site and neighbourhood safety and security.*
- 4. To regulate the height of side and rear boundary dividing fences in the interest of maintaining visual privacy.*
- 5. To generally restrict the height of side and rear boundary dividing fences to 1.8 metres because higher fences can often adversely affect the amenity of an adjoining property by reason of dominant bulk, overshadowing or restriction of views.*
- 6. To regulate the height of retaining walls in the interests of maintaining streetscape compatibility and protecting neighbours' amenity.*

Table 10 demonstrates how the requirements of Policy P350.07 are satisfied.

Table 10 – Policy P350.07 requirements applicable to proposal

Clause	Requirement	Proposed	Complies						
1. Street Walls and Fences									
1.1	<p><i>Fences situated on either the primary street boundary or the portions of the side boundaries within the front setback area, are to comply with the requirements set out in Table 1 below:</i></p> <p><i>Table 1</i> <i>Requirements for Fencing Design - Primary Streets and Within the Front Setback Area</i></p> <table><tr><th><i>Design Element</i></th><th><i>Requirements</i></th></tr><tr><td><i>Solid base of fence</i></td><td><i>Maximum height: 1.2 metres. Materials: Face brickwork, rendered brick, limestone blocks, or similar masonry.</i></td></tr><tr><td><i>Open grille panels between piers</i></td><td><i>Maximum height: 1.8 metres. Percentage open: 80% minimum.</i></td></tr></table>	<i>Design Element</i>	<i>Requirements</i>	<i>Solid base of fence</i>	<i>Maximum height: 1.2 metres. Materials: Face brickwork, rendered brick, limestone blocks, or similar masonry.</i>	<i>Open grille panels between piers</i>	<i>Maximum height: 1.8 metres. Percentage open: 80% minimum.</i>	The proposed fence in the street setback area comprises a solid base of 0.65m and infill panels with 80% visual permeability with a height of 1.8m.	✓
<i>Design Element</i>	<i>Requirements</i>								
<i>Solid base of fence</i>	<i>Maximum height: 1.2 metres. Materials: Face brickwork, rendered brick, limestone blocks, or similar masonry.</i>								
<i>Open grille panels between piers</i>	<i>Maximum height: 1.8 metres. Percentage open: 80% minimum.</i>								
1.2	<p><i>A solid fence to a maximum of 1.8 metres height is permissible to the extent indicated below:</i></p> <p><i>(c) A solid wall not exceeding 1.0 metre in width, for the purpose of installing meter boxes adjacent to the street boundary.</i></p>	A solid letterbox wall with a height of 1.8m and a width of 1.0m is proposed for portion of the front boundary.	✓						
2. Sight Lines									
2.1	<p><i>Any obstruction located within a driveway corner truncation area [refer clause 2.4 below] is to comply with the requirements set out below:</i></p> <p><i>(a) A maximum of 0.75 metres height;</i></p> <p><i>(b) No more than one masonry pier with dimensions conforming to those specified in Table 1 of clause 1.1 above a height of 0.75 metres, to a maximum of 1.8 metres; and</i></p> <p><i>(c) Any fencing above a height of 0.75 metres, to a maximum of 1.8 metres, is to be a minimum 80% visually permeable.</i></p>	No walls are located within the driveway truncation area.	✓						
2.4	<p><i>The corner truncation area is measured in the manner described, irrespective of the angle of intersection of the two boundaries:</i></p> <p><i>(a) The driveway corner truncation area is delineated by:</i></p> <p><i>(i) the point where the edge of the driveway and street boundary intersect;</i></p> <p><i>(ii) the point on the street boundary 1.5 metres from the edge of the driveway; and</i></p> <p><i>(iii) the point on the edge of the driveway 1.5 metres from the street boundary, thus forming a triangular area.</i></p>		n/a						
3. Fences on Side and Rear Boundaries Behind Front Setback Area									
3.1	<p><i>New fences on or adjacent to side and rear boundaries that are not located within the front setback area are to comply with the following:</i></p> <p><i>(a) The fences are to be constructed of brick, timber, capped manufactured precoloured metal sheet,</i></p>	To be a condition of approval.	✓						

Clause	Requirement	Proposed	Complies
	<i>capped corrugated fibre-cement sheet or brushwood; and</i> (b) <i>The height is to be 1.8 metres unless:</i> (i) <i>a greater height is approved under clause 4.1 of this Policy; or</i> (ii) <i>the adjoining property owner agrees in writing to a height less than 1.8 metres but in any case the height is to be not less than 1.6 metres.</i>		
3.2	<i>In conjunction with any proposed residential development, the applicant is to provide new fences on the rear boundary and all side boundaries of the site behind the front setback area, other than in the following circumstances:</i> (a) <i>Where the proposal involves only additions, alterations or outbuildings appurtenant to an existing dwelling; or</i> (b) <i>Where an existing fence is structurally sound, on a straight alignment, 1.8 metres high, and free of damage or discolouration.</i>	To be a condition of approval.	✓
3.3	<i>Where an existing fence is to be replaced, the new fence is to be erected immediately following the removal of the existing fence.</i>	To be a condition of approval.	✓
5. Internal Fencing			
	<i>Where a development comprises two or more dwellings, the following provisions apply in respect of any 'internal' fence visible from any communal street, other common area or the front of any dwelling:</i> (a) <i>The fence is not to be constructed of fibre cement sheeting; and</i> (b) <i>Where the formed driveway serving a parking bay incorporates a 'corner' at any point, any 'internal' fence is to be aligned so as to provide a 4.25 metre truncation or larger, at such corner.</i>	No fibre-cement fence or fence obstructing access to a parking space is proposed.	✓
6. Retaining Walls			
6.1	<i>Cutting or filling on any part of a site is not to exceed a depth of 150 mm unless retained by a structurally adequate wall. Details of any required retaining walls are to be shown on the site plan submitted as part of a development application.</i>	Cutting or filling of more than 150mm is not proposed.	✓
6.3	<i>Where a retaining wall is required, construction of the wall is to be completed prior to, or immediately after, any part of a site has been excavated or filled.</i>	To be a condition of approval.	✓

The proposed development complies with Policy 350.07 and warrants approval accordingly.

5.12 Policy P350.14 Use or Closure of Rights-of-Way

The City's *Policy P350.14 Use or Closure of Rights-of-Way (Policy 350.14)* applies to all private ROWs. The objectives of Policy 350.14 are:

(a) To ensure that 'essential' rights-of-way which are unpaved at the time of a development application, are upgraded to a sufficient standard in conjunction with the proposed development.

(b) To minimise the number of vehicle crossovers to a public street where development sites have alternative access via a right-of-way.

(c) To prevent vehicular access from 'obsolete' rights-of-way to adjoining properties so as to preserve the option of closure, recognising that such rights-of-way present fire, health and security hazards.

(d) To clarify the circumstances under which the Council may be prepared to support the closure of an 'obsolete' right-of-way.

The ROW adjoining the subject site is developed with a single house, under construction at the time of writing of this report, which provides primary vehicle access to the single house. The ROW is therefore defined as an 'essential' ROW under the provisions of Policy 350.14.

Table 11 demonstrates how the requirements of Policy P350.14 are satisfied.

Table 11 – Policy P350.14 requirements applicable to proposal

Clause	Requirement	Proposed	Complies
6. Vehicular Access via a Right-of-Way			
(a)	<i>Subject to clauses 6(a) and 6(b) of this Policy, an essential right-of-way may be used to provide vehicular access to a garage, carport or unroofed car parking bay serving a proposed dwelling on a site adjoining the right-of-way.</i>	The proposed development provides vehicle egress via the ROW.	✓
7. Upgrading and Maintenance of Essential Rights-of-Way			
(a)	<i>Where primary vehicular access to the site of proposed residential development is via an essential right-of-way which is not paved at the time of submission of the development application:</i> <i>(i) the portion of the right-of-way which adjoins the development site is to be paved, drained, kerbed and maintained by the property owners to a standard sufficient to sustain the loadings of heavy service vehicles and to the specifications of the City's Engineering Infrastructure Department;</i> <i>(ii) the property owners are to meet the full cost of all design, construction and maintenance associated with the upgrading works.</i>	To be a condition of approval.	✓

The access to the ROW complies with Policy P350.14 and warrants approval accordingly.

6 Conclusion

The proposed development provides a high quality residential development within the H4 residential area within the CBACP area. The proposed development responds to its location and provides a benchmark for future development which is likely to progress in the area. The proposed development will positively contribute to the growth and vitality of the Canning Bridge area.

The CBACP sets the desired future character for the area, and in this respect the proposed development complies in all respects to the design guidelines of the CBACP. It is an appropriate development which warrants approval accordingly.

The proposed development is also consistent with the site and development standards of TPS6 and the relevant local planning policies which have been adopted by the City.

Notwithstanding that the Draft SPP7.3 (and associated Apartment Design Guidelines) is not a relevant planning consideration under clause 67 of the Deemed Provisions, an assessment against the Apartment Design Guidelines has nonetheless demonstrated the development complies broadly with the 'good design' principles set out in the Apartment Design Guidelines.

The proposed development therefore warrants approval.

Appendix 1

Certificate of Title and Plan 3486

WESTERN



AUSTRALIA

REGISTER NUMBER

413/P3486DUPLICATE
EDITION
N/ADATE DUPLICATE ISSUED
N/A**RECORD OF CERTIFICATE OF TITLE**
UNDER THE TRANSFER OF LAND ACT 1893VOLUME
1116FOLIO
882

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

LAND DESCRIPTION:

LOT 413 ON PLAN 3486

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

REUBEN PEARCE LANE
LOIS ALBERTA LANE
BOTH OF 38 MARINE PARADE, COTTESLOE
AS JOINT TENANTS

(T T10426/1955) REGISTERED 12/7/1955

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. EASEMENT BENEFIT - SEE PLAN 3486 (SHEET 2) AND SECTION 167A TLA.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.
* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.
Lot as described in the land description may be a lot or location.

-----END OF CERTIFICATE OF TITLE-----

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents of for local government, legal, surveying or other professional advice.

SKETCH OF LAND: 1116-882 (413/P3486)
PREVIOUS TITLE: 1000-229
PROPERTY STREET ADDRESS: 47 CLYDESDALE ST, COMO.
LOCAL GOVERNMENT AUTHORITY: CITY OF SOUTH PERTH

**LOT 8 & PT LOT 7 OF
CANNING LOC.37**
FBs 5605, 5678 & 6113
PLAN 3383
INDEX PLAN PERTH 2000 13.18
" " 13.19
CORR. 4408-13
NOW C/T 923-53
FEE OF R.O.W.S NOW IN C/T 1418-856

APPROVED
15-9-14

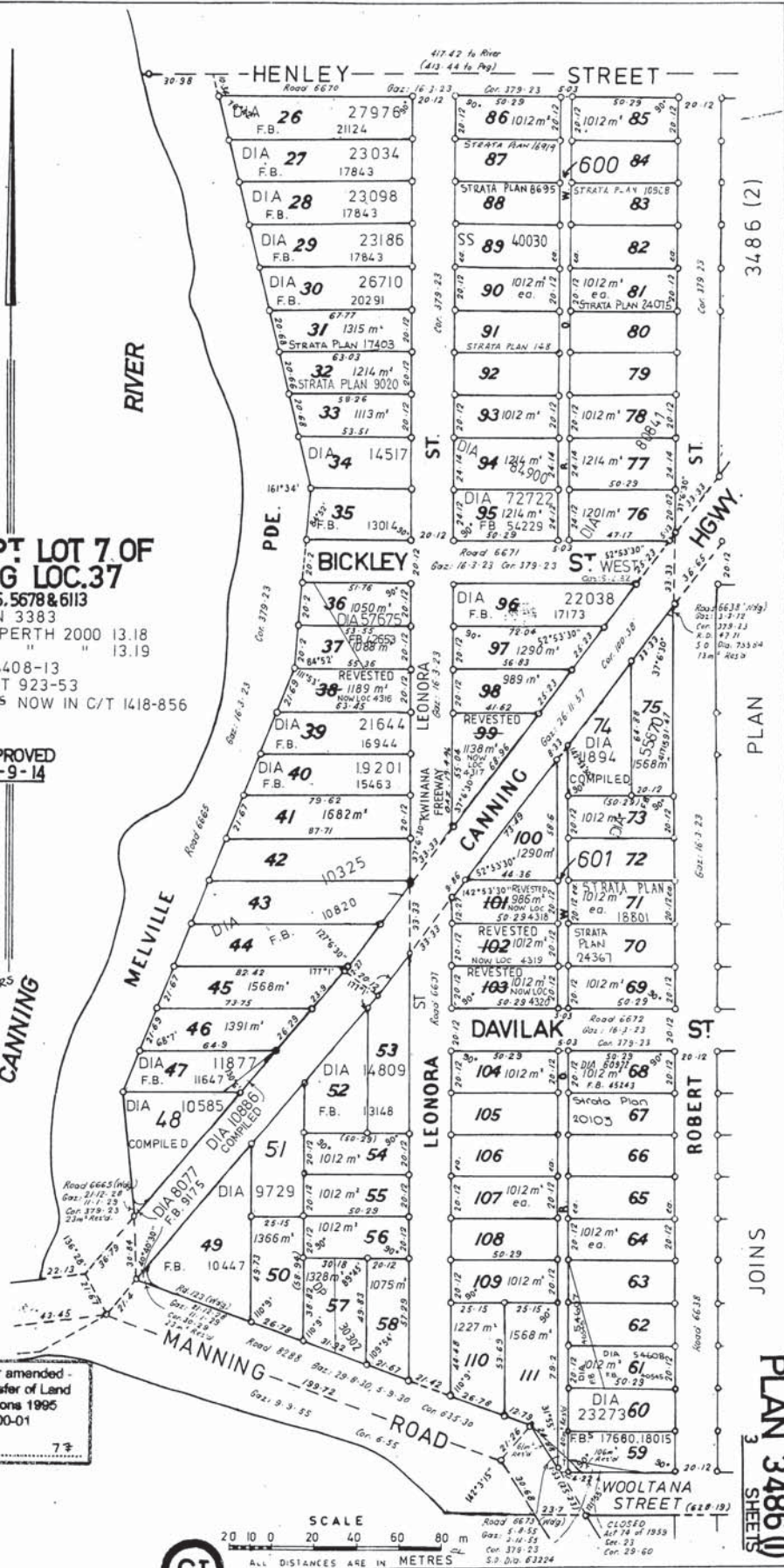
CANNING

Land Parcel identifier amended -
Regulation 8 of Transfer of Land
(Surveys) Regulations 1995
Corr 1775-2000-01
Date: 3.11.2010 73

P 003486 F 01



SCALE
20 10 0 20 40 60 80 m
ALL DISTANCES ARE IN METRES



Land Parcel Identifier amended -
Regulation 8 of Transfer of Land
(Surveyors) Regulations 1995
Corr 1775-2000-01
Date: 3.11.2010 79

LOT 8 & PT LOT 7 OF CANNING LOC. 37

FB's 5605,5678 & 6113

COR. 4408-B

PLAN 3383

INDEX PLANS PERTH 2000 13.18

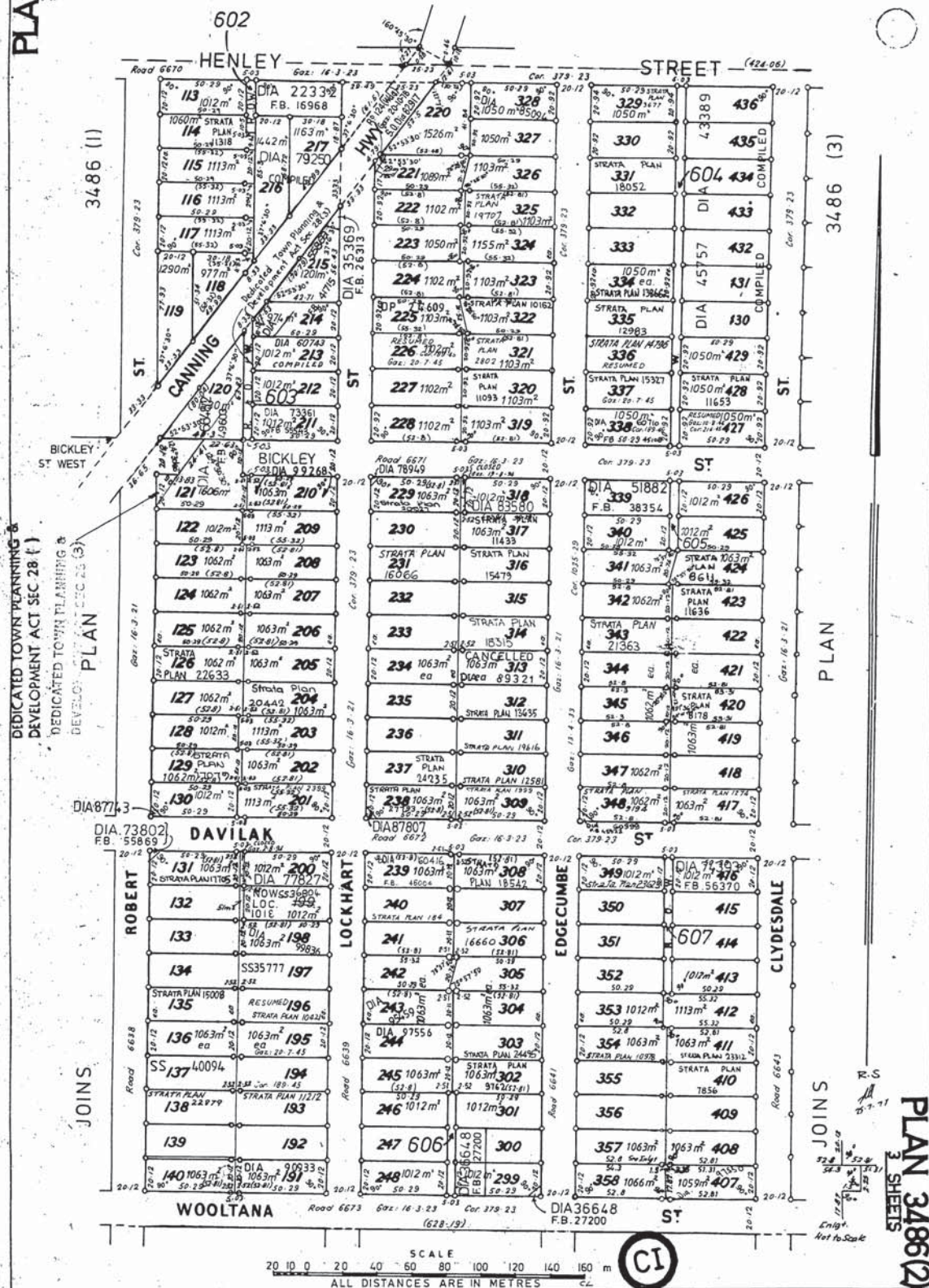
13.19

Now C/T 923-53
FEE OF R.O.W.'s NOW IN C/T 1418-856

P 003486 F 02



APPROVED
15-9-1914



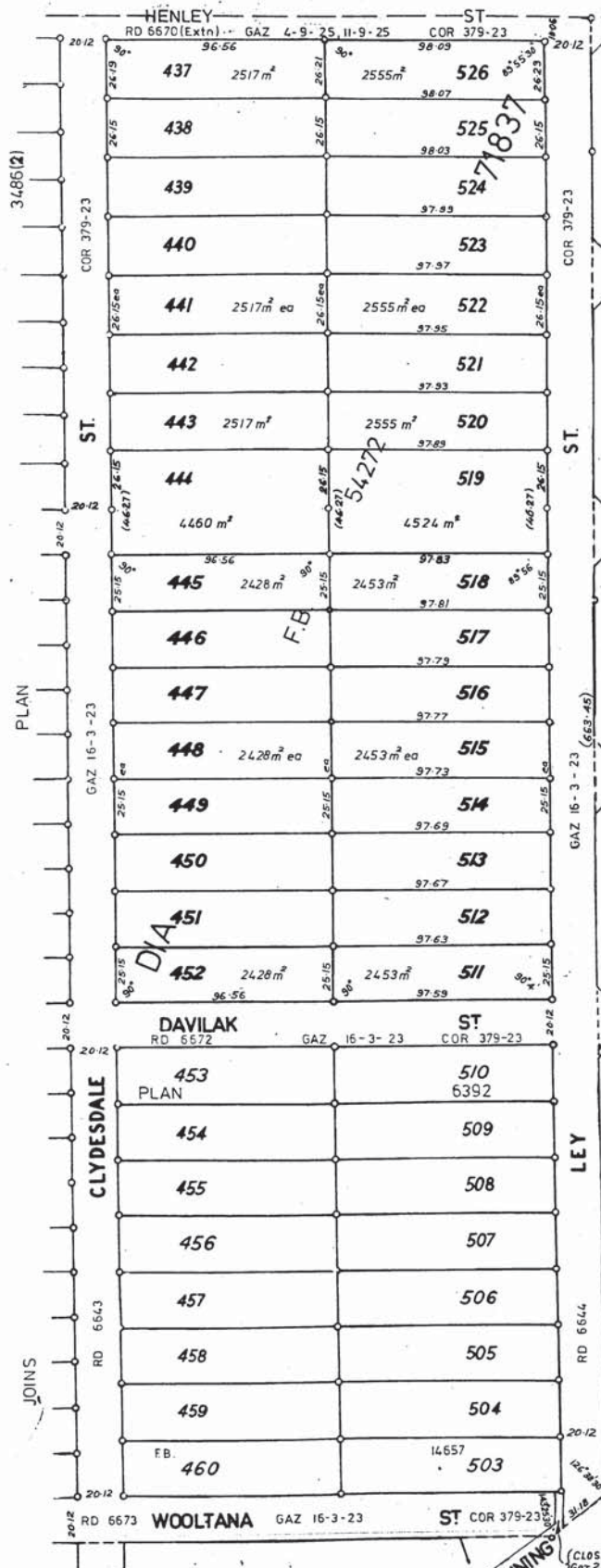
PLAN 3486(3)
3 SHEETS

LOT 8 & PT LOT 7 OF
CANNING LOC.37
FB's 5605.56 78 & 6113
COR. 4408-13

PLAN 3383
INDEX PLANS PERTH 2000 13.18
13.19

NOW C/T 923-53

APPROVED
15-9-14



PLAN 3486(3)
3 SHEETS

P 003486 F 03



SCALE
20 0 20 40 60 80 100 120 140 160m
ALL DISTANCES ARE IN METRES



Appendix 2 Development Plans

DRAWING LIST			
Sheet Number	Sheet Name	Current Revision	Current Revision Date
A001	SURVEY	D	02.06.2017
A010	SITE PLAN - OVERALL	D	02.06.2017
A012	SITE PLAN - LANDSCAPE	D	02.06.2017
A100	FLOOR PLAN - BASEMENT	D	02.06.2017
A101	FLOOR PLAN - GROUND LEVEL	D	02.06.2017
A102	FLOOR PLAN - MEZZANINE LEVEL	D	02.06.2017
A103	FLOOR PLAN - LEVEL 1	D	02.06.2017
A104	FLOOR PLAN - LEVEL 2	D	02.06.2017
A105	FLOOR PLAN - LEVEL 3	D	02.06.2017
A106	FLOOR PLAN - ROOF GARDEN	D	02.06.2017
A200	ELEVATIONS	D	02.06.2017
A201	ELEVATIONS	D	02.06.2017

A1



SERVICES PROVIDED FROM NOW BEFORE YOU DO PLANS
 DESIGN DETAIL PLOTTED FROM INTERIOR CONSTRUCTION PLANS
 OWNER CERTIFICATE OF TITLE FOR EASEMENTS, RESTRICTING COVENANTS, ETC.
 THIS SURVEY DOES NOT GUARANTEE THE CORRECT POSITION OF BOUNDARY PEGS OR FENCES
 ALL FEATURES AND BUILDING POSITIONS ARE APPROXIMATE ONLY, AS THEY HAVE BEEN
 PROVIDED FROM MEASUREMENTS TAKEN FROM EXISTING PEGS, FENCES AND WALLS.
 INFORMATION SHOWN ON THIS PLAN IS CURRENT AT THE DATE SHOWN.
 NOTES: MICHIGAN SURVEYS ACCEPTS NO RESPONSIBILITY FOR ANY CHANGES THAT
 HAVE OCCURRED AFTER THE DATE TO SITE LEVELS, FEATURES OR BUILDINGS.
 SUGGESTED BOUNDARY PEGS HAVE BEEN OBTAINED FROM SURVEY PLANS
 AND ARE SUBJECT TO FIELD SURVEY
 A BOUNDARY RE-ESTABLISHMENT SURVEY IS RECOMMENDED PRIOR TO UNDERTAKING
 ANY SITE WORK OR CONSTRUCTION

ROSS McLOUGHLIN CONSULTING SURVEYOR JONDALUP UNIT 1, 9 MERCEUR LANE LANCELIN 4 SALVAGE CRESCENT MOBILE 0419 251 999 EMAIL rossmac@msi.net.au		LOT 413 (No.47) CLYDESDALE STREET - COMO SITE PLAN SCALE: 1:200 @ A3 SIZE DATE: 22.2.2017 DATUM: AND (SEWER MIN LID)		LOCAL AUTHORITY: CITY OF SOUTH PERTH PLAN: P3486 AREA: 1812sq ²		SURVEYOR: RAM DRAWN: RAM SDR FILE: CV2	
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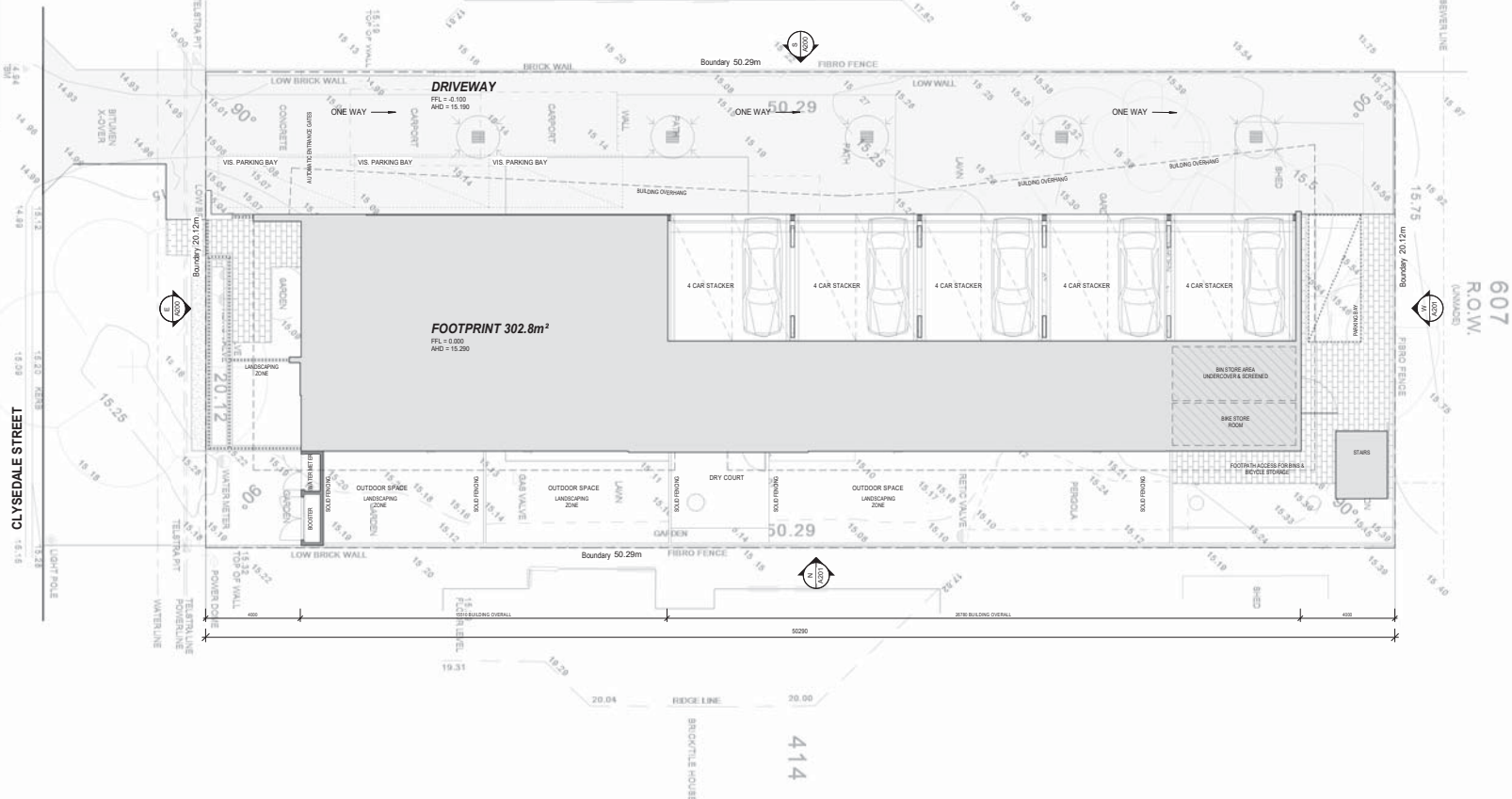
SITE & GENERAL NOTES:

- ALL LEVELS, DIMENSIONS, PORTIONS AND HEIGHTS TO BE SHOWN ON THE BEFORE COMMENCING ANY BUILDING WORK. DATUM PROVIDED IS A.D.
- EXISTING DIMENSIONS ARE TO THE FACE UNLESS OTHERWISE NOTED.
- ALL ARCHITECTURAL DRAWINGS ARE TO BE MADE IN CONSULTATION WITH SPECIFICATIONS AND ALL OTHER RELEVANT DRAWINGS FOR ELECTRICAL, PLUMBING, STAIRS, ELEVATIONS AND CONCRETE LABOUR WORKS.
- REFER TO DIMENSIONS DRAWINGS FOR ALL STRUCTURAL WORKS.
- UNDER STAIRS DIMENSIONS WILL SUPERSEDE SMALL SCALE DRAWINGS.
- CONTRACTOR TO CONFIRM GROUND LEVELS AND EXISTENCE OF ALL OTHER SERVICES AS SHOWN ON SERVICES LAYOUT AND PRIOR TO COMMENCEMENT OF ANY WORK. ENGINEER TO BE NOTIFIED UPON DISCREPANCIES.
- CONTRACTOR TO CONFIRM GROUND WATER TABLE AND LEVEL PRIOR TO ANY WORK AND IF ANY DE- WATERING IS REQUIRED.
- ALL NECESSARY APPROVALS FROM RELEVANT AUTHORITIES TO BE OBTAINED PRIOR TO THE COMMENCEMENT OF ANY WORK.
- AS CONSTRUCTED SURVEY TO BE PROVIDED BY LICENSED SURVEYOR.
- FOR CONSTRUCTION INFORMATION REFER TO GEOTECHNICAL REPORT.
- GEOTECHNICAL INVESTIGATION WORK HAS BEEN CARRIED OUT. THE INFORMATION CONTAINED IN THE REPORTS IS INFORMATION ON THE NATURE OF THE GROUND. THERE IS NO TEST CERTIFICATE. IT IS NOT A COMPLETE DESCRIPTION OF CONDITIONS EXISTING AT OR BELOW GROUND LEVELS. ADVISE THE SITE.
- FOR ALL SITE PREPARATION AND COMPACTION - REFER TO LOCAL ENGINEERING DRAWING AND SPECIFICATION.
- THE CONTRACTOR SHALL PROVIDE COMPACTION CERTIFICATES FOR CUT AND FILL AREAS CORROBORATING THAT THE AREAS HAVE BEEN ADEQUATELY COMPACTED.
- ALL EXISTING EXTERIOR VESSELS INCLUDING TREES AND ALL EXISTING SERVICES, MANHOLES, UNDER BODIES AND BARRIERS TO BE PROTECTED BY CONTRACTOR.
- THE CONTRACTOR SHALL LIMIT THE MOVEMENT OF EQUIPMENT AND MANPOWER TO THE WORK SITE ONLY.
- PAVINGWORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF AS PAVING AND THE GEOTECHNICAL REPORT.
- THE CONTRACTOR SHALL ALLOW FOR DUST CONTROL MEASURES AS REQUIRED.
- SURFACE STABILISATION TO BE APPLIED TO THE TOTAL DISTURBED AREA OF THE SITE AS FAR AS POSSIBLE AT THE COMPLETION OF ELEVATION OF WORK.

Unit No.	Architectural	Drain	Drain Area	Drain Area
1	75.5sqm	65.5sqm	5sqm	4.5sqm
2	75.5sqm	65.5sqm	5sqm	4.5sqm
3	128.2sqm	112.2sqm	16sqm	14.5sqm
4	75.5sqm	65.5sqm	5sqm	4.5sqm
5	75.5sqm	65.5sqm	5sqm	4.5sqm
6	75.5sqm	65.5sqm	5sqm	4.5sqm
7	48.8sqm	41.8sqm	7sqm	6.5sqm
8	74.7sqm	65.7sqm	9sqm	8.5sqm
9	75.5sqm	65.5sqm	5sqm	4.5sqm
10	74.2sqm	65.2sqm	9sqm	8.5sqm
11	75.5sqm	65.5sqm	5sqm	4.5sqm
12	75.5sqm	65.5sqm	5sqm	4.5sqm
13	48.8sqm	41.8sqm	7sqm	6.5sqm
14	74.7sqm	65.7sqm	9sqm	8.5sqm
15	75.5sqm	65.5sqm	5sqm	4.5sqm
16	74.2sqm	65.2sqm	9sqm	8.5sqm
17	75.5sqm	65.5sqm	5sqm	4.5sqm
18	75.5sqm	65.5sqm	5sqm	4.5sqm
19	48.8sqm	41.8sqm	7sqm	6.5sqm
20	74.7sqm	65.7sqm	9sqm	8.5sqm
21	75.5sqm	65.5sqm	5sqm	4.5sqm

CLYDESDALE STREET

CLYDESDALE STREET



DATE	REVISION	SCHEDULE
15.08.2017	1	PROPOSED SITE PLAN
15.08.2017	2	PROPOSED SITE PLAN COMMENT AS PER COUNCIL FEEDBACK
15.08.2017	3	PROPOSED SITE PLAN COMMENT AS PER COUNCIL FEEDBACK
15.08.2017	4	PROPOSED SITE PLAN COMMENT AS PER COUNCIL FEEDBACK
15.08.2017	5	PROPOSED SITE PLAN COMMENT AS PER COUNCIL FEEDBACK



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LANDSCAPING NOTE

ALLOW TO CARRY OUT AUTOMATIC RETICULATION CONNECTION TO THE MAIN WATER EXTENSION PLAN WITH THE AUTOMATIC TIMER LOCATED INSIDE BUILDING MAIN SWITCH BOARD. DIVISION OF AREAS TO BE WATERED DETERMINED ON SITE.

UNDERTAKE RETICULATION DESIGN BY AN APPROVED CONTRACTOR WHICH MUST BE APPROVED BY THE SUPERINTENDENT PRIOR TO INSTALLATION.

ALL LANDSCAPING BEDS TO BE MULCHED TO A DEPTH OF 75mm WITH MULCH.

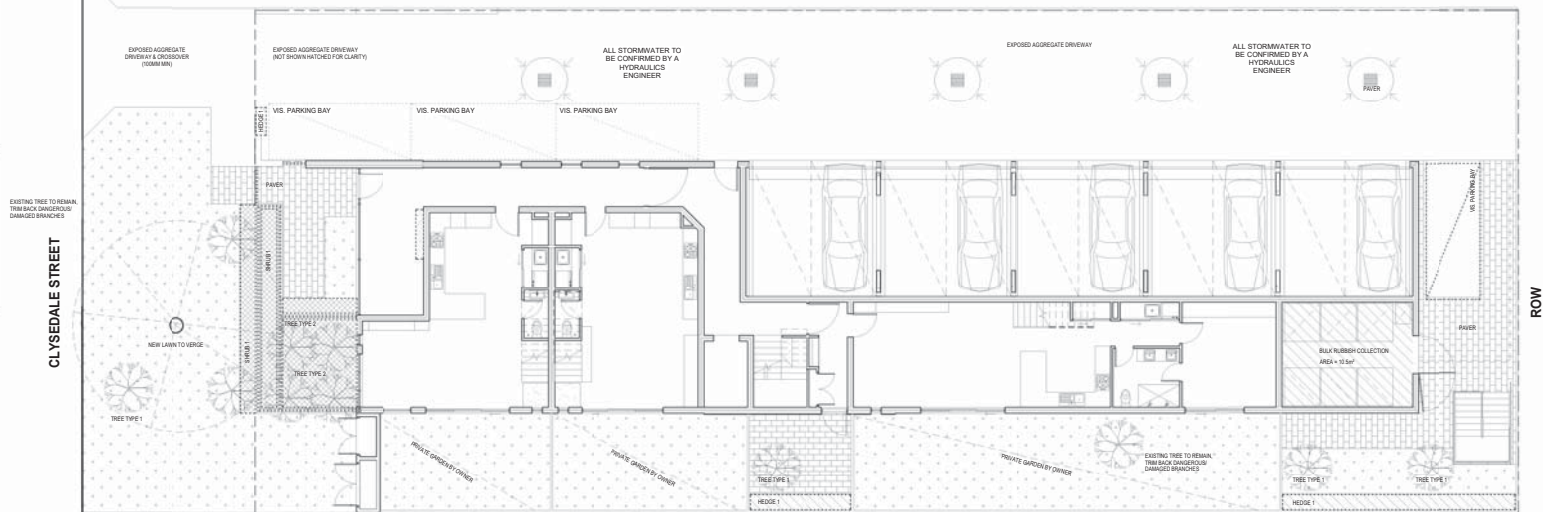
PLANTING BEDS SHALL HAVE A MINIMUM DEPTH OF 100mm OF SUB SOIL.

SOIL TO BE OF SUSTAINABLE HORTICULTURAL QUALITY, FREE OF ALL CONTAMINANTS SUCH AS LIMESTONE ROAD BASE MATERIAL, CEMENT, COAL ASH, SOOT AND OTHERS WHICH MAY HARM PLANTS.

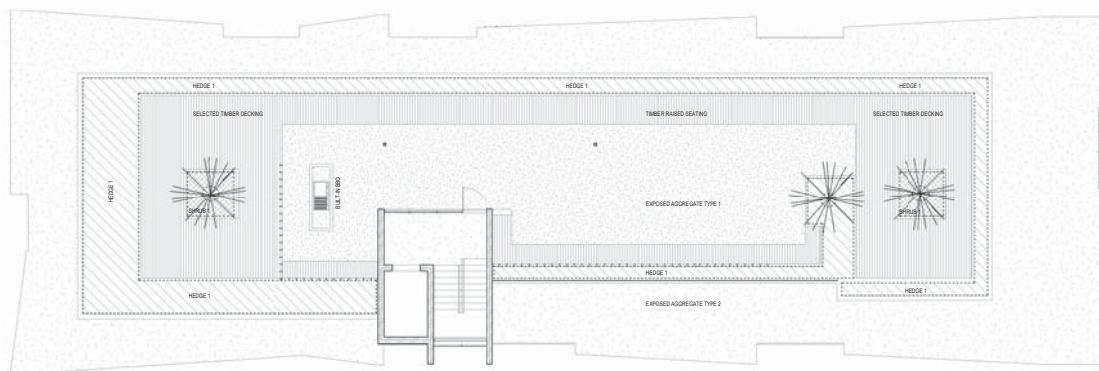
ALL PLANTS SHALL BE FERTILIZED DURING PLANTING WITH A SLOW RELEASE FERTILIZER HAVING AN N-P-K RATIO OF 18-22-18.

REFER HYDRAULIC DRAWINGS FOR LOCATION OF HOSECOCKS.

LANDSCAPING TO ALLOW CONNECTING TO MAIN SUPPLY OF WATER AT 0.6



1 LANDSCAPE LAYOUT - GROUND
SCALE 1 : 100



2 LANDSCAPE LAYOUT - ROOF GARDEN
SCALE 1 : 100



02.06.2017	D	REISSUED FOR DA
18.05.2017	C	REISSUED FOR DA COMMENT AS PER COUNCIL FEEDBACK
06.04.2017	B	REISSUED FOR DA COMMENT
27.03.2017	A	ISSUED FOR DA COMMENT
DATE	Rev	DESCRIPTION
REVISION SCHEDULE		



Contractor to verify all dimensions on site before commencing work. MOODS Design Pty Ltd is to be notified of any discrepancies in the dimensions and setting out of work, for resolution. Copyright of designs shown hereon is retained by this office. Authority is required for any reproduction.



1 9444 0511 SUITE 1
1 9444 0522 127 HERDSMAN PO
e info@probus.net.au WENDLEY 601
ABN 27 121 224 459 PO BOX 22
ACN 121 224 459 COMO VIA 601

SITE PLAN - LANDSCAPE

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT # (#47) CLYDESDALE ST.
COMO

MODUS PROJECT	D17-1028
DESIGN	SH
DRAWN	ME
CHECKED	SH
SCALE	1 : 30
DATE	MARCH 2011

REVISION

SHADOW COVERAGE
SHOWN AT:
21 JUNE 12.00PM



NO	DATE	DESCRIPTION
1	21/06/2017	PROPOSED DEVELOPMENT
2	21/06/2017	REVISIONS
3	21/06/2017	REVISIONS
4	21/06/2017	REVISIONS
5	21/06/2017	REVISIONS
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8	21/06/2017	REVISIONS
9	21/06/2017	REVISIONS
10	21/06/2017	REVISIONS



Contractor to verify all dimensions on site before commencing work. MODUS Design Pty Ltd is to be notified of any discrepancies in the development and setting out of the work, for resolution. Copyright of designs created by MODUS is retained by MODUS. Authority is required for any reproduction.



1 0044 0011 107 HEDDERDALE CDE
2 0044 0012 107 HEDDERDALE CDE
3 0044 0013 107 HEDDERDALE CDE
4 0044 0014 107 HEDDERDALE CDE
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6 0044 0016 107 HEDDERDALE CDE
7 0044 0017 107 HEDDERDALE CDE
8 0044 0018 107 HEDDERDALE CDE
9 0044 0019 107 HEDDERDALE CDE
10 0044 0020 107 HEDDERDALE CDE

SITE PLAN - OVERSHADOWING

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT # (47) CLYDESDALE ST.
COMO

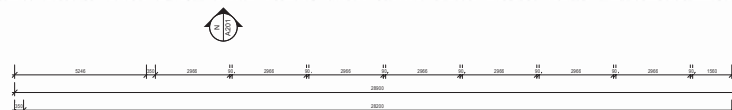
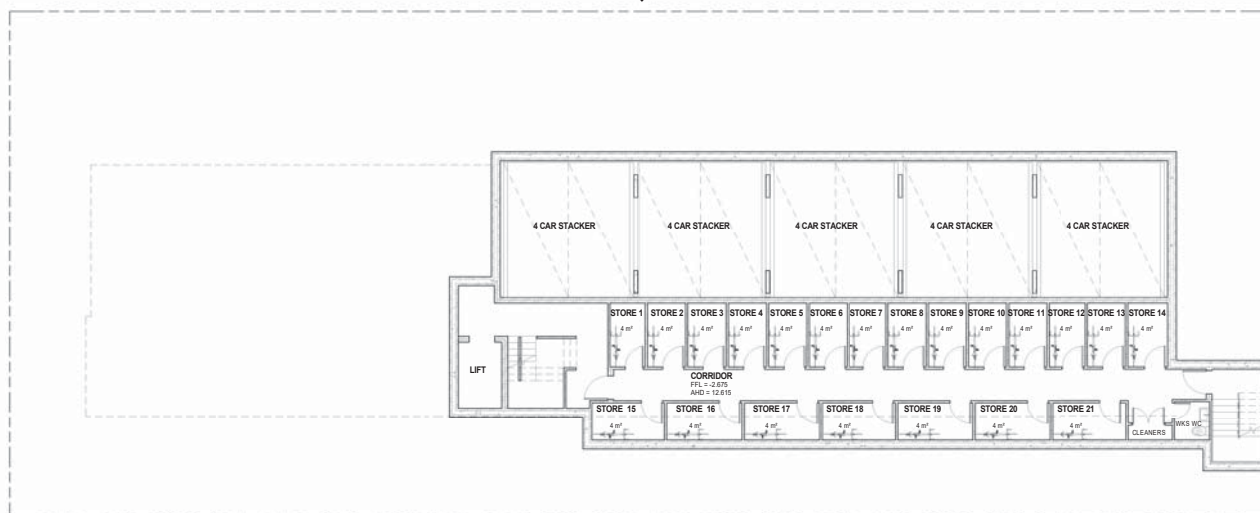
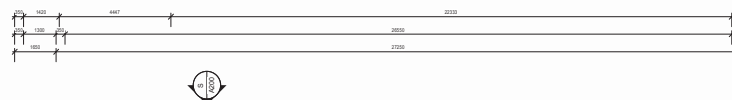
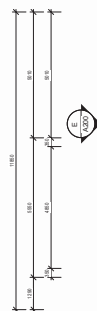
MODUS PROJECT D17-1028
DESIGN 001
DRAWN 001
CHECKED 001
SCALE 1:200
DATE 20/06/2017

REVISION D
A1 001 A030

- [illegible]

8BP	DOOR - REFER TO ROOF PLAN FOR SIZE AND LOCATION
8C	STRUCTURAL COLUMN - REFER TO STRUCTURAL ENGINEER'S DRAWING
17A	DESIGN LEVEL IN RELATION TO AND:
AC	AIR CONDITIONING UNIT - REFER TO SPECIFICATION
WC	TOILET PAN - REFER TO SPECIFICATION
VB	VANITY BASIN - REFER TO SPECIFICATION
VB	WALKER - REFER TO BUILDERS SPECIFICATION
OVEN/BN	UNDER BENCH CUPBOARD WITH HOT PLATE A RANGEHOOD OVER - REFER TO BUILDERS SPECIFICATION
ENDRP	END OF MACHINE WITH DRYER - REFER TO SPECIFICATION
SH	SHOWER - REFER TO SPECIFICATION
HC	HOSE COCK - REFER TO HYDRAULIC DWS
HW	HOT WATER UNIT - REFER TO HYDRAULIC SPECIFICATION
CRW	COLD WASHIER - REFER TO BUILDERS SPECIFICATION
S	SKIN - REFER TO BUILDERS SPECIFICATION
P	PANTRY - REFER TO BUILDERS SPECIFICATION
PL	PLASTER - REFER TO BUILDERS SPECIFICATION
MC	MICROWAVE - REFER TO BUILDERS SPECIFICATION
B	GALV. STEEL BOLLARD - REFER TO DETAIL

* ALL COMMON AREAS INCLUDING CORRIDORS, ACCESSWAYS, TRUNCATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS 1428.1-2000, SECTION 6 - CONTINUOUS ACCESSIBLE PATHS OF TRAVEL.



02.06.2017	D	REISSUED FOR OA
18.05.2017	C	REISSUED FOR OA COMMENT AS PER COUNCIL FEEDBACK
27.03.2017	A	ISSUED FOR OA COMMENT
DATE	No	DESCRIPTION



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t 9444 9511 SUITE 13
 f 9444 9522 127 HERDMAN CDE
 e info@modus.net.au WEMBLEY 6014
 ABN 27 121 224 459 PO BOX 222
 ACN 121 224 459 COMO WA 6952

FLOOR PLAN - BASEMENT

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT # (#47) CLYDESDALE ST.
COMO

MODUS PROJECT	D17-1028
DESIGN	SW
DRAWN	MS
CHECKED	SWNH
SCALE	1 : 100
DATE	MARCH 2017

A1
D
A100

SITE & GENERAL NOTES

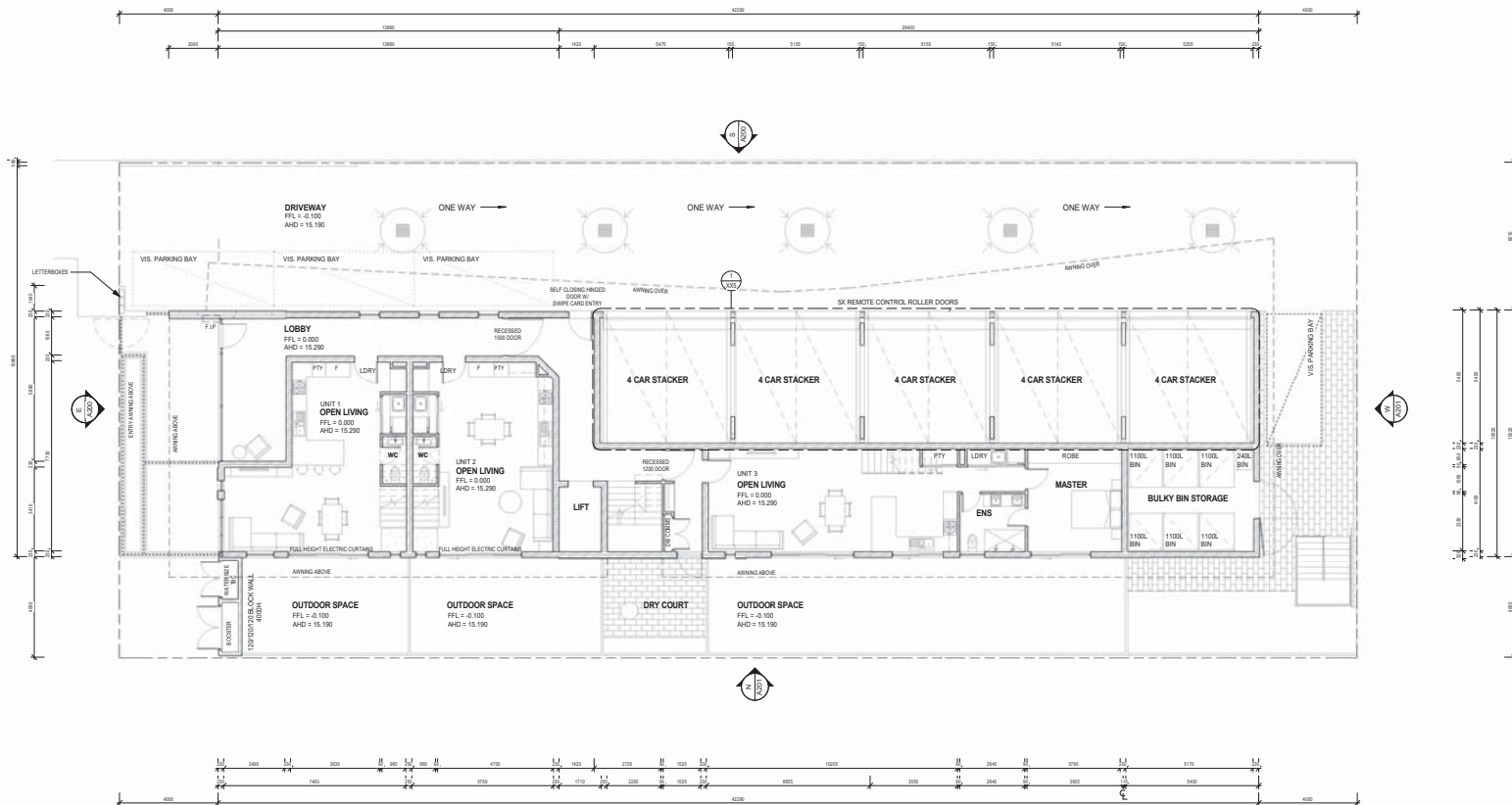
- [illegible]

LEGEND

- [illegible]

DESIGN FOR ACCESS AND MOBILITY:

- ALL COMMON AREAS INCLUDING CORRIDORS, ACCESSWAYS, TRUNCATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH MS 1428.1-2000 SECTION 5 - CONTIGUOUS ACCESSIBLE PATHS OF TRAVEL.



1 FFL (GROUND)
SCALE 1:100



02.06.2017	D	REISSUED FOR DA
18.05.2017	C	REISSUED FOR DA COMMENT AS PER COUNCIL FEEDBACK
06.04.2017	B	REISSUED FOR DA COMMENT
27.03.2017	A	ISSUED FOR DA COMMENT
DATE	No.	DESCRIPTION



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1 9444 9511 SUITE 1
1 9444 9522 127 HERCULEAN PK
e info@medusa.net.au WILMINGTON, WV 26180

FLOOR PLAN - GROUND LEVEL

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT # (#47) CLYDESDALE ST.
COMO

MODUS PROJECT	D17-1028
DESIGN	SH
DRAWN	ME
CHECKED	SWIN
SCALE	1 : 30
DATE	MARCH 2011

A1 DWG A101

SITE & GENERAL NOTES:

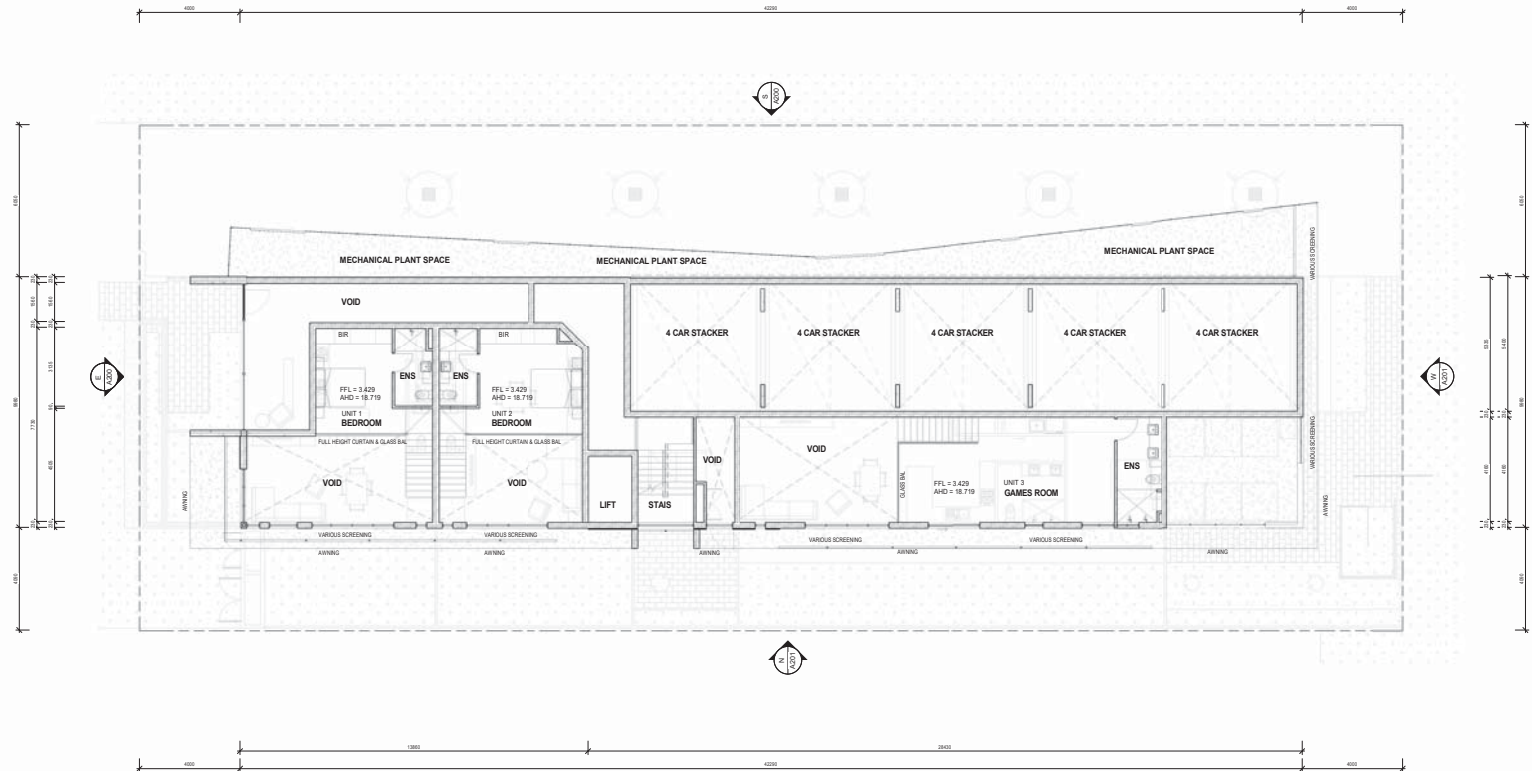
- ALL LEVELS, DIMENSIONS, POSITIONS AND HEIGHTS TO BE VERIFIED ON SITE BEFORE COMMENCING ANY BUILDING WORK. DATA PROVIDED IS AND.
- FIGURED DIMENSIONS ARE TO BE TAKEN AND NO SCALING OF DRAWINGS WILL BE ALLOWED.
- ALL ARCHITECTURAL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH SPECIFICATIONS AND ALL OTHER RELEVANT DRAWINGS FROM STRUCTURAL, ELECTRICAL, CIVIL, HYDRAULICS AND MECHANICAL ENGINEERS.
- ANY DISCREPANCIES ARE TO BE REPORTED TO THE SUPERINTENDENT IMMEDIATELY.
- ALL MEASUREMENTS TO BE COMPLETED BY THE CONTRACTOR FOR ELECTRICAL, PLUMBING, AIR-CONDITIONING AND CONCRETE LABOUR WORKS.
- REFER TO DIMENSIONED DRAWINGS FOR ALL STRUCTURAL WORKS.
- LARGE SCALE DRAWINGS WILL SUPERSEDE SMALL SCALE DRAWINGS.
- CONTRACTOR TO OBTAIN LOCAL, STATE, TERRITORY AND FEDERAL, ALL OTHER SERVICES AS SHOWN ON SERVICES LISTED TO AND PRIOR TO THE COMMENCEMENT OF ANY WORK. ENGINEER TO BE NOTIFIED AFTER DISCREPANCIES.
- CONTRACTOR TO COMPLY WITH GRADE AND WATER TABLE INCLUDES, PRIOR TO ANY WORK AND IF ANY OR WATERING IS REQUIRED.
- ALL NECESSARY APPROVALS FROM RELEVANT AUTHORITIES TO BE OBTAINED PRIOR TO THE COMMENCEMENT OF ANY WORK.
- AS CONSTRUCTED SURVEY TO BE PROVIDED BY LICENSED SURVEYOR.
- FOR CONSTRUCTION VERIFICATION INFORMATION REFER TO GEOTECHNICAL REPORT.
- GEOTECHNICAL INVESTIGATION HAVE BEEN CARRIED OUT. THE INFORMATION CONTAINED IN THE REPORTS IS INFORMATION ON THE BASIS OF THE GEOPHYSICAL DATA AND TESTS. IT IS NOT A GUARANTEE OF THE ACCURACY OF THE INFORMATION CONTAINED IN THE REPORTS.
- FOR ALL SITE PREPARATION AND COMPACTION - REFER TO CIVIL ENGINEERING DRAWING SPECIFICATION.
- THE CONTRACTOR SHALL PROVIDE COMPACTION CERTIFICATES FOR CUT AND FILL AREAS CERTIFYING THAT THE AREAS HAVE BEEN ADEQUATELY COMPACTED.
- ALL EXISTING TREES AND SHRUBS INCLUDING TREES AND ALL EXISTING SERVICES, MANHOLES, UTILITIES AND SERVICES TO BE PROTECTED BY CONTRACTOR.
- THE CONTRACTOR SHALL LIMIT THE MOVEMENT OF EQUIPMENT AND MANPOWER TO THE WORK SITE ONLY.
- LANDSCAPING ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF AS 3100 AND SITE GEOTECHNICAL REPORT.
- THE CONTRACTOR SHALL ALLOW FOR GUEST CONTROL MEASURES AS REQUIRED.
- DISPERSED LANDSCAPING TO BE APPLIED TO THE TOTAL DISTURBED AREA OF THE SITE AS SOON AS POSSIBLE AFTER COMPLETION OF SECTION OF WORK.

LEGEND

- REF: REFER TO ROOF PLAN FOR SIZE AND LOCATION
STRUCTURAL COLUMN: REFER TO STRUCTURAL ENGINEERS DRAWING FOR SIZE AND LOCATION
DESIGN LEVEL IN RELATION TO AHD
- 17.88: AIR CONDITIONING UNIT - REFER TO SPECIFICATION
17.88: TOLUET FILL - REFER TO SPECIFICATION
17.88: UNIT 1 SWIM - REFER TO SPECIFICATION
17.88: UNDER BENCH CHASE UNDER WITH HOT PLATE & BANGGOOD CHASE - REFER TO BUILDERS SPECIFICATION
17.88: UNDER BENCH CHASE UNDER WITH OTHER OVER - REFER TO SPECIFICATION
17.88: SINKER - REFER TO SPECIFICATION
17.88: FLOOR COVER - REFER TO MATERIALS SPECIFICATION
17.88: HOT WATER LINE - REFER TO HYDRAULIC SPECIFICATION
17.88: DSH WARDEN - REFER TO BUILDERS SPECIFICATION
17.88: DSH - REFER TO BUILDERS SPECIFICATION
17.88: PAVING - REFER TO BUILDERS SPECIFICATION
17.88: LAUNDRY TROUGH - REFER TO BUILDERS SPECIFICATION
17.88: MOWDOWN - REFER TO BUILDERS SPECIFICATION
17.88: GULL STEEL BOLDED - REFER TO DETAIL

DESIGN FOR ACCESS AND MOBILITY:

- ALL COMMON AREAS INCLUDING CORRIDORS, ACCESSWAYS, ENTRANCES HAVE BEEN REVIEWED IN ACCORDANCE WITH AUSTRALIAN STANDARD 2900-2011 ACCESSIBLE PATHS OF TRAVEL.



NORTH

1 FFL (MEZZANINE LEVEL)

SCALE 1:100



NO	DATE	BY	REVISION
1	17/08/2017	Y	REVISED FOR 3D
2	17/08/2017	Y	REVISED FOR 3D
3	17/08/2017	Y	REVISED FOR 3D
4	17/08/2017	Y	REVISED FOR 3D
5	17/08/2017	Y	REVISED FOR 3D
6	17/08/2017	Y	REVISED FOR 3D
7	17/08/2017	Y	REVISED FOR 3D
8	17/08/2017	Y	REVISED FOR 3D
9	17/08/2017	Y	REVISED FOR 3D
10	17/08/2017	Y	REVISED FOR 3D



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1 9444 8511 127 HEDDERDALE RD
2 9444 8512 127 HEDDERDALE RD
3 127 121 224 AVE
4 127 121 224 AVE
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9 127 121 224 AVE
10 127 121 224 AVE

FLOOR PLAN - MEZZANINE LEVEL

PROPOSED APARTMENT DEVELOPMENT
FOR YARAN GROUP
LOT # (M47) CLYDESDALE ST.
COMO

REVISION	DATE	BY	REVISION
1	17/08/2017	Y	REVISED FOR 3D
2	17/08/2017	Y	REVISED FOR 3D
3	17/08/2017	Y	REVISED FOR 3D
4	17/08/2017	Y	REVISED FOR 3D
5	17/08/2017	Y	REVISED FOR 3D
6	17/08/2017	Y	REVISED FOR 3D
7	17/08/2017	Y	REVISED FOR 3D
8	17/08/2017	Y	REVISED FOR 3D
9	17/08/2017	Y	REVISED FOR 3D
10	17/08/2017	Y	REVISED FOR 3D

A1 8/10 A102

SITE & GENERAL NOTES:

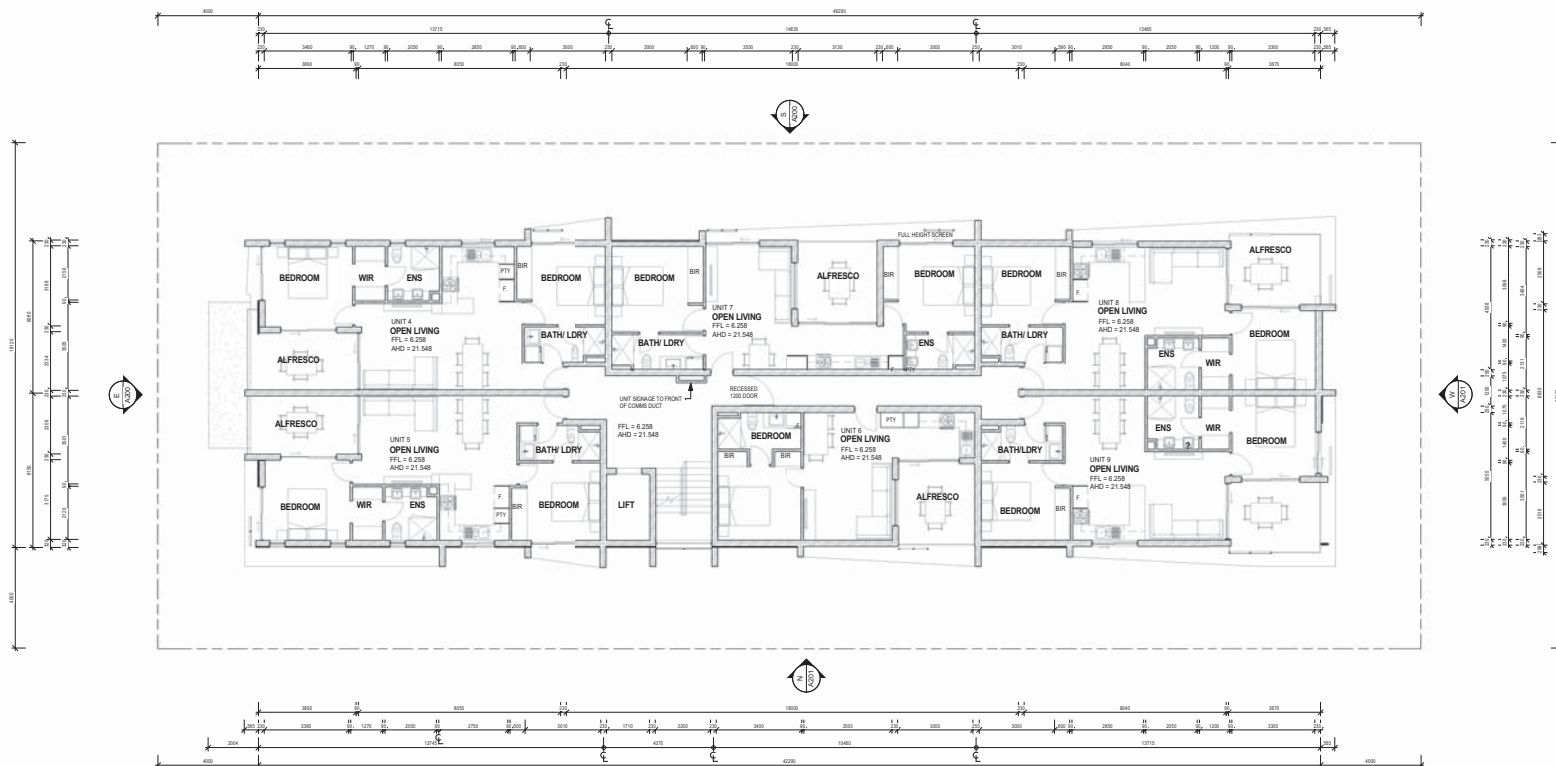
- ALL LEVELS, DIMENSIONS, POSITIONS AND HEIGHTS TO BE VERIFIED ON SITE BEFORE COMMENCING ANY BUILDING WORK. DATUM PROVIDED IS AHD.
- FIGURED DIMENSIONS ARE TO BE TAKEN AND NO SCALING OF DRAWINGS WILL BE ALLOWED.
- ALL ARCHITECTURAL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH SPECIFICATIONS AND ALL OTHER RELEVANT DRAWINGS FROM STRUCTURAL, MECHANICAL, CIVIL, HYDRAULICS AND MECHANICAL ENGINEERS.
- ANY DISCREPANCIES ARE TO BE REPORTED TO THE SUPERINTENDENT IMMEDIATELY.
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- REFER TO DIMENSIONED DRAWINGS FOR ALL STRUCTURAL WORKS.
- LARGE SCALE DRAWINGS WILL SUPERSEDE SMALL SCALE DRAWINGS.
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LEGEND

- REF: J/P - REFER TO ROOF PLAN FOR SIZE AND LOCATION
STRUCTURAL COLUMN - REFER TO STRUCTURAL DRAWINGS
AND FOR DETAIL
- 138B - AIR CONDITIONING UNIT - REFER TO SPECIFICATION
AC - TOLLSTAIR - REFER TO SPECIFICATION
VLS - VANITY BASIN - REFER TO SPECIFICATION
F - FROSE - REFER TO BUILDERS SPECIFICATION
DISH/ST - RECESSED OVER HANGERS WITH HOT PLATE & RANGEROOD OVER - REFER TO BUILDERS SPECIFICATION
WASH/ST - RECESSED BATHING WITH OVERFLOW - REFER TO SPECIFICATION
H/C - HOSE COCK - REFER TO HYDRAULIC DING
H/W - HOT WATER UNIT - REFER TO HYDRAULIC SPECIFICATION
D/W - DRY WARMER - REFER TO BUILDERS SPECIFICATION
S - SINK - REFER TO BUILDERS SPECIFICATION
P - PANTRY - REFER TO BUILDERS SPECIFICATION
L - LAUNDRY TROUGH - REFER TO BUILDERS SPECIFICATION
M/V - MICROVAPE - REFER TO BUILDERS SPECIFICATION
B - BAKED STEEL BOLLARD - REFER TO DETAIL

DESIGN FOR ACCESS AND MOBILITY:

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NORTH



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FLOOR PLAN - LEVEL 1

PROPOSED APARTMENT DEVELOPMENT FOR YARAN GROUP LOT # (M47) CLYDESDALE ST. COMO

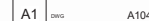
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3	04/04/2017	127	REVISIONS

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- LEGEND

DESIGN FOR ACCESS AND MOBILITY

- NORTH



- LEGEND

- DESIGN FOR ACCESS AND MOBILITY:

- ALL COMMON AREAS INCLUDING
CORRIDORS, ACCESSWAYS,
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IN ACCORDANCE WITH AS 1628.1-2
SECTION 6 - CONTINUOUS
ACCESSIBLE PLATHING FOR



FFL (LEVEL 3)
SCALE 1 : 100



YARAN



modus
design pty ltd

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e info@modus.net.au WEMBLEY 031

FLOOR PLAN - LEVEL 3

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT # (#47) CLYDESDALE ST.
COMO

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DESIGN
DRAWN
CHECKED
SCALE
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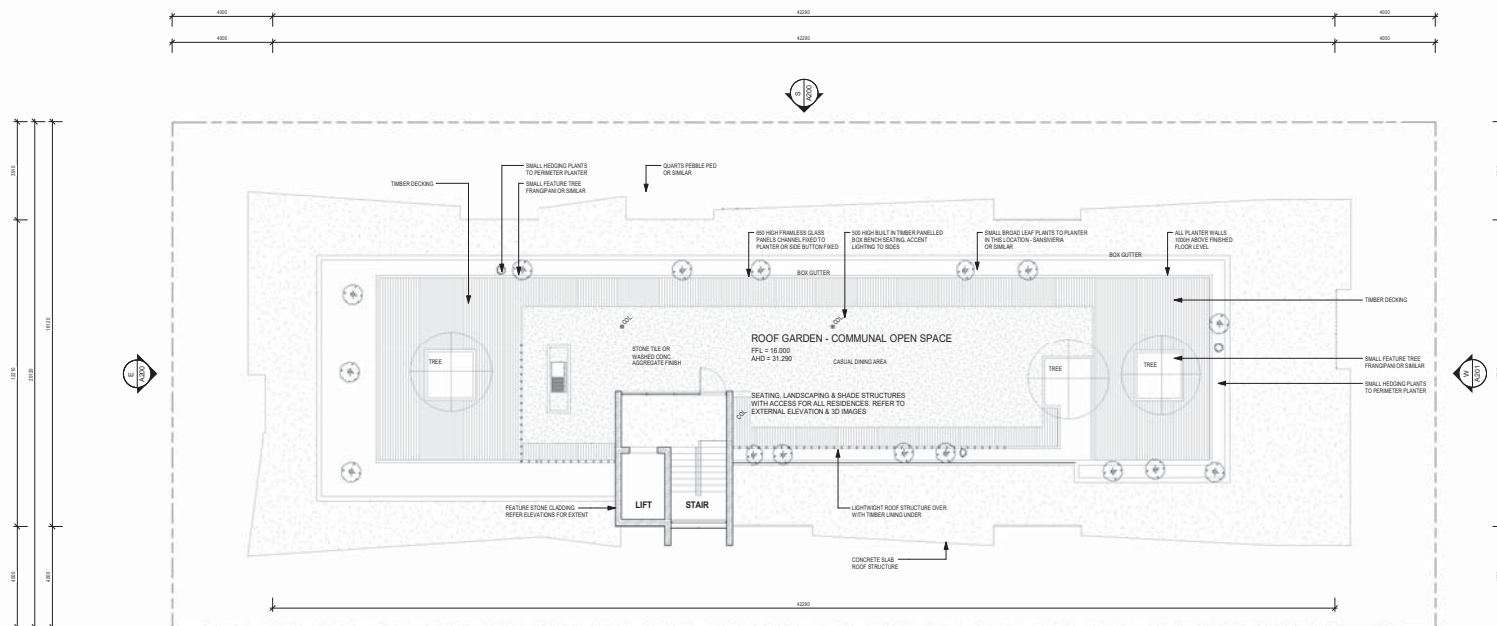
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| BSP | DWIPPE - REFER TO ROOF PLAN FOR SIZE AND LOCATION |
| CS | STRUCTURAL COLUMN - REFER TO STRUCTURAL ENGINEERS DRAWING |
| DE | DESIGN LEVELS IN RELATION TO AHD |
| AC | AIR CONDITIONING UNIT - REFER TO SPECIFICATION |
| WC | TOILET PAN - REFER TO SPECIFICATION |
| V | VOLLEY BALL - REFER TO SPECIFICATION |
| BR | REFER TO BUILDERS SPECIFICATION |
| DN/BNP | UNDER BENCH GIVEN UNDER WITH HOT PLATE & RANGEHOOD
REFER TO BUILDERS SPECIFICATION |
| FR | FREACHING WITH DRYER - REFER TO SPECIFICATION |
| SHR | SHELF - REFER TO SPECIFICATION |
| HC | HOSE COCK - REFER TO HYDRAULIC DWG |
| MHU | HOT WATER TAP - REFER TO HYDRAULIC SPECIFICATION |
| DSH | DISH WASHER - REFER TO BUILDERS SPECIFICATION |
| S | SINK - REFER TO BUILDERS SPECIFICATION |
| PWTR | PANTRY - REFER TO BUILDERS SPECIFICATION |
| LX | LAUNDRY TROUGH - REFER TO BUILDERS SPECIFICATION |
| STL | STEEL - REFER TO BUILDERS SPECIFICATION |
| GLK | GULLY ACCESS POINT - REFER TO SPECS |

DESIGN FOR ACCESS AND MOBILITY:

- ALL COMMON AREAS INCLUDING
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TRUNCATIONS HAVE BEEN DESIG-
NED IN ACCORDANCE WITH AASHTO 1.1
SECTION 6 - CONTINUOUS
ACCESSIBLE RADIUS OF TRAIL



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18.05.2017	C	REISSUED FOR CA COMMENT AS P COUNCIL FEEDBACK
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FLOOR PLAN - ROOF GARDEN

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT # (#47) CLYDESDALE ST.
COMO

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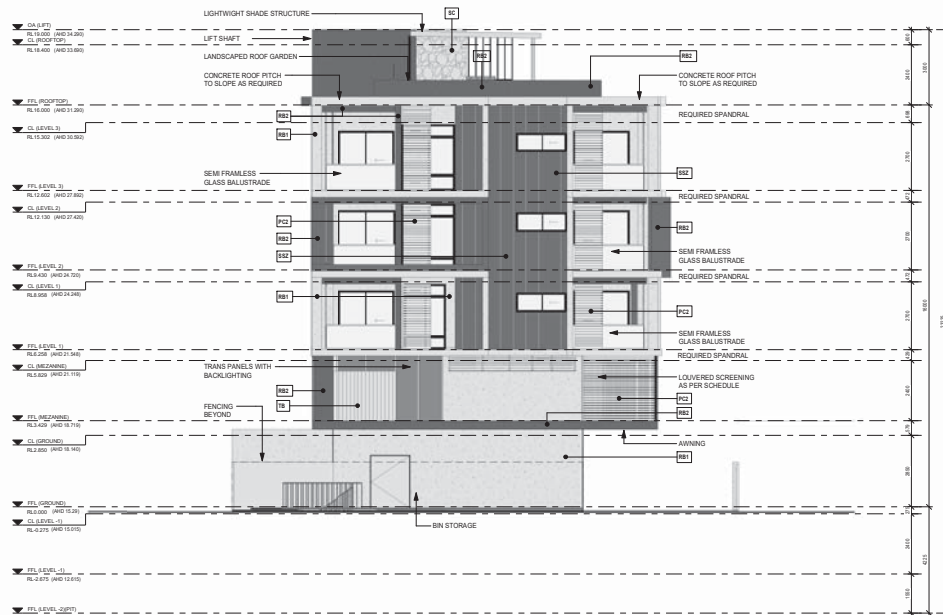
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- CONTRACTOR TO COMPLY WITH ALL WATER TABLE REGULATIONS, PRIOR TO ANY WORK AND IF ANY WATERING IS REQUIRED.
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- THE CONTRACTOR SHALL PROVIDE COMPARTMENTATION FOR CUP AND ALL AREAS CERTIFYING THAT THE AREAS HAVE BEEN ADEQUATELY COMPLETED.
- ALL EXISTING TREES AND HERONS INCLUDING TREES AND ALL EXISTING SERVICES, MANHOLES, CULVERTS AND SERVICES TO BE PROTECTED BY CONTRACTOR.
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- DISPERSED EXISTING ARE TO BE APPLIED TO THE TOTAL DISTRIBUTED AREA OF THE SITE AS SOON AS POSSIBLE AFTER COMPLETION OF SECTION OF WORK.

LEGEND

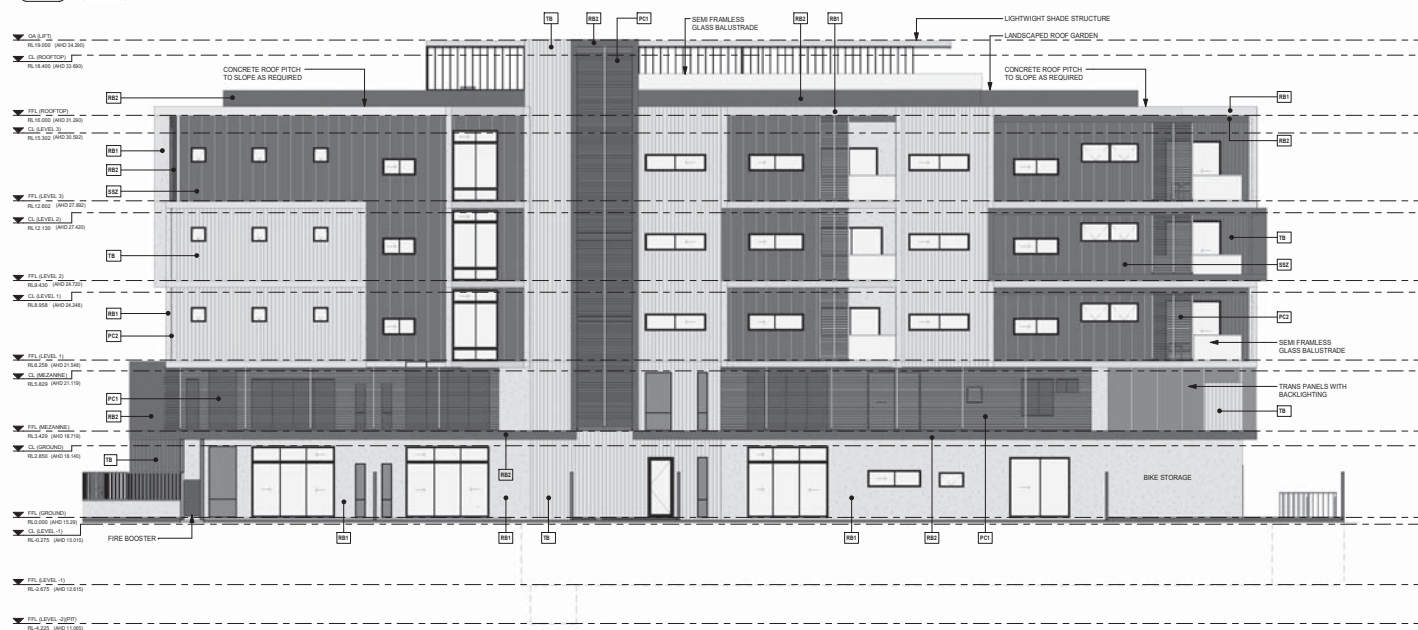
- REF. - REFER TO REF PLAN FOR SIZE AND LOCATION.
- STRUCTURAL COLUMN - REFER TO STRUCTURAL ENGINEER'S DRAWING FOR SIZE AND LOCATION.
- ANY CONSTRUCTION UNIT - REFER TO SPECIFICATION.
- TOLUET - REFER TO SPECIFICATION.
- UNIT - REFER TO SPECIFICATION.
- PRIME - REFER TO BUILDERS SPECIFICATION.
- UNDER BENCH CHAIR UNDER WITH HOT PLATE & BANGKHOOD CHAIR - REFER TO BUILDERS SPECIFICATION.
- WASHING MACHINE WITH DRYER CABIN - REFER TO SPECIFICATION.
- SHOWER - REFER TO SPECIFICATION.
- ROCK COCK - REFER TO HYDRAULIC CODE.
- NOT WATER LINE - REFER TO HYDRAULIC SPECIFICATION.
- DISH WASHER - REFER TO BUILDERS SPECIFICATION.
- SINK - REFER TO BUILDERS SPECIFICATION.
- PANTRY - REFER TO BUILDERS SPECIFICATION.
- LAUNDRY TROUGH - REFER TO BUILDERS SPECIFICATION.
- MICROWAVE - REFER TO BUILDERS SPECIFICATION.
- ONLY STEEL BOLDED - REFER TO DETAIL.

FINISHES SCHEDULE

- RENDERED BRICKWORK TEXTURE FINISH 1 - WHITE.
- RENDERED BRICKWORK TEXTURE FINISH 2 - DARK CONTRAST COLOUR.
- FEATURE STONE CLADDING - TRAVERTINE.
- TIMBER LOOK CLADDING - HEATHERTEX WEATHERPROOF NATURAL 100 VERTICAL.
- STANDING SEAM CLADDING - COLORBOND DARK BRONZE, 90mm PROFILE.
- DARK BRONZE COLOUR - VARIOUS APPLICATIONS - POWDERCOATED LOUVRES AND SCREENS DULUX ELECTROPLAT DARK BRONZE - PAINTED SURFACES WHERE SHOWN - WINNING EDGES.
- LIGHT SILVER OR GREY POWDERCOAT FINISH TO LOUVRED SCREENS.
- RENDERED FINISH - LIMESTONE LOOK - RANDOM PATTERN.



W WEST ELEVATION
SCALE 1 : 100



N NORTH ELEVATION1
SCALE 1 : 100



DATE	REVISION	DESCRIPTION
15.08.2017	1	REVISION FOR AS PER
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15.08.2017	3	REVISION FOR AS PER
15.08.2017	4	REVISION FOR AS PER
15.08.2017	5	REVISION FOR AS PER



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3	08/04/2017	127 HEDDERDALE RD
4	08/04/2017	127 HEDDERDALE RD
5	08/04/2017	127 HEDDERDALE RD

ELEVATIONS

PROPOSED APARTMENT DEVELOPMENT FOR YARAN GROUP LOT # (M47) CLYDESDALE ST. COMO

REVISION	DATE	BY	CHKD	APPD
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2	08/04/2017	127 HEDDERDALE RD	127 HEDDERDALE RD	127 HEDDERDALE RD
3	08/04/2017	127 HEDDERDALE RD	127 HEDDERDALE RD	127 HEDDERDALE RD
4	08/04/2017	127 HEDDERDALE RD	127 HEDDERDALE RD	127 HEDDERDALE RD
5	08/04/2017	127 HEDDERDALE RD	127 HEDDERDALE RD	127 HEDDERDALE RD

A1 DWG A201

Appendix 3 Transport Impact Statement

Proposed Residential Development
47 Clydesdale Street, Como

TRANSPORT IMPACT AND PARKING ASSESSMENT – V4

FINAL REPORT

Prepared for: Yaran Property Group

Prepared by: Move Consultants



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May 2017

DOCUMENT ISSUE AUTHORISATION

Issue	Rev	Date	Description	Checked	Approved
1	0	30/05/17	FINAL	HH	HH
2	1	31/05/17	REV	HH	HH
3	2	31/05/17	REV	HH	HH
4	3	01/06/17	REV	HH	HH

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1. INTRODUCTION

1.1 OVERVIEW

This Transport Impact and Parking Assessment has been prepared by Move Consultants on behalf of Yaran Property Group with regard to a proposed residential development to be located at 47 Clydesdale Street, Como in the City of South Perth. The subject land is currently occupied by a single-family dwelling and is located between Canning Highway and Manning Road in the southern side of the suburb of Como.

1.2 SITE LOCATION

The site is located on the western side of Clydesdale Street, between Philp Avenue and Davilak Street approximately 295m north of Manning Road. The site is generally surrounded by residential uses to all sides and is located approximately 535m due south-east of the Canning Bridge Railway Station. The site is currently occupied by a single-family dwelling with access to a ROW at the rear of the site (western boundary) running parallel to Clydesdale Street and connecting through to Davilak Street to the north. The site is located within the Davilak Quarter as annotated within the *Canning Bridge Activity Centre*.

The location of the site is shown in Figure 1

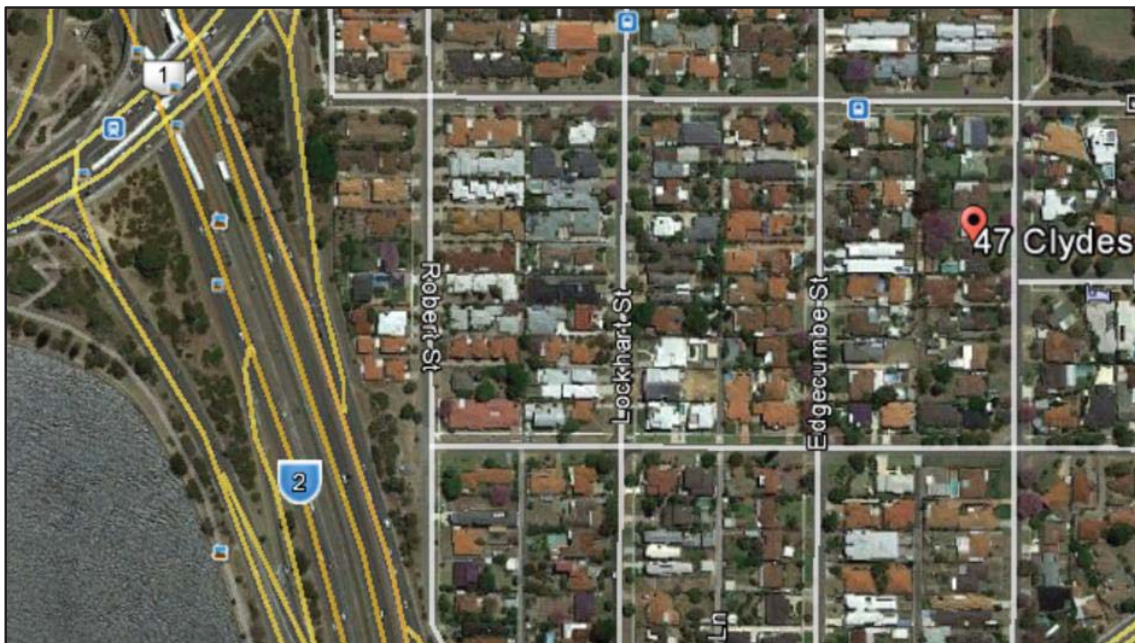


Figure 1: Local Context

The general metropolitan context is shown in Figure 2.

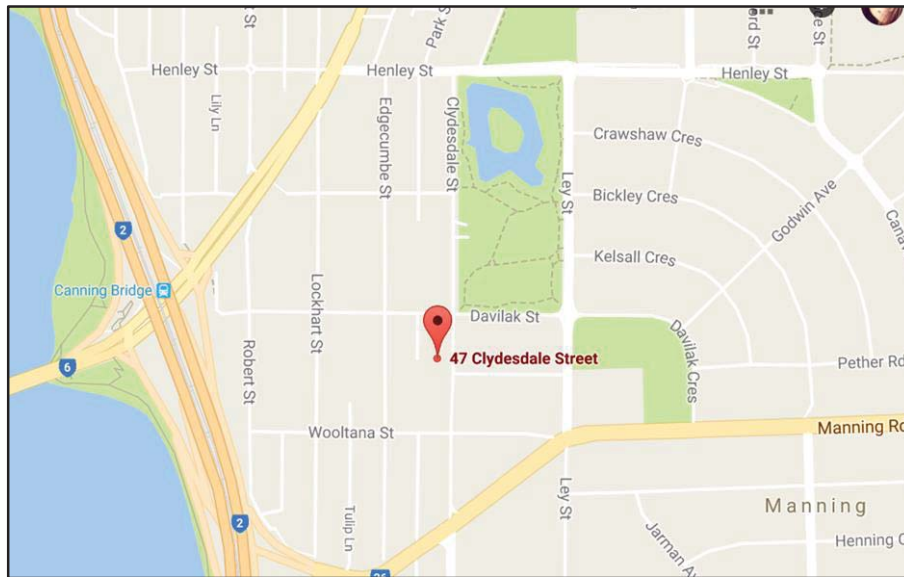


Figure 2: Metropolitan Context

1.3 SCOPE OF ASSESSMENT

This report has been prepared in accordance with the Western Australian Planning Commission's *Transport Assessment Guidelines for Developments: Volume 4 – Individual Developments* (2016).

Specifically, this report aims to assess the impacts of the proposed development on the boundary road network in the vicinity of the site to identify any modifications, to site or road layout, which may be required to serve the proposed site. In addition, the assessment considers the proposed access, circulation, and egress arrangements to and from the site.

For this purpose, the traffic operations on the adjacent and broader local road network have been assessed under both existing and future proposed traffic conditions with regard to the potential impacts from additional traffic generated by the proposed development of the site.

2. EXISTING SITUATION

2.1 ROAD INFRASTRUCTURE

The proposed development is to be constructed on a site currently occupied by a single-family dwelling on the west side of Clydesdale Street, between Davilak Street and Philp Avenue, Como with a single crossover proposed to the west side of Clydesdale Street connecting through to the existing ROW at the rear of the site running parallel to Clydesdale Street and connecting to the south side of Davilak Street to the north-west of the site. The site is bounded by existing residential uses to all sides and is located approximately 295m north of Manning Road. It is also located within the *Canning Bridge Activity Centre* area.

Manning Road is a primary east-west connecting road serving a broad catchment of users between Canning Bridge to the north, Como to the west and the Cannington City Centre to the east and other major activity nodes, such as Curtin University, the Karawara Shopping Centre and neighbourhood centres of Wilson and St. James. It functions as a parallel reliever to Canning Highway to the north and Leach Highway to the south.

Manning Road has been classified as a *District Distributor A* road, under the Main Roads Western Australia *Functional Road Hierarchy*, and has been defined as "...roads which carry traffic between industrial, commercial and residential areas and generally connect to Primary Distributors. These are likely to be truck routes and provide only limited access to adjoining property and are managed by Local Government." It has been constructed as a dual divided carriageway to the south of the site. Manning Road operates under a posted speed limit of 60kph in the vicinity of the site and is owned, operated and maintained by the City of South Perth. It has also been classified as an *Other Regional Road* or *Blue Road* in the *Metropolitan Region Scheme*.

Both Davilak Street, to the north of the site, and Clydesdale Street, along the eastern boundary of the site, have been classified as *Access Roads* under the Main Roads Western Australian *Functional Road Hierarchy* with these roads defined as those which "... provide access to abutting properties with amenity, safety and aesthetic aspects having priority over the vehicle movement function. These roads are bicycle and pedestrian friendly. They are managed by Local Government." Both have been constructed to a single undivided carriageway standard with a seal of 6 to 7m and operate under a speed limit of 50kph. These roads are owned, operated and maintained by the City of South Perth. The balance of the roads in the general vicinity of the site are also classified as *Access Roads*. A ROW at the rear of the site (along the western boundary) is approximately 4.0 to 4.5m wide and runs parallel to Clydesdale Street connecting with Davilak Street in a T-intersection arrangement north-west of the site.

Figure 3 illustrates the functional road hierarchy in the vicinity of the site.

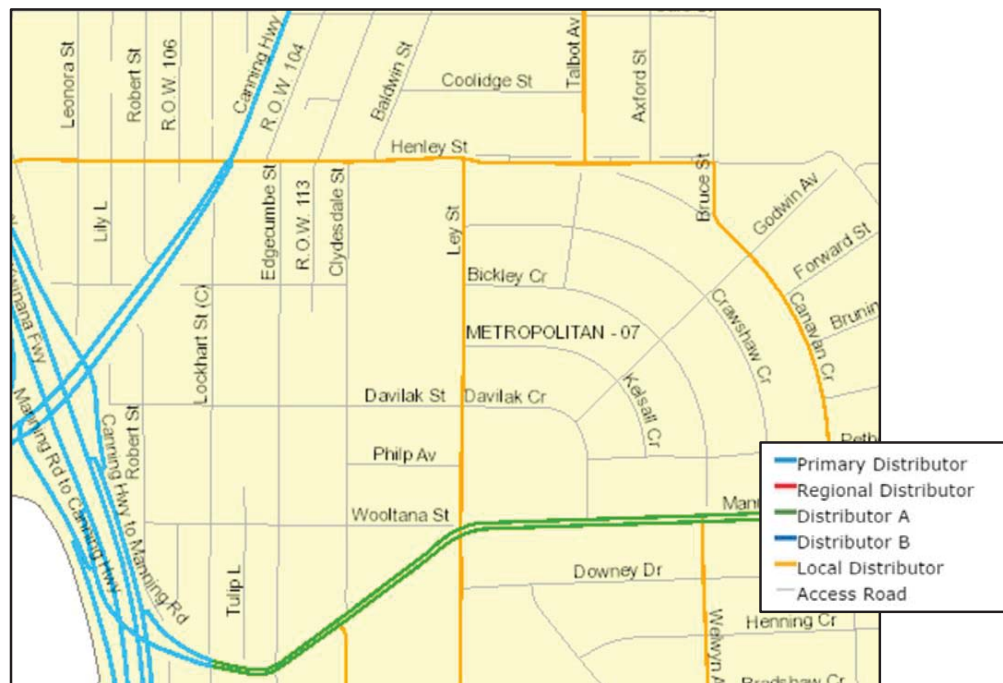


Figure 3: MRWA Functional Road Hierarchy

Existing traffic volumes are outlined in Table 1.

Road	Daily Volume (vpd)	Date/Source	Practical Capacity (vpd)
Manning Road	26,500 vpd	MRWA, 2017	35,000 to 40,000 vpd
Clydesdale Street	750 vpd	City of South Perth, 2011	3,000 vpd
Davilak Street	1,200 vpd (est).	N/A	3,000 vpd

The site is served by Transperth Bus Route 30 (Perth-Curtin University Bus Station via Labouchere Road and Hope Avenue) which runs along Davilak Street to the north of the site. This service provides 15-minute service frequency during the weekday roadway peak periods, 30-minute service during the midday and early evening period and hourly service on weekends. Figure 4 shows the existing public transport services in the area.



MC 47 Clydesdale Street TIA V4 010617.docx

A footpath of 1.5m in width is in place on the east side of Clydesdale Street, opposite the site. Davilak Street to the north of the site has a footpath on the south side of the street with on-road bicycle lanes in place on both sides of the road connecting further to the west with the off-road Principal Shared Path (PSP) in place to the north-west of running along the Kwinana Freeway connecting into the Perth CBD.

Figure 5 shows the cycling and pedestrian infrastructure in the vicinity of the site.



Figure 5: Existing Cycling and Pedestrian Infrastructure

3. PROPOSED DEVELOPMENT

A site plan of the proposed development has been prepared by Modus Design. A copy of the site plan is contained in **Appendix A**.

3.1 PROPOSED LAND USES

The proposal seeks the development of 21 multiple-dwelling residential units. The proposed residential development is to be constructed on the site which is currently occupied by a single-family dwelling, located on the west side of Clydesdale Street, Como in the City of South Perth. Existing residential uses are located to all sides of the site.

3.2 PROPOSED ACCESS AND PARKING ARRANGEMENTS

The proposed access arrangements are shown to consist of a crossover located abutting then northern boundary of the site connecting to the western boundary of Clydesdale Street then configured as one-way westbound only with an exit only crossover at the rear (western boundary) of the site at the existing ROW running parallel to Clydesdale Street and connecting with Davilak Street to the north, approximately 60m west of Clydesdale Street.

Direct access to the car parking area on the site will provide ingress and egress to and from 20 residential tenant car parking bays arranged in a 10 x 2 stacking arrangement plus three (3) visitor bays located just inside the Clydesdale Street crossover in a parallel arrangement and a single visitor bay located west of the tenant bays at right-angles to the northern façade of the building.

The proposed car parking supply consists of 20 dedicated residential tenant bays, which is consistent and compliant with the *Canning Bridge Activity Centre Plan* which states under DO 18 that car parking be provided at a minimum rate of 0.75 bays to a maximum rate of 1.0 bays for each studio, 1-bedroom or 2-bedroom dwelling. The minimum car parking requirement is therefore 19.5 bays which is satisfied by the proposed 20-bay provision on the site. Four (4) bays are proposed on-site site dedicated visitor car parking will be provided as the site is located within an area very well served by existing on-street parking and high quality public transport, cycling and pedestrian infrastructure. This is consistent with good and orderly planning and relevant endorsed policies and guidelines such as the *Canning Bridge Activity Centre Plan*, *State Planning Policy 4.2: Activity Centres for Perth and Peel* and *Development Control 1.6: Planning to Support Transit Use and Transit-Oriented Development* as the site is located within 800m of a railway station as well as consistent with the tenets in the *Canning Bridge Activity Centre Plan*. Rubbish collection will be undertaken on the kerbside by Council vehicles and a separate Waste Management Plan will be prepared in consultation with the City of South Perth during the detailed design stages of the project.

3.3 END OF TRIP FACILITIES

End-of-trip facilities (including bicycle racks) are proposed to be provided on the site within individual storage lockers and consistent with Austroads guidelines and the *Canning Bridge Activity Centre Plan*.

4. TRANSPORT ANALYSIS

A traffic generation and distribution exercise has been undertaken to assess the potential traffic impacts associated with the proposed development. The aim of this exercise was to establish the traffic volumes which would be generated from the proposed development and to quantify the effect that the additional traffic has on the surrounding road network, specifically on the local road network including Davilak Street and Clydesdale Street. Also, the volume and functionality of traffic at the proposed crossover to the west side of Clydesdale Street, east side of the existing parallel ROW to the west and Davilak Street/ROW intersections were also assessed.

4.1 TRIP GENERATION

The traffic generated by the proposed development has been predicted by applying trip generation rates for the *Residential Condominium/Townhouse* (230) category. These rates were derived from the *Institute of Transportation Engineers' (ITE) Trip Generation Manual, 8th Edition*. This trip generation represents the 'worst case' scenario as the anticipated net site traffic increase has not been adjusted to reflect the proximity to existing high quality public transport, pedestrian and cycling infrastructure or the limited amount of car parking on the site, which typically result in a reduction in net impact on the boundary road system. The total maximum anticipated traffic generated by the proposed development is estimated to be in the order of 92 vehicular trips (46 inbound/46 outbound) on a daily basis, 7 vehicular trips (1 inbound/6 outbound) during the a.m. peak hour; and 8 vehicular trips (5 inbound/3 outbound) during the p.m. peak hour.

4.2 TRAFFIC ASSESSMENT

Based upon the existing traffic patterns in the area and the spatial distribution of adjacent land uses, the following distribution for the proposed 'new' development generated traffic has been assumed:

- 40% to and from the south via Clydesdale Street and Ley Street; and
- 60% to and from the north via Clydesdale Street to Henley Road.

The number of trips entering / exiting the site via the proposed site crossover(s) has been assigned based upon the most logical route for vehicles to take given their origin / destination.

The anticipated site-generated traffic was then assigned to the respective crossovers to Clydesdale Street, the ROW at the rear of the property and the intersection of Davilak Street/ROW based upon the existing proportions for both the weekday a.m. and p.m. peak hours. The resultant increases in weekday daily and a.m. and p.m. peak hour-generated under the 'worst case' scenario for the boundary road network would be as follows:

- Manning Road:
 - Daily: +37 vehicular trips
 - A.M. Peak Hour: +3 vehicular trips
 - P.M. Peak Hour: +3 vehicular trips
- Clydesdale Street (North):
 - Daily: +55 vehicular trips
 - A.M. Peak Hour: +4 vehicular trips
 - P.M. Peak Hour: +5 vehicular trips
- Clydesdale Street (South):
 - Daily: +37 vehicular trips
 - A.M. Peak Hour: +3 vehicular trips
 - P.M. Peak Hour: +5 vehicular trips
- Davilak Street:
 - Daily: +46 vehicular trips
 - A.M. Peak Hour: +7 vehicular trips
 - P.M. Peak Hour: +8 vehicular trips

These increases in daily and a.m./p.m. peak hour volumes will have a negligible impact on existing traffic operations in the area and can be comfortably accommodated within the practical capacities of the respective links on the boundary road network.

4.3 CRASH HISTORY

A review of the crash history along the frontage of the site and at the nearby local road intersections for the 5-year reporting period of 2012-2016 indicates that no crashes occurred on Clydesdale Street along the eastern boundary of the site or on Davilak Street west of Clydesdale Road involving manoeuvring into or out of a driveway or low volume road connection. The risk profile therefore associated with the proposed crossover locations to both Clydesdale Street and the ROW to the rear will not be impacted by the development due to the homogenous nature of the traffic generation of the site (primarily outbound during the morning peak period travelling west to the ROW and then north along the ROW to Davilak Street (6 vph) and inbound (5 vph) during the afternoon peak period). The balance of access to the ROW at the rear of the site between the subject land's northern boundary and Davilak

Street consists of rear access to 3 to 4 existing properties abutting either side of the ROW. Estimated traffic generation along the ROW inclusive of outbound traffic associated with the site would be no more than 10 vph or 1 vehicle exiting at Davilak Street every 10 minutes during the peak hours. Conflict is therefore expected to be minimal along the short section of the ROW with vehicles associated with the site only exiting in a northbound direction.

5. VEHICULAR ACCESS AND PARKING

5.1 ON-SITE QUEUING, CIRCULATION, AND ACCESS

The site plan indicates a site crossover along the eastern boundary of the site to Clydesdale Street along the northern boundary leading into a car parking area to serve 20 car parking bays proposed to operate as 10 x 2 car stackers located at right angles to the south side of the crossover. This car stacking arrangement is proposed to allow for ingress at grade with vehicles being parked within the basement level for the lower bay and at ground level for the upper bay. Based upon the review of the proposed car stacking technology. The anticipated wait times for the car stacking mechanisms is in the vicinity of 2 to 3 minutes which will not result in any delays within the circulation area adjacent to the stacking mechanism based upon anticipated turnover (typically a maximum of 8 vehicles per hour inbound and outbound and likely less than that due to the constrained parking supply on the site). Based upon the anticipated site-generated traffic during the weekday peak hours of between 7 and 8 vehicles per hour (less than 1 vehicle per 7 to 8 minutes entering or exiting), no vehicular queuing for inbound traffic from Clydesdale Street or outbound traffic to the ROW to the west is expected to occur with the maximum demand during this time period. The crossovers to both Clydesdale Street and the ROW has been designed to be compliant with City of South Perth and Austroads standards and guidelines and the relevant Australian Standards with all vehicles inbound and outbound undertaking this manoeuvre in forward gear.

A review of the sight distance requirements at the crossover to Clydesdale Street for inbound vehicles and at the ROW for exiting vehicles indicates that adequate sight distance is in place to satisfy minimum sight distance requirements in accordance with Austroads Guide to Road Design: Part 4A – Unsignalised and Signalised Intersections and AS 2890.1: Off-Street Parking.

A review of the proposed on-site circulation and car parking layout within the ground floor area in the vicinity of the car stacking areas was also undertaken to assess the adequacy of the proposed site access and circulation on the site with all movements typically via a left-turn into the car parking bays in forward gear and outbound into the manoeuvring area in reverse gear into order to enter and exit the site crossover within the property in order to enter and exit the site in forward gear. The design of the proposed car parking areas within these levels has been reviewed using AutoTrack and the relevant Australian Standards and Austroads guidelines, with the proposed design considered adequate to accommodate on-site manoeuvring and circulation.

The proposed layout of the respective car parking areas is consistent with relevant Australian and Council standards. The proposed 4.0m crossover at the Clydesdale Street boundary inside the car parking area flares from 4.0m wide to a two-way width. This flaring will allow for 2-way movement within the car parking area and direct access to the proposed car parking bays laid out in a right-angle arrangement. All vehicles will enter and exit this area in forward gear with entry via Clydesdale Street only and exit via the western boundary to the ROW and then north to Davilak Street. Entry and exit to the four (4) visitor bays adjacent to the internal crossover would be in a westbound only direction.

The anticipated risks associated with simultaneous inbound traffic associated with existing property access within the ROW and outbound traffic associated with the subject site would be virtually nil as a result due to the homogenous nature of the traffic (primarily outbound during the a.m. peak hour and inbound during the p.m. peak hour combined with very low demand volumes overall equating to no more than 10 vph maximum during the a.m. peak hour and less during the p.m. peak hour inclusive of development-generated traffic) and the proposed one-way westbound traffic entry and exit arrangement on the site. Hence, the 4.0m width of the proposed crossovers to both Clydesdale Street and the ROW would accommodate the low volumes of traffic during peak periods comfortably. Rubbish collection will be undertaken on the kerbside by Council vehicles and a separate Waste Management Plan will be prepared in consultation with the City of South Perth during the detailed design stages of the project.

5.2 PARKING DEMAND AND SUPPLY

The proposed car parking supply consists of 20 dedicated residential tenant bays, which is consistent and compliant with the *Canning Bridge Activity Centre Plan* which states under DO 18 that car parking be provided at a minimum rate of 0.75 bays to a maximum rate of 1.0 bays for each studio, 1-bedroom or 2-bedroom dwelling. The minimum car parking requirement is therefore 19.5 bays which is satisfied by the proposed 01-bay provision on the site. The four (4) on-site car parallel car parking bays are sufficient to accommodate demand associated with visitors to the development. The area is very well served by high quality public transport, cycling and pedestrian infrastructure. This is consistent with good and orderly planning and relevant endorsed policies and guidelines such as the *Canning Bridge Activity Centre Plan*, *State Planning Policy 4.2: Activity Centres for Perth and Peel* and *Development Control 1.6: Planning to Support Transit Use and Transit-Oriented Development* as the site is located within 800m of a railway station and major bus node and is served by high quality pedestrian and cycling infrastructure.

An illustration of a typical car stacking arrangement is attached in **Appendix B**.

6. CONCLUSIONS

The aim of this Transport Impact and Parking Assessment was to discuss the traffic likely to be generated by the proposed residential 21-unit multiple dwelling development proposed at 47 Clydesdale Street, Como, in the City of South Perth and to assess the impacts associated with anticipated site-generated upon the adjacent transport infrastructure. In particular, the assessment considered the impacts on the boundary road network including Clydesdale Street, Davilak Street and the ROW at the rear of the site connecting to the south side of Davilak Street.

A review of the expected traffic generation associated with the proposal indicates that the local road network has sufficient practical capacity to accommodate the increases in vehicular site-generated traffic and that the development generated traffic will have a negligible impact on existing traffic operations during the weekday a.m. and p.m. roadway peak periods with no vehicular queuing or impacts to operations expected within the site or on the boundary road network associated with this traffic.

The site plan indicates a site crossover along the eastern boundary of the site to Clydesdale Street along the northern boundary leading into a car parking area to serve 20 car parking bays proposed to operate as 10 x 2 car stackers located at right angles to the south side of the crossover. This car stacking arrangement is proposed to allow for ingress at grade with vehicles being parked within the basement level for the lower bay and at ground level for the upper bay. Based upon the review of the proposed car stacking technology. The anticipated wait times for the car stacking mechanisms is in the vicinity of 2 to 3 minutes which will not result in any delays within the circulation area adjacent to the stacking mechanism based upon anticipated turnover (typically a maximum of 8 vehicles per hour inbound and outbound and likely less than that due to the constrained parking supply on the site). Based upon the anticipated site-generated traffic during the weekday peak hours of between 7 and 8 vehicles per hour (less than 1 vehicle per 7 to 8 minutes entering or exiting), no vehicular queuing for inbound traffic from Clydesdale Street or outbound traffic to the ROW to the west is expected to occur with the maximum demand during this time period. The crossovers to both Clydesdale Street and the ROW has been designed to be compliant with City of South Perth and Austroads standards and guidelines and the relevant Australian Standards with all vehicles inbound and outbound undertaking this manoeuvre in forward gear.

A review of the proposed on-site circulation and car parking layout within the ground floor area in the vicinity of the car stacking areas was also undertaken to assess the adequacy of the proposed site access and circulation on the site with all movements typically via a left-turn into the car parking bays in forward gear and outbound into the manoeuvring area in reverse gear into order to enter and exit the site crossover within the property in order to enter and exit the site in forward gear. The design of the proposed car parking areas within these levels has been reviewed using AutoTrack and the relevant Australian Standards and Austroads guidelines, with the proposed design considered adequate to accommodate on-site manoeuvring and circulation.

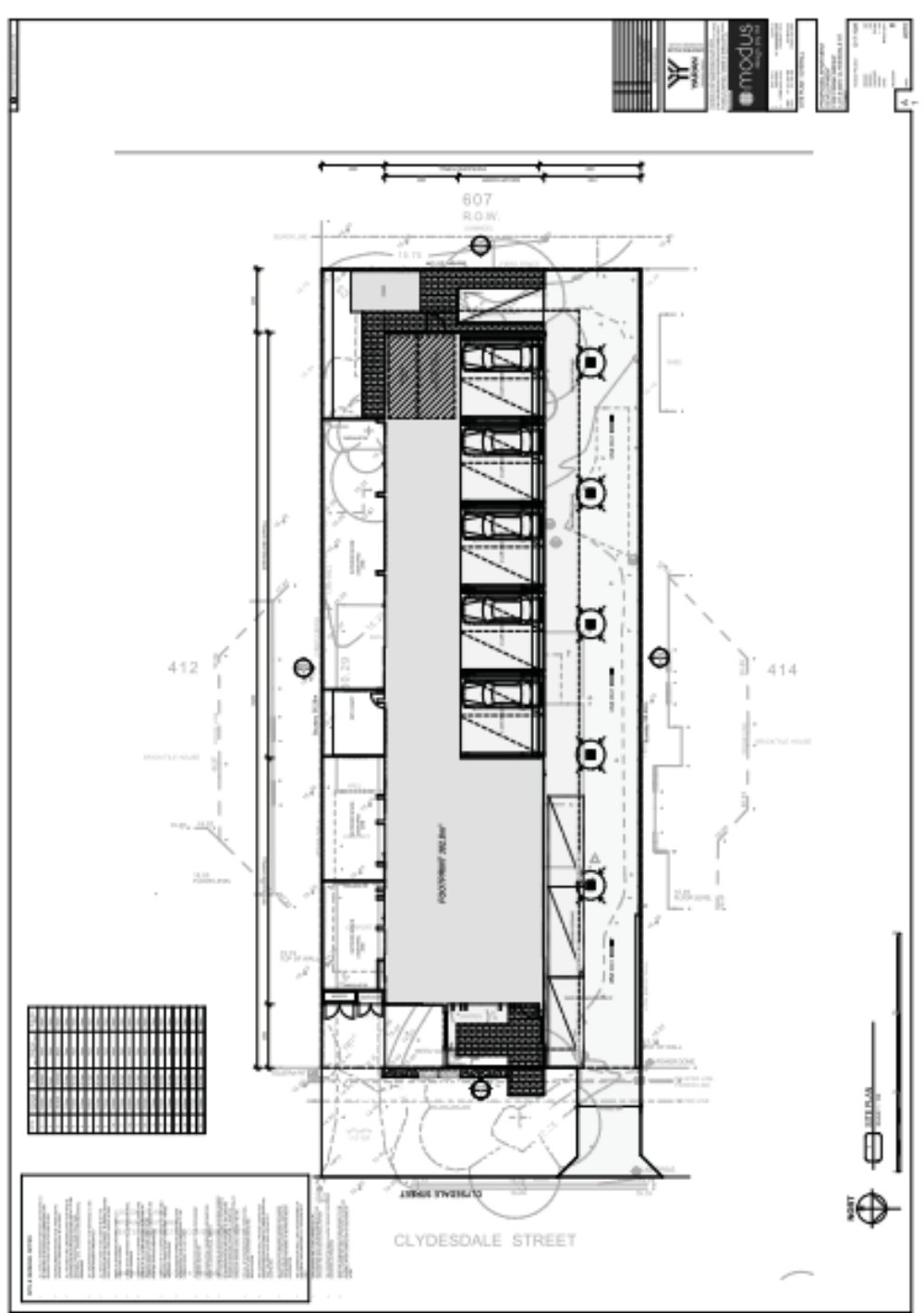
The proposed layout of the respective car parking areas is consistent with relevant Australian and Council standards. The proposed 4.0m crossover at the Clydesdale Street boundary inside the car parking area flares from 4.0m wide to a two-way width. This flaring will allow for 2-way movement within the car parking area and direct access to the proposed car parking bays laid out in a right-angle arrangement. All vehicles will enter and exit this area in forward gear with entry via Clydesdale Street only and exit via the western boundary to the ROW and then north to Davilak Street. Entry and exit to the three (3) parallel visitor bays inside the Clydesdale Street boundary would be in a westbound only direction.

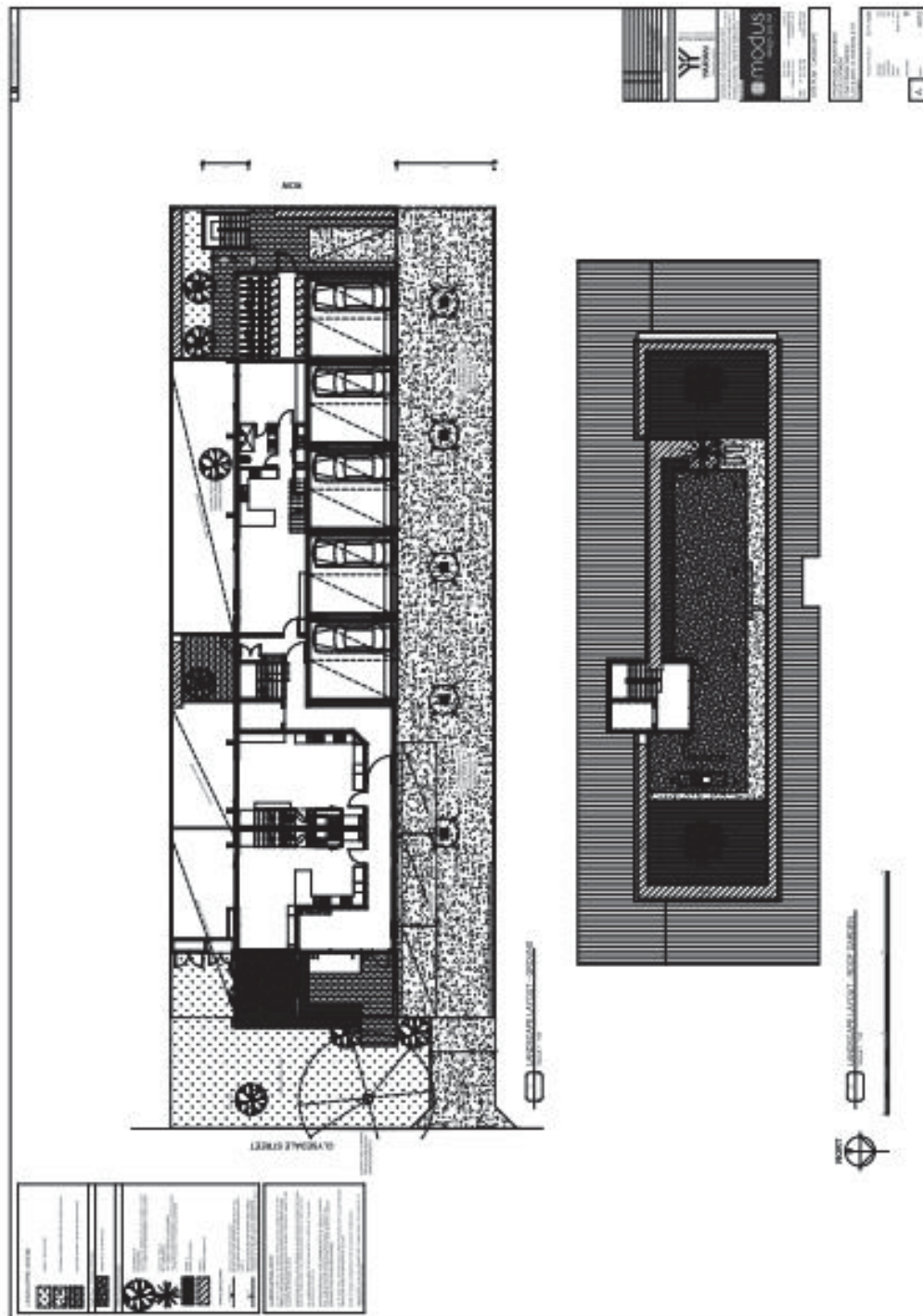
The proposed on-site car parking supply for the site is consistent with the *Canning Bridge Activity Centre Plan*, *State Planning Policy 4.2: Activity Centres for Perth and Peel* and *D.C. 1.6: Planning to Support Transit Use and Transit-Oriented Development*. Visitor car parking demand associated with the proposal can be comfortably accommodated within the on-site supply.

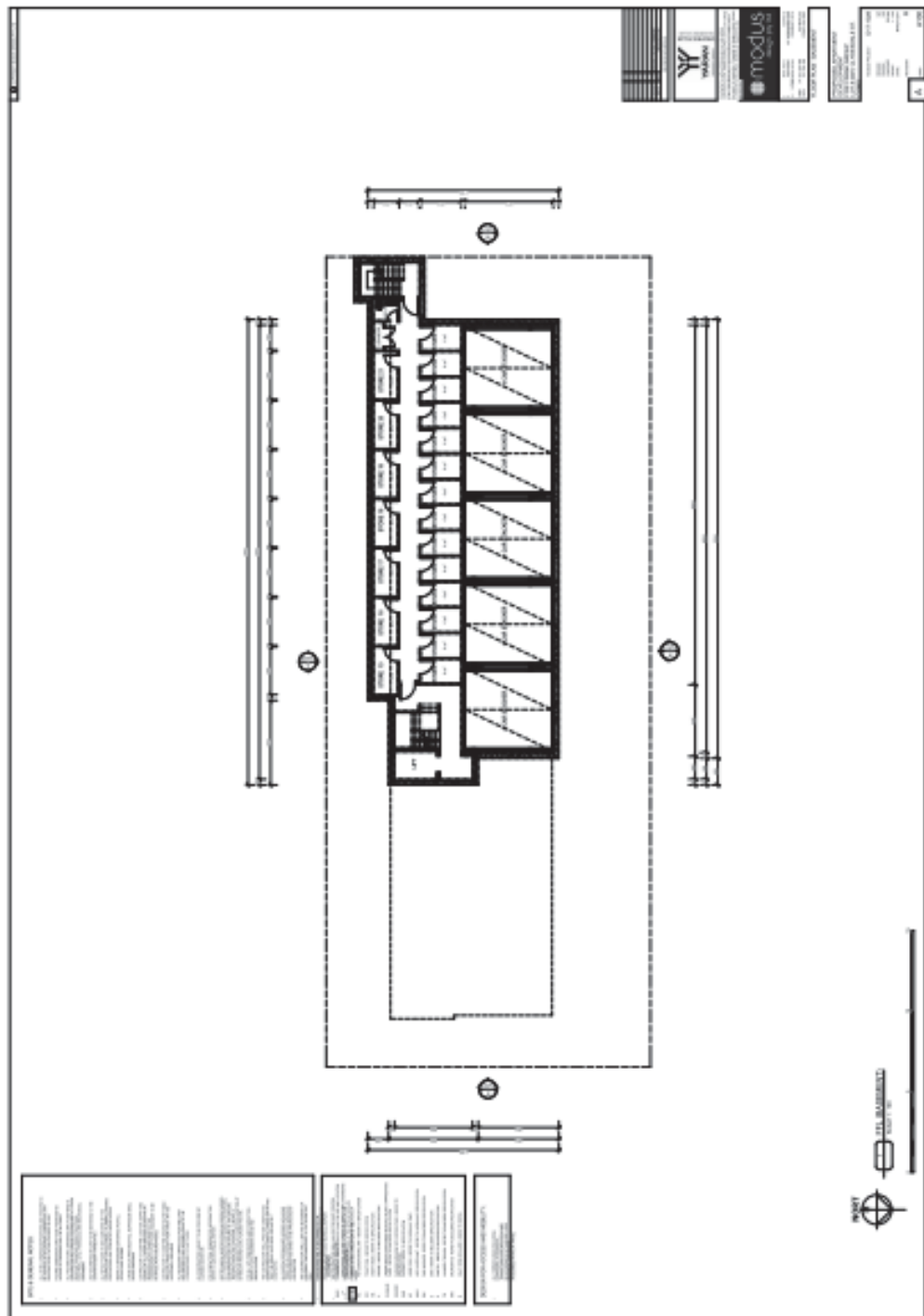
In conclusion, it should be noted that based both on a review of the modelled total traffic assessment and observed traffic operations of the boundary road system, the anticipated site-generated traffic associated with the proposed development can be accommodated within the existing practical capacity and functional road classification of the local road system.

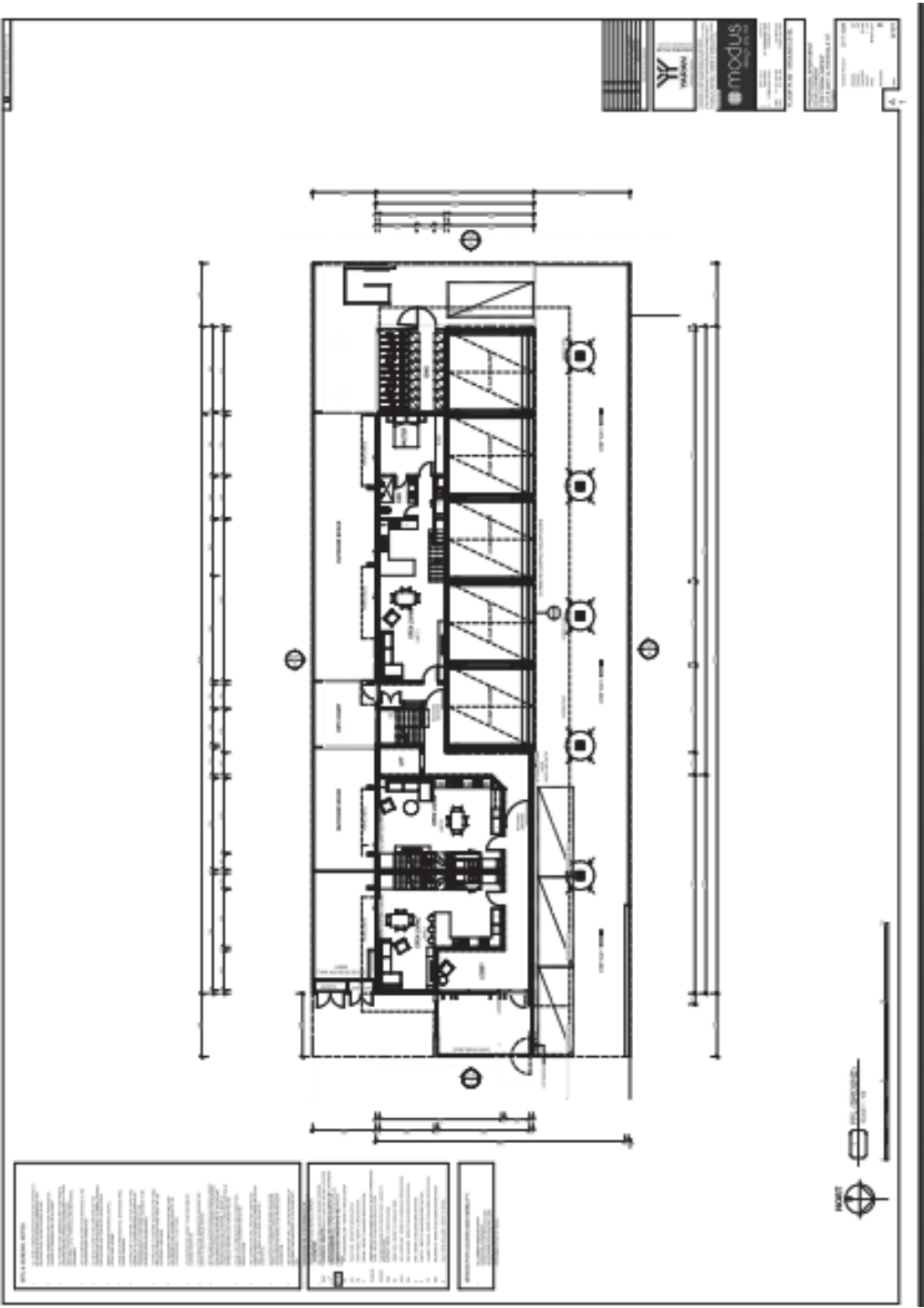
APPENDIX A: SITE PLAN

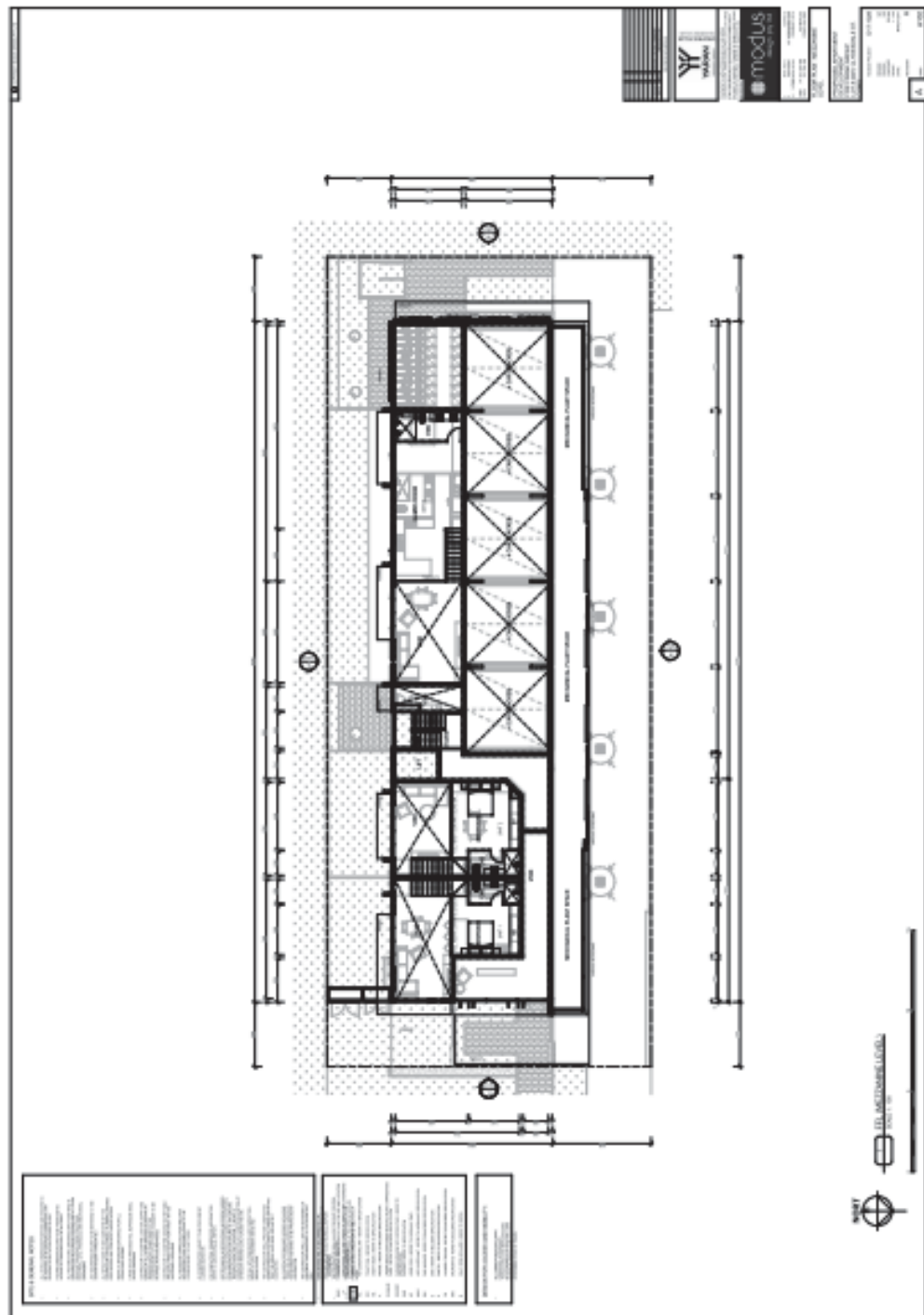


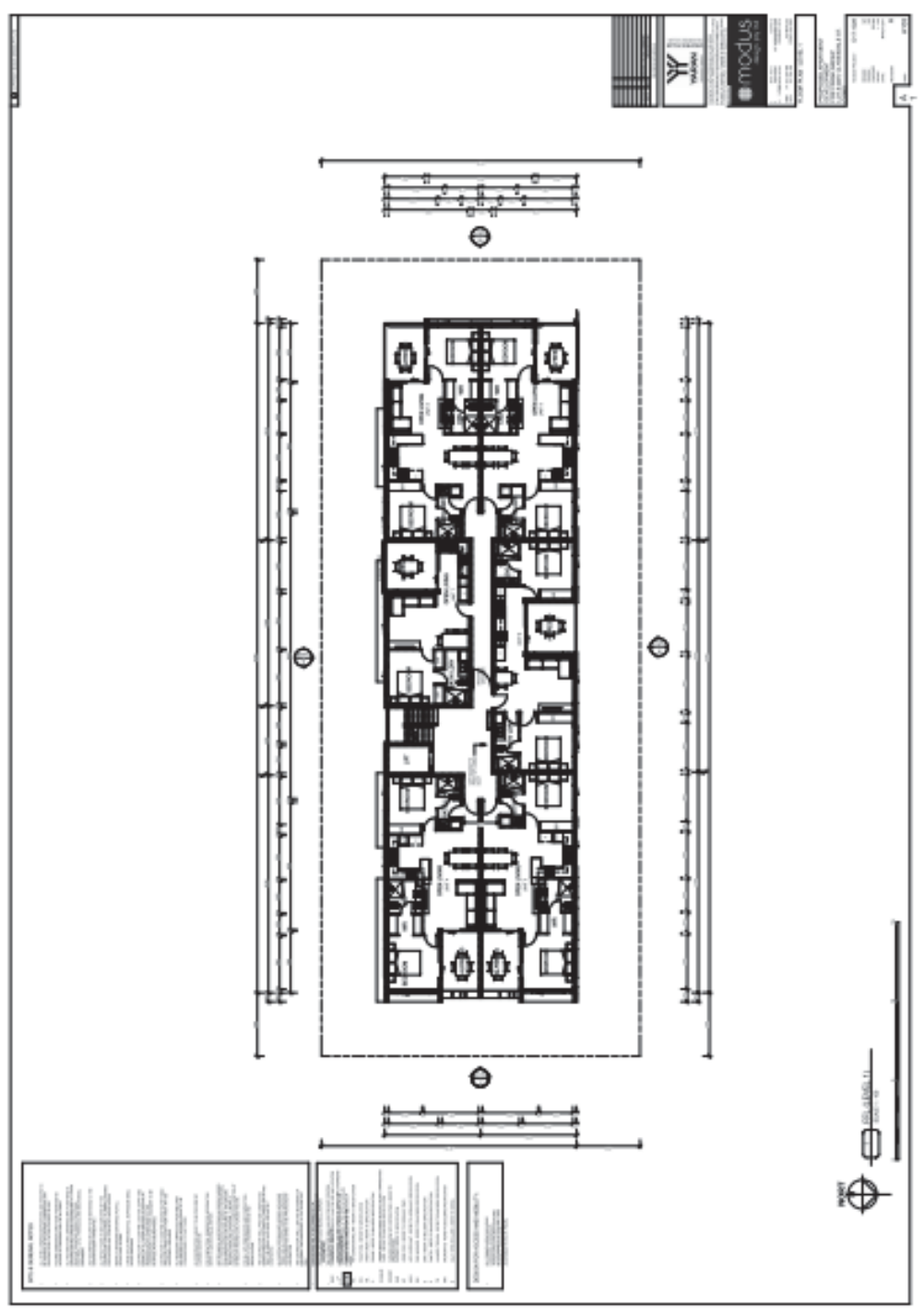


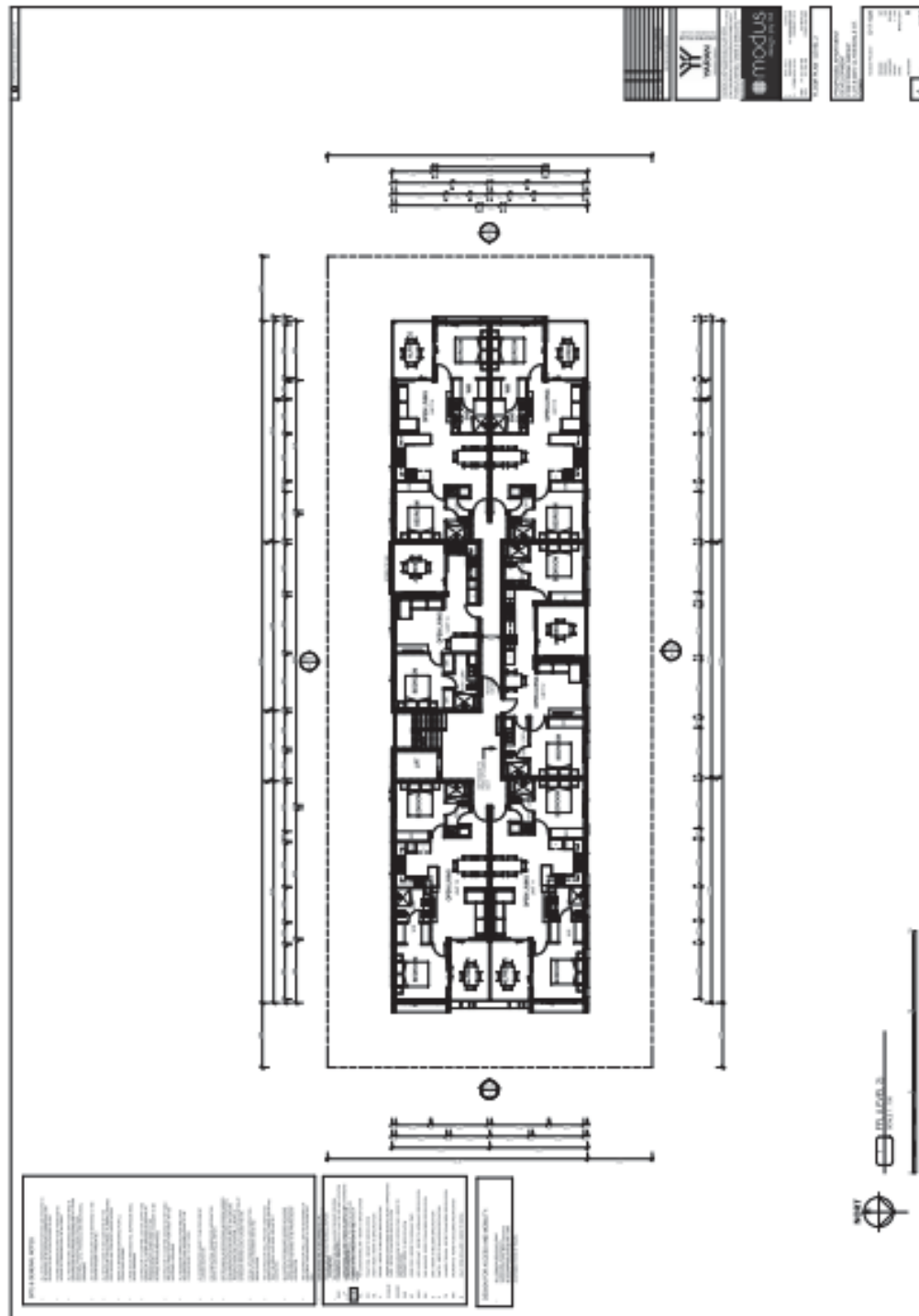


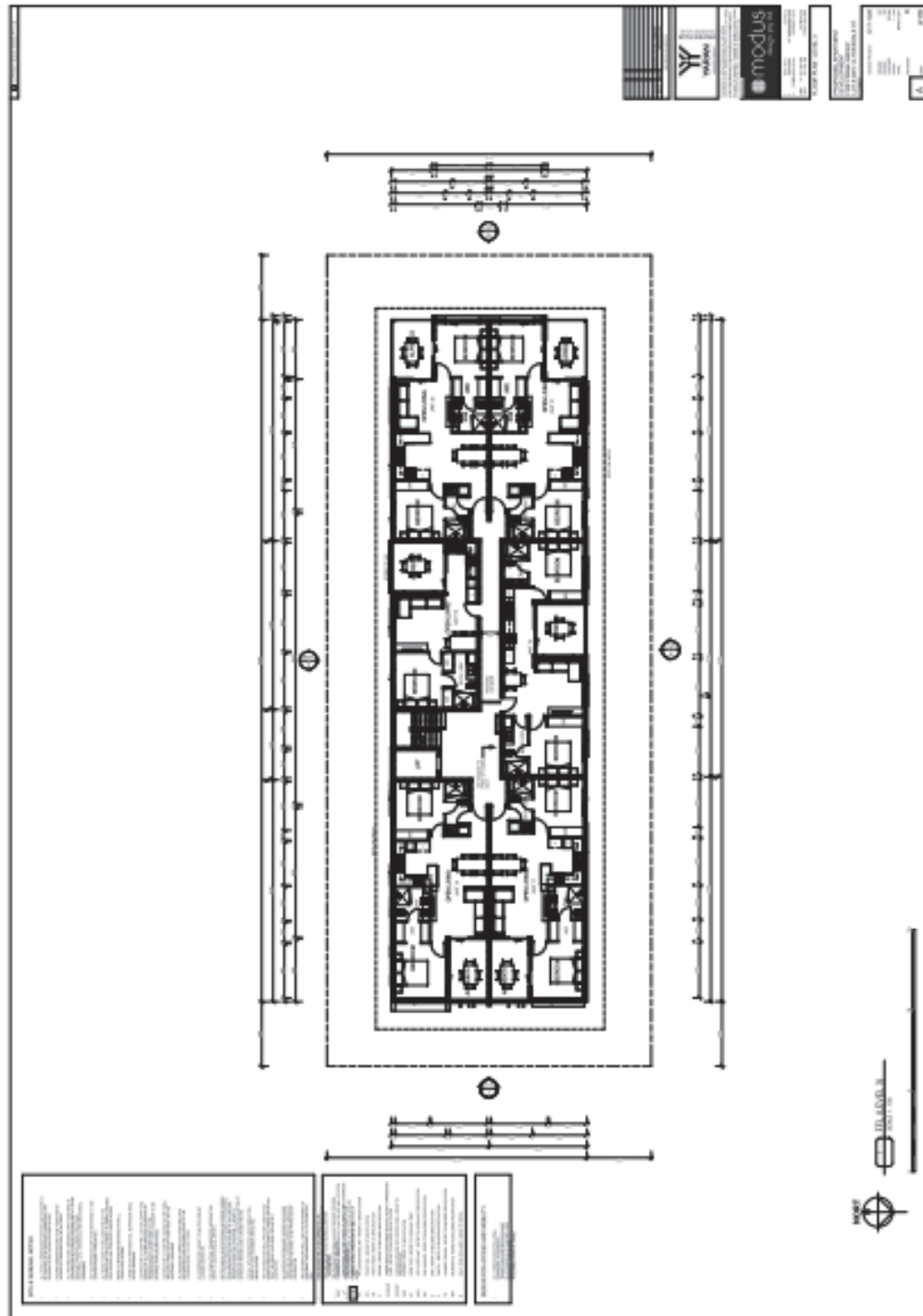












APPENDIX B: PROPOSED CAR STACKING ARRANGEMENT



Appendix 4 Waste Management Plan

1. Introduction

This Waste Management Plan has been prepared in accordance with the City of South Perth's *Waste Guidelines for New Developments* (February 2017). It applies to the proposed development of 21 multiple dwellings at Lot 413 (47) Clydesdale Street, Como (**subject site**).

2. Summary of development

The proposed development comprises 21 multiple dwellings (6 x one-bed and 25 x two-bed) in a four-storey development.

3. Anticipated Waste Development

The proposed development is anticipated to generate waste at the following rate:

Use	Refuse (L/week)	Recycling (L/week)	Paper and cardboard (L/week)
6 x 1-bed and 15 x 2-bed apartments	1,980	1,140	1,140

4. Receptacle Size and Quantity

The following waste receptacles will be used:

- 2 x 1,100L mobile garbage bins (**MGBs**) for refuse, and
- 4 x 1,100L MGBs plus 1 x 240L MGB for recycling, paper and cardboard

5. Bin Storage Area

All MGBs will be stored in a bin room located on the ground level of the building at the rear of the building near the basement staircase. Residents can access the bin room via the central lift / staircase, and then via the basement-level staircase.

The bin room is 5.17m x 4.16m, with an area of 21.5m². MGBs will be arranged along either side of the bin room, with access to all MGBs via a central access path.

The bin room will be designed to include the following:

- A smooth impervious floor sloped to a drain connected to the sewer system of not less than 75mm in thickness subject to the City's approval.
- Raised above the finished floor level to prevent stormwater ingress.
- Enough space to facilitate the cleaning of receptacles.
- Walls and floors constructed of a material which facilitates the cleaning.

- Fitted with a self-closing gate.
- Ventilated to a suitable standard as approved by the City. Where mechanical ventilation is to be used, the outlet for vented air will be in a location which will not adversely impact residents.
- Provided with artificial lighting, sensor or switch controlled both internal/external to the room.
- Vermin will be excluded.

Space is available for bulky waste storage in the bin room and at ground level near the bin room.

6. Waste System

No compactor, chute or other waste system is proposed. It will be the responsibility of residents to sort waste into the correct MGBs based on the City's requirements.

7. Collection Method and Frequency and Waste Service Provider

Full MGBs will be presented to the Clydesdale Street verge on collection day for collection by the City's waste collection vehicles (side or rear load). Level and at-grade access is available via the driveway between the bin room and verge. A paved area will be provided on the verge for the placing of the MGBs for collection.

Refuse is collected weekly (every Wednesday) and recycling is collected fortnightly (every second Wednesday). It will be the responsibility of the strata manager of the complex to arrange for bins to be presented on the verge for collection and returned to the bin room following collection.

The City provides one hard waste and two green waste verge-side collections per year. Residents will be required to leave any bulky waste in the designated bulky waste area; residents must not place bulky waste on the verge at any time. It will be the responsibility of the strata manager of the complex to arrange for bulky (hard) waste and green waste to be moved from the bulky waste storage area to the verge for collection in accordance with the City's requirements.

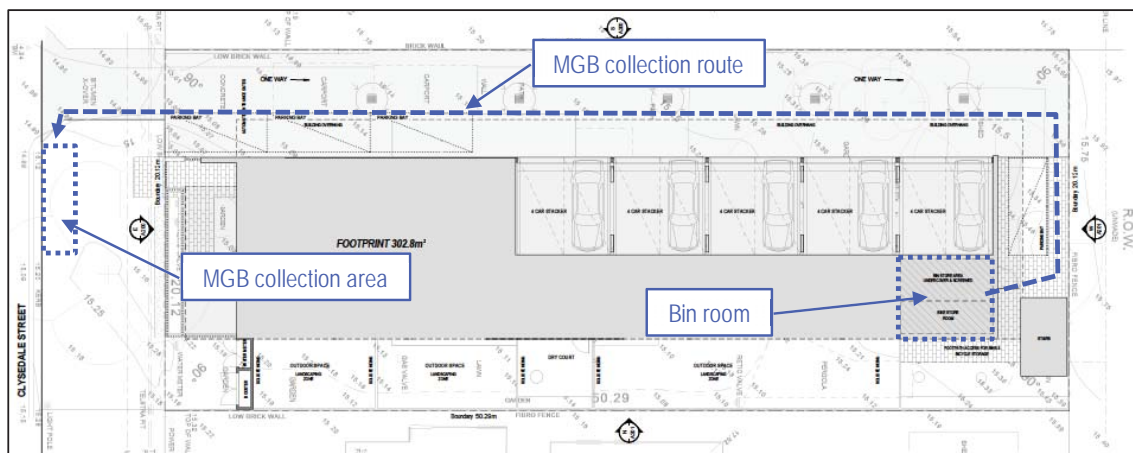


Figure 1 – Waste management site plan

Appendix 5 Apartment Design Guideline Assessment

The following is a high-level assessment of the proposed development against the design elements of the draft Apartment Design Guidelines in order to demonstrate how the development addresses the relevant design considerations.

Part 2	Primary Controls	Provided	Compliant
Table 1 – Primary Controls Table			
	Precinct Planned Areas (R-AC0) as per Local Planning Scheme, LDP or Precinct Controls.	As per Canning Bridge Activity Centre Plan.	✓
Part 3	Siting the Development	Provided	Compliant
Site Analysis			
3.1.1 and 3.1.2	Design Criteria Site analysis report to address elements in Appendix 4 – Checklist.	N/A	N/A
Orientation			
3.2.1	Design Guidance <ul style="list-style-type: none"> Buildings face the street, direct access from the street Overshadowing to south minimised. 	<ul style="list-style-type: none"> Building fronts Clydesdale Street, entry from Clydesdale Street. Overshadowing to the south minimised by locating development centrally on the subject site. 	✓
3.2.2	Design Guidance <ul style="list-style-type: none"> Minimise overshadowing to the south. 	<ul style="list-style-type: none"> Overshadowing to the south minimised by locating development centrally on the subject site. 	✓
Existing Tree Retention			
3.3.1 and 3.3.2	Design Criteria <ul style="list-style-type: none"> Identify trees for retention. 	<ul style="list-style-type: none"> One street tree will be retained. 	✓
Deep Soil Areas			
3.4.1	Design Criteria <ul style="list-style-type: none"> 12% (121m²) of site area minimum deep soil area with minimum dimension of 3m, or 8% (81m²) if existing tree retained. Minimum number of trees: <ul style="list-style-type: none"> 8 small (6-8m canopy) 3 medium (8-12m canopy) 2 large (12+m canopy) 	<ul style="list-style-type: none"> Approx. 139m² of outdoor space / landscaping zone provided. 7 small trees within site boundary in common property areas. 3 trees provided on the roof top. Private courtyards make up a portion of the deep soil areas which will be landscaped independently by the individual apartment landowner following construction. 	✓ ✓
Communal and Public Open Space			
3.5.1	Design Criteria <ul style="list-style-type: none"> 15% (152m²) communal open space for 21 dwellings. 	<ul style="list-style-type: none"> Roof garden communal open space – approx. 274m² (27%). 	✓

Part 3	Siting the Development	Provided	Compliant
	<ul style="list-style-type: none"> Achieve minimum of 50% direct sunlight. 	<ul style="list-style-type: none"> Roof garden communal open space is open design to achieve direct sunlight. 	✓
3.5.2	Design Guidance <ul style="list-style-type: none"> Communal open space to address needs of residents. 	<ul style="list-style-type: none"> The residential lobby and rooftop garden provide suitable areas for the enjoyment of residents. The barbeque and seating areas provide opportunities for residents to use the space for dining and passive activities. 	✓
3.5.3	Design Guidance <ul style="list-style-type: none"> Communal open space to be readably visible. 	<ul style="list-style-type: none"> Roof level is setback to ensure the design is not visible from the street and neighbouring properties to ensure visual privacy. The rooftop is easily accessible by all apartments ensuring accessibility. 	✓
Visual Privacy			
3.6.1	Design Criteria <ul style="list-style-type: none"> View cone as per existing R-Code requirements. Balconies unscreened for at least 25% of perimeter. 	<ul style="list-style-type: none"> Most balconies and habitable rooms are provided with a 6.0m setback cone of vision to the property boundary. Where variations to this requirement are proposed, the adjoining properties will not be negatively impacted due to overlooking being focused on driveways and car parking areas. Side balconies are unscreened. 	Discretion Required
3.6.2	Design Guidance <ul style="list-style-type: none"> Communal open space separated from private open space. Bedrooms and living areas separated from gallery access. Balconies located in front of living rooms to increase internal privacy. Windows offset from widows of adjacent building. Recessed balconies or vertical fins to separate balconies. 	<ul style="list-style-type: none"> Roof garden is separated from private open space. Generally separated. Balconies accessible from living areas. Additional access from bedrooms is provided in some circumstances. N/A – no adjacent buildings. N/A – no adjacent balconies. 	✓ ✓ ✓ N/A N/A
Public Domain Interface			
3.7.1	Design Guidance <ul style="list-style-type: none"> Direct street access to courtyards is desirable where achievable. Upper level balconies and widows to overlook the public domain. Level changes to front dwelling. Visually permeable front fence. Limit solid wall on street frontages. 	<ul style="list-style-type: none"> Direct access to street fronting courtyard is not provided and not incorporated into the overall design. This ensures the entrance to the development is appropriate and easily distinguishable. Alfresco areas fronting Clydesdale Street. No level change to front dwelling. Permeable front fence provided. 	N/A ✓ ✓ ✓

Part 3	Siting the Development	Provided	Compliant
		<ul style="list-style-type: none"> Limited solid wall for a letterbox along Clydesdale Street, with a width of only 1.0m. 	✓
3.7.2	Design Guidance <ul style="list-style-type: none"> Mail boxes integrated with front fences. Visual prominence of underground car park vents minimised. Services located in basement car park or out of view. Minimal ground floor level changes. Durable, graffiti-resistance materials to be used. No parking in front setback. 	<ul style="list-style-type: none"> Letterboxes integrated into front fence. N/A - No car park vents. Bins and storage located to rear of building. Ground floor at street level. Achievable. A visitor parking bay is located in the street setback area. 	✓ N/A ✓ ✓ ✓ justification required
Pedestrian Access and Entries			
3.8.1/3.8.2/3.8.3	Design Guidance <ul style="list-style-type: none"> Numerous non-specific design guidance requirements on pathways and wayfinding and entrance features. 	<ul style="list-style-type: none"> The pedestrian entrance is clearly marked and identifiable to the street. 	✓
Vehicle Access			
3.9.1	Design Guidance <ul style="list-style-type: none"> Width and number of vehicle access points to be minimised. Car park access integrated into façade. Car park entry behind building line, security gate allow for waiting car. Vehicle entries minimise ramp length, excavation and impact on built form. Car park entrance from lowest order vehicle access way. Vehicle standing areas that increase driveway width and encroach setbacks avoided. Vehicle circulation avoid headlights shining into habitable rooms or neighbouring building. Visual impact of long driveways to be minimised through changing alignments and screen planting. Minimise the need for large vehicles to enter and manoeuvre within the site. Clear sight lines at pedestrian and vehicle crossings. Pedestrian and vehicle access should be separated and distinguishable. Traffic calming devices used where appropriate. 	<ul style="list-style-type: none"> Single crossover, 4.0m standard. Carpark to rear. Car park entry from rear. Carpark entrance at grade, no excavation, car park at rear – no impact on built form. Clydesdale Street is only road frontage. 4m driveway width allows one-way access through the site to the ROW at the rear. Common hallways adjacent to driveway – no habitable rooms impacted. Boundary wall to adjacent buildings. Landscaping is provided at the rear of the driveway to break up the depth perception of the driveway. Bin collection will be at street. Street setback provides for clear pedestrian lines. Pedestrian access at front of building, and distinguished with paving. Traffic calming not required for this scale of development. 	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ N/A
Car and Bicycle Parking			
3.10.1	Design Criteria <ul style="list-style-type: none"> Minimum car parking – Location A (Canning Bridge Activity Centre area) <ul style="list-style-type: none"> 6 x 1 bed plus 15 x 2 bed = 19.5 bays 	<ul style="list-style-type: none"> 20 bays provided. 	✓

Part 3	Siting the Development	Provided	Compliant
	<ul style="list-style-type: none"> Maximum car parking – double minimum – 39 bays. Visitor parking – 4 bays required. Car parking in accordance with AS2890.1. Visitor parking bays marked and accessible for disabled. Design Guidance <ul style="list-style-type: none"> Mechanical staking bays supported. Up to 25% reduction in visitor parking achievable where adequate on-street parking on public parking is provided in proximity. 	<ul style="list-style-type: none"> 20 bays provided. Four visitor parking bays provided. Car parking is compliant with Australian Standards. Visitor parking bays will be marked for use by visitors. Mechanical stacking bays provided. Not required. 	<ul style="list-style-type: none"> ✓ ✓ ✓ ✓ ✓ N/A
3.10.2	Design Criteria <ul style="list-style-type: none"> Bicycle – minimum 0.5/dwelling – 10.5 bays. Motorcycle – minimum 1/5 parking bays – 5 required. 1 electric charging station per 5 visitor bays – N/A only 4 visitor bays required. 	<ul style="list-style-type: none"> Each dwelling provided with space to store a bicycle in the storeroom. No motorcycle bays provided N/A 	<ul style="list-style-type: none"> ✓ ✗ N/A
3.10.3	Design Guidance <ul style="list-style-type: none"> Car park design and access is safe and secure. 	<ul style="list-style-type: none"> The car parking area is easily accessible by residents and is visible from the residential lobby. Each car stacker is provided with a garage door to provide security for the parked cars. 	<ul style="list-style-type: none"> ✓
3.10.4	Design Guidance <ul style="list-style-type: none"> N/A – various excavation and below ground requirements. 	<ul style="list-style-type: none"> N/A – development generally at grade. 	<ul style="list-style-type: none"> N/A
3.10.5	Design Criteria <ul style="list-style-type: none"> 1 tree per 4 uncovered bays. 1m landscaping strip to unscreened parking to street. 	<ul style="list-style-type: none"> N/A – stacker bays are covered. N/A – stacker bays are screened from street. 	<ul style="list-style-type: none"> N/A N/A
3.10.6	Design Guidance <ul style="list-style-type: none"> Above ground parking not exposed to street. 	<ul style="list-style-type: none"> Car stackers screened from street. 	<ul style="list-style-type: none"> ✓

Part 4	Designing the Building	Provided	Compliant
Solar and Daylight Access			
4.1.1	Design Criteria <ul style="list-style-type: none"> Living rooms and private open space of 70% of apartments receive 2 hrs of sunlight. Maximum 15% of apartments receive no direct sunlight. 	<ul style="list-style-type: none"> Living rooms and private open space for more than 70% of the apartments receive 2 hours or more of sunlight. All apartments provided with access to direct sunlight. 	<ul style="list-style-type: none"> ✓ ✓
4.1.2	Design Criteria <ul style="list-style-type: none"> Habitable rooms have a window in external wall, and total glass area of not less than 10% of the floor area of the room. 	<ul style="list-style-type: none"> Upper bedrooms of the ground floor apartment do not meet this requirement. However, the void will provide adequate light. Windows make up more than 10% of the floor area of the room 	<ul style="list-style-type: none"> ✓

Part 4	Designing the Building	Provided	Compliant
4.1.3	Design Guidance <ul style="list-style-type: none"> To incorporate shading and glare control, particularly for warmer months. 	<ul style="list-style-type: none"> Shading can be provided by individual apartment owners when the development is operational. Each balcony is provided with a roof over the entirety of the balcony. In addition, the siting and location of the balconies assists in improving the shade for each balcony. 	✓
Natural Ventilation			
4.2.1	Design Guidance <ul style="list-style-type: none"> All habitable rooms can be naturally ventilated. 	<ul style="list-style-type: none"> The proposed development is sited and designed to allow for ventilation through each of the apartments. Each apartment can benefit from south-westerly sea breezes due to large amounts of exterior wall. These walls have numerous window openings allowing for natural ventilation for each apartment. 	✓
4.2.2	Design Criteria <ul style="list-style-type: none"> 60% of apartments are cross-ventilated Maximum depth of cross-over apartment 18m. 	<ul style="list-style-type: none"> No cross ventilation. However, more than 57% of the apartments receive ventilation from the sea breezes from the south west. Apartment sizes are <18m depth. 	Justification required ✓
4.2.3	Design Criteria <ul style="list-style-type: none"> Various technical requirements for single-aspect apartments. 	<ul style="list-style-type: none"> N/A to this development 	N/A
Ceiling Heights			
4.3.1	Design Criteria <ul style="list-style-type: none"> Ceiling heights Req: <ul style="list-style-type: none"> 2.7m habitable room 2.4m non-habitable room 2.7m GF, 2.4m 2F for 2 level apartments 	<ul style="list-style-type: none"> 2.8m/2.4m for 2 storey apartments, 2.7m remainder. 	✓
Apartment Size and Layout			
4.4.1	Minimum internal area <ul style="list-style-type: none"> 1 Bed – 47m² 2 Bed – 67m² 	<ul style="list-style-type: none"> Architectural living area calculations meet the requirement (NOTE: strata living areas do not meet minimum areas for majority of apartments) 	✓
4.4.3	Design Criteria <ul style="list-style-type: none"> Master bedroom 10m², other bedrooms 9m² Bedroom minimum dimension of 3m Living area minimum width 3.6m for 1 bed, 4m for 2 and 3 bed. 	<ul style="list-style-type: none"> Some bedrooms below 10m² with the majority maintaining the minimum requirement. Minimum living dimension achieved. 	Justification required ✓
Private open space and balconies			
4.5.1	Design Criteria <ul style="list-style-type: none"> Minimum balcony area – 8/10m 	<ul style="list-style-type: none"> Minimum balcony size 10m 	✓

Part 4	Designing the Building	Provided	Compliant
4.5.2	Design Guidance <ul style="list-style-type: none"> Various criteria relating to private open space location and orientation. 	<ul style="list-style-type: none"> Each balcony is located to maximise sunlight penetration and views to the north, east and west. 	✓
4.5.3	Design Guidance <ul style="list-style-type: none"> Various criteria relating to private open space and balcony design integration into the overall architectural form detail of the building. 	<ul style="list-style-type: none"> Each balcony integrates into the building design and is accessible from living areas to perform part of the overall living experience for each apartment. 	✓
Circulation and Common Spaces			
4.6.1	Design Criteria <ul style="list-style-type: none"> N/A – circulation not required for this scale of development. 	<ul style="list-style-type: none"> N/A 	N/A
Storage			
4.7.1	Design Criteria <ul style="list-style-type: none"> Storage area – 3m² 1 bed, 4m² 2 bed 	<ul style="list-style-type: none"> 21 stores provided, all 4m² 	✓
Acoustic Privacy			
4.8.1/2	Design Guidance <ul style="list-style-type: none"> Noise transfer is minimised through the siting and layout of buildings. Reduce internal noise transfer between apartments within a building through layout and acoustic treatments 	<ul style="list-style-type: none"> The apartments have been designed to have bathrooms and kitchens centrally located adjacent to the corridors to reduce noise to surrounding apartments. 	✓
Noise and Pollution			
4.9.1/2	Design Guidance <ul style="list-style-type: none"> In noisy environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission. 	<ul style="list-style-type: none"> The subject site is not located within proximity to any noise generators. Clydesdale Street is a local road that does not generate substantial noise. 	✓
Apartment Mix			
4.10.1/2	Design Guidance <ul style="list-style-type: none"> A range of apartment types and sizes is provided to cater for different household types now and into the future. The apartment mix is distributed to suitable locations within the building. 	<ul style="list-style-type: none"> A mix of one and two bedroom apartments are provided within this development. The mix in apartments size allows for openings and balconies to be provided on every elevation to improve solar access and façade composition. 	✓
Ground Floor Apartments			
4.11.1/2	Design Guidance <ul style="list-style-type: none"> Direct street access to ground floor apartments can be beneficial to residents and the streetscape. Activity is facilitated through front gardens, terraces and the facade of the building. Design solutions may include: 	<ul style="list-style-type: none"> Access to the ground floor apartments is from the residential lobby. 	Discretion Required Discretion Required

Part 4	Designing the Building	Provided	Compliant
	<ul style="list-style-type: none"> both street, foyer and other common internal circulation entrances to ground floor apartments; private open space is next to the street; doors and windows face the street. Fencing treatments to balance the need for privacy and with passive surveillance and activation of the street. Retail or home office spaces should be located along street frontages. Ground floor apartment layouts support small office/home office use to provide future opportunities for conversion into commercial or retail areas. In these cases provide higher floor to ceiling heights and ground floor amenities for easy conversion. 	<ul style="list-style-type: none"> Each ground floor apartment is provided with large outdoor alfresco areas running along the eastern side of the development. Due to the size of the subject site and layout of utilities, the ground floor apartments are unable to be provided with direct access to the street. Fencing provided along the boundaries of the ground floor apartments to provide privacy for residents. N/A N/A 	<p>✓</p> <p>N/A N/A</p>
Facades			
4.12.1/2	Design Guidance <ul style="list-style-type: none"> Building facades provide visual interest along the street while respecting the character of the local area. Building functions are expressed by the facade. 	<ul style="list-style-type: none"> The proposed development includes a mixture of materials, windows and articulation of the façade to the street and lot boundaries. 	<p>✓</p>
Roof Design			
4.13.1/2/3	Design Guidance <ul style="list-style-type: none"> Roof treatments are integrated into the building design and positively respond to the street. Opportunities to use roof space for residential accommodation and open space are maximised. Roof design incorporates sustainability features. 	<ul style="list-style-type: none"> The proposed roof garden area and design of the proposed roofing provide a visually attractive feature to the proposed development. The use of the roof allows for the provision of more open space on the subject site. 	<p>✓</p>
Landscape Design			
4.14.1/2/3	Design Guidance <ul style="list-style-type: none"> Landscape design is viable and sustainable. Landscape design contributes to resident amenity and recreation. Landscape design contributes to the streetscape and amenity. 	<ul style="list-style-type: none"> Proposed development incorporates high quality landscaping within the street setback and surrounding the built form. In addition, the inclusion of the rooftop garden further contributes to the resident's amenity and recreation. 	<p>✓</p>
Universal Access			
4.16.1	Design Criteria <ul style="list-style-type: none"> 20% of apartments meet the essential design features of WA Liveable Homes universal design standards. 	<ul style="list-style-type: none"> This further analysis has not been provided as part of this application. 	<p>✗</p>
Adaptive Reuse			
4.17.1/2	Design Guidance	<ul style="list-style-type: none"> N/A, the proposed development is a new structure. 	<p>N/A</p>

Part 4	Designing the Building	Provided	Compliant
	<ul style="list-style-type: none"> New additions to existing buildings are contemporary and complementary, enhancing an area's identity and sense of place. Adaptation builds upon character of existing building and meets performance-objectives for residential amenity. 		
Energy Efficiency			
4.20.1	Design Criteria <ul style="list-style-type: none"> Sustainability report addressing Appendix 8 – sustainability checklist. 	<ul style="list-style-type: none"> A Green Star report has been prepared as part of this development application. 	✓
4.20.2	Design Criteria <ul style="list-style-type: none"> 25% above the minimum compliance of Section J of NCC. 	<ul style="list-style-type: none"> A Green Star report has been prepared as part of this development application. 	✓
Water management and conservation			
4.21.1	Design Criteria <ul style="list-style-type: none"> Sustainability report addressing Appendix 8 – sustainability checklist 	<ul style="list-style-type: none"> This further analysis has not been provided as part of this application. 	✗
4.21.2	Design Criteria <ul style="list-style-type: none"> 40% less than Water Corp average per person figures. 	<ul style="list-style-type: none"> This further analysis has not been provided as part of this application. 	✗
Waste Management			
4.22.1/2	Design Criteria <ul style="list-style-type: none"> Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents. Domestic waste is minimised by providing safe and convenient source separation and recycling. 	<ul style="list-style-type: none"> The bin storage area is located at the rear of the proposed development, accessible to all residents. The bin storage area includes refuse and recycling bins. 	✓ ✓
Building Maintenance			
4.23.1/2/3	Design Guidance <ul style="list-style-type: none"> Building design detail provides protection from weathering. Systems and access enable ease of maintenance. Material selection reduces ongoing maintenance costs. 	<ul style="list-style-type: none"> The proposed development has been designed to withstand protection from weathering using durable cladding, feature steel columns and stone. The building will have a strata company and body to ensure the regular maintenance and upkeep of the proposed development. The choice of materials is not cost prohibitive and will allow for to the ongoing maintenance where necessary. 	✓ ✓ ✓

Appendix 6 Sustainability Statement of Compliance

ENQUIRIES: PRASANNA SURaweera
PROJECT NO: 29432-PER-G

02 June 2017

Yaran Property Group
23 Lyall St,
South Perth
WA 6151

Attention: Aidan Gorjy

Dear Sir

RE: SUSTAINABILITY STATEMENT OF COMPLIANCE FOR 47 CLYDESDALE STREET

In this regard we confirm that we have been engaged as the Sustainability consultants for the project to assess the potential of the project to achieve the Sustainability objectives, specifically the targeted 4 star equivalent Green Star rating.

The ESD team will be led by Prasanna Suraweera, who is an accredited Green Star Professional and head of the Sustainability department within Wood & Grieve Engineers.

The proposed approach is as follows:

- **Performance Requirement:** Target an equivalent (self-assessed) 5 star Green Star Design and As-Built performance (i.e. minimum 60 points) as at the completion of working drawing stage (building licence).
- **DA Phase Deliverables (by Developer):**
 - Preliminary statement of compliance to be provided by a practicing Green Star Accredited Professional (GSAP) confirming intent to comply with above performance requirement.
- **Working Drawings Phase Deliverables (by Design & Construct Contractor):**
 - Statement of compliance to be provided by a practicing Green Star Accredited Professional (GSAP) confirming compliance with above performance requirement.
 - Statement of compliance to be supported by summary report including the following.
 - * Confirmation of final performance achieved as at completion of design documents.
 - * Sustainability Strategy/Initiatives incorporated (Green Star Score Card) into the project.
 - * Appropriate design documents/statements confirming compliance to claimed initiatives.
- **Practical Completion Phase Deliverables (by Design & Construct Contractor):**
 - Head Contractor to provide standard certification confirming compliance to design documents.

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- **Clarifications:**

- Formal Green Star (Design or As Built) rating shall not be sort.
- No Construction phase reporting or submissions are expected.
- Level of documentation required for a formal GBCA Submission is not to be targeted.

The proposed design solution has been developed in conjunction with these objectives in mind and a performance brief has been integrated in to the Design and Construction brief. Refer attached summary report outlining preliminary strategy for the targeted 5 star performance. This will be further reviewed and developed in the coming detailed design phase of the project.

I trust this satisfies your requirements, please contact me should you have any further queries.

Yours faithfully

A handwritten signature in black ink, consisting of a stylized, cursive 'P' followed by a horizontal line.

Prasanna Suraweera
for **Wood & Grieve Engineers**

Cat	Credit Number	Credit Name	Credit description	Points Available	Points Targeted	Cumulative Points	Comments
Reg	0.0	Project Registration	N/A	0	Yes	0%	N/A
Man	2.1	Commissioning and Tuning - Services and Maintainability Review	1 point is available where a comprehensive services and maintainability review of the project is performed.	1	1	1.0%	Head contractor to review the design and submit for a review by Strata manager representative. Include this scope in GSAP scope for D&C tender
Man	2.3	Commissioning and Tuning - Building Systems Tuning	1 point is available where a tuning process is in place that addresses all nominated building systems.	1	1	2.0%	Motion sensors, time switches and common area HVAC to be tuned. We also expect the contractors to be available during the defects liability period to ensure the equipment is performing as expected. This should be fairly standard practice.
Man	5.2	Commitment to Performance - End of Life Waste Performance	1 point is available where there is a commitment to set targets and measure results that minimise construction waste from end of life of interior fitouts or other building attributes.	1	1	3.0%	Can be included in sales contract. Potentially include clause in this phase.
Man	6.0	Metering and Monitoring - Metering	To qualify for points under this credit it is a conditional requirement that accessible metering be provided to monitor building energy and water consumption, including all energy and water common and major uses, and sources.	Required	Yes	3.0%	Separate water and electrical meters, no gas. Includes both energy and water authority meters per apartment .
Man	7.0	Construction Environmental Management - Formalised Management System	The conditional requirement is met where a comprehensive project-specific Environmental Management Plan (EMP) is in place for construction.	Required	Yes	3.0%	Main contractor to provide EMP EMP to be in accordance with NSW Environmental Management Systems Guidelines.
Man	8.1A	Waste in operations	EITHER 8.1A or 8.1B. 1 point is available when facilities are in place to collect and separate distinct waste streams, and where these facilities meet best practice access requirements for collection by the relevant waste contractor.	1	1	4.0%	Operational Waste Management Plan to be developed for the project by a waste consultant. Waste consultant required to confirm that this should be achievable. Generally a DA requirement.
IEQ	9.2	Quality of Internal Air - Provision of Outside Air	2 points are awarded where the nominated area is provided with sufficient outside air to ensure levels of indoor pollutants are maintained at acceptable levels. For mechanically ventilated or mixed-mode spaces: - 1 point is awarded where outside air is provided at a rate 50% greater than that required in AS1668.2:2012 or CO2 concentrations are maintained below 800ppm. 2 points are awarded where outside air is provided at a rate 100% greater than that required in AS1668.2:2012 or CO2 concentrations are maintained below 700ppm For naturally ventilated spaces: - 2 points are awarded where the requirements of AS1668.4-2012 are met.	2	2	5.9%	Naturally ventilated apartments

Cat	Credit Number	Credit Name	Credit description	Points Available	Points Targeted	Cumulative Points	Comments
IEQ	9.3	Quality of Internal Air - Exhaust or Elimination of Pollutants	1 point is awarded where the nominated pollutants, such as those arising from printing equipment, cooking processes and equipment and vehicle exhaust, are limited by either removing the source of pollutants from the nominated area, or exhausting the pollutants directly to the outside of the project while limiting their entry into other areas.	1	1	6.9%	Apartment kitchens will be exhausted directly to the outside
IEQ	10.1	Acoustic Comfort - Internal Noise Levels	1 point is available where internal ambient noise levels in the nominated area are suitable and relevant to the activity type in the room. This includes all sound generated by the building systems and any external noise ingress.	1	1	7.9%	Typically easily achieved, pending confirmation by Acoustic consultant.
IEQ	11.0	Lighting Comfort - Minimum Lighting Comfort	The conditional requirement is met where lights are flicker free and accurately address the perception of colour in the space	Required	Yes	7.9%	No further action required Standard Practice
IEQ	11.3	Lighting Comfort - Localised Lighting Control	1 point is available where; in the nominated area, occupants have the ability to control the lighting in their immediate environment.	1	1	8.9%	Lights have localised switches and Power outlets for future task lights/lamps in the residential areas.
IEQ	12.2	Visual Comfort - Views	1 point is awarded where 60 % of the nominated area has a clear line of sight to a high quality internal or external view.	1	1	9.9%	Majority of spaces are designed to have views to the outside
IEQ	13.1	Indoor Pollutants - Paints, adhesives, sealants and carpets	1 point is available where at least 95% of all internally applied paints, adhesives, sealants and carpets meet stipulated 'Total VOC Limits'. or, where no paints, adhesives, sealants or carpets are used in the building.	1	1	10.9%	Generally easy to achieve.
IEQ	13.2	Indoor Pollutants - Engineered wood products	1 point is available where at least 95% of all engineered wood products meet stipulated formaldehyde limits or no new engineered wood products are used in the building.	1	1	11.9%	Generally easy to achieve. E0 engineered wood products to be selected.
Ene	15.0	Greenhouse Gas emissions - Conditional Requirement	This Conditional Requirement must be met in order for a project to be illegible for points under this credit. Compliance with this requirement may be demonstrated using a modelled performance approach or a prescriptive approach as outlined in Compliance Requirements.	Required	Yes	11.9%	Must achieve at least 6.5 star average and 5.5 star NatHERS rating, which is ~0.5 star above minimum compliance. Beyond the above, building performance to be estimated based on previous experience on achieved points only. Detailed modelling not expected add any significant value to the project.
Ene	16A	Peak Electricity Demand Reduction - Reference Building Pathway	1 out of 2 points is available where it is demonstrated that the use of on-site electricity generation systems reduces the total peak electricity demand by at least 15%	2	2	13.9%	Similar to Greenhouse Gas emissions credit, Peak demand performance is expected to be achieved based on previous experience on achieved points. Detailed modelling not expected add any significant value to the project.

Cat	Credit Number	Credit Name	Credit description	Points Available	Points Targeted	Cumulative Points	Comments
Tra	17B	Sustainability Transport - Performance Pathway	Up to 7 points out of 10 are available where reduced carbon emissions from transport and increased active transport mode participation are demonstrated using specified prescriptive criteria.	10	7	20.8%	Engage a transport consultant to conduct formal review and provide recommendations to achieve this performance. Possible requirements will include bike racks, electric car charges, small car/motorcycle bays, minimum numbers of parking, etc.
Wat	18A	Potable Water - Modelled Pathway	Up to 12 points are available based on the magnitude of the predicted reduction in potable water consumption, when the project is compared against a reference building.	12	4	24.8%	Drip irrigation and moisture sensors should be included. Water efficient fixtures and fittings. This requires 4 WELS Star toilets, 6 WELS Star taps in kitchen and bathroom and 7.5 l/min shower, No washing machines are being provided. Shall include rainwater harvesting and reuse for toilets and irrigation. Size of rainwater tank to be tested, expect to be in the range of 50KL to 70KL.
Mat	20.1	Responsible Building Materials - Steel	<p>1 point is available where 95% of the building's steel is sourced from a Responsible Steel Maker; and</p> <p>For steel framed buildings, at least 60% of the fabricated structural steelwork is supplied by a steel fabricator/steel contractor accredited to the Environmental Sustainability Charter of the Australian Steel Institute (ASI); or</p> <p>For concrete framed buildings, at least 60% (by mass) of all reinforcing bar and mesh is produced using energy-reducing processed in its manufacture (measured by average mass by steel maker annually).</p>	1	1	25.7%	Should be generally achievable by selecting suitable steel suppliers for reinforcing steel.

Cat	Credit Number	Credit Name	Credit description	Points Available	Points Targeted	Cumulative Points	Comments
Mat	22.1	Reduction of Construction and Demolition Waste	<p>1 point is available where the construction waste going to and Demolition Waste landfill is reduced either by:</p> <ul style="list-style-type: none"> - minimizing the total amount of waste sent to landfill when compared against a typical building; <p>Waste GFA Points awarded</p> <p>15 kg/m² = 0 points 12.5 kg/m² = 0.5 points 10 kg/m² = 1 point or</p> <ul style="list-style-type: none"> - 1 point is awarded where project teams can demonstrate that 90% of the waste generated during construction and demolition has been diverted from landfill. Waste shall be reported in kg/m² GFA. <p>To calculate the amount of waste diverted from landfill, the project is required to report the total amount of waste generated (kg/m²), and the total amount of waste diverted from landfill (kg/m²) and report on the proportion diverted as a percentage.</p>	1	1	26.7%	Typically business as usual and achieved by most mainstream waste contractors. (i.e. Instant Waste achieve 90%+ C&D waste recycling)
Eco	23.0	Ecological Value - Endangered or Vulnerable Species or Ecological Communities	The project team must demonstrate that no critically endangered, endangered or vulnerable species or ecological communities were present on the site at time of purchase.	Required	Yes	26.7%	Achieved by site location.
Eco	24.0	Sustainable Sites - Conditional Requirement	<p>The Conditional Requirement is met where, 5 years prior to the project's Green Star Registration date, the project site met the following conditions:</p> <ul style="list-style-type: none"> - The project is not on land containing old-growth forest - The project does not impact on any wetland listed as being 'High National Importance' - Where the project may have an impact on any wetland NOT listed as being of 'High National Importance', Wetland Protection Measures must be in place* - The project must not have a significant impact on 'Matters of National Significance' listed under the Environmental Protection and Biodiversity Conservation Act 1999 	Required	Yes	26.7%	Achieved by site location.
Eco	24.1	Sustainable Sites - Reuse of Land	1 point is available where 75% of the site was Previously Developed Land at the date of site purchase or (for previously owned land) at the project's Green Star registration date.	1	1	27.7%	Project is an infill site, therefore achieved by site selection.

Cat	Credit Number	Credit Name	Credit description	Points Available	Points Targeted	Cumulative Points	Comments
Eco	25.1	Heat Island Reduction	1 point is available if at least 75% of the total project site area comprises building or landscaping elements that reduce the impact of heat island effect.	1	1	28.7%	This would require pale roof, pale hardscape or natural vegetation on at least 75% of site as seen from above.
Emi	26.1	Stormwater - Reduced Peak Discharge to Sewer	1 point is available where the post-development peak event discharge from the site does not exceed the pre-development peak event discharge.	1	1	29.7%	All main stormwater infiltrated on site
Emi	27.0	Light Pollution - Light Pollution to Neighbouring Bodies	For the project to be awarded a point for this credit, the project must comply with AS 4282 'Control of the Obtrusive Effects of Outdoor Lighting'	Required	Yes	29.7%	Ensure minimal light spill from the site.
Emi	27.1	Light Pollution - Reduction in Light Pollution	For the project to be awarded a point for this credit, the project must comply with AS 4282 'Control of the Obtrusive Effects of Outdoor Lighting' 1 point is available where it can be demonstrated that a specified reduction in light pollution has been achieved by the project. Control of ULOR or Control of Direct Illuminance.	1	1	30.7%	Ensure minial light spil into the night sky. Ensure no uplight externally.
Emi	28.1	Microbial Control	1 point is awarded where the building either: - is naturally ventilated; - has waterless heat-rejection systems; or - has a water-based heat rejection system that includes measures for Legionella control and a Legionella Risk Management Plan has been provided	1	1	31.7%	No water based heat rejection expected.
IEQ	12.1	Visual Comfort - Daylight	Up to 2 points are available where a percentage of the nominated area receives high levels of daylight during 80% of the nominated hours. - 40% Nominated Area = 1 point - 60% Nominated Area = 2 points	2	1	32.7%	Generally easy to achieve.
Man	4.1	Building Information - Building Operations and Maintenance Information	1 point is awarded where it is demonstrated that comprehensive Operations and Maintenance information is developed and made available to the facilities management team.	1	1	33.7%	No further action required Creation of some additional documentation by the design team required. Additional costs expected to be minimal.
IEQ	14.1	Thermal Comfort	1 point is available where a high degree of thermal comfort is provided to occupants in the space equivalent to 80% of all occupants being satisfied in the space.	1	1	34.7%	All spaces are conditioned and therefore will meet thermal comfort requirements.

Cat	Credit Number	Credit Name	Credit description	Points Available	Points Targeted	Cumulative Points	Comments
Ene	15B	Greenhouse Gas emissions - NaTHERS Pathway	Up to 12 out of 20 points are available where a NaTHERS rating and 'best practice' building attributes demonstrate that the predicted building GHG emissions have been reduced compared to a typical dwelling or residence.	17	4.9	39.5%	Must achieve atleast 6.5 star average and 5.5 star NatHERS rating, which is ~0.5 star above minimum compliance. Beyond the above, building performance to be estimated based on previous experience on achieved points only. Detailed modelling not expected add any significant value to the project. DHW -Electric storage Lighting - <2.5W/m2 Ceiling fans to be included in bedrooms The minimum energy star rating for the air conditioning equipment is at least 3-star (as per AS 3823.2-2011); and the rated capacity of the air conditioning equipment does not exceed the design heating capacity by more than 20% and the design cooling capacity by more than 10%.
Ene	15B.1	Greenhouse Gas emissions - Solar PV	Allow for 10KW to 20 KW solar PV array		4.4	43.9%	Roof location yet to be coordinated.
Ene	15B.1	Greenhouse Gas emissions - NaTHERS Pathway	Fans	2	1	44.9%	Ceiling fans to be included in bedrooms
Mat	19A	Life Cycle Impacts - LCA Modelled Pathway	Up to 7 points are available where a whole-of-building whole-of-life (cradle-to-grave) life cycle assessment (LCA) is conducted for the project and a reference building. Points are awarded based on the extent of environmental impact reduction achieved against six environmental impacts categories, when compared to a reference building, with an option to expand reporting to additional criteria.	7	7	51.8%	No modelling to be targeted. Point claimed based on expected outcomes from previous projects.
Man	2.2	Commissioning and Tuning - Building Commissioning	1 point is available where comprehensive precommissioning and commissioning activities are performed for all nominated building systems.	1	1	52.8%	Contractor to carryout commissioning to CIBSE standards.
Mat	20.3	Responsible Building Materials - Cables, pipes, floors and blinds	1 point is available where 90% (by cost) of all cables, pipes, flooring and blinds in a project either: - Do not contain PVC and have an Environmental Product Declaration (EPD); or - Meet Best Practice Guidelines for PVC.	1	1	53.8%	Best practice PVC can be achieved at minimal cost.

Cat	Credit Number	Credit Name	Credit description	Points Available	Points Targeted	Cumulative Points	Comments								
Eco	23.1	Ecological Value	<p>To be awarded points in this credit, the project must demonstrate that no endangered, threatened or vulnerable species were present on the site at time of purchase.</p> <p>Up to 3 points are awarded where the ecological value of the site is improved by the project</p> <p>The number of points awarded is determined by the Green Star - Change of Ecological Value Calculator based on a comparison of the state of the site before and after design/construction.</p> <table><tr><td>Relative Improvement of Ecological Value</td><td>Points Achieved</td></tr><tr><td>20%</td><td>1</td></tr><tr><td>40%</td><td>2</td></tr><tr><td>60%</td><td>3</td></tr></table>	Relative Improvement of Ecological Value	Points Achieved	20%	1	40%	2	60%	3	3	1	54.8%	
Relative Improvement of Ecological Value	Points Achieved														
20%	1														
40%	2														
60%	3														
IEQ	12.0	Visual Comfort - Glare Reduction	The conditional requirement is met where the glare in the nominated area from sunlight through all viewing facades is reduced through a combination of blinds, screens, fixed devices, or other means.	Required	Yes	54.8%	Blinds to be included by occupant.								
Eco	24.2	Sustainable Sites - Contamination and Hazardous Materials	1 point is available where the site, or an existing building, was previously contaminated and the site has been remediated in accordance with a best practice remediation strategy.	1	1	55.7%	existing site has asbestos which is being remediated								
Inn	30D	Innovation Challenges	Contractors education	Inn	1	56.7%	<p>This involves ensuring that at least 80% of contractors that attend site for more than 3 days receive training on sustainability and Green Star.</p> <p>GSAP scope to include training materials.</p>								
Man	2.0	Commissioning and Tuning - Environmental Performance Targets	For the project to be awarded points for this credit, documented targets for the environmental performance of the project must be set.	Required	Yes	56.7%	Design Intent Report to be developed early in design phase; including basic functions, operations, and maintenance, and water and energy targets.								
Man	4.2	Building Information - Building User Information	1 point is awarded where a relevant and current building user information, is developed and made available to all relevant stakeholders.	1	1	57.7%	Creation of some additional documentation by the design team required. Digital building user information required for different stakeholders.								
Ene	15B.2	Greenhouse Gas emissions - NaTHERS Pathway	Air pressurisation test	1	1	58.7%	Air pressurisation test could be completed for a sample of spaces.								

Cat	Credit Number	Credit Name	Credit description	Points Available	Points Targeted	Cumulative Points	Comments
Man	3.1	Adaptation and Resilience - Implementation of a Climate Adaptation Plan	2 points are available where: - A project specific climate adaptation plan has been developed in accordance with a recognised standard; and - Solutions have been included into the building design and construction that specifically address the risk assessment component of the adaptation plan.	2	2	60.7%	Complete a climate change adaptation and resilience plan for the development.
Man	1.0	Green Star Accredited Professional	1 point is available where a Green Star Accredited Professional – Design & As Built (GSAP) has been contractually engaged to: - Provide advice, support and information related to Green Star principles, structure, timing and processes; - Provide guidance and support in all stages of the project leading to certification.	1	1	61.7%	Green Star Accredited Professionals (GSAP) must be engaged by the D&C builder to complete works.
Man	6.1	Metering and Monitoring - Monitoring Systems	To qualify for points under this credit it is a conditional requirement that accessible metering be provided to monitor building energy and water consumption, including all energy and water common and major uses, and sources. 1 point is available where a monitoring strategy is addressed through a monitoring system, capable of capturing and processing the data produced by the installed energy and water meters, and accurately and clearly presenting data consumption trends.	1	1	62.7%	Embed network type metering solution with live validation of meter reading via the monitoring system.

Cat	Credit Number	Credit Name	Credit description	Points Available	Points Targeted	Cumulative Points	Comments
Inn		Energy Metering Integrity	To encourage accuracy of metering over the life of the building to inform energy consumption practices and reduce wasted energy.	1	1	63.7%	Demonstrate that the metering network (including sub-meters) is continually and automatically monitored by a system that is able to produce alerts if any inaccuracies are found. Inaccuracies are defined as in excess of meter tolerances (e.g. 'Class 1' meters shall not have inaccuracies of more than 2% due to metering accuracy class); and
Inn		Occupant Engagement	To increase the availability of information on the benefits and outcomes of sustainable design practices and sustainable operation practices across the industry.	1	1	64.7%	<p>Demonstrate that a pre-occupancy survey on staff or occupants (where known) has been performed. Where the building is speculative, the pre-occupancy survey does not need to be performed until a tenant has been signed up, provided such tenant is occupying another space; and</p> <p>Complete a post-occupancy survey on a significant proportion of occupants (including tenanted spaces) no earlier than 6 months and no later than 12 months after from practical completion. The Applicant must also commit to providing the results upon completion with the GBCA, for information purposes only. This can be provided at a date later than the project's Green Star submission.</p>

Cat	Credit Number	Credit Name	Credit description	Points Available	Points Targeted	Cumulative Points	Comments								
Mat	21.1	Sustainable Products -Product Transparency and Sustainability	<p>3 points are awarded when products meet transparency and sustainability requirements under one of the following initiatives:</p> <p>1.1 Reused Products 1.2 Environmental Product Declarations 1.3 Third-Party Certification 1.4 Stewardship Programs 1.5 Recycled Content Products</p> <p>Points are calculated based percentage of compliant products. This is demonstrated by the Product Score (PS), which is the value of the compliant products multiplied by the Product Sustainability Factor, divided by the Project Contract Value (PCV).</p> <table><tr><td>Points</td><td>% Compliant Products</td></tr><tr><td>1</td><td>3%</td></tr><tr><td>2</td><td>6%</td></tr><tr><td>3</td><td>9%</td></tr></table>	Points	% Compliant Products	1	3%	2	6%	3	9%	0	na	64.7%	Difficult to achieve for this project scale.
Points	% Compliant Products														
1	3%														
2	6%														
3	9%														
Man	5.1	Commitment to Performance - Environmental Building Performance	1 point available where there is a commitment to set targets and measure results for environmental performance.	1	0	64.7%	Difficult to achieve without detailed modelling works.								
Man	7.1	Construction Environmental Management - Formalised Management System	1 point is awarded where credit criteria 7.0 is awarded and a systematic and methodical approach to planning, implementing and auditing is in place during construction to ensure conformance with the EMP.	1	0	64.7%	Unlikely for contractors to be ISO 14001, BS 7750 or the European Community's EMAS certified								
IEQ	10.2	Acoustic Comfort - Reverberation	1 point is available where the nominated area has been built to reduce the persistence of sound to a level suitable to the activities in the space.	1	0	64.7%	Can be costly to achieve Reverberation time in the nominated area below the maximum stated in the 'Recommended Reverberation Time' provided in Table 1 of AS/NZ 2107:2000.								
IEQ	10.3	Acoustic Comfort - Acoustic Seperation	1 point is available where the nominated enclosed spaces have been built to minimise crosstalk between rooms and between rooms and open areas.	1	0	64.7%	Can be costly to achieve requirement for cross talk between rooms								

Cat	Credit Number	Credit Name	Credit description	Points Available	Points Targeted	Cumulative Points	Comments
IEQ	11.1	Lighting Comfort - General Illuminance and Glare Reduction	1 point is available where, in the nominated area: - Lighting levels and quality comply with best practice guidelines; and - Glare is eliminated	1	0	64.7%	Could be difficult to achieve some of the criteria and will restrict lighting design / fitting selections. Residential Spaces For residential spaces, the point will be awarded where in living spaces, kitchen, bathrooms and bedrooms: - The lighting design includes or permits general fixed lighting that provides good maintained illuminance values for the entire room; and - The installed fittings all have fittings with rated colour variation not exceeding 3 MacAdam Ellipses (decorative fittings being exempt).
Emi	29.1.A	Refrigerants Impacts - TSDEI less than 15	1 point is awarded where: The combined Total System Direct Environmental Impact of the refrigerant systems in the building is less than 15; OR All refrigerants in the project have an ozone depletion potential of zero, and a global warming potential of 10 or less;	1	0	64.7%	Not achieved with traditional split systems
Man	2.4	Commissioning and Tuning - Independent Commissioning Agent	1 additional point is available for utilisation of an Independent Commissioning Agent (ICA) to advise, monitor, and verify the commissioning and tuning of the nominated building systems throughout the design, tender, construction, commissioning and tuning phases.	1	0	64.7%	Generally costly to implement
Emi	26.2	Stormwater - Reduced Pollution Targets	1 additional point is available, where the first point has been achieved and all stormwater discharged from site meets specified Pollution Reduction Targets.	1	0	64.7%	All water is infiltrated and naturally treated.
IEQ	9.1	Quality of Internal Air - Ventilation system attributes	1 point is awarded where: - The entry of outdoor pollutants is mitigated; AND - The system is designed for ease of maintenance and cleaning; AND - The system has been cleaned prior to occupation and use.	1	0	64.7%	Not achievable

Cat	Credit Number	Credit Name	Credit description	Points Available	Points Targeted	Cumulative Points	Comments
IEQ	11.2	Lighting Comfort - Individual Control and Surface Illuminance	1 point is available where, in the nominated area, a combination of lighting and surfaces improve uniformity of lighting to give visual interest.	1	0	64.7%	Could be difficult to achieve some of the criteria and will restrict lighting design / fitting selections. Residential - At least one wall in each living space, kitchen and bedrooms are provided with specific wall-washing or a wall mounted fitting.
IEQ	14.2	Thermal Comfort - Advanced Thermal Comfort	1 additional point is available where a high degree of thermal comfort is provided to occupants in the space equivalent to 90% of all occupants being satisfied in the space.	1	0	64.7%	Modelling required to confirm.
Mat	19B.3	Life Cycle Impacts - Prescriptive Pathway	Up to 5 points are available for 19B where the project reduces the amount of building materials used. The following options are included in this criterion: - Building Reuse (1 point 50% facade retained, 2 points 80% facade retained; 1 point 30% of structure retained, 2 points 60% of structure retained) There are 8 points available between the options in this pathway. However, only a maximum of 5 can be awarded.	0	0	64.7%	Not targeted
Mat	20.2	Responsible Building Materials - Timber	1 point is available where at least 95% (by cost) of all timber used in the building and construction works is either certified by a forest certification scheme that meets the GBCA's 'Essential' criteria for forest certification; or is from a reused source.	1	0	64.7%	Not targeted to to cost.
Emi	29.1.B	Refrigerants Impacts - TSDEI between 15 and 35	1 point is awarded where: The combined Total System Direct Environment Impact (TSDEI) of the refrigerant systems is between 15 and 35, AND a leak detection system is in place;	1	0	64.7%	Not possible without leak detection
Emi	29.1.C	Refrigerants Impacts - No refrigerants	1 point is awarded where: Where there are no refrigerants employed by nominated building systems, this point is awarded.	1	0	64.7%	Not achieved.
Inn	30D	Innovation Challenges	Financial Transparency	Inn	0	64.7%	Not possible for equivalency rating.
5 Star Sub total						65%	



NOTES CANNING BRIDGE DESIGN REVIEW PANEL

Meeting Date: 3 May 2017
Meeting Time: 9:30 am
Venue: City of Melville - Swan Room
Meeting Started: 9:37 am

1. Attendance

(a) Panel Members

Dominic Snellgrove	(Chairman – Cameron Chisholm Nicol) – Left 12:30 pm
Fred Chaney	(Chaney Architecture)
Malcolm MacKay	(Mackay Urban Design)
Hans Oerlemans	(Place Laboratory)

(b) Proponents

Yaran Group - *Item 1*
MJA Design Intent - *Item 3*
Norup & Wilson and Hillam Architects - *Item 6*
Huston & Associates – *Item 7*

(c) City Officers

Mark Scarfone	(City of Melville)
Jack Hobbs	(City of Melville)
Annalise Miller	(City of Melville)
Siven Naidu	(City of South Perth)
Erik Dybdahl	(City of South Perth)

(d) Note Taker

Antonetta Papalia (City of Melville)

2. Apologies

Damien Pericles (REALM Studios)
Chris Maher (Studio 53)

3. Declaration of Interest

Nil

4. Item 1 – 47 Clydesdale Street, Como

21 Multiple Dwellings

4.1. Officer Presentation – *Started 9:41 am*

City of South Perth Planning Officer, Erik Dybdahl briefly introduced this application as a pre-lodgement item.

Officer Comments

- 21 unit development
- Four stories
- One mezzanine

4.2. Proponent Presentation – *Started 9:47 am*

Applicants from Yaran Group answered questions about this item from the Canning Bridge Design Review Panel.

4.3. Design Quality Principles

(a) Character

- Not discussed

(b) Continuity and Enclosure

- Not discussed

(c) Quality of the Public Realm

- Not discussed

(d) Ease of Movement

- Not discussed

(e) Legibility

- Not discussed

(f) Adaptability

- Not discussed

(g) Diversity

- Not discussed

(h) Sustainability

- South facing apartments do not present a good outcome as they do not capitalise on northern aspect. The elevations are acceptable architecturally, however there is considerable potential to flip the design and allow the ground floor apartments to orientate themselves and open to northern sunlight.
- Flipping the design would also increase the potential to preserve the tree located on verge.

- (i) Where the proponent is seeking a development bonus under Clause 21 of CBACP:

The extent to which exemplary design is proposed as part of the development – detailed comment is required to illustrate how exemplary design has been achieved.

- (j) General Comment

- Applicant requested to provide a shadow diagram.
- Having reviewed almost the identical proposal for 21 Kishorn Street in Applecross, the only issue with the current proposal is southern facing apartments, which would benefit from flipping the design to maximise natural solar aspect.

~~4.4. Design Assessment~~

~~(a) Strengths of the proposal~~

~~(b) Suggested improvements to the proposal~~

4.5. Recommendation

The Panel is to make a recommendation regarding the elements of the design that are supported and those elements that would benefit from further consideration.

For preliminary applications, the Panel's comments shall be provided to the proponent to assist in the development of the design

5. Item 2 – 4 Patterson Street, Como

8 Storey Multiple Dwellings

5.1. Officer Presentation

Discussion started 9:38 am whilst waiting on applicants from item 1 at 47 Clydesdale Street, Como to arrive. Discussion re-commenced at 9:54 am.

City of South Perth Planning Officer, Erik Dybdahl discussed changes and improvements made to the proposal from the applicant and requested some advice on the changes.

This item has previously been presented to the December 2016 and February 2017 Canning Bridge Design Review Panel.

The applicant was not required to be in attendance.

Officer Comments

- Universal access has been relocated
- H8 Zone – all developments in this zone need to be set back by minimum 4 metres (balconies included)

5.2. Design Quality Principles

- (a) Character
 - Not discussed
- (b) Continuity and Enclosure
 - Not discussed
- (c) Quality of the Public Realm
 - Not discussed
- (d) Ease of Movement
 - Not discussed
- (e) Legibility
 - Not discussed
- (f) Adaptability
 - Not discussed
- (g) Diversity
 - Not discussed
- (h) Sustainability
 - Not discussed
- (i) Where the proponent is seeking a development bonus under Clause 21 of CBACP:
The extent to which exemplary design is proposed as part of the development – detailed comment is required to illustrate how exemplary design has been achieved.
- (j) General Comment
 - The panel were supportive of the universal access to the main entry.
 - Panel were not supportive of the balcony projections located to the east of the proposal along Patterson Street, due to the precedent set and the requirement of future developments along the street to project in the same manner to capture oblique views
 - Panel were supportive of the setback variation at the street corner due to the architectural legibility, however applicant to provide a straightened balcony edge along Patterson Street to the lessor setback projection.

Note: Applicant has incorporated the above changes into the working drawings, hence above noted for City information only.

5.3. ~~Design Assessment~~

- ~~(a) Strengths of the proposal~~
- ~~(b) Suggested improvements to the proposal~~

5.4. Recommendation

The Panel is to make a recommendation regarding the elements of the design that are supported and those elements that would benefit from further consideration.

For preliminary applications, the Panel's comments shall be provided to the proponent to assist in the development of the design

6. Item 3 – 87 Robert Street, Como

23 Multiple Dwellings

6.1. Officer Presentation – Started 10.13 am

City of South Perth Senior Planning Officer, Siven Naidu introduced the pre-lodgement item at 87 Robert Street, Como.

Officer Comments

- H8 Zone; Q3 Zone
- Due to lot size; it can only go 6 stories high
- Issues with setbacks – should be 4m; currently 2.2m

Applicants Comments

- | | |
|----------------------------------|--|
| • Pre-Lodgement | • Entrance on the left |
| • 1130 sq./m ² | • Increase screening to southern balconies |
| • Long elevation – Northern face | • 7 levels: 6 stories plus basement level |
| • 20 metre maximum height | |
| • Glazed lobby | |

6.2. Proponent Presentation – Started 10.16 am

Applicants from MJA Design Intent introduced their pre-lodgement item to the Canning Bridge Design Review Panel.

- 46 Car Parking Bays
- 3 Visitor Bays
- 7 Levels (6 Stories plus basement)

6.3. Design Quality Principles

(a) Character

- The panel acknowledge a visual reference to the 1930's and 40's in the curved balcony forms which provide a subtle reference to the project's broader historical context.

(b) Continuity and Enclosure

- Not discussed

(c) Quality of the Public Realm

- The entry is clear and accessible however might benefit from the inclusion of an accessible planter/green space in front of the resident lounge.

(d) Ease of Movement

- Lots of congestion noted with apartment entries located in close proximity to each other. Ground floor lift access could be improved with a more direct and linear approach assisting with way finding and the delivery of furniture etc

(e) Legibility

- Some concern was noted over the ground floor height appearing quite compressed.

(f) Adaptability

- Not discussed

(g) Diversity

- Not discussed

(h) Sustainability

- Not discussed

(i) Where the proponent is seeking a development bonus under Clause 21 of CBACP:

The extent to which exemplary design is proposed as part of the development – detailed comment is required to illustrate how exemplary design has been achieved.

(j) General Comment

- Presentation was good as it indicated a well-conceived scheme and presented an elegant architectural solution.
- Air-conditioning condensers to be located in stores or at a central area on roof and not to be located on balconies
- Applicant was requested to provide a shadow diagram.
- Some concerns noted around the centrally located 1 bedroom apartments as they may eventually be compromised once the neighbouring sites are developed.

6.4. Design Assessment

(a) Strengths of the proposal

- Supportive of the lobby projection into the side setback as it serves architecture purpose.

(b) Suggested improvements to the proposal

- Applicant to consider the location of the bin store, as it takes up potential lobby space.
- Applicant to consider a courtyard space to allow an added visual connection between street and residential lounge.
- The ground floor looks compressed in height. Proponent to explore the possibility of raising the height to present a more generous lobby height and entry.
- Potential issues with buildings that float over car bays; rear car bays are exposed, therefore some degree of protection is important, especially with balconies located above.
- Rear balcony to maintain a 4 metre setback.
- Whilst the panel support the curved form of the front balcony it may be advantageous to set the shallow dimension back further so that an 'average' of 4 meters can be achieved if possible to avoid planning issues associated with precedent.

7. Item 4 – 557-559 Marmion Street, Booragoon

Four Storey Mixed Use Development with Basement
(25 x Multiple Dwellings and 7 x Office Tenancies)

7.1. Officer Presentation – Started 10.51 am

This item was previously presented to the January 2017 Canning Bridge Design Review Panel and the April 2017 City of Melville Design Review Panel.

City of Melville Planning Officer, Annalise Miller discussed the additional information provided by the applicant in response to the April 2017 DRP meeting.

The applicant was not required to be in attendance.

Officer Comments

- 2.6m floor to ceiling
- Living room/balcony repeat has not been separated
- Half a metre above maximum height
- Melville City Centre Structure Plan

7.2. Design Quality Principles

~~(a) Character~~

~~(b) Continuity and Enclosure~~

~~(c) Quality of the Public Realm~~

~~(d) Ease of Movement~~

~~(e) Legibility~~

~~(f) — Adaptability~~

~~(g) — Diversity~~

~~(h) — Sustainability~~

~~(i) — General Comment~~

7.3. Design Assessment

(a) Strengths of the proposal

- As described April 2017 DRP minutes.
- Reduced size of void to carpark and associated screening a further positive.

(b) Suggested improvements to the proposal.

- Preference of the panel would be to maintain 2.7 metre floor to ceiling heights for all dwellings rather than 2.6 proposed;
- Separate entrances for residential and non-residential uses is supported however the spaces are too narrow. Potential to create more generous spaces by reducing the size of the adjoining tenancies;
- Applicant should consider a more muted, logical use of brick on the front elevations and consider removing the triangular structures at the ground level;
- Provide at least one planter with a depth of 1.2 metres to accommodate substantial trees.

7.4. Recommendation

The Panel is to make a recommendation regarding the elements of the design that are supported and those elements that would benefit from further consideration.

Applicant should incorporate the above improvements into the final design.

8. Item 5 – 6 Riseley Street, Applecross

Four Storey Mixed Use (6 MDs)
Riseley Centre Structure Plan

8.1. Officer Presentation – Started 11:00 am

This item was previously presented to the February 2017 City of Melville Design Review Panel

City of Melville Planning Officer, Jack Hobbs discussed the additional information provided by the applicant. Specifically comment was sought in relation to the proposed secondary courtyard for the first floor dwellings.

The applicant was not required to be in attendance.

8.2. Design Quality Principles

- ~~(a) Character~~
- ~~(b) Continuity and Enclosure~~
- ~~(c) Quality of the Public Realm~~
- ~~(d) Ease of Movement~~
- ~~(e) Legibility~~
- ~~(f) Adaptability~~
- ~~(g) Diversity~~
- ~~(h) Sustainability~~
- ~~(i) General Comment~~

8.3. Design Assessment

- ~~(a) Strengths of the proposal~~
- ~~(b) Suggested improvements to the proposal~~

8.4. Recommendation

The Panel is to make a recommendation regarding the elements of the design that are supported and those elements that would benefit from further consideration.

The proposed courtyard is considered to provide a low level of amenity to future occupants and is not supported on that basis. Applicant is encouraged to reduce the dwelling size to a 2x1 or 1x1 to increase the size of this courtyard space.

9. Item 6 – 20-22 Kintail Road, Applecross

Mixed Use Development

9.1. Officer Presentation – Started 11:03 am

City of Melville Planning Officer, Jack Hobbs introduced item as a pre-lodgement application to the Panel.

Officer Comments

- M10 Zone
- Canning Bridge Structure Plan
- 16 Stories
- Commercial included

Planning Services Coordinator, Mark Scarfone made comment about discrepancy and explained in order to receive the 'bonus section' for this development; the design and development needs to be deemed as an exemplary design from the Canning Bridge Design review Panel and it needs to exceed all criteria.

9.2. Proponent Presentation – Started 11.:14 am

Applicants provided detailed presentation regarding the proposal, including design philosophy.

Applicants Comments

- Pre-Lodgement
- Goal for a 5 star green star rating
- Penthouse included – hardly visible from the street
- Concrete canopy on ground floor

9.3. Design Quality Principles

(a) Character

- Proposed development is essentially a box on a box maximising the available developable volume. There are no generous spatial moves or attempts to moderate or mediate the immediate bulk and mass of the proposed volume.

(b) Continuity and Enclosure

- *The ground floor uses including the building entry and associated commercial spaces provide adequate engagement at ground floor level.*

(c) Quality of the Public Realm

- Whilst the ground floor uses engage with the street and the pedestrian experience almost half of level 1 and the entire length of level 2 are set aside for car parking with no visual or active engagement with the street scape.
- In seeking exemplary design' the car parking in the podium levels would need to be screened by active and occupied land uses.
- It is intended that a podium be inhabited and activated thereby creating the sense of a street and an enclosure to the street which engages with and addresses the public domain. In doing so that facilitates the proposition of a taller tower element that can then set back and rise above the established street scape. It has been an important and consistent principle of this Design Review Panel that where exemplary

design' is being sought and a podium/tower typology presented then podium car parking be sleeved with active and inhabited spaces.

- Where a community benefit space is offered it might generally benefit by being located on the ground floor to be visible and to be as accessible as possible to the community.
- In seeking exemplary design deep soil planting zones should be considered as per the draft Design WA suite of documents

(d) Ease of Movement

- The location of the bike stores on the first floor is not supported, this is not practical for users of the building.
- Consider the users of the community benefit space and its location on the first floor

(e) Legibility

- Natural light should be provided to all circulations spaces.

(f) Adaptability

- Not discussed

(g) Diversity

- Not discussed

(h) Sustainability

- Seek to increase the proportion of cross ventilation to at least 60% of dwellings

(i) Where the proponent is seeking a development bonus under Clause 21 of CBACP:

The extent to which exemplary design is proposed as part of the development – detailed comment is required to illustrate how exemplary design has been achieved.

- The proposed development is not considered to be exemplary. Key issues to be addressed by the applicant are detailed in the suggested improvements section below.
- The podium design is the critical issue, it sets and creates the streetscape. The podium needs to be engaging and active at all level.

(j) General Comment

(Any comments not covered by the above points)

- The panel does not support 'snorkel' apartments, which provide bedrooms with access to natural light via long narrow corridors.

9.4. Design Assessment

(a) Strengths of the proposal

- Good design hand
- Natural light into lobby is good
- Architecture is well resolved

(b) Suggested improvements to the proposal

- The podium needs to work with the street and needs to engage with the streetscape. It should incorporate active land uses at all levels.
- Need to create and offer community benefit. Community benefit is not necessarily about space provided – it could be a piazza space or a generous spatial move. Consider the idea of community dividend, the aspects of the proposal that give back to the community and the aspects which clearly show how the additional height has been earned.
- Need to work on excellent amenity for residents, by way of increased levels of natural/cross ventilation, natural light to corridors, no snorkel apartments, excellent common spaces.
- Carefully consider the setbacks of the building, including the treatment of the boundary walls. Look at creative ways to modulate the height of the building and to terminate the vista along First Avenue.
- Locate end of trip facilities, including bicycle parking on the ground floor or basement level.
- Incorporate deep soil zones and extensive landscaping into the development.

9.5. Recommendation

The Panel is to make a recommendation regarding the elements of the design that are supported and those elements that would benefit from further consideration.

For preliminary applications, the Panel's comments shall be provided to the proponent to assist in the development of the design

- Applicant to incorporate suggested improvements into proposal for further review by the DRP.

10. Item 7 – 30 Weld Road, Palmyra

Multiple Dwellings
Not in an activity centre plan.

10.1. Officer Presentation – Started 11:54 am

City of Melville Planning Officer, Jack Hobbs briefly introduced this item as a pre-lodgement application.

Officer Comments

- R50 Zone
- Outside of Canning Bridge Zone
- Seeking plot ratio of 1.0 in lieu of 0.6.
- Semi under-croft parking
- No waste management plan provided
- Narrow entry points

Planning Services Coordinator, Mark Scarfone made comment about plot ratio and explained the process and purpose of the panel the Design Review Meetings. It was noted a development needs to a high quality demonstrating why discretion should be applied. The Design Review Panel assists officers in making this determination.

10.2. Proponent Presentation – 12:07 pm

Applicants from Huston & Associates introduced their item to the Design Review Panel.

Applicants Comments

- Pre-Lodgement
- Long site orientated north
- Living areas to the north
- Light and ventilation to every room in apartments
- Cross ventilation to every apartment
- Local Planning Policy 1.9

10.3. Design Quality Principles

(a) Character

- Pitched roof and suburban vernacular are supported.
- The density and layout is good.
- Streetscape is good, consider providing front door to street for dwellings facing the street.
- Tree alcoves are a good idea, consider the opportunity to bring trees and day light into the parking areas.

(b) Continuity and Enclosure

- Not discussed

(c) Quality of the Public Realm

- North outdoor living area makes sense.
- Like the use of turf in these spaces, consider watering, mowing, drainage issues carefully.
- Think creatively to get more light into the balcony spaces.

(d) Ease of Movement

- The corridors are quite tight, an additional 200mm would assist.

(e) Legibility

- Poor sense of entrance and arrival through the car park. Find a direct route to the dwellings, this a fundamental issue for the development.
- Think about whole entry space as a courtyard which you drive through, an entry court. Materiality and gate location are key to a successful space.

(f) Adaptability

- Not discussed.

(g) Diversity

- Not discussed.

(h) Sustainability

- Good cross ventilation to all dwellings

(i) General Comment

- Support scale of buildings;
- Don't support internal bedrooms.
- Consider the location of air conditioning condensers and show these on plan.

4.3.1 Design Assessment

(a) Strengths of the proposal

- Comfortable and very happy with streetscape
- Pitched roof works well.
- Good tree planting and landscaping

(b) Suggested improvements to the proposal

- Need to create a sense of arrival and direct entry to the dwellings.
- Ensure all bedrooms have access to natural light and ventilation.
- Widen corridors to improve circulation.
- Apartment 1 and Apartment 2 could have a front yard with additions of gates

4.3.2 Recommendation

The Panel is to make a recommendation regarding the elements of the design that are supported and those elements that would benefit from further consideration.

For preliminary applications, the Panel's comments shall be provided to the proponent to assist in the development of the design

Applicant to incorporate suggested improvements into proposal prior to lodgement.

11. Next Meeting

The next meeting has tentatively been booked for 7 June 2017 from 9.30am until 12.30pm.

Meeting finished and closed at 12.46 pm.

Consultation Submission Summary – 47 Clydesdale Street, Como – 21 Multiple Dwellings (5-Level)

This proposal was advertised in accordance with the City's Consultation Policy (P301) to all likely affected landowners and occupiers within proximity to the development. A sign advertising the development to the general public was also placed on the site and throughout the consultation period, a total of 150 letters were issued and over the period of advertising the City received 39 formal submissions, which are summarised as follows:

- *The proposed development is completely out of scale with the existing surrounding development. While we understand the new precinct caters for larger scale developments, this is an excessive number of dwellings and building scale being on the fringe of the Canning Bridge Activity Centre.*
- *It is difficult to see how any local context has been considered that respects the aspiration of our community and neighbourhood.*
- *It appears the mezzanine floor could easily be bricked up and walled off at a later date, thus no longer being defined as a mezzanine level and should be considered a story.*
- *Residents can use Clydesdale Street for access instead of what is described in the proposal. Me and my fellow neighbours use the laneway to exit and return to our houses. The developers want to turn the laneway into a one-way access and we are not happy with that. How are we supposed to get to our houses?*
- *The parking provision for the development of 21 dwellings is grossly inadequate; a majority of tenants will have at least two vehicles meaning excess vehicles will simply be parked on the street causing congestion, safety issues and the destruction of verges.*
- *A total of 36 beds are planned for the building and only 20, mechanically stacked, car parking bays have been provided, as required by the CBACP. The proposed car stacking arrangement shown in the proposal is not adequate to accommodate a medium sized SUV. Furthermore, the noise generated by the use of the units will directly impact neighbouring residents.*
- *The provision for only 4 visitors parking bays as defined by the CBACP seems inadequate, especially when one considers that these bays will also act as bays for disabled. Specific bicycle parking has not been provided, instead the developer is expecting that residents will use the storerooms provided for each apartment.*
- *It is more than likely the visitor bays will be used by the additional residents of the development, therefore forcing additional vehicles onto the street and verge exacerbating the parking, access and safety issues.*
- *With balconies on every side, but particularly the central balconies, directly look over the adjoining residential dwellings and sensitive outdoor living areas including pool areas, while there is no provision in the CBAC for privacy, the developer should consider this impact.*

- *Notwithstanding overlooking requirements not applying to the CBACP area, there is an identifiable issue to the northern elevation of the proposed development. Namely, a clear line of sight from a Unit 5 and Unit 6 bedroom into the dining room of 45 Clydesdale St of approximately 7.5m which we consider unacceptable.*
- *No bicycle parking is provided for visitors or residents at ground level, I thought they were supposed to be supporting transport alternatives by providing these facilities.*
- *The overshadowing is extensive and will completely overshadow the southern property and others throughout the day. It seems the developer has not addressed this concern and its impacts upon neighbouring properties at all.*
- *There is clearly no consideration for resident overflow parking and with regard to visitor parking it is in breach of CBACP's Park and Services Objective. It states:*

"Objectives – To ensure that adequate vehicle parking and access is provided for multi-storey development, to ensure that off-street parking is linked to pedestrian routes and to ensure car parking and servicing activities do not dominate the street." (CBACP p37)

With insufficient offset parking, it is evitable that parking will encroach onto verges in the surrounding areas and have a detrimental impact on our neighbourhood street scape.

- *The car stacker operating noise will affect the neighbouring properties, especially those properties that back onto the ROW, and also the roof top air conditioners in the surrounding area.*
- *With a potential of up to 72 people residing in this block – nearly the entire population of Philp Av – the communal drying is inadequate for this number.*
- *The main concern is the noise to us from the proposed outbound vehicular use of the small section of retained ROW by any one of 21 owners to exit and use Davilak Street especially westbound, be it peak hour in the mornings or during weekends etc. It will turn the ROW into a road which is probably not what was intended when the small section was retained for existing owners.*
- *This will greatly adversely affect our living enormously, especially sleeping arrangements, both with noise (some vehicles are very noisy) and unhealthy petrol fumes which will be passing very close only metres from our sleeping areas, much closer than from street level... While this noise and activity will not affect many directly, it is not fair on us, and obviously has not been considered.*
- *What measures is the developer required to undertake to ensure structural integrity of neighboring properties by undermining foundations and/or vibration during sheet piling?*
 - A. Base of the lift pit of the proposed development at FFL -4.225, the soil undermined at angle of repose at 45 Degrees encroaches under floor slab of my property by approximately 1.5m at worst location.*
- *The ROW is not wide enough to have a large amount of traffic. The ROW can also not cater for cars to go two ways and therefore with the amount of traffic proposing to use it, there will be instances where people pull into the ROW and then have to back up to let someone*

come the other way. This will be dangerous for people using the ROW and traffic along Davilak St but more importantly, people walking from the Canning Bridge train station along the footpath on Davilak St (of which there are many) as it is difficult to reverse out of the ROW as you cannot see people walking on the footpath. Increased traffic to this extent on the ROW is not acceptable and is therefore dangerous.

- *We have recently built a new home in the area, like many of our neighbours have, at great cost. Developments such as the Proposed Development, if approved in their current form, will decrease the value of new built homes in the area.*

PS Ref: 5225

4 August 2017

Chief Executive Officer
City of South Perth
Cnr Sandgate Street and South Terrace
SOUTH PERTH WA 6151

Attention: Erik Dybdahl, Senior Planning Officer

Dear Sir,

**LOT 413 (47) CLYDESDALE STREET, COMO
RESPONSE TO REQUEST FOR FURTHER INFORMATION
PROPOSED 21 MULTIPLE DWELLINGS**

Planning Solutions acts on behalf of Yaran Property Group, the proponent of the proposed development of 21 multiple dwellings on Lot 413 (47) Clydesdale Street, Como. (**subject site**).

We refer to the Request for Further Information (**RFI**) received from the City of South Perth (**City**) on the 19 July 2017. This submission responds to the RFI request and outlines the various modifications to the proposed development to improve the design and functionality of the site.

Amended Plans

In response to the various comments received, the design has been modified to improve the overall development. Refer **Appendix 1**, Amended Development Plans. Specifically, the following changes have been made to the proposed development:

- Modifications to the height of the proposed development, incorporating a reduction in the concrete trim around the top level of the building by 40mm.
- Provision of an additional car parking bay abutting the Right of Way (**ROW**).
- Reconfiguration of the stairwell and landscaping area fronting the ROW.
- Reduction in the size of the bin storage area to 17.9m² to allow for 10 x 660L bins to be provided.
- Minor modification to the landscape area provided along the common driveway to provide larger scale trees.

The abovementioned modifications are a response to the additional technical reporting and information gathered to support the proposed development. Refer to **Table 1**, which provides additional information to support the proposed changes to the plans and response to the previous information outlined within the RFI.

Table 1: Response to request for further information from City

Item No.	Design Element	City's Comment	Planning Solutions Comments	Compliance
1	Building Heights	<ul style="list-style-type: none"> In accordance with the Element 3 of the CBAC design guidelines, the proposed development height is deemed non-compliant in accordance with the method of measurement from the mean NGL under the building envelope of 15.25 (using 8 datum points). The building height is measured to 31.63 AHD resulting in an overall building height of 16.38 metres. Revised plans are required to lower the overall building height by no less than 0.38 metres. Furthermore, the stair/lift overrun and shading structures to the rooftop garden are limited to a maximum height of 3.0m above the building height limit. Addressing the overall building height and reducing it by no less than 0.38 metres will also address this aspect. 	<ul style="list-style-type: none"> The concrete trim around the top level of the building has been reduced, and the ground floor level lowered by 40mm, so that the building now achieves a maximum height of 16m above the mean NGL of 15.25m AHD. 	✓
2	Car Stackers	<ul style="list-style-type: none"> More information is required toward the management of the stackers system and a clear outline of how each resident will park and retrieve their vehicle with the proposed system. 	<ul style="list-style-type: none"> The car stackers are entirely consistent with the requirements of the City's Policy P350.3. The length of car stacker bays has been increased to 5.5m. The car stackers system used will be a Wöhr Parklift (Premium Type 440-225/220). A demonstration of the use of this system is provided in this video: https://www.youtube.com/watch?v=TxFeimQSxaM 	✓
3	Amount of car bays in car stackers	<ul style="list-style-type: none"> In accordance with Clause 8.2 of City Policy P350.3 only a maximum of 80% of all onsite parking bays are permitted to be provided in mechanical parking devices. Currently only 4 out of 24 (16.6%) are provided outside of the mechanical parking device and all of which are visitor bays. Revised plans or adequate justification is to be presented for City evaluation to address this matter. 	<ul style="list-style-type: none"> The design has been amended to include an additional visitor car parking bay, accessed from the ROW. With the additional bay, 20% of the total on-site car parking is not in a mechanical parking device. 	✓
4	Landscaping	<ul style="list-style-type: none"> While the City acknowledges the proposed development achieves the required landscaping provision. Requirement 10.6 requires landscaping to be incorporated within setback areas. It is noted the southern side of the site is characterised by a 6.0m wide hardstand vehicle access way. The City would encourage some form of landscaping of this area, perhaps in the form of intermittent tree planting along the boundary, strategically placed so as to maintain adequate vehicle movements and reversing depths. 	<ul style="list-style-type: none"> Trees are now provided intermittently along the 6m wide driveway along the boundary fence. The trees have been positioned to ensure vehicle access is maintained for residents and visitors to access the car stackers and visitor bays. 	✓

5	Waste Management	<ul style="list-style-type: none"> The City of South Perth Waste Management Plan Guidelines V2 states: <i>"The space required for collection from the verge must not exceed one third of the Property frontage or 15 receptacles"</i> Based on the WMP more than one third of the property boundary will be exceeded each fortnight when general waste and recycling bins are presented. The City does not support this. On site waste collection should be considered. Please amend the WMP to ensure compliance. 	<ul style="list-style-type: none"> The waste management plan has been updated to provide 10 x 660L bins. The waste will be collected from the street by the City with the Strata Manager of the apartment building to arrange for the bins to be collected, in accordance with the updated waste management plan located within Appendix 2. Where all ten bins are lined up along the verge, the bins will take up a width of 8.0m, which is 40% of the subject site's frontage. It is proposed to line the bins in rows two-deep, which reduces the width of bins along the verge to 4.0m (20% of the frontage). 	✓
6	Infrastructure Services Comment	<ul style="list-style-type: none"> If the development chooses to seal the ROW for their development the design will need to be an inverted crown pavement with soak wells centred along the route. It will require a 200mm base with an asphalt seal with mountable kerbing to match adjacent property levels. Based on previous experience, the City will need to undertake the works themselves on a cost recovery basis. The City estimates that the works will be in the order of \$55,000 and will need to be funded prior to BA approval. 	<ul style="list-style-type: none"> The proponent agrees to seal the ROW to provide access to the proposed development. We consider this can be dealt with through an appropriately-worded condition of development approval. 	✓
		<ul style="list-style-type: none"> Crossover application 	<ul style="list-style-type: none"> A crossover application can be provided to the City prior to the construction of the crossover. 	✓
		<ul style="list-style-type: none"> Maintain verge levels 	<ul style="list-style-type: none"> The proposed development does not seek to amend the levels of the verge adjacent to the subject site. 	✓
		<ul style="list-style-type: none"> Street trees 	<ul style="list-style-type: none"> The proposed development will ensure the retention of street trees. During construction, these trees will be protected to ensure they are not damaged. 	✓
		<ul style="list-style-type: none"> The minimum treatment for a temporary crossing is a sealed road base surface. 	<ul style="list-style-type: none"> Construction activities will be undertaken in accordance with the City's requirements. 	✓
		<ul style="list-style-type: none"> An approved 'Stormwater Drainage for Proposed Buildings' application is required prior to construction. 	<ul style="list-style-type: none"> Five soakwells are provided along the driveway. This can be confirmed through the building permit process. 	✓

7	Neighbourhood Consultation	<ul style="list-style-type: none"> The proposed development is completely out of scale with the existing surrounding development. While we understand the new precinct caters for larger scale developments, this is an excessive number of dwellings and building scale being on the fringe of the Canning Bridge Activity Centre. 	<ul style="list-style-type: none"> The proposed height and bulk of the proposed development is consistent with the provisions of the Davilak Quarter (Q4) H4 precinct of the Canning Bridge Activity Centre Plan (CBACP). 	✓
		<ul style="list-style-type: none"> It is difficult to see how any local context has been considered that respects the aspiration of our community and neighbourhood. 	<ul style="list-style-type: none"> The proposed development is consistent with the objectives and proposed future amenity and built form for the Q4 precinct. The proposed development is also compliant with the development requirements of the CBACP. 	✓
		<ul style="list-style-type: none"> It appears the mezzanine floor could easily be bricked up and walled off at a later date, thus no longer being defined as a mezzanine level and should be considered a story. 	<ul style="list-style-type: none"> The proposed development has been designed such that the mezzanines are not enclosed. The enclosure of mezzanines is not proposed. 	✓
		<ul style="list-style-type: none"> Residents can use Clydesdale Street for access instead of what is described in the proposal. Me and my fellow neighbours use the laneway to exit and return to our houses. The developers want to turn the laneway into a one-way access and we are not happy with that. How are we supposed to get to our houses? 	<ul style="list-style-type: none"> The proposal will not impact the ability for other residents to access their properties via the ROW. One-way access along the ROW is not proposed. 	✓
		<ul style="list-style-type: none"> The parking provision for the development of 21 dwellings is grossly inadequate; a majority of tenants will have at least two vehicles meaning excess vehicles will simply be parked on the street causing congestion, safety issues and the destruction of verges 	<ul style="list-style-type: none"> The car parking is compliant with the provisions of the CBACP. There are no requirements under the CBACP to provide visitor parking. The proposal however incorporates five visitor car parking bays to ensure visitors can park on the subject site rather than within the street. 	✓
		<ul style="list-style-type: none"> A total of 36 beds are planned for the building and only 20, mechanically stacked, car parking bays have been provided, as required by the CBACP. The proposed car stacking arrangement shown in the proposal is not adequate to accommodate a medium sized SUV. Furthermore, the noise generated by the use of the units will directly impact neighbouring residents. 	<ul style="list-style-type: none"> The car parking is compliant with the provisions of the CBACP. The proposed car-stacker system can accommodate medium-size SUVs. The car stackers will comply with the <i>Environmental Protection (Noise) Regulations 1997</i>. 	✓
		<ul style="list-style-type: none"> The provision for only 4 visitors parking bays as defined by the CBACP seems inadequate, especially when one considers that these bays will also act as bays for disabled. Specific bicycle parking has not been provided, instead the developer is expecting that residents will use the storerooms provided for each apartment. 	<ul style="list-style-type: none"> The CBACP does not require the provision of on-site visitor car parking bays. The proposed development has been modified to provide an additional visitor car parking bay. Bicycle parking is provided in accordance with the requirement of Clause 18.1 of the CBACP. Bicycle parking within the storerooms is practical solution for apartment developments. 	✓

	<ul style="list-style-type: none"> It is more than likely the visitor bays will be used by the additional residents of the development, therefore forcing additional vehicles onto the street and verge exacerbating the parking, access and safety issues. 	<ul style="list-style-type: none"> The visitor car parking bays can be sign posted to ensure they are not used by residents of the proposed development. This can be managed by Strata Management who will control the premises once constructed. 	✓
	<ul style="list-style-type: none"> With balconies on every side, but particularly the central balconies, directly look over the adjoining residential dwellings and sensitive outdoor living areas including pool areas, while there is no provision in the CBAC for privacy, the developer should consider this impact. 	<ul style="list-style-type: none"> The proposed development has been centrally located on the subject site to minimise the impact of overlooking. In addition, four of the six balconies on each floor are orientated to Clydesdale Street or the ROW to minimise the impact of overlooking. 	✓
	<ul style="list-style-type: none"> Notwithstanding overlooking requirements not applying to the CBACP area, there is an identifiable issue to the northern elevation of the proposed development. Namely, a clear line of sight from a Unit 5 and Unit 6 bedroom into the dining room of 45 Clydesdale St of approximately 7.5m which we consider unacceptable 	<ul style="list-style-type: none"> The proposed development has been centrally located on the subject site to minimise the impact of overlooking, and windows provided on the northern aspect to maximise access to sunlight. Further, although overlooking requirements do not apply in the CBACP area, the 4m setback of bedroom windows from the northern lot boundary exceeds the minimum 3m setback which would otherwise apply under the Residential Design Codes. 	✓
	<ul style="list-style-type: none"> No bicycle parking is provided for visitors or residents at ground level, I thought they were supposed to be supporting transport alternatives by providing these facilities. 	<ul style="list-style-type: none"> Bicycle parking is provided in accordance with the requirement of Clause 18.1 of the CBACP. Bicycle parking is located within the storerooms of each of the apartments. 	✓
	<ul style="list-style-type: none"> The overshadowing is extensive and will completely overshadow the southern property and others throughout the day. It seems the developer has not addressed this concern and its impacts upon neighbouring properties at all. 	<ul style="list-style-type: none"> There are no overshadowing requirements within the CBACP. 	✓
	<ul style="list-style-type: none"> There is clearly no consideration for resident overflow parking and with regard to visitor parking it is in breach of CBACP's Park and Services Objective. It states: "Objectives – To ensure that adequate vehicle parking and access is provided for multi-storey development, to ensure that off-street parking is linked to pedestrian routes and to ensure car parking and servicing activities do not dominate the street." (CBACP p37) With insufficient offset parking, it is evitable that parking will encroach onto verges in the surrounding areas and have a detrimental impact on our neighbourhood street scape. 	<ul style="list-style-type: none"> The car parking is compliant with the provisions of the CBACP. The proposal development incorporates five visitor car parking bays which is above the standard requirements of the CBACP. 	✓

	<ul style="list-style-type: none"> • The car stacker operating noise will affect the neighbouring properties, especially those properties that back onto the ROW, and also the roof top air conditioners in the surrounding area. 	<ul style="list-style-type: none"> • The proposed development will comply with the <i>Environmental Protection (Noise) Regulations 1997</i>. Further, air-conditioning units have been removed from the roof-top and will be placed at the mezzanine level. 	✓
	<ul style="list-style-type: none"> • With a potential of up to 72 people residing in this block – nearly the entire population of Philp Av – the communal drying is inadequate for this number. 	<ul style="list-style-type: none"> • Each apartment is provided with laundries that can accommodate electric dryers. 	✓
	<ul style="list-style-type: none"> • The main concern is the noise to us from the proposed outbound vehicular use of the small section of retained ROW by any one of 21 owners to exit and use Davilak Street especially westbound, be it peak hour in the mornings or during weekends etc. It will turn the ROW into a road which is probably not what was intended when the small section was retained for existing owners. 	<ul style="list-style-type: none"> • The ROW is intended to provide vehicle access. The proponent will be responsible for sealing and draining the ROW from the subject site to Davilak Street. This will improve the vehicle access for surrounding land owners to access their properties. 	✓
	<ul style="list-style-type: none"> • This will greatly adversely affect our living enormously, especially sleeping arrangements, both with noise (some vehicles are very noisy) and unhealthy petrol fumes which will be passing very close only metres from our sleeping areas, much closer than from street level... While this noise and activity will not affect many directly, it is not fair on us, and obviously has not been considered. 	<ul style="list-style-type: none"> • The proposed development is consistent with the objectives and provisions of the CBACP. The proposed development is consistent with the desired future amenity of the area, with the design of the apartment building centrally located on the subject site to reduce the impact of bulk on the adjoining properties. 	✓
	<ul style="list-style-type: none"> • What measures is the developer required to undertake to ensure structural integrity of neighbouring properties by undermining foundations and/or vibration during sheet piling? A. Base of the lift pit of the proposed development at FFL -4.225, the soil undermined at angle of repose at 45 Degrees encroaches under floor slab of my property by approximately 1.5m at worst location. 	<ul style="list-style-type: none"> • These measures can be confirmed during the building permit process. 	✓
	<ul style="list-style-type: none"> • The ROW is not wide enough to have a large amount of traffic. The ROW can also not cater for cars to go two ways and therefore with the amount of traffic proposing to use it, there will be instances where people pull into the ROW and then have to back up to let someone come the other way. This will be dangerous for people using the ROW and traffic along Davilak St but more importantly, people walking from the Canning Bridge train station along the footpath on Davilak St (of which there are many) as it is difficult to reverse out of the ROW as you cannot see people walking on the footpath. Increased traffic to this extent on the ROW is not acceptable and is therefore dangerous. 	<ul style="list-style-type: none"> • The City's Infrastructure services has confirmed the ROW is satisfactory to allow access to the subject site. The proponent has agreed to seal the ROW to formalise access to the subject site. • The ROW is wide enough to allow for two way vehicle access. 	✓

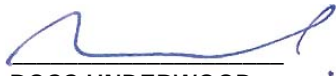
		<ul style="list-style-type: none"> • We have recently built a new home in the area, like many of our neighbours have, at great cost. Developments such as the Proposed Development, if approved in their current form, will decrease the value of new built homes in the area. 	<ul style="list-style-type: none"> • There is no evidence to suggest this development will lower property values in the area. 	✓
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The above mentioned information addresses the RFI issued by the City on the 19 July 2017. The amended plans provide an improve the apartment design and ensure further compliance with the planning framework.

We look forward to the City's favourable assessment of the application, and positive recommendation to the Development Assessment Panel with the Responsible Authority Report.

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

Yours sincerely,



ROSS UNDERWOOD
SENIOR PLANNER

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APPENDIX 1
AMENDED DEVELOPMENT PLANS

DRAWING LIST			
Sheet Number	Sheet Name	Current Revision	Current Revision Date
A001	SURVEY	C	02.06.2017
A010	SITE PLAN - OVERALL	E	31.07.2017
A012	SITE PLAN - LANDSCAPE	E	31.07.2017
A030	SITE PLAN - OVERSHADOWING	B	02.06.2017
A100	FLOOR PLAN - BASEMENT	D	31.07.2017
A101	FLOOR PLAN - GROUND LEVEL	E	31.07.2017
A102	FLOOR PLAN - MEZZANINE LEVEL	C	02.06.2017
A103	FLOOR PLAN - LEVEL 1	D	11.07.2017
A104	FLOOR PLAN - LEVEL 2	D	11.07.2017
A105	FLOOR PLAN - LEVEL 3	D	11.07.2017
A106	FLOOR PLAN - ROOF GARDEN	C	02.06.2017
A200	ELEVATIONS	F	31.07.2017
A201	ELEVATIONS	F	31.07.2017

REVISION F
A1 DWG A000

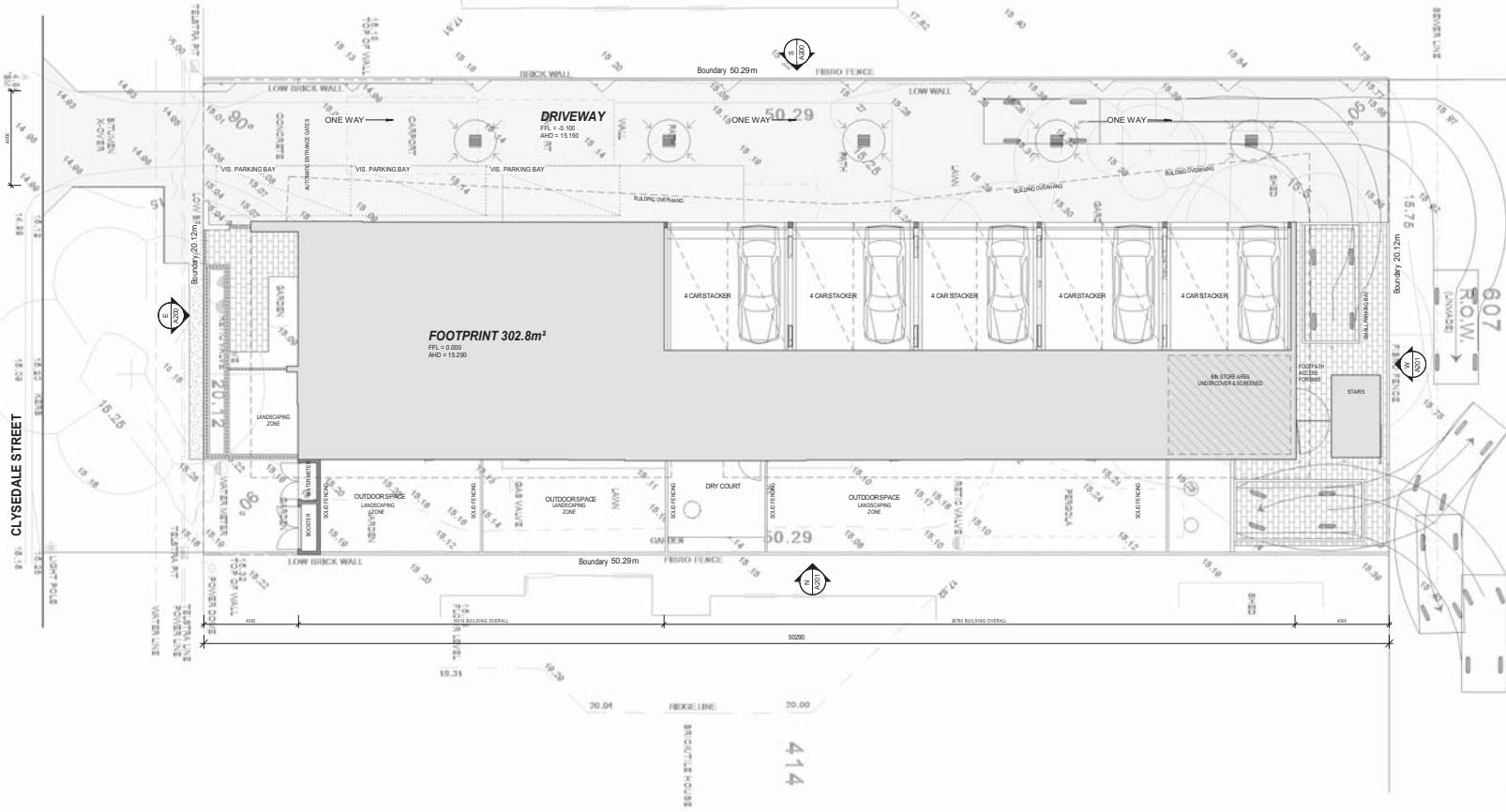


SITE & GENERAL NOTES:

- ALL LEVELS, DIMENSIONS, PORTIONS AND HEIGHTS TO BE SHOWN ON DRAWINGS ARE TO BE TAKEN FROM THE BUILDING WORK, DATA PROVIDED & AVAL.
- FIGURED DIMENSIONS ARE TO BE TAKEN AND NO SCALE OF DIMENSIONS, BE ALLOWED.
- ALL ARCHITECTURAL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH SPECIFICATIONS AND ALL OTHER RELEVANT DOCUMENTS FROM STRUCTURAL, ELECTRICAL, CIVIL, MECHANICAL AND MECHANICAL ENGINEERING.
- ANY DISCREPANCIES ARE TO BE REPORTED TO THE SUPERINTENDENT IMMEDIATELY.
- ALL SETOUT WORK TO BE COMPLETED BY THE CONTRACTOR FOR ELECTRICAL, PLUMBING, MECHANICAL AND CONCRETE LABOUR WORKS.
- REFER TO ENGINEERS DRAWINGS FOR ALL STRUCTURAL WORKS.
- LARGE SCALE DRAWINGS WILL SUPERSEDE SMALL SCALE DRAWINGS.
- CONTRACTOR TO CONFIRM LOCATION, DEPTH AND EXTENT OF ALL UNDER SERVICES AS SHOWN ON SURVEYED LAYOUT AND ADVISE TO THE SUPERINTENDENT OF ANY DISCREPANCIES TO BE RECTIFIED BEFORE COMMENCEMENT.
- CONTRACTOR TO CONFIRM GROUND WATER TABLE AND LEVELS PRIOR TO COMMENCEMENT AND IF ANY DE WATERING IS REQUIRED.
- ALL NECESSARY APPROVALS FROM RELEVANT AUTHORITIES MUST BE OBTAINED PRIOR TO THE COMMENCEMENT OF ANY WORK.
- ALL CONSTRUCTED SURVEY TO BE PROVIDED BY LICENSED SURVEYOR.
- FOR CONSTRUCTION / MODIFICATION INFORMATION REFER TO GEOTECHNICAL REPORT.
- GEOTECHNICAL INVESTIGATIONS HAVE BEEN CARRIED OUT. THE INVESTIGATION RESULTS IN THE REPORTS TO BE PROVIDED TO THE CONTRACTOR FOR THE CONSTRUCTION OF THE BUILDING. IT IS NOT A GUARANTEE OF THE ACCURACY OF THE DATA OR OF THE BUILDING GROUND LEVELS ACROSS THE SITE.
- FOR ALL SITE PREPARATION AND CONSTRUCTION REFER TO CIVIL ENGINEERS DRAWINGS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL PROVIDE COMPACTOR CERTIFICATES FOR CUT AND FILL AREAS CERTIFYING THAT THE AREAS HAVE BEEN ADEQUATELY COMPACTED.
- ALL EXISTING ESTIMATED VEHICLES INCLUDING THREE AND A HALF TONNAGE VEHICLES, TRUCKS AND BUSES TO BE PROTECTED BY CONTRACTOR.
- THE CONTRACTOR SHALL TAKE THE MOVEMENT OF EXISTING SERVICES INTO ACCOUNT AND PROVIDE PROTECTION AS REQUIRED.
- LANDSCAPING ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF AS 2900-2017 AND SITE GEOTECHNICAL REPORT.
- THE CONTRACTOR SHALL ALLOW FOR DUST CONTROL MEASURES AS REQUIRED.
- SURFACE STABILISATION TO BE APPLIED TO THE EXISTING GROUND SURFACE OF THE SITE AS SOON AS POSSIBLE AFTER COMPLETION OF SECTION OF WORK.

Lot No.	Address	Lot Area	Block Area	Block Area
1	75.00m	65.00m	51.00m	45.00m
2	75.00m	65.00m	51.00m	45.00m
3	125.00m	112.00m	65.00m	45.00m
4	75.00m	65.00m	51.00m	45.00m
5	75.00m	65.00m	51.00m	45.00m
6	75.00m	65.00m	51.00m	45.00m
7	45.00m	41.00m	33.00m	29.00m
8	75.00m	65.00m	51.00m	45.00m
9	75.00m	65.00m	51.00m	45.00m
10	75.00m	65.00m	51.00m	45.00m
11	75.00m	65.00m	51.00m	45.00m
12	75.00m	65.00m	51.00m	45.00m
13	45.00m	41.00m	33.00m	29.00m
14	75.00m	65.00m	51.00m	45.00m
15	75.00m	65.00m	51.00m	45.00m
16	75.00m	65.00m	51.00m	45.00m
17	75.00m	65.00m	51.00m	45.00m
18	75.00m	65.00m	51.00m	45.00m
19	45.00m	41.00m	33.00m	29.00m
20	75.00m	65.00m	51.00m	45.00m
21	75.00m	65.00m	51.00m	45.00m

CLYDESDALE STREET



DATE	REVISION	DESCRIPTION
11/01/2017	1	FOR SUBMITTAL TO DA - DCC/CL
11/01/2017	2	FOR SUBMITTAL TO DA - DCC/CL
11/01/2017	3	FOR SUBMITTAL TO DA - DCC/CL
11/01/2017	4	FOR SUBMITTAL TO DA - DCC/CL
11/01/2017	5	FOR SUBMITTAL TO DA - DCC/CL
11/01/2017	6	FOR SUBMITTAL TO DA - DCC/CL
11/01/2017	7	FOR SUBMITTAL TO DA - DCC/CL
11/01/2017	8	FOR SUBMITTAL TO DA - DCC/CL
11/01/2017	9	FOR SUBMITTAL TO DA - DCC/CL
11/01/2017	10	FOR SUBMITTAL TO DA - DCC/CL
11/01/2017	11	FOR SUBMITTAL TO DA - DCC/CL
11/01/2017	12	FOR SUBMITTAL TO DA - DCC/CL
11/01/2017	13	FOR SUBMITTAL TO DA - DCC/CL
11/01/2017	14	FOR SUBMITTAL TO DA - DCC/CL
11/01/2017	15	FOR SUBMITTAL TO DA - DCC/CL
11/01/2017	16	FOR SUBMITTAL TO DA - DCC/CL
11/01/2017	17	FOR SUBMITTAL TO DA - DCC/CL
11/01/2017	18	FOR SUBMITTAL TO DA - DCC/CL
11/01/2017	19	FOR SUBMITTAL TO DA - DCC/CL
11/01/2017	20	FOR SUBMITTAL TO DA - DCC/CL
11/01/2017	21	FOR SUBMITTAL TO DA - DCC/CL



Contractor to verify all dimensions on site before commencing work. MODUS DESIGN PTY LTD is not liable for any discrepancies in the dimensions and setting out of the work, for re-orientation. Contractor of nature of work is not liable for any discrepancies in the dimensions and setting out of the work, for re-orientation. Authority is required for any re-orientation.



1	04/04/2017	04/04/2017
2	04/04/2017	04/04/2017
3	04/04/2017	04/04/2017
4	04/04/2017	04/04/2017
5	04/04/2017	04/04/2017
6	04/04/2017	04/04/2017
7	04/04/2017	04/04/2017
8	04/04/2017	04/04/2017
9	04/04/2017	04/04/2017
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15	04/04/2017	04/04/2017
16	04/04/2017	04/04/2017
17	04/04/2017	04/04/2017
18	04/04/2017	04/04/2017
19	04/04/2017	04/04/2017
20	04/04/2017	04/04/2017
21	04/04/2017	04/04/2017

SITE PLAN - OVERALL

PROPOSED APARTMENT DEVELOPMENT FOR YARAN GROUP LOT # (47) CLYDESDALE ST. COM3

REVISION	DATE	DESCRIPTION
1	04/04/2017	04/04/2017
2	04/04/2017	04/04/2017
3	04/04/2017	04/04/2017
4	04/04/2017	04/04/2017
5	04/04/2017	04/04/2017
6	04/04/2017	04/04/2017
7	04/04/2017	04/04/2017
8	04/04/2017	04/04/2017
9	04/04/2017	04/04/2017
10	04/04/2017	04/04/2017
11	04/04/2017	04/04/2017
12	04/04/2017	04/04/2017
13	04/04/2017	04/04/2017
14	04/04/2017	04/04/2017
15	04/04/2017	04/04/2017
16	04/04/2017	04/04/2017
17	04/04/2017	04/04/2017
18	04/04/2017	04/04/2017
19	04/04/2017	04/04/2017
20	04/04/2017	04/04/2017
21	04/04/2017	04/04/2017



07.06.2017	B	REISSUED FOR GA
18.06.2017	A	REISSUED FOR GA COMMENT AS PER COUNCIL FEEDBACK
DATE	No.	DESCRIPTION
REVISION SCHEDULE		



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 f 9444 9522 127 HEROSMAN PO
 e info@evodex.net.au WENDLEY 601
 ABN 27 121 224 459 PO BOX 22
 ADN 121 224 459 GORDON 369

SITE PLAN - OVERSHADOWING

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT # (#47) CLYDESDALE ST.
COMO

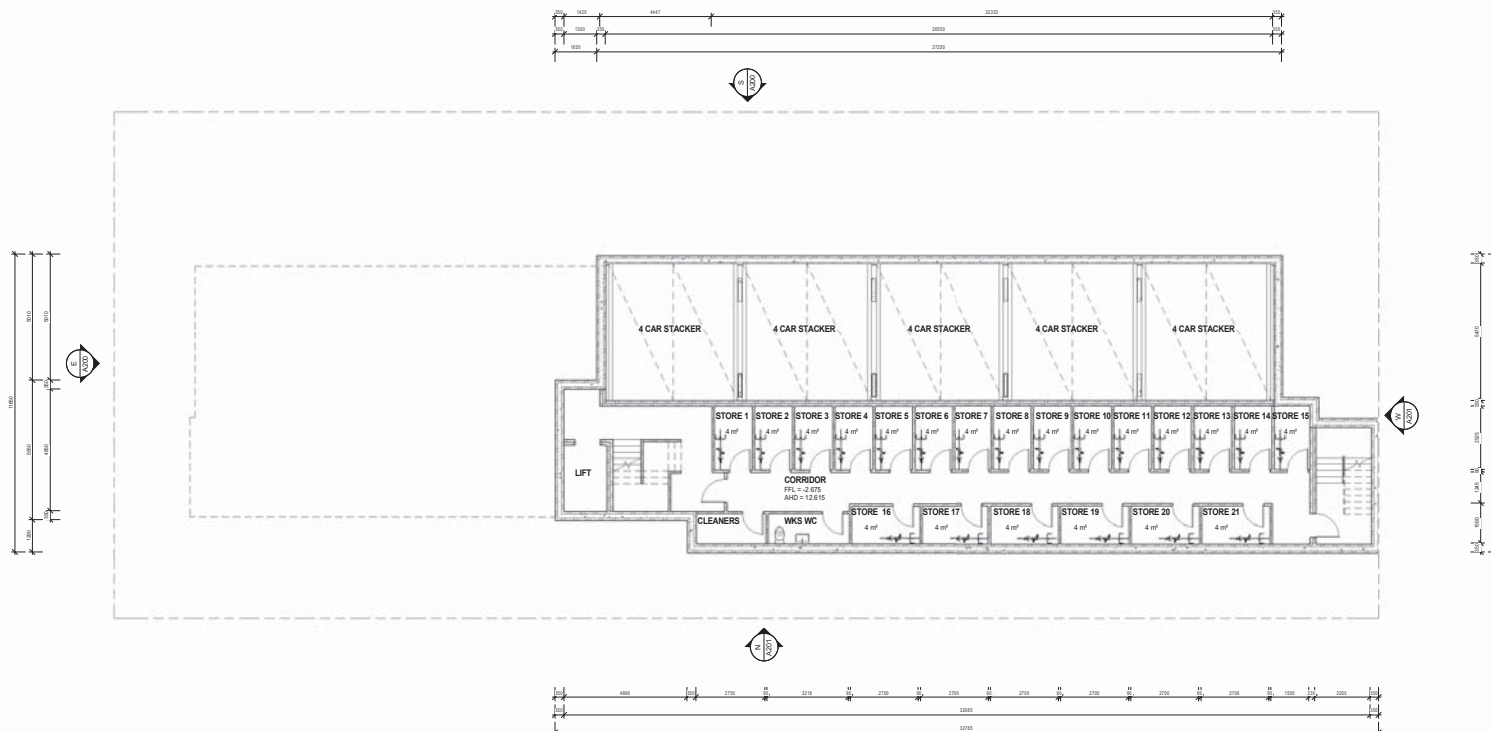
MODUS PROJECT	D17-102
DESIGN	SH
DRAWN	M
CHECKED	SV
SCALE	1:20
DATE	MARCH 2011

A1

- [illegible]

BRP	DOOR-PIE - REFER TO ROOF PLAN FOR SIZE AND LOCATION
STC	STRUCTURAL COLUMN - REFER TO STRUCTURAL ENGINEERING DRAWING FOR SIZE
AC	DESIGN LEVEL IN RELATION TO AHD
AC	AIR CONDITIONING UNIT - REFER TO SPECIFICATION
MC	TOILET PAN - REFER TO SPECIFICATION
VC	VANITY BASIN - REFER TO SPECIFICATION
CH	CHIMNEY - REFER TO BUILDERS SPECIFICATION
CHENP/NS	UNDER BENCH ONION UNDER WITH HOT RATE & RANGE HOOD - REFER TO BUILDERS SPECIFICATION
MSD	MISCELLANEOUS - REFER TO SPECIFICATION
SHS	SINK - REFER TO SPECIFICATION
HC	HOSE COCK - REFER TO HYDRAULIC DWG
HRU	HOT WATER UNIT - REFER TO HYDRAULIC SPECIFICATION
DISW	DISH WASHER - REFER TO BUILDERS SPECIFICATION
P	PANTRY - REFER TO BUILDERS SPECIFICATION
S	SHOWER - REFER TO BUILDERS SPECIFICATION
ST	STAIR - REFER TO BUILDERS SPECIFICATION
NS	NON-SLIP - REFER TO BUILDERS SPECIFICATION
MSW	MICROWAVE - REFER TO BUILDERS SPECIFICATION
BL	BAL. S.S. CLOS. BOLLARD - REFER TO DATA

* ALL COMMON AREAS INCLUDING CORRIDORS, ACCESSWAYS, TRUNCATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS1428.1-2009 SECTION 6 - CONTINUOUS ACCESSIBLE PATHS OF TRAVEL.



1 FFL (BASEMENT)
SCALE 1 : 100



31.07.2017	D	REDISSUED FOR DA - COUNCIL AMENDMENTS
02.08.2017	C	REDISSUED FOR DA
18.08.2017	B	REDISSUED FOR DA COMMENT AS TO COUNCIL FEEDBACK
27.03.2017	A	ISSUED FOR DA COMMENT
DATE	No.	DESCRIPTION
REVISION SCHEDULE		



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 e info@vmodex.net.au WEMBLEY 601
 ABN 27 121 224 459 PO BOX 22
 A/CN 121 224 459 CORNO WA 600

FLOOR PLAN - BASEMENT

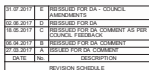
PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT # (#47) CLYDESDALE ST
COMO

MODUS PROJECT D17-1028
DESIGN
DRAWN
CHECKED
SCALE
DATE
REVISION
A1
DWG A100

- [illegible]

BRP	DOOR- REFER TO ROOF PLAN FOR SIZE AND LOCATION
STC	STRUCTURAL COLUMN- REFER TO STRUCTURAL ENGINEER'S DRAWING
AC	DESIGNIVE LINE- IN RELATION TO A/C
AC	AIR CONDITIONING UNIT- REFER TO SPECIFICATION
WC	TOILET PAN- REFER TO SPECIFICATION
VC	VANITY BASIN- REFER TO SPECIFICATION
WB	WALL- REFER TO BUILDERS SPECIFICATION
CHENP	UNDER BENCH CUPBOARD UNDER WITH HOT PLATE A RANGEHOOD- REFER TO BUILDERS SPECIFICATION
CHENP	UNDER BENCH CUPBOARD WITH HOT PLATE- REFER TO SPECIFICATION
WC	WASH CUB- REFER TO SPECIFICATION
SHR	HOSE COCK- REFER TO HYDRAULIC DESIGN
HWB	HOT WATER TAP- REFER TO HYDRAULIC SPECIFICATION
DISW	DISHWASHER- REFER TO BUILDERS SPECIFICATION
S	SINK- REFER TO BUILDERS SPECIFICATION
P	PAINTERY- REFER TO BUILDERS SPECIFICATION
STC	STRUCTURAL COLUMN- REFER TO BUILDERS SPECIFICATION
AC	AIR CONDITIONING- REFER TO BUILDERS SPECIFICATION
SH	SHOWER, SHOWER, SHOWER, SHOWER

* ALL COMMON AREAS INCLUDING CORRIDORS, ACCESSWAYS, TRUNCATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS 1428.1-2009 SECTION 6 - CONTINUOUS ACCESSIBLE PATHS OF TRAVEL.



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E	info@vmodex.net.au	WEMBLEY 6014
ASN	27 121 224 459	PO BOX 222
ACN	121 224 459	CONO WA 6952

FLOOR PLAN - GROUND LEVEL

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT # (#47) CLYDESDALE ST.
COMO

DESIGN	SW
DRAWN	MS
CHECKED	SWHH
SCALE	1:100
DATE	MARCH 2017

A1
REVISION
E
A101

- [illegible]

LEGEND

- | | |
|----------|--|
| REF | DOOR- REFER TO ROOF PLAN FOR SIZE AND LOCATION |
| 17.00 | STRUCTURAL COLUMN - REFER TO STRUCTURAL ELEVATIONS |
| | DESIGN LINE, IN RELATION TO HW |
| AC | ALL CONDITIONING UNIT - REFER TO SPECIFICATION |
| VC | TOLLET PAN - REFER TO SPECIFICATION |
| W | WATER - REFER TO SPECIFICATION |
| FR | FRIDGE - REFER TO BUILDERS SPECIFICATION |
| CH/EN/SP | UNDER BENCH/ON UNDER WITH HOT RATE & RANGECOOK - REFER TO BUILDERS SPECIFICATION |
| EMERY | EMERY - REFER TO SPECIFICATION |
| SHR | SHOWER - REFER TO SPECIFICATION |
| HW | HOSE COCK - REFER TO HYDRAULIC DWG |
| HWB | HOT WATER UNIT - REFER TO HYDRAULIC SPECIFICATION |
| DISW | DISH WASHNER - REFER TO BUILDERS SPECIFICATION |
| S | SINK - REFER TO BUILDERS SPECIFICATION |
| P | PANTRY - REFER TO BUILDERS SPECIFICATION |
| L | LAUNDRY TROUGH - REFER TO BUILDERS SPECIFICATION |
| M | MICROWAVE - REFER TO BUILDERS SPECIFICATION |
| B | GALV. STEEL BOLLARD - REFER TO DETAIL |

DESIGN FOR ACCESS AND MOBILITY:

- * ALL COMMON AREAS INCLUDING
CORRIDORS, ACCESSWAYS,
TRUNCATIONS HAVE BEEN DESIGNED
IN ACCORDANCE WITH AS 1428.1-20
SECTION 6 - CONTINUOUS
ACCESSIBLE PATHS OF TRAVEL.



1 FFL (MEZZANINE LEVEL)
SCALE 1 : 100



02.06.2017	C	ISSUED FOR DA
18.05.2017	B	ISSUED FOR DA COMMENT AS P COUNCIL FEEDBACK
27.03.2017	A	ISSUED FOR DA COMMENT
DATE	Re:	DESCRIPTION
		REVISIONS SCHEDULE



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l	9444 9511	SUITE
f	9444 9522	127 HERDSMAN PT
e	info@evodex.net.au	WEMBLEY 60
ABN	27 121 224 459	PO BOX 2
ACN	121 224 459	COMO WA 60

FLOOR PLAN - MEZZANINE
LEVEL

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT # (#47) CLYDESDALE ST.
COMO

MODUS PROJECT	D17-102
DESIGN	5
DRAWN	1
CHECKED	SWT
SCALE	1:1
DATE	MARCH 20

A1

SITE & GENERAL NOTES:

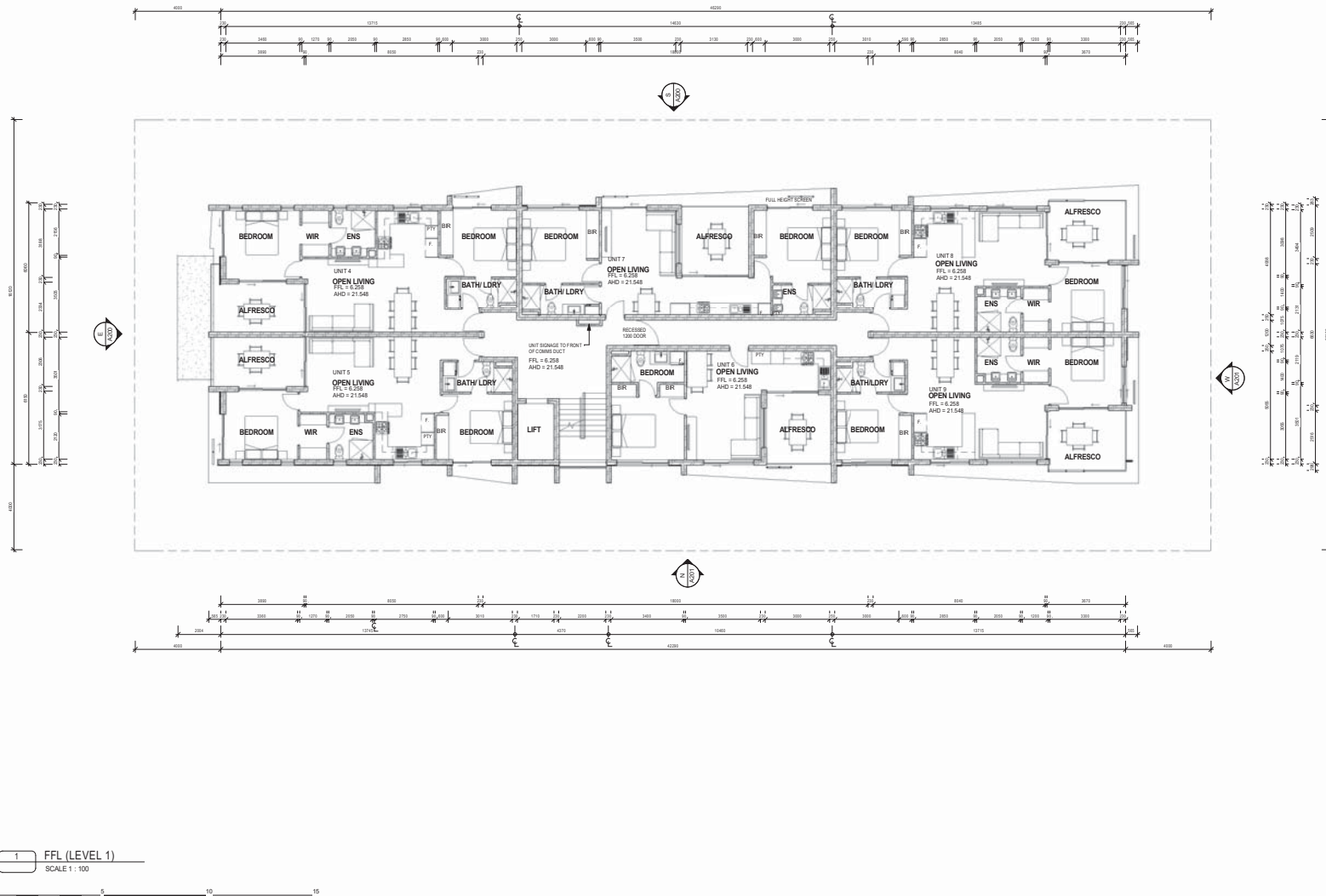
- ALL LEVELS, DIMENSIONS POSITIONS AND HEIGHTS TO BE VERIFIED ON SITE BEFORE COMMENCING ANY BUILDING WORK. DATA PROVIDED IS AID.
- FIXED DIMENSIONAL LINES TO BE SHOWN AND NO SINKING OF DRIVE RISE WILL BE ALLOWED.
- ALL MECHANICAL DRAINAGE ARE TO BE MADE IN CONJUNCTION WITH SPECIFICATIONS AND ALL OTHER RELEVANT DRAWINGS FROM STRUCTURAL, ELECTRICAL, CIVIL, HYDRAULICS AND MECHANICAL ENGINEERS.
- ANY DISCREPANCIES ARE TO BE REPORTED TO THE SUPERINTENDENT IMMEDIATELY.
- ALL SETOUT WORK TO BE COMPLETED BY THE CONTRACTOR FOR ELECTRICAL, PLUMBING, BETWEEN, EARTHWORKS AND CONCRETE LABOUR WORKS.
- REFER TO ENGINEERS DRAWINGS FOR ALL STRUCTURAL WORKS.
- UNDER SCALE DIMENSIONS WILL SUPERSEDE SMALL SCALE DRAWINGS.
- CONTRACTOR TO CONFIRM LOCAL SETTING AND EXTENT OF ALL OTHER SERVICES AS SHOWN ON SERVICES LAYOUT PLANS PRIOR TO THE COMMENCEMENT OF ANY WORK. ENGINEER TO BE NOTIFIED UPON DISCREPANCIES.
- CONTRACTOR TO CONFIRM GROUND WATER TABLE AND LEVELS PRIOR TO ANY WORK AND IF ANY DR. WATERING IS REQUIRED.
- ALL NECESSARY APPROVALS FROM RELEVANT AUTHORITIES TO BE OBTAINED PRIOR TO THE COMMENCEMENT OF ANY WORK.
- AS COMPLETED SURVEY TO BE PROVIDED BY LICENSED SURVEYOR.
- FOR CONSTRUCTION, IDENTIFICATION INFORMATION REFER TO GEOTECHNICAL REPORT.
- GEOTECHNICAL INVESTIGATION HAVE BEEN CARRIED OUT. THE INFORMATION CONTAINED IN THE REPORTS IS INFORMATION ON THE BASIS OF THE GEOTECHNICAL INVESTIGATION. THE CONTRACTOR SHALL OBTAIN A COMPLETE DESCRIPTION OF CONDITIONS EXISTING AT OR BELOW GROUND LEVEL, BEFORE THE SITE.
- FOR ALL SITE PREPARATION AND COMPLETION, REFER TO THE ENGINEERS DRAWINGS AND SPECIFICATION.
- THE CONTRACTOR SHALL PROVIDE COMPLETION CERTIFICATE FOR CIVIL AND ALL RELEVANT CERTIFYING THAT THE PROJECT HAS BEEN COMPLETED.
- ALL EXISTING DETACHED HOUSES, BUILDINGS, TREES AND ALL EXISTING SERVICES, MANHOLES, AIR VENTS AND WARE TO BE PROTECTED BY CONTRACTOR.
- THE CONTRACTOR SHALL LIMIT THE MOVEMENT OF EQUIPMENT AND MANPOWER TO THE WORK SITE ONLY.
- EARTHWORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF AS 3799-2007 AND SITE GEOTECHNICAL REPORT.
- THE CONTRACTOR SHALL ALLOW FOR DUST CONTROL MEASURES AS REQUIRED.
- SURFACE DEMOLITION TO BE APPLIED TO THE TOTAL DISTURBED AREA OF THE SITE AS SOON AS POSSIBLE AFTER COMPLETION OF SECTION OF WORK.

LEGEND

- REF: J/P - REFER TO ROOF PLAN FOR SIZE AND LOCATION. STRUCTURAL COLUMN - REFER TO STRUCTURAL ENGINEERS DRAWING FOR DETAIL.
- LEVEL - REFER TO SPECIFICATION.
- AC - AIR CONDITIONING UNIT - REFER TO SPECIFICATION.
- WC - TOILET/STAIR - REFER TO SPECIFICATION.
- VB - VANITY BASIN - REFER TO SPECIFICATION.
- F - FRODO - REFER TO BUILDERS SPECIFICATION.
- UNDER BENCH OVER UNDER WITH HOT PLATE A RANGEROOD OVER - REFER TO BUILDERS SPECIFICATION.
- WASHER - WASHING MACHINE WITH DRAIN OVER - REFER TO SPECIFICATION.
- SHR - SHOWER - REFER TO SPECIFICATION.
- HC - HOSE COCK - REFER TO HYDRAULIC SPEC.
- HTWATER UNIT - REFER TO HYDRAULIC SPECIFICATION.
- DISHWASHER - REFER TO BUILDERS SPECIFICATION.
- S - SINK - REFER TO BUILDERS SPECIFICATION.
- PAINT - REFER TO BUILDERS SPECIFICATION.
- LAUNDRY TROUGH - REFER TO BUILDERS SPECIFICATION.
- MW - MECHANICAL - REFER TO BUILDERS SPECIFICATION.
- B - ONLY STEEL BOLLARD - REFER TO DETAIL.

DESIGN FOR ACCESS AND MOBILITY:

- ALL COMMON AREAS, WALKWAYS, DRIVEWAYS AND AREAS SHALL BE DESIGNED IN ACCORDANCE WITH AS/NZS 15939:2009 BUILDINGS - CONTINGENTS ACCESSIBLE PATHS OF TRAVEL.



11 OF 2017	D	PROPOSED CIVIL OR - HINDON
12 OF 2017	D	PROPOSED CIVIL OR - HINDON
13 OF 2017	D	PROPOSED CIVIL OR - HINDON
14 OF 2017	D	PROPOSED CIVIL OR - HINDON
15 OF 2017	D	PROPOSED CIVIL OR - HINDON
16 OF 2017	D	PROPOSED CIVIL OR - HINDON
17 OF 2017	D	PROPOSED CIVIL OR - HINDON
18 OF 2017	D	PROPOSED CIVIL OR - HINDON
19 OF 2017	D	PROPOSED CIVIL OR - HINDON
20 OF 2017	D	PROPOSED CIVIL OR - HINDON



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1	9444 8011	9444 8011
2	9444 8012	127 HENDONMAN AVE
3	9444 8013	127 HENDONMAN AVE
4	9444 8014	127 HENDONMAN AVE
5	9444 8015	127 HENDONMAN AVE
6	9444 8016	127 HENDONMAN AVE
7	9444 8017	127 HENDONMAN AVE
8	9444 8018	127 HENDONMAN AVE
9	9444 8019	127 HENDONMAN AVE
10	9444 8020	127 HENDONMAN AVE

FLOOR PLAN - LEVEL 1

PROPOSED APARTMENT DEVELOPMENT FOR YARAN GROUP LOT # (M47) CLYDESDALE ST. COMB

DESIGN	MS	DIT-1028
DRAWN	MS	
CHECKED	MS	
SCALE	1:100	
DATE	MARCH 2017	
REVISION	D	
A1	MS	A103

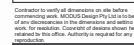
- LEGEND

DESIGN FOR ACCESS AND MOBILITY:

ALL COMMON AREAS INCLUDING
CORRIDORS, ACCESSWAYS,
TRUNCATIONS HAVE BEEN DESIGNED
IN ACCORDANCE WITH AS 1428.1-2009
SECTION 6 - CONTINUOUS
ACCESSIBLE PATHS OF TRAVEL.



1 FFL (LEVEL 2)
SCALE 1 : 100



t 9444 9511
 f 9444 9522
 e info@moda.net.au
 ASN 27 121 224 458
 AUM 424 204 680

FLOOR PLAN - LEVEL 2

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT # (#47) CLYDESDALE ST
COMO

MODUS PROJECT	D17-
DESIGN	
DRAWN	
CHECKED	
SCALE	
DATE	MAR 2007
REVISION	
A1	A

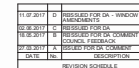
- LEGEND

- #### DESIGN FOR ACCESS AND MOBILITY:

- ALL COMMON AREAS INCLUDING
CORRIDORS, ACCESSWAYS,
TRUNCATIONS HAVE BEEN DESIGNED
IN ACCORDANCE WITH AS1428.1-2009
SECTION 8 - CONTINUOUS
ACCESSIBLE PATHS OF TRAVEL.



SCALE 1 : 100



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 f 9444 9532 127 HERODMAN FOE
 e info@rodex.net.au WENDLEY 6014
 ABN 27 121 224 459 PO BOX 222
 ACN 121 224 459 COMO WA 6952

FLOOR PLAN - LEVEL 3

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT # (#47) CLYDESDALE ST
COMO

MODUS PROJECT		D17-1028
DESIGN		SW
DRAWN		MS
CHECKED		SWNH
SCALE		1: 100
DATE		MARCH 2017
REVISION		D
A1	DWG	A105

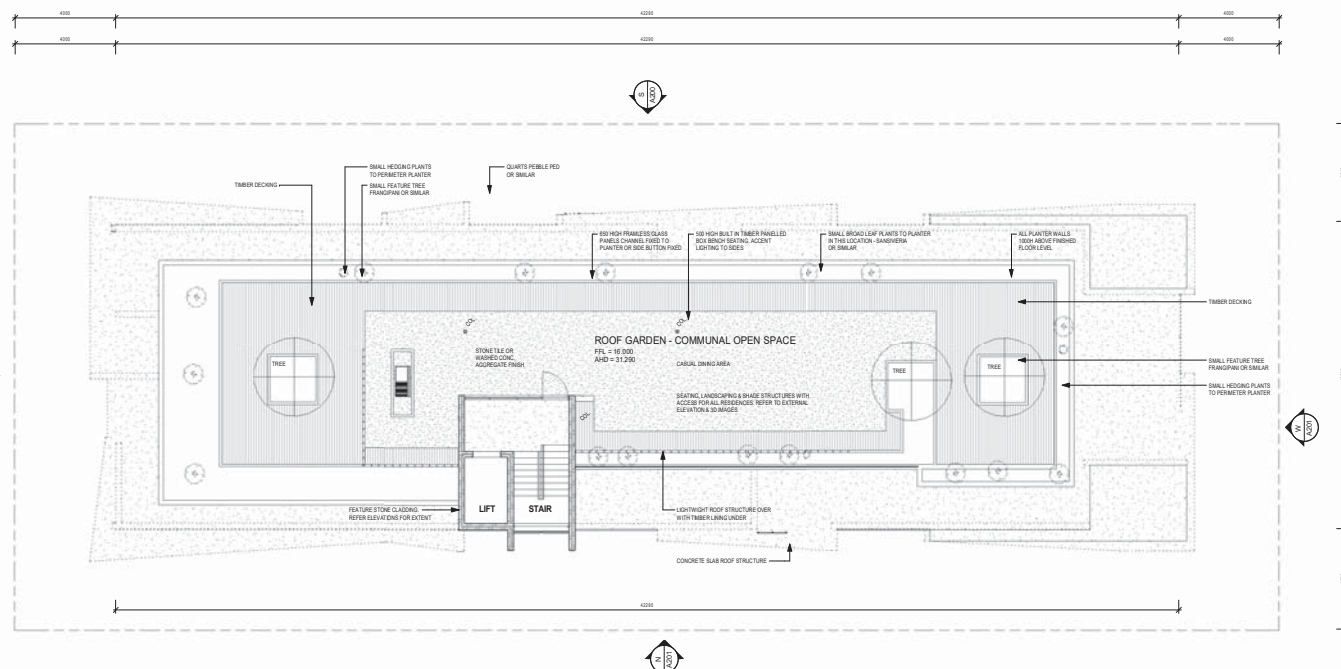
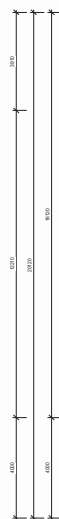
- ALL BUILDING WORKS (CONSTRUCTION AND REPAIRS) TO BE
LIVE UNDER THE CONTRACTOR'S RESPONSIBILITY AND
SUPERVISION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR
FOLLOWING DIRECTIONAL AND TO "MAKE NO AND NO
CHANGE" TO THE CONTRACT. THE CONTRACTOR SHALL
ADHERE TO ALL ARCHITECTURAL DRAWINGS AND TO BE RESPONSIBLE
FOR THE PROTECTING AND PRESERVING THE EXISTING
ELECTRICAL, CIVIL, MECHANICAL AND MECHANICAL
SYSTEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR
ANY DISCREPANCIES ARE TO BE REPORTED TO THE
ARCHITECT IMMEDIATELY.
- ALL STAFF WHO ARE NOT EMPLOYED BY THE
CONTRACTOR FOR ELECTRICAL, PLUMBING, AIR
CONDITIONING, OR MECHANICAL WORK SHALL BE
REQUIRED TO SIGN A STATEMENT OF WORK. THE
CONTRACTOR SHALL BE RESPONSIBLE FOR ALL
STRUCTURAL WORK.
- LARGE SCALE BUILDINGS DRIVING SMALL SCALE
WORK SHALL BE RESPONSIBLE FOR THE PROTECTING
AND PRESERVING THE EXISTING ELECTRICAL, CIVIL,
MECHANICAL AND MECHANICAL SYSTEMS. THE
CONTRACTOR SHALL BE RESPONSIBLE FOR THE
PROTECTING AND PRESERVING THE EXISTING
ELECTRICAL, CIVIL, MECHANICAL AND MECHANICAL
SYSTEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR
ANY DISCREPANCIES ARE TO BE REPORTED TO THE
ARCHITECT IMMEDIATELY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE
PROTECTING AND PRESERVING THE EXISTING
ELECTRICAL, CIVIL, MECHANICAL AND MECHANICAL
SYSTEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR
ANY DISCREPANCIES ARE TO BE REPORTED TO THE
ARCHITECT IMMEDIATELY.
- AS CONTRACTED - SUBMIT TO BE PROVIDED FOR
LONGER THAN THE CONTRACT PERIOD.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE
PROTECTING AND PRESERVING THE EXISTING
ELECTRICAL, CIVIL, MECHANICAL AND MECHANICAL
SYSTEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR
ANY DISCREPANCIES ARE TO BE REPORTED TO THE
ARCHITECT IMMEDIATELY.
- GEOTECHNICAL INVESTIGATIONS HAVE BEEN CONDUCTED
AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE
PROTECTING AND PRESERVING THE EXISTING
ELECTRICAL, CIVIL, MECHANICAL AND MECHANICAL
SYSTEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR
ANY DISCREPANCIES ARE TO BE REPORTED TO THE
ARCHITECT IMMEDIATELY.
- FOR SITE PREPARATION AND CONSTRUCTION
MEASUREMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE
FOR THE PROTECTING AND PRESERVING THE EXISTING
ELECTRICAL, CIVIL, MECHANICAL AND MECHANICAL
SYSTEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR
ANY DISCREPANCIES ARE TO BE REPORTED TO THE
ARCHITECT IMMEDIATELY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE
PROTECTING AND PRESERVING THE EXISTING
ELECTRICAL, CIVIL, MECHANICAL AND MECHANICAL
SYSTEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR
ANY DISCREPANCIES ARE TO BE REPORTED TO THE
ARCHITECT IMMEDIATELY.
- ALL EXISTING STRUCTURES VERIFIED BUILDING
CONSTRUCTION SHALL BE RESPONSIBLE FOR THE
PROTECTING AND PRESERVING THE EXISTING
ELECTRICAL, CIVIL, MECHANICAL AND MECHANICAL
SYSTEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR
ANY DISCREPANCIES ARE TO BE REPORTED TO THE
ARCHITECT IMMEDIATELY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE
PROTECTING AND PRESERVING THE EXISTING
ELECTRICAL, CIVIL, MECHANICAL AND MECHANICAL
SYSTEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR
ANY DISCREPANCIES ARE TO BE REPORTED TO THE
ARCHITECT IMMEDIATELY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE
PROTECTING AND PRESERVING THE EXISTING
ELECTRICAL, CIVIL, MECHANICAL AND MECHANICAL
SYSTEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR
ANY DISCREPANCIES ARE TO BE REPORTED TO THE
ARCHITECT IMMEDIATELY.
- SURFACE DRAINAGE TO BE APPLIED TO THE
TOTAL DISTURBED AREA OF THE SITE. SOON
AFTER THE COMPLETION OF THE PROJECT, THE
CONTRACTOR SHALL BE RESPONSIBLE FOR THE
PROTECTING AND PRESERVING THE EXISTING
ELECTRICAL, CIVIL, MECHANICAL AND MECHANICAL
SYSTEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR
ANY DISCREPANCIES ARE TO BE REPORTED TO THE
ARCHITECT IMMEDIATELY.

LEGEND

- [illegible]

DESIGN FOR ACCESS AND MOBILITY:

- ALL COMMON AREAS INCLUDING
CORRIDORS, ACCESSWAYS,
TRUNCATIONS HAVE BEEN DESIGNED
IN ACCORDANCE WITH AS1428.1-3
SECTION 6 - CONTIGUOUS
ACCESSIBLE PATHS OF TRAVEL.



1 FFL (ROOF GARDEN)
SCALE 1 : 100



02.06.2017	C	ISSUED FOR QA
18.05.2017	B	ISSUED FOR QA COMMENT AS TO COUNCIL FEEDBACK
27.03.2017	A	ISSUED FOR QA COMMENT
DATE	No.	DESCRIPTION
REVISION SCHEDULE		



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f	9444 9522	127 HERODSMAN PI
e	info@moda.net.au	WENDLEY GO

FLOOR PLAN - ROOF GARDEN

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT # (#47) CLYDESDALE ST.
COMO

MODUS PROJECT D17-102

DESIGN 5

DRAWN 1

CHECKED SWIN

SCALE 1:1

DATE MARCH 20

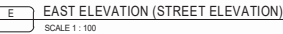
REVISION

A1 DWG A10

- LEGEND

FINISHES SCHEDULE

- | | | |
|---------------|-----|------------|
| MODUS PROJECT | | D17-1028 |
| DESIGN | | SW |
| DRAWN | | MS |
| CHECKED | | SWNH |
| SCALE | | 1: 100 |
| DATE | | MARCH 2017 |
| REVISION | | F |
| A1 | DWG | A200 |



SITE & GENERAL NOTES:

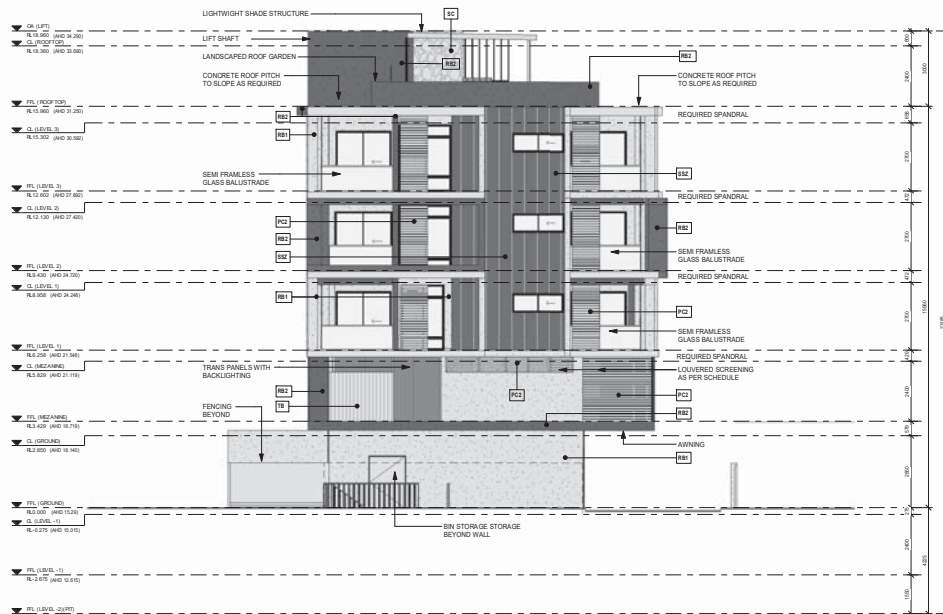
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LEGEND

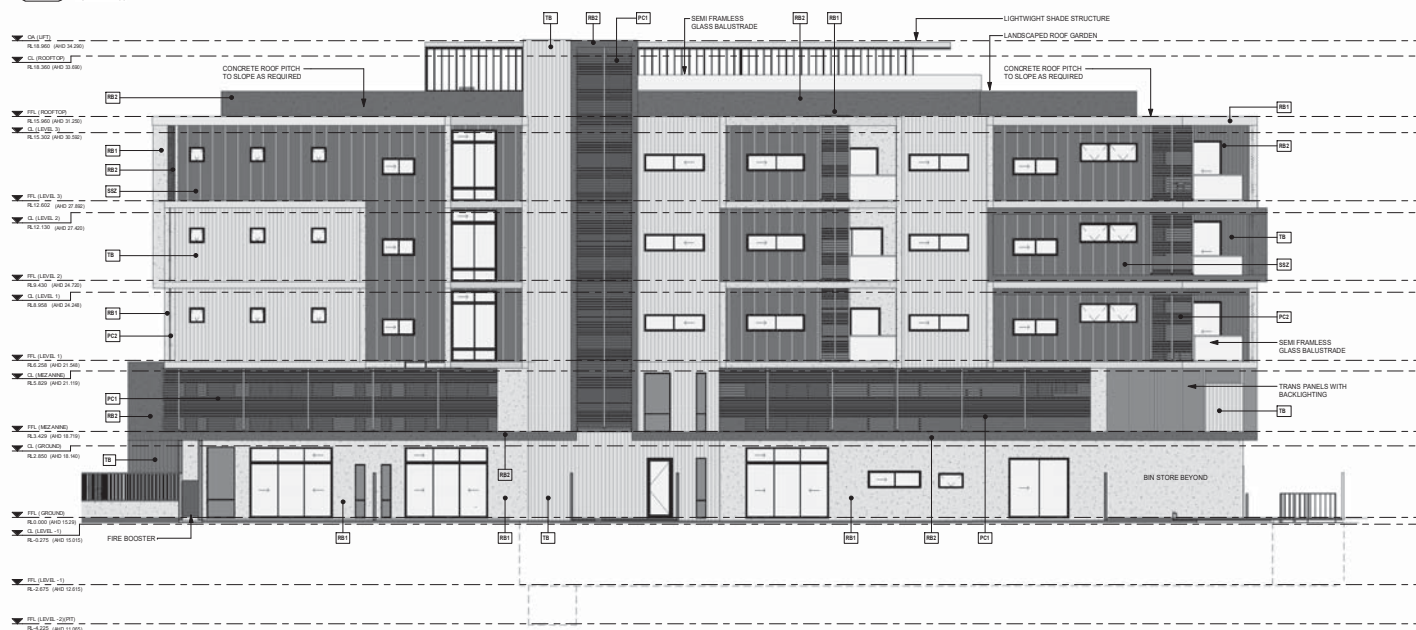
- | | |
|-------|--|
| BRP | DOORPIPS - REFER TO ROOF PLAN FOR SIZE AND LOCATION |
| STR | STRUCTURAL COLUMN - REFER TO STRUCTURAL ELEVATIONS |
| DES | DESIGN LEVEL - REFER TO DESIGN LEVELS |
| AC | DESIGN LEVEL IN RELATION TO AHD |
| AC | AIR CONDITIONING UNIT - REFER TO SPECIFICATION |
| NC | TOILET PAN - REFER TO SPECIFICATION |
| VB | VANITY BASIN - REFER TO SPECIFICATION |
| WB | WATER BATH - REFER TO BUILDERS SPECIFICATION |
| CHENP | UNDER BENCH CHEN UNDER WITH HOT PLATE & RANGHOOD |
| CH | CHINA - REFER TO BUILDERS SPECIFICATION |
| SHR | SHOWER MACHINE WITH GLASS - REFER - REFER TO SPECIFICATION |
| SHR | SHOWER MACHINE WITH GLASS - REFER - REFER TO SPECIFICATION |
| HW | HOUSE COOK - REFER TO HYDRAULIC DWG |
| HW | HOT WATER UNIT - REFER TO HYDRAULIC SPECIFICATION |
| DW | DISH WASHING - REFER TO BUILDERS SPECIFICATION |
| S | SINK - REFER TO BUILDERS SPECIFICATION |
| P | PANTRY - REFER TO BUILDERS SPECIFICATION |
| J | JACKET - REFER TO BUILDERS SPECIFICATION |
| MW | MICROWAVE - REFER TO BUILDERS SPECIFICATION |
| S | SALV. STONE BOLLARD - REFER TO DETAIL |

FINISHES SCHEDULE

- | | |
|------------|--|
| FB1 | RENDERED BRICKWORK TEXTURE FINISH 1 - WHITE |
| FB2 | RENDERED BRICKWORK TEXTURE FINISH 2 - DARK CONTRAST COLOUR |
| SC | FEATURE STONE CLADDING - TRAVERTINE |
| TS | TIMBER LOOK CLADDING - WEATHERTECH WEATHERGROOVE NATURAL 150 VERTICAL |
| SD | STANDING SEAM CLADDING - COLORBOND DARK BRONZE, 38mm PROFILE |
| PC1 | DARK BRONZE COLOUR - VARIOUS APPLICATIONS - POWDERCOATED LOUVRES AND SCREENS DULUX EXTRAS DARK DARK BRONZE, PAINTED SURFACES THERE SHOWN - AWWING GULF |
| PC2 | LIGHT SILVER OR GREY POWDERCOAT FINISH TO LOUVRED SCREENS |
| SC2 | RENDERED FINISH - LIMESTONE LOOK - RANDOM PATTERN |



W WEST ELEVATION
SCALE 1 : 100



N NORTH ELEVATION
SCALE 1 : 100



31.07.2017	F	ISSUED FOR QA - COUNCIL AMENDMENTS
11.07.2017	E	ISSUED FOR QA - WINDOW AMENDMENTS
02.06.2017	D	ISSUED FOR QA
18.05.2017	C	ISSUED FOR QA COMMENT AS PER COUNCIL FEEDBACK
DATE	No.	DESCRIPTION
REVISION SCHEDULE		



Contractor to verify all dimensions on site before commencing work. MOCUS Design Pty Ltd is to be notified of any discrepancies in the dimensions and setting out of work, for resolution. Copyright of designs shown herein is retained by this office. Authority is required for any reproduction.



1 9444 9511 SLITE 1
f 9444 9532 127 HERDSMAN PO
e info@voodu.net.au WENDLEY 6011

ELEVATIONS

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT # (#47) CLYDESDALE ST.
COMO

MODULUS PROJECT D17-1020

DESIGN 2

DRAWN	M
CHECKED	SWIN

SCALE 1 : 50
DATE MARCH 2011

REVISION

A1	2000	A201
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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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APPENDIX 2
WASTE MANAGEMENT PLAN

Waste Management Plan

1. Introduction

This Waste Management Plan has been prepared in accordance with the City of South Perth's *Waste Guidelines for New Developments* (February 2017). It applies to the proposed development of 21 multiple dwellings at Lot 413 (47) Clydesdale Street, Como (**subject site**).

2. Summary of development

The proposed development comprises 21 multiple dwellings (6 x one-bed and 25 x two-bed) in a four-storey development.

3. Anticipated Waste Development

The proposed development is anticipated to generate waste at the following rate:

Use	Refuse (L/week)	Recycling (L/week)	Paper and cardboard (L/week)
6 x 1-bed and 15 x 2-bed apartments	1,980	1,140	1,140

4. Receptacle Size and Quantity

The following waste receptacles will be used:

- 3 x 660L mobile garbage bins (**MGBs**) for refuse, and
- 7 x 660L MGBs recycling, paper and cardboard

5. Bin Storage Area

All MGBs will be stored a bin room located on the ground level of the building at the rear of the building near the basement staircase. Residents can access the bin room via the central lift / staircase, and then via the basement-level staircase.

The bin room is 5.25m x 3.41m, with an area of 17.9m². MGBs will be arranged along either side of the bin room, with access to all MGBs via a central access path.

The bin room will be designed to include the following:

- A smooth impervious floor sloped to a drain connected to the sewer system of not less than 75mm in thickness subject to the City's approval.
- Raised above the finished floor level to prevent stormwater ingress.
- Enough space to facilitate the cleaning of receptacles.
- Walls and floors constructed of a material which facilitates the cleaning.
- Fitted with a self-closing gate.
- Ventilated to a suitable standard as approved by the City. Where mechanical ventilation is to be used, the outlet for vented air will be in a location which will not adversely impact residents.

Waste Management Plan

- Provided with artificial lighting, sensor or switch controlled both internal/external to the room.
- Vermin will be excluded.

Space is available for bulky waste storage in the bin room and at ground level near the bin room.

6. Waste System

No compactor, chute or other waste system is proposed. It will be the responsibility of residents to sort waste into the correct MGBs based on the City's requirements.

7. Collection Method and Frequency and Waste Service Provider

Full MGBs will be presented to the Clydesdale Street verge on collection day for collection by the City's waste collection vehicles (side or rear load). Level and at-grade access is available via the driveway between the bin room and verge. A paved area will be provided on the verge for the placing of the MGBs for collection. The MGBs will be placed in rows two-deep, no more than 5 MGBs wide as viewed from the street.

Refuse is collected weekly (every Wednesday) and recycling is collected fortnightly (every second Wednesday). It will be the responsibility of the strata manager of the complex to arrange for bins to be presented on the verge for collection and returned to the bin room following collection.

The City provides one hard waste and two green waste verge-side collections per year. Residents will be required to leave any bulky waste in the designated bulky waste area; residents must not place bulky waste on the verge at any time. It will be the responsibility of the strata manager of the complex to arrange for bulky (hard) waste and green waste to be moved from the bulky waste storage area to the verge for collection in accordance with the City's requirements.

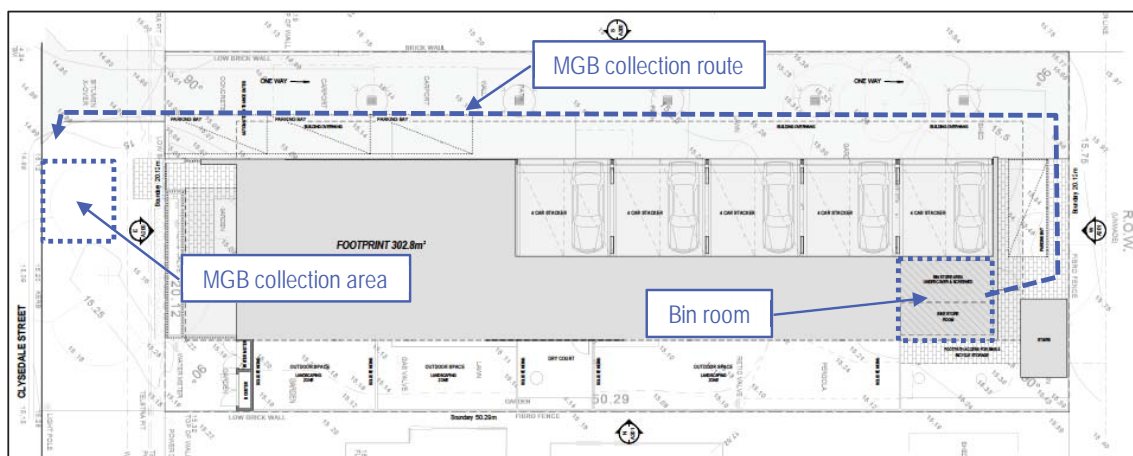


Figure 1 – Waste management site plan



MEMORANDUM

To:	Erik Dybdahl - STATUTORY PLANNING OFFICER, Development Services
From:	Ermiyas Bulli - Environmental Health Officer, Development Services
Date:	5 July 2017
Reference:	CL4/47;11.2017.211.1
Subject:	Proposed 21 Multiple Dwellings within a 5 Level Building – Lot 413 (No 47) Clydesdale Street,

Hi Erik

In assessing this proposal for Environmental Health related comments, the following applies;

Waste Management

- It is noted in the Waste Management Plan (WMP) that the bins storage in the bin compound is sufficient (based on the proposed 6 x 1,100L & 1 x 240 litre bin).
- The City of South Perth Waste Management Plan Guidelines V2 states:
"The space required for collection from the verge must not exceed one third of the Property frontage or 15 receptacles"
Based on the WMP more than one third of the property boundary will be exceeded each fortnight when general waste and recycling bins are presented. The City does not support this. On site waste collection should be considered. Please amend the WMP to ensure compliance.
- It is noted that 1,100L bins will primarily be used. The City's Waste Management Services have suggested the use of 660L bins instead, as they are easier to move up and down driveway. Please confirm if any changes are made to the bin sizes.
- If 660L bins are used, please note that the bins storage must be sufficient within the bin compound.

Noise generally

All mechanical ventilation services, motors and pumps e.g. air conditioners to be located in a position so as not to create a noise nuisance as determined by the *Environmental Protection Act 1986* and *Environmental Protection (Noise) Regulations 1997*.

Car park Ventilation

Car park ventilation to be designed to ensure that the carbon monoxide build up in the parking area does not exceed 50 ppm per hour in accordance with the *Health Act (Carbon Monoxide) Regulations 1975*.

Regards

Ermiyas Bulli

ENVIRONMENTAL HEALTH OFFICER, DEVELOPMENT SERVICES

From: Aidan Gorjy <aidan@yaran.com.au>
Sent: Wednesday, 16 August 2017 10:21 AM
To: Erik Dybdahl
Cc: Ross Underwood; Faryar Gorjy
Subject: RE: HPRM: RE: Environmental Health related comments - Record Number D- 17- 47368 - Lot 413 (No 47) Clydesdale Street.

Hi Erik,

Confirming we will ensure the driveway will be built suitable for heavy vehicles (20 tons).

Regards

AIDAN GORJY BCom (Property)
Project Manager

YARAN PROPERTY GROUP

T 08 9466 8802

M 0410 150 350

F 08 9466 8880

E aidan@yaran.com.au

W www.yaran.com.au

A 23 Lyall St South Perth WA 6151



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From: Erik Dybdahl [mailto:erikd@southperth.wa.gov.au]
Sent: Wednesday, 16 August 2017 10:11 AM
To: Aidan Gorjy <aidan@yaran.com.au>
Cc: Ross Underwood <ross@planningsolutions.com.au>
Subject: FW: HPRM: RE: Environmental Health related comments - Record Number D- 17- 47368 - Lot 413 (No 47) Clydesdale Street.

Hi Aidan,

Are you able to confirm the below for Craig?

Regards,

Erik Dybdahl

Senior Planning Officer | Development Services | City of South Perth
Civic Centre, Cnr Sandgate Street & South Terrace, SOUTH PERTH WA 6151
Phone: 9474 0777 | Fax: 9474 2425 | Web: <http://www.southperth.wa.gov.au>



From: Craig Barker
Sent: Tuesday, 15 August 2017 6:41 AM
To: Erik Dybdahl; Ermiyas Bulli
Cc: Jason Jenke
Subject: HPRM: RE: Environmental Health related comments - Record Number D- 17- 47368 - Lot 413 (No 47) Clydesdale Street.

Hi Ermiyas and Erik,

Happy with the amended comments however would like information on clearance of building and that the driveway will be built suitable for heavy vehicle (20 tons)

Regards

Craig Barker

Waste and Fleet Coordinator

P 9474 0936 **M** 0415 093 608 craigb@southperth.wa.gov.au
199 Thelma Street ,Como 6152



From: Erik Dybdahl
Sent: Monday, 14 August 2017 1:42 PM
To: Ermiyas Bulli; Craig Barker
Cc: Jason Jenke
Subject: RE: Environmental Health related comments - Record Number D- 17- 47368 - Lot 413 (No 47) Clydesdale Street.

Hi Ermiyas and Craig,

Further to your comments, the applicant has now revised the WMP again.

Are you able to review and confirm whether the City endorses the WMP.

Regards,

Erik Dybdahl

Senior Planning Officer | Development Services | City of South Perth
Civic Centre, Cnr Sandgate Street & South Terrace, SOUTH PERTH WA 6151
Phone: 9474 0777 | Fax: 9474 2425 | Web: <http://www.southperth.wa.gov.au>



From: Ermiyas Bulli
Sent: Friday, 11 August 2017 2:48 PM
To: Erik Dybdahl
Cc: Jason Jenke
Subject: Environmental Health related comments - Record Number D- 17- 47368 - Lot 413 (No 47) Clydesdale Street.

Hi Erik,

Please see the following comments from City's Waste Coordinator.

Regards

Ermiyas Bulli

Environmental Health Officer

P 9474 0777 **E** ermiyasb@southperth.wa.gov.au
Cnr Sandgate St & South Tce, South Perth WA 6151



From: Craig Barker
Sent: Thursday, 10 August 2017 9:45 AM
To: Ermiyas Bulli
Cc: Jason Jenke
Subject: RE: Environmental Health related comments - Record Number D- 17- 47368 - Lot 413 (No 47) Clydesdale Street.

Hi Ermiyas ,

For the developer to propose placing 10 x 660l bins on verge ,I have estimated that they will need to have a hardstand area of 5m x 4m on the verge .No consideration has been given to the mature tree ,how narrow Clydesdale Street is and will the hardstand area for bin become a parking area .

Has the developer consider weekly recycling so he could reduce 3 bins .
Also due to this block having ROW access ,the truck could drive down the side driveway into the ROW where the bins could be serviced from the rear of the property (either the bin room) and drive off forward and exit onto Davilak ST. Clearance of building will be required and driveway will need to be suitable for heavy vehicle (20 tons)

Regards

Craig Barker

Waste and Fleet Coordinator

P 9474 0936 **M** 0415 093 608 craigb@southperth.wa.gov.au

199 Thelma Street ,Como 6152



From: Ermiyas Bulli

Sent: Wednesday, 9 August 2017 10:21 AM

To: Craig Barker

Cc: Jason Jenke

Subject: FW: Environmental Health related comments - Record Number D- 17- 47368 - Lot 413 (No 47) Clydesdale Street.

Hi Craig,

As discussed with Jason, please find attached amendments for 47 Clydesdale Street. Thank you Craig.

Regards

From: Erik Dybdahl

Sent: Tuesday, 8 August 2017 4:14 PM

To: Ermiyas Bulli

Subject: RE: Environmental Health related comments - Record Number D- 17- 47368 - Lot 413 (No 47) Clydesdale Street.

Hello Ermiyas,

As part of the comments you provided (D-17-47368) on this application you requested some amendments to the waste management plan provided. As part of their response to our further information request they have made some amendments to the Waste Management Plan I hope in line with your comments.

Could you please review the amended Waste Management Plan, Appendix 2 of the attached document and confirm if it is suitable for endorsement or provide further comment?

Kind Regards,

Erik Dybdahl

Senior Planning Officer | Development Services | City of South Perth

Civic Centre, Cnr Sandgate Street & South Terrace, SOUTH PERTH WA 6151

Phone: 9474 0777 | Fax: 9474 2425 | Web: <http://www.southperth.wa.gov.au>



From: Ermiyas Bulli
Sent: Wednesday, 5 July 2017 2:28 PM
To: Erik Dybdahl
Subject: Environmental Health related comments - Record Number D- 17- 47368 - Lot 413 (No 47) Clydesdale Street.

Hi Erik,

Please find Environmental Health related comments for the proposed 21, Multiple Dwellings within a 5 Level Building located at Lot 413 (No 47) Clydesdale Street on **Record Number D- 17- 47368**.
Thanks Erik.

Regards,

Ermiyas Bulli

Environmental Health Officer

P 9474 0777 **E** ermiyasb@southperth.wa.gov.au
Cnr Sandgate St & South Tce, South Perth WA 6151



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Application for Planning Approval Requiring Engineering Comments



TO:	Engineering Design
FROM:	Erik Dybdahl Statutory Planning Officer, Development Services
DATED:	14 June 2017

PROPERTY ADDRESS:	Lot 413 (No. 47) Clydesdale Street, Como
PROPOSAL:	21 Multiple Dwellings Within A 5-Level Building
APPLICATION DATE:	14 June 2017
ID NUMBER:	11.2017.211.1
PLAN LOCATIONS:	Development Plans - D-17-47119 Development Report – D-17-47116

GENERAL COMMENT:	Yes
VEHICLE MOVEMENTS:	Yes
ONSITE PARKING:	Yes
STREET TREES:	Yes
CROSSOVER DESIGN:	Yes
VERGE TREATMENTS:	No
GROUND LEVELS:	No
LOWEST POINT OF STREET: (DRAINAGE ISSUE)	No
BUS STOP RELOCATION:	No
OTHER:	No

ENGINEERING COMMENTS IN RELATION TO ABOVE:

Right of Way

The development proposes access from the property via the rear: 5m wide, City of South Perth Right of Way (ROW) No. 121. The City will need the developer to upgrade the seal and drainage along the entire 80m length or, should they not seek access, provide 50% of the construction cost for the ROW area just opposite their property. These funds will be held by the City until a suitable level of funding is available for it to complete the works. The funds required will be $20.12 \times 5/2 \times 100 = \$5,030$.

If the development chooses to seal the ROW for their development the design will need to be an inverted crown pavement with soak wells centred along the route. It will require a 200mm base with an asphalt seal with mountable kerbing to match adjacent property levels. Based on previous experience, the City will need to undertake the works themselves on a cost recovery basis. The City estimates that the works will be in the order of \$55,000 and will need to be funded prior to BA approval.

The developer is to ensure a suitable turning envelope is provided for vehicles turning into the ROW from their internal driveway.

Crossing Design

A crossing application must be submitted and approved by Engineering Infrastructure prior to construction. The crossing will be checked for compliance during and post construction. The crossing must be constructed in-line with the City's crossing requirements, which are provided in the Management Practice M353 'Crossing Construction'.

The crossing shall be 500mm of the property boundary and ensure that gutter and verge flow cannot drain from the verge into the development. The maximum crossing width can be 6m, but to maximise road

Application for Planning Approval Requiring Engineering Comments



parking it is suggested that a minimum width (3m) crossing is installed.

Property Line Levels

The verge levels are not to be lowered or altered in any way to accommodate the development.

Street Trees

Care is to be taken to retain the existing verge tree.

Temporary Crossing

It is a requirement of the Public Places and Local Government Property Local Law that in the absence of any formal crossing to a new building, a temporary crossing is to be constructed to the site. This temporary crossing will then be the only means of access to the site. The uncontrolled access to new building sites results in loose sand drifting constantly onto the roadway. The loose sand accumulates in the drainage system and eventually into the detention system prior to the wetlands. The minimum treatment for a temporary crossing is a sealed road base surface.

Stormwater

The development is located within the Manning Drainage Precinct and classified as a Type 2 Residential Building as defined in Policy P354 (Stormwater Drainage Requirements for Proposed Buildings) and Management Practice M354. This precinct allows for the discharge of stormwater into soakwells. The development will need to ensure that all stormwater falling on site is collected, contained and disposed of on site.

A separate stormwater disposal application is required to detail all conditions relating to the design and installation of stormwater apparatus, as well as a Certification from the designer that the treatment satisfies contemporary standards and/or the requirements of the Management Practice. A rough desktop calculation shows the need for at least 23m³ of belowground storage equivalent to 5x 1.8dia x 1.8 deep soak wells.

Assuming these will be installed along the driveway, the development driveway shall be paved to ensure stormwater is directed into such. The developer will need to ensure that stormwater will not drain from the verge into the property and vice versa, and provide areas of aboveground storage to provide for higher than 10ARI's storms.

An approved 'Stormwater Drainage for Proposed Buildings' application is required prior to construction. This application will detail all conditions relating to the stormwater design and installation and/or the requirements of the Management Practice. Please see the link below to reference the above mentioned management practices:

<https://southperth.wa.gov.au/docs/default-source/6-about-us/council/policies-delegations/housing-and-land-uses/p354-stormwater-drainage-requirements-for-proposed-buildings.pdf>

Name:	S Foster	Date:	29 th June 2017
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Application for Planning Approval Network Operations Comments



TO:	Network Operations
FROM:	Erik Dybdahl Statutory Planning Officer, Development Services
DATED:	14 June 2017

PROPERTY ADDRESS:	Lot 413 (No. 47) Clydesdale Street, Como
PROPOSAL:	21 Multiple Dwellings Within A 5-Level Building
APPLICATION DATE:	14 June 2017
ID NUMBER:	11.2017.211.1
PLAN LOCATIONS:	Development Plans - D-17-47119 Development Report – D-17-47116

GENERAL COMMENT:	Yes
VEHICLE MOVEMENTS:	No
ONSITE PARKING:	No
STREET TREES:	No
CROSSOVER DESIGN:	No
VERGE TREATMENTS:	No
GROUND LEVELS:	No
LOWEST POINT OF STREET: (DRAINAGE ISSUE)	No
BUS STOP RELOCATION:	No
OTHER:	No

NETWORK OPERATIONS COMMENTS IN RELATION TO ABOVE:

Transport Impact Plan

The City accepts Traffic Impact and Parking Assessment report (v4 - Final) provided (D-17-47116).

Construction Management Plan

No Construction Management Plan (CMP) has been received.

A CMP will be required to be submitted to Engineering Infrastructure for approval. The CMP will address all of the following in order. This list is not exhaustive and may require other matters not listed to be considered.

The CMP will provide as a minimum:

- An appropriately detailed Traffic Management Plan (TMP) that is endorsed by an accredited Road Traffic Manager (RTM);
- The Traffic Management Plan that ensures no works including substantial deliveries of building materials are undertaken during the peak morning hours (7am to 9am);
- Details of how and where building materials will be stored before use on site as only the Park Street verge will be potentially available;
- An acknowledgement that excavation works (within 3 metres of the road edge) will require 'work zone barriers';
- Detailed analysis of how the adjacent road network will best operate during construction;
- Project time-lines with appropriate mile-stones (to allow for appropriate coordination and communication to surrounding stakeholders);

Application for Planning Approval

Network Operations Comments



- Details of proposed treatments for through traffic and construction vehicles in and around site (to allow Ranger Services and Traffic & Design jointly coordinate the best parking outcomes); and
- The proposed route for trucks servicing the site including lay over areas where required (to allow Ranger Services and Traffic & Design jointly coordinate the most appropriate routes for trucks).

Stormwater Drainage

Localised discharge into the subsoil is the required method of disposal of stormwater for this development. As a five level development the contributing area for the calculation of stormwater will be the plan area of the site plus 50% of the greater wall area i.e. 1140 square metres being site area 800 square metres plus 50% of wall area (42 metres by 16 metres). The number and size of soak wells is to be determined by a consulting hydraulics engineer using the contributing area multiplied by an industry acceptable coefficient. The total soak well capacity is expected to be about 20 cubic metres. The bottom of the soak well is to be minimum 500mm above the highest winter water table level.

Right of Way 101 off Davilak Street

As the Right of Way (ROW) at the rear of the development is to be used for egress from the property and particularly for waste collection vehicles, the developer will pave and drain to the satisfaction of Engineering Infrastructure all of the ROW to the rear of the property. The ROW may be constructed as an extension of the internal driveway or other materials as agreed with Engineering.

Waste Collection

In general waste collection will be on site. No bins are to be placed on the verge for collection. Collection vehicles must access from Clydesdale Street and drive through to exit in a forward direction via the constructed ROW. Provision must be made for both recyclables and for general waste.

Additional comment will be provided by the Coordinator Environmental Health Services in association with the Waste Coordinator.

Mechanical Parking Devices (Car Stackers)

Based on the information supplied it is very difficult to assess whether the proposed development complies with the requirements of Planning Policy P350.03 – Car parking Access Siting and Design and specifically Clause 8.1 Mechanical Parking Devices. The expectation from the proposed layout would be that the system employed will be an “independent” system thus allowing a vehicle to be parked or retrieved without having to affect another. It therefore requires the awning height to be in excess of 4.5 metres to enable two vehicles of 2.1 metre height to be stacked.

Four visitor parking bays are provided at ground level and twenty as “stacker bays”. Policy P350.03 requires 20% of the total bays to be provided to be “provided without requiring the use of mechanical parking device”.

Developer Contribution

Engineering Infrastructure has identified in excess of \$11 million dollars of work required to public infrastructure additions within the area between Canning Highway and Manning Road. Substantially the improvements relate to road widenings where parking and cycling requirements

Application for Planning Approval Network Operations Comments



are in conflict, the construction of roundabouts to provide better intersection control, and traffic signal upgrades to improve pedestrian connectivity across the major roads. Based on the area affected within this sector a unit rate of \$33 per square metre of development lot could be applied as a contribution.

With a site area of 1012 square metres the developer could be requested to contribute \$33,396 for future Infrastructure Improvement works.

Name:	S Foster	Date:	3 rd August 2017
-------	----------	-------	-----------------------------

Waste Management Plan

1. Introduction

This Waste Management Plan has been prepared in accordance with the City of South Perth's *Waste Guidelines for New Developments* (February 2017). It applies to the proposed development of 21 multiple dwellings at Lot 413 (47) Clydesdale Street, Como (**subject site**).

2. Summary of development

The proposed development comprises 21 multiple dwellings (6 x one-bed and 25 x two-bed) in a four-storey development.

3. Anticipated Waste Development

The proposed development is anticipated to generate waste at the following rate:

Use	Refuse (L/week)	Recycling (L/week)	Paper and cardboard (L/week)
6 x 1-bed and 15 x 2-bed apartments	1,980	1,140	1,140

4. Receptacle Size and Quantity

The following waste receptacles will be used:

- 3 x 660L mobile garbage bins (**MGBs**) for refuse, and
- 4 x 660L MGBs recycling, paper and cardboard

5. Bin Storage Area

All MGBs will be stored a bin room located on the ground level of the building at the rear of the building near the basement staircase. Residents can access the bin room via the central lift / staircase, and then via the basement-level staircase.

The bin room is 5.25m x 3.41m, with an area of 17.9m². MGBs will be arranged along either side of the bin room, with access to all MGBs via a central access path.

The bin room will be designed to include the following:

- A smooth impervious floor sloped to a drain connected to the sewer system of not less than 75mm in thickness subject to the City's approval.
- Raised above the finished floor level to prevent stormwater ingress.
- Enough space to facilitate the cleaning of receptacles.
- Walls and floors constructed of a material which facilitates the cleaning.
- Fitted with a self-closing gate.
- Ventilated to a suitable standard as approved by the City. Where mechanical ventilation is to be used, the outlet for vented air will be in a location which will not adversely impact residents.

Waste Management Plan

- Provided with artificial lighting, sensor or switch controlled both internal/external to the room.
- Vermin will be excluded.

Space is available for bulky waste storage in the bin room.

6. Waste System

No compactor, chute or other waste system is proposed. It will be the responsibility of residents to sort waste into the correct MGBs based on the City's requirements.

7. Collection Method and Frequency and Waste Service Provider

Refuse and recycling is collected by the City weekly (every Wednesday).

The City's waste collection vehicles will travel through the subject site via Clydesdale Street and stop in the right of way (R.O.W.) near the bin room. The City will take the MGBs from the bin room for transfer of waste to the collection vehicle, and return the empty MGBs to the bin room. The waste collection vehicles will then continue along the R.O.W to Davilak Street.

The City provides one hard waste and two green waste verge-side collections per year. Residents will be required to leave any bulky waste in the designated bulky waste area; residents must not place bulky waste on the verge at any time. It will be the responsibility of the strata manager of the complex to arrange for bulky (hard) waste and green waste to be moved from the bulky waste storage area to the verge for collection in accordance with the City's requirements.

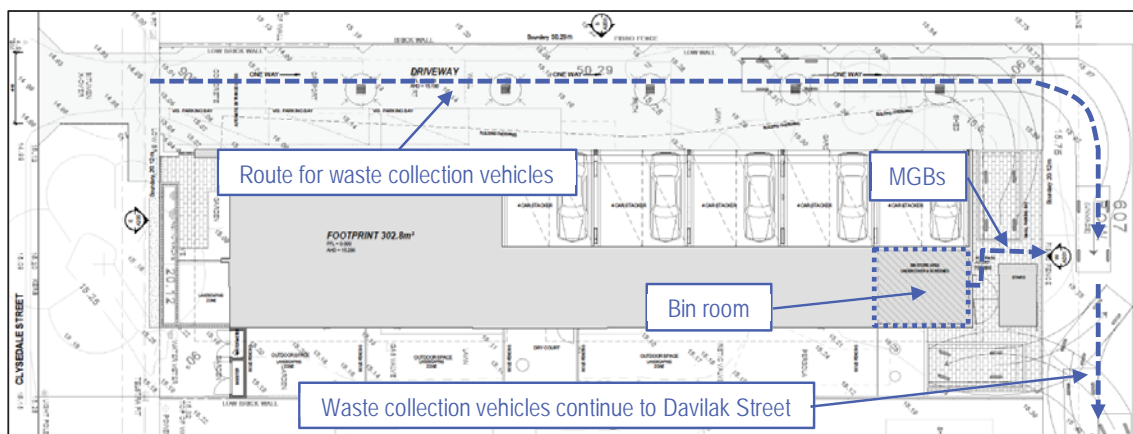


Figure 1 – Waste management site plan

Application for Planning Approval Requiring Street Tree Comments



TO:	Landscapes Officer, City Environment
FROM:	Erik Dybdahl Statutory Planning Officer, Development Services
DATED:	14 June 2017

PROPERTY ADDRESS:	Lot 413 (No. 47) Clydesdale Street, Como
PROPOSAL:	21 Multiple Dwellings Within A 5-Level Building
APPLICATION DATE:	14 June 2017
ID NUMBER:	11.2017.211.1
PLAN LOCATION:	Development Plans - D-17-47119 Development Report - D-17-47116

OWNER:	Mr R P Lane & Mrs L A Lane
POSTAL ADDRESS:	C/- R W Smith, 8 Calley Drive, LEEMING WA 6149
APPLICANT:	Clydesdale 47 Pty Ltd
PHONE:	9466 8802
EMAIL:	aidan@yaran.com.au
POSTAL ADDRESS:	23 Lyall Street, SOUTH PERTH WA 6151

THE DEVELOPMENT PROPOSES:

☒ construction of crossover less than 3.0m from existing street tree ☐ removal of City tree(s)

CITY ENVIRONMENT TO COMPLETE

EXISTING SPECIES: JACARANDA	HEIGHT: 10M	DBH: .3M
STREET TREE MANAGEMENT PLAN SPECIES: JACARANDA	TREE ID: 2532	

CONDITION: ☐ GOOD ☒ FAIR ☐ POOR ☐ DEAD UNDER POWERLINES: ☐ YES ☒ NO

COMMENT: LARGE HEALTHY TREE WITH SOME DEAD WOOD

RECOMMENDATION:

REMOVE TREE ☐ YES ☒ NO REPLACEMENT TREE ☐ YES ☒ NO ALTER CROSSOVER ☐ YES ☒ NO

MIN CLEARANCE FROM TREE TO CROSSOVER IF TREE RETAINED 3 METRES PRUNING REQUIRED TO GIVE 4M CLEARANCE ☐

COST TO APPLICANT: REMOVAL OR PRUNING COST: (AS PER TENDERS) _____
STUMP GRINDING: (AS PER TENDER) _____
REPLACEMENT: (\$190 PER 100 LTR TREE) _____
** POST PLANTING MAINTENANCE IF APPLICABLE: (\$300) _____
ADMINISTRATION: (\$100) _____
DESIRABLE SPECIES - ADD AMENITY VALUATION: _____
GST: _____

** MAINTENANCE FEE CAN BE WAIVED IF OWNER AGREES TO TAKE RESPONSIBILITY FOR WATERING TOTAL: _____

CONDITIONS: CONSTRUCT AS PER PLAN. NO GLEDITSIA'S TO BE PLANTED ON VERGE

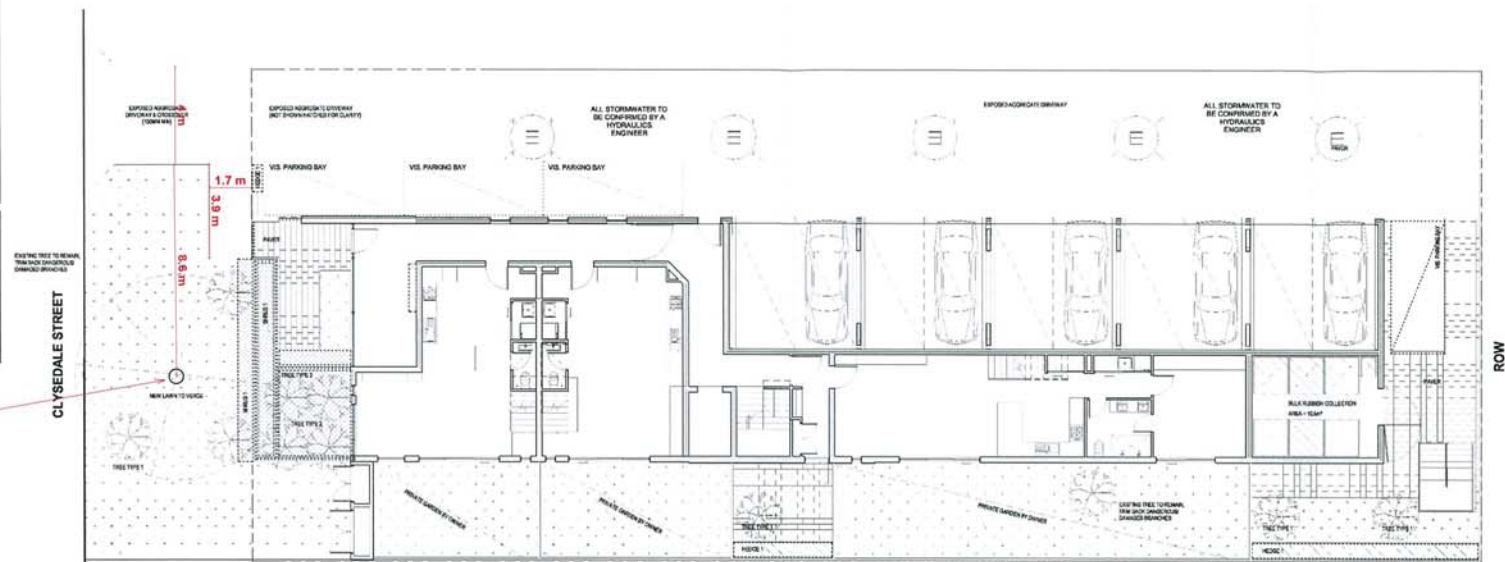
PARKS	APPLICANT AGREED TO CONDITIONS: <input type="checkbox"/>	FEE TO: APPLICANT <input type="checkbox"/> OR OWNER <input type="checkbox"/>	N/A
	DEBTORS REQ. TO PLANNING: N/A	RECOMMENDATION NOTED ON TREE MANAGER:	N/A
	DELEGATED AUTHORITY: <input type="checkbox"/>	FEE PAID NOTED ON STREET TREE PAYMENT LIST	N/A
PLANNING	DEBTORS REQ. TO FINANCE: <input type="checkbox"/>	PARKS NOTIFIED IF PLAN REFUSED:	<input type="checkbox"/>

SIGNED:
INSPECTING OFFICER

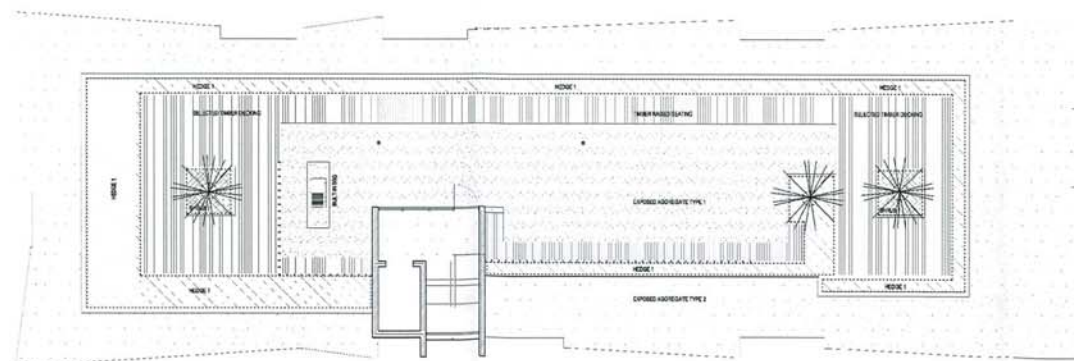
DATE: 19-6-17

SIGNED:
MANAGER PARKS AND ENVIRONMENT

DATE: 19/6/17

[illegible][illegible]

1 LANDSCAPE LAYOUT - GROUND
SCALE 1 : 100



2 LANDSCAPE LAYOUT - ROOF GARDEN
SCALE 1 : 100



12.25.2017	B	ISSUED FOR CA
16.25.2017	C	ISSUED FOR CA COMMENTARY COUNCIL PRESIDENT
18.24.2017	B	ISSUED FOR CA COMMENT
17.23.2017	A	ISSUED FOR CA COMMENT
24.12	NA	DECEMBER



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1 0684 9017 SUITE 12
 2 0684 9022 127 HARRISON RD
 3 e@protonmail.ch MILWAUKEE WI 53214
 ADDR 27 121 224 436 PO BOX 202

SITE PLAN - LANDSCAPE

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT # (H47) CLYDESDALE ST.
COMO

MOORE PROJECT	D17-1029
DESIGN	SM
DRAWING	402
CHECKED	SM
SCALE	1" = 100'
DATE	MARCH 2011



Metro Central Joint Development Assessment Panel Agenda

Meeting Date and Time: 31 January 2017; 3:30pm
Meeting Number: MCJDAP/221
Meeting Venue: City of Melville
10 Almondbury Road
Booragoon

Attendance

DAP Members

Mr Charles Johnson (Presiding Member)
Mr Christopher Antill (Deputy Presiding Member)
Mr Luigi D'Alessandro (Specialist Member)
Cr Cameron Schuster (Local Government Member, City of Melville)
Cr Nicole Foxton (Local Government Member, City of Melville)
Cr Colin Cala (Local Government Member, City of South Perth) - *item 9.1 withdrawn*
Cr Glenn Cridland (Local Government Member, City of South Perth) - *item 9.1 withdrawn*

Officers in attendance

Mr Mark Scarfone (City of Melville)
Ms Beryl Foster (City of Melville)

Local Government Minute Secretary

Ms Antonetta Papalia (City of Melville)

Applicants and Submitters

Ms Belinda Moharich (Moharich and More)
Mr Aidan Gorjy (Yaran)
Mr Dan Lees (TPG Town Planning, Urban Design & Heritage) - *item 9.1 withdrawn*
Mr SS Chang (SS Chang Architects)
Mr Scott Cameron (Finbar) - *item 9.1 withdrawn*
Mr Joseph Keane
Ms Vicki Redden - *item 9.1 withdrawn*
Mr Craig Dermer - *item 9.1 withdrawn*
Ms Carol Roe - *item 9.1 withdrawn*
Mr Michael Hotchkin (Hotchkin Hanly Lawyers) - *item 9.1 withdrawn*
Ms Helen Cook
Mr Sarino Martelli
Mr Dane Chandler (Francis Burt Chambers)
Mr Ross Underwood (Planning Solutions)
Mr Farya Gorjy (Yaran Property Group)

Members of the Public / Media

Nil



1. Declaration of Opening

The Presiding Member declares the meeting open and acknowledges the past and present traditional owners and custodians of the land on which the meeting is being held.

2. Apologies

Nil

3. Members on Leave of Absence

Nil

4. Noting of Minutes

Note the Minutes of meeting No.220 held on the 25 January 2017 were not available at the time of Agenda preparation.

5. Declarations of Due Consideration

Any member who is not familiar with the substance of any report or other information provided for consideration at the DAP meeting must declare that fact before the meeting considers the matter.

6. Disclosure of Interests

Nil

7. Deputations and Presentations

7.1 Mr Phillip Courtney (Courtney Computer Consultancy; PerthAirQuality) presenting against the application at Item 9.1. The presentation will address the traffic. *This item has been withdrawn.*

7.2 Ms Vicki Redden presenting against the application at Item 9.1. The presentation will address the extension of time request. *This item has been withdrawn.*

7.3 Mr Craig Dermer presenting against the application at Item 9.1. The presentation will address the extension of time request. *This item has been withdrawn.*

7.4 Ms Carol Roe presenting against the application at Item 9.1. The presentation will address the extension of time request. *This item has been withdrawn.*

7.5 Mr Dan Lees (TPG Town Planning Urban Design & Heritage) presenting for the application at Item 9.1. The presentation will outline the reasons for the 12 month extension. *This item has been withdrawn.*

7.6 Mr Michael Hotchkin (Hotchkin Hanly Lawyers) presenting for the application at Item 9.1. The presentation will outline the legal basis for the extension of time request. *This item has been withdrawn.*



- 7.7 Mr Scott Cameron (Finbar) presenting for the application at Item 9.1. The presentation will outline the reasons for the 12 month extension. *This item has been withdrawn.*
- 7.8 Mr Joseph Keane presenting against the application at Item 10.2.
- 7.9 Ms Helen Cook presenting against the application at Item 10.2. The presentation will address the car parking.
- 7.10 Mr Sarino Ross Martelli presenting against the application at Item 10.2. The presentation will impact on the resident's lives.
- 7.11 Mr Dane Chandler (Francis Burt Chambers) presenting against the application at Item 10.2. The presentation will address the number of storeys and the amenity.
- 7.12 Ms Belinda Moharich (Moharich and More) presenting for the application at Item 10.2. The presentation will support the RAR recommendation and respond to issues raised by submitters.
- 7.13 Mr Ross Underwood (Planning Solutions) presenting for the application at Item 10.2. The presentation will support the RAR recommendation and respond to issues raised by submitters.
- 7.14 Mr Farya Gorjy (Yaran Property Group) presenting for the application at Item 10.2. The presentation will support the RAR recommendation and respond to issues raised by submitters.

8. Form 1 – Responsible Authority Reports – DAP Applications

Nil

9. Form 2 – Responsible Authority Reports – Amending or cancelling DAP development approval

- 9.1 Property Location: Civic Triangle" site, South Perth:
Lot 1 (No. 12) Labouchere Road,
Lot 88 (previously Lot 1092) (No. 14-16)
Labouchere Road,
Lot 1 (No. 18) Labouchere Road,
Lot 500 (No. 1) Mends Street,
Lot 2 (No. 3) Mends Street,
Lot 2 (No. 97) Mill Point Road,
Lot 3 (No. 99) Mill Point Road,
Lot 464 (No. 101) Mill Point Road and
Lot 432 (No. 103) Mill Point Road.
- Application Details: Proposed Amendment (Validity of Approval) to
Approved 'Civic Heart' Mixed Development
- Applicant: South Perth Civic Triangle Pty Ltd
- Owner: South Perth Civic Triangle Pty Ltd
- Responsible authority: City of South Perth
- DoP File No: DAP/15/00721

This item has been withdrawn.



10. Appeals to the State Administrative Tribunal

- | | | |
|-------------|------------------------|---|
| 10.1 | Property Location: | Lot 1061 (No. 22) Kintail Road, Applecross |
| | Application Details: | Mixed use development including 24 Multiple Dwellings, a non-residential tenancy and associated car parking |
| | Applicant: | Castelli Group |
| | Owner: | 22 Kintail Road Pty Ltd |
| | Responsible authority: | City of Melville |
| | DoP File No: | DAP/15/00894 |
|
 | | |
| 10.2 | Property Location: | 21 Kishorn Road, APPLECROSS WA 6153 |
| | Application Details: | Four Storey (with Basement and Roof terrace) development comprising 21 multiple dwellings |
| | Applicant: | Yaran Property Group |
| | Owner: | Kishorn 21Pty Ltd |
| | Responsible authority: | City of Melville |
| | DoP File No: | DAP/16/01071 |

11. General Business / Meeting Closure

In accordance with Standing Order 7.3 only the Presiding Member may publicly comment on the operations or determinations of a DAP and other DAP members should not be approached to make comment.



State Administrative Tribunal Reconsideration

Responsible Authority Report

(Regulation 12)

Property Location:	21 Kishorn Road, APPLECROSS WA 6153
Application Details:	Four Storey (with Basement and Roof terrace) development comprising 21 multiple dwellings
DAP Name:	Joint Metro Central Development Assessment Panels
Applicant:	Yaran Property Group
Owner:	Kishorn 21 Pty Ltd
LG Reference:	DA-2016-733
Responsible Authority:	City of Melville
Authorising Officer:	Steve Cope Director Urban Planning
Department of Planning File No:	DAP/16/1071
Report Date:	23 January
Application Receipt Date:	13 December
Application Process Days:	41 days
Attachment(s):	<ol style="list-style-type: none">1. Development Plans (received 7 September 2016)2. Transport Statement (received 4 July 2016)3. Green Star Assessment report (dated 22 June 2016)4. Canning Bridge Activity Centre Plan Design Review Panel Minutes Summary5. Applicants letter to State Solicitors Office (received 13 January 2017)6. Applicants Legal Advise (received 13 January 2017)7. Applicants Development Assessment (received 13 January 2017)8. Development Architectural Renders (received 13 January 2017)9. Traffic Impact and Parking Assessment Report (received 13 January 2017)10. Noise Assessment Report of Hydraulic Car Stacker (received 13 January 2017)

Officer Recommendation:

That the Metro Central Development Assessment Panel, pursuant to section 31 of the *State Administrative Tribunal Act 2004* in respect of SAT application DR310/2016, resolves to:

Reconsider its decision dated 30 September 2016 and **approve** DAP Application reference DAP/16/1071 and accompanying plans (A001, A010, A012, A101, A102, A103, A104, A105, A106, A200, A201 received 7 September 2016) in accordance with the provisions of Local Planning Scheme No.6, subject to the following conditions;

Conditions

1. This decision constitutes planning approval only and is valid for a period of two years from the date of approval. If the subject development is not substantially commenced within the two year period, the approval shall lapse and be of no further effect.
2. All stormwater generated on site is to be retained on site.
3. Prior to the initial occupation of the development, bicycle parking facilities for 21 bicycles shall be provided in accordance with Australian Standard AS 2890.3 to the satisfaction of the City. The facilities shall thereafter be retained for the life of the development.
4. Prior to the initial occupation of the development, all unused crossover(s) shall be removed and the kerbing and road verge reinstated at the owners cost to the satisfaction of the City.
5. The development shall be serviced by a concrete or brick paved vehicle crossover with a minimum width of 6m and located a minimum of 1.5m away from the outside of the trunk of any street tree. The crossover is to be constructed prior to the initial occupation of the development in accordance with the City's specifications to the satisfaction of the City.
6. Fencing and all structures within the front setback area are to comply with Council Policy CP-078 Residential Development to the satisfaction of the City.
7. Any roof mounted or freestanding plant or equipment shall be located and/or screened so as not to be visible from the surrounding street(s) to the satisfaction of the City.
8. Prior to the commencement of works, the street tree/s to be retained within the verge are to be protected through the installation of a Tree Protection Zone (TPZ). Each TPZ is to be installed as per Australian Standard AS4970-2009 and in accordance with the following criteria to the satisfaction of the City:
 - A free-standing mesh fence erected around each street tree with a minimum height of 1.8m and a 2m minimum radius measured from the outside of the trunk of each tree.
 - If an approved crossover, front fence, footpath, road or similar is located within the 2m radius, the TPZ fencing shall be amended to be the minimum distance necessary to allow the works to be completed.
 - Fixed signs are to be provided on all visible sides of the TPZ fencing clearly stating 'Tree Protection Zone – No Entry'.
 - The following actions shall not be undertaken within any TPZ:

- Storage of materials, equipment fuel, oil dumps or chemicals
- Servicing and refuelling of equipment and vehicles
- Attachment of any device to any tree (including signage, temporary service wires, nails, screws, winches or any other fixing device)
- Open-cut trenching or excavation works (whether or not for laying of services)
- Changes to the natural ground level of the verge
- Location of any temporary buildings including portable toilets
- The unauthorised entry by any person, vehicle or machinery
- No unauthorised pruning of the canopy or roots of any Street Tree is permissible under the City of Melville's Street Tree Policy CP-029. Pruning may only be undertaken by the City's approved contractors following a written submission to and approval by the City.

Once erected to the required standard, the TPZ shall be maintained in good condition to the satisfaction of the City and may only be removed upon occupation of the development.

9. All external clothes drying facilities shall be screened from view of the primary and secondary street to the satisfaction of the City.
10. Prior to the commencement of works, a detailed landscaping and reticulation plan for the subject site and the road verge adjacent to the site shall be submitted to and approved in writing by the City. The landscaping plan is to include details of (but not limited to):
 - (a) The location, number and type of proposed trees and shrubs including planter size and planting density;
 - (b) Any lawns to be established;
 - (c) Any existing vegetation and/or landscaped areas to be retained;
 - (d) Any verge treatments; and
 - (e) The landscaping treatment to be applied to the drive way access leg boundary

The approved landscaping and reticulation plan shall be fully implemented within the first available planting season after the initial occupation of the development and maintained thereafter to the satisfaction of the City. Any species which fail to establish within the first two planting seasons following implementation shall be replaced in accordance with the City's requirements.

11. Prior to the initial occupation of the development, a Waste Management Plan shall be prepared in accordance with Council Policy CP90 – Waste and Recyclables Collection for Multiple Dwellings, Mixed Use Developments and Non-Residential Developments and submitted in writing for the approval of the Manager Statutory Planning. Once approved, the

development is to be constructed and operated in accordance with the Waste Management Plan to the satisfaction of the City.

12. Prior to the commencement of works, details of the exterior colours, materials and finishes are to be submitted to and approved in writing by the City. Once approved, the development is to be constructed in accordance with those details.
13. No development (including fencing, letter boxes or any other structure) or landscaping over 0.6m in height is to be located within the 1.5m x 1.5m sightline truncation where the vehicle access point meets the road reserve.
14. Prior to the initial occupation of the development, the surface finish of the boundary wall(s) are to be finished externally to the same standard as the rest of the development to the satisfaction of the City.
15. Lighting is to be provided to all car parking areas and the exterior entrances to all buildings in accordance with Australian Standard AS 1158.3.1 (Cat. P). All external lighting to be hooded and oriented so that the light source is not directly visible to the travelling public or abutting development.
16. A Construction Management Plan is to be prepared by the Applicant and submitted to the City for approval at least 30 days prior to the commencement of works. The Construction Management Plan shall detail how the construction of the development will be managed including the following:
 - public safety and site security;
 - hours of operation,
 - noise and vibration controls;
 - air and dust management;
 - stormwater, groundwater and sediment control;
 - waste and material disposal;
 - Traffic Management Plans prepared by an accredited personnel for the various phases of the construction, including any proposed road closures;
 - the parking arrangements for contractors and sub-contractors;
 - on-site delivery times and access arrangements;
 - the storage of materials and equipment on site (no storage of materials on the verge will be permitted) ; and
 - any other matters likely to impact upon the surrounding properties or road reserve.Once approved, the development is to be constructed in accordance with the Construction Management Plan to the satisfaction of the City.
17. Temporary structures, such as prefabricated or demountable offices, portable toilets and skip bins necessary to facilitate storage, administration and construction activities are permitted to be installed within the property boundaries of the subject site(s) for the duration of the construction period. These structures must not obstruct vehicle sight lines Temporary structures are to be removed prior to initial occupation of the development.

18. Prior to the commencement of works, a scheme for the provision of Public Art shall be submitted to and approved in writing by the City in consultation with the City's Public Art Panel. Once approved, the Public Art shall be provided in accordance with Council Policy – 085: Provision of Art in Development Proposals and the Canning Bridge Structure Plan prior to the initial occupation of the development to the satisfaction of the City. Alternatively, the public art contribution may be satisfied by a cash-in-lieu payment at the same rate, made prior to the commencement of works.

Background:

Insert Property Address:	Lot 270 (No. 21) Kishorn Road, APPLECROSS WA 6153
Insert Zoning	MRS: Urban
	TPS: District Centre – Canning Bridge Centre
Insert Use Class:	Residential (Multiple Dwellings)
Insert Strategy Policy:	None Applicable
Insert Development Scheme:	Local Planning Scheme No. 6
Insert Lot Size:	1012m ²
Insert Existing Land Use:	Residential
Value of Development:	\$3,350,000

Approval is sought for the construction of a four storey (with basement and roof terrace) development comprising 21 Multiple Dwellings at Lot 270 (No. 21) Kishorn Road, Applecross.

A Development Application was originally submitted for this site on 4 July 2016. This proposal is essentially the same as the proposal currently under consideration. The proposal was assessed in accordance with the provisions of LPS6, the Canning Bridge Activity Centre Plan (CBACP) and Council Policies, and the City recommended to the JDAP in its Responsible Authority Report, that planning consent for the DA should be granted.

Despite the City's recommendation, the JDAP determined to refuse the application at its meeting on 30 September 2016 for the following reasons;

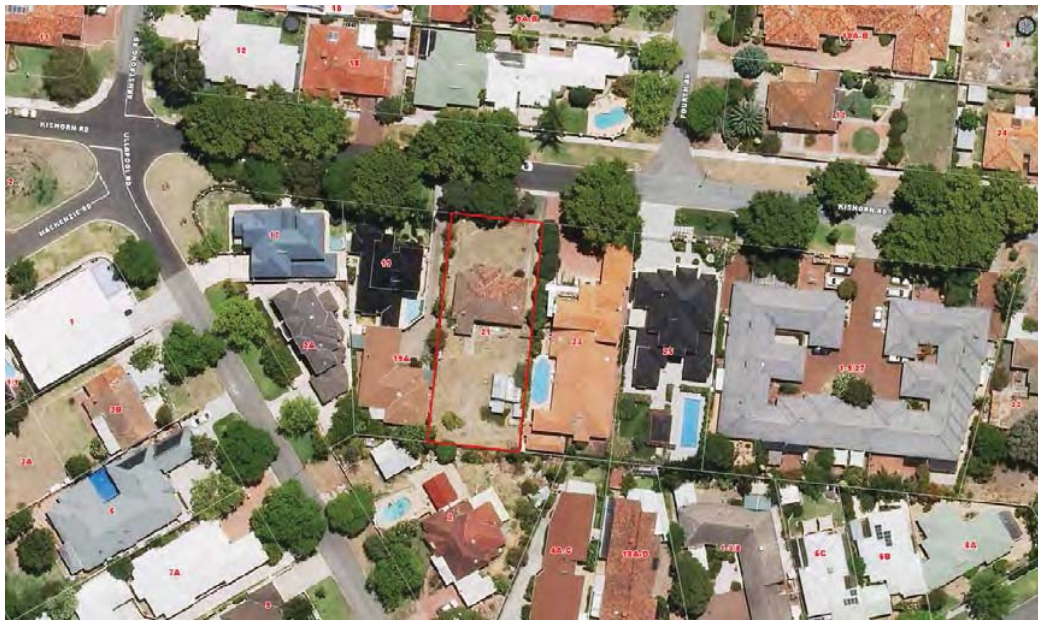
1. The proposal is considered to be inconsistent with the objectives of the Structure Plan.
2. The building height of five storeys is inconsistent with height requirement at Element 3.
3. The proposal is considered to be inconsistent with Element 2 which requires site planning should avoid buildings which are likely to create excessively bulky elements both within a development site and as it relates to surrounding development.
4. The proposal is inconsistent with Element 3 which requires that developments ensure that interfaces between zones are appropriately managed.
5. Insufficient information was available regarding the noise of the car stacker system to be satisfied as to its operation and the potential impact on the locality.

Following the decision of the DAP the applicant submitted an identical application to the City of Melville for its determination. The applicant also sought a review of the

decision made by the JDAP, by the State Administrative Tribunal being the subject of this report.

The application lodged with the City was referred to the December meeting of the Council for determination with a recommendation for approval. , At this meeting the Council resolved to defer the decision until February 2017 pending the outcome of the Section 31 request. a

Site Context



The subject site currently contains a single storey single house on a 1012m² lot. The site is located within the H4 Residential area of Q1 – Kintail Quarter of the Canning Bridge Activity Centre Plan (CBACP).

The site is currently surrounded by a mix of one and two storey single houses and grouped dwellings.

The intent of the H4 precinct is to provide a transition in density and scale from the M10 and M15 areas of the CBACP through to the existing low density residential development outside of the activity centre plan area.

The site is well serviced by public transport with the Canning Bridge train station located approximately one kilometre to the east of the site and Canning Highway (a high frequency bus route) located approximately 250 metres to the south.

Statutory Context

The key aspects of the planning framework applicable in this case are the Canning Bridge Activity Centre Plan, and the City of Melville Local Planning Scheme No.6.

Details: outline of development application

Approval is sought for the construction of 21 Multiple Dwellings within a four storey (with basement and partially covered roof terrace) building. The development proposes a range of dwelling types, including a number of one bedroom dwellings with an associated mezzanine at the ground floor level, a mix of one and two bedroom dwellings on levels 1-4. Car parking on site is accommodated via the use of car stackers and communal open space is provided on the roof terrace.

The proposed development has been the subject of a rigorous design review process by the Canning Bridge Design Advisory Panel (the Panel). The Panel concluded that the design as presented for approval to the JDAP represented a high quality design outcome.

Legislation & policy:

Legislation

1. Planning and Development Act 2005
2. City of Melville Local planning Scheme No. 6(LPS6)
 - Canning Bridge Activity Centre Plan
3. State Government Policies
 - SPP3: Urban Growth and Development
 - Activity Centres for Perth and Peel
4. Local Policies
 - CP-029: Street Tree Policy
 - CP-056: Planning Process and Decision Making
 - CP-065: Crime Prevention Through Environmental Design of Buildings Policy
 - CP-067: Amenity
 - CP-079: Car Parking and Access
 - CP-085: Provision of Public Art in Development Proposals
 - CP-090: Waste and Recyclables Collection for Multiple Dwellings, Mixed Use and Non-Residential Developments.

Consultation:

Public Consultation

Public consultation was not required as the proposal is considered to meet the provisions of the CBACP.

An informal process of notification was however followed, and the proposed development was the subject of an onsite sign, with the detailed plans being made available for inspection on the City's website. This informal notification process is outlined within Council Policy CP-056 Planning Process and Decision Making Policy.

Consultation with other Agencies or Consultants

Canning Bridge Activity Centre Plan Design Review Panel

Prior to formal lodgement, the proposal was subject to a formal design review process. This process was repeated after lodgement.

The design review process highlighted a number of deficiencies and opportunities for design improvement, all of which have been well received by the applicant. The most recent rendition of plans has incorporated the comments of the Design Review Panel (DRP), and the design of the development as now proposed is considered to represent an outcome which meets the DRP recommendations.

A summary of the Design Review Panels comments is attached to this report.

Planning assessment:

The proposal has been assessed against, and is considered to satisfy the relevant provisions contained within LPS6, the CBACP and Council Policies.

The development comprises a four storey structure which has been designed to accommodate car parking and car park stackers at the ground floor level, screened from the street by the main building entrance and ground floor apartments.

The double height car stackers result in a generous floor to ceiling height on the ground floor, which in turn enables the provision of a mezzanine level within those apartments, and an over height entrance feature. The generous entrance feature provides a high quality entry statement towards the street frontage.

The Design Review Panel consider the upper floor levels provide functional apartment layouts, appropriately sized outdoor living space, and adequate access to natural light and ventilation.

In relation to the external appearance the DRP consider the development is well considered, with appropriate levels of articulation achieved. The roof space is proposed to be utilised as a communal outdoor living space, with dedicated facilities for occupiers, and shade structures provided.

The four storey design of the development is consistent with the building height limitations imposed by the CBACP.

The following commentary is provided in response to the individual reasons for refusal cited in the JDAP refusal determination

- 1. The proposal is considered to be inconsistent with the objectives of the Structure Plan.*

The objectives of the CBACP are broadly to increase the density and diversity of the dwellings and non-residential land uses within the boundaries of the precinct, to ensure the area provides sufficient intensity to support the high frequency public transport.

The proposed development satisfies the objectives of the CBACP as it will clearly deliver density and diversity of housing, improve land efficiency, and provide housing variety and affordability whilst supporting the facilities in the area.

2. *The building height of 5 storeys is inconsistent with height requirement at Element 3.*

Height under the Canning Bridge Activity Centre Plan is defined as;

In relation to a building, means the distance measured from the natural level of that part of land on which the building is erected to the highest point of any part of the building above it but does not include

- (a) Any lift plant, water tower or similar utility or services, not exceeding 3.0 metres in height; or*
- (b) Any architectural feature or decoration, other than a free standing sign, not used for any form of accommodation, or any open roofed structures which may be developed to provide recreation and open space opportunities for building occupants which may be approved by the decision maker.*

The proposed development includes a roof space to be utilised as a communal outdoor living space, with dedicated facilities for occupiers and appropriate shade structures provided, the use of the roof in this manner is consistent with the provisions of the CBACP, and complies with the Design requirements of the building height and outlined by Element 3, as it is an open roofed structure providing recreation space for occupants of the building.

The provision of a mezzanine within the ground floor apartments is enabled due to the generous floor to ceiling height of the ground floor as a result of the location of double height car stackers which are also sited on the ground floor of the development. The proposed mezzanines have been assessed in accordance with definition contained within the CBACP.

A storey under the CBACP is defined as;

Has the same meaning as ‘Storey’ in the national Construction Code Series (building Code of Australia Class 2 to Class 9 Buildings), and means a space within a building which is situated between one floor and the floor level next above, or if there is no floor above, the ceiling or roof above, but not –

- (a) A space that contains only –*
 - i. A lift shaft, stairway or meter room; or*
 - ii. A bathroom shower room, laundry, water closet, or other sanitary compartment; or*
 - iii. Accommodation intended for not more than 3 vehicles; or*
 - iv. A combination of the above; or*
- (b) A mezzanine*

A mezzanine floor is defined by the Building Codes of Australia (BCA) as;

“An intermediate floor within a room”

The above definition specifically excludes a mezzanine from the definition of a ‘storey’. Legal advice has been sought by the City to determine whether its interpretation of the CBACP provisions and definitions, relative to the inclusion of mezzanines, is correct in this instance.

The legal advice concludes that the mezzanines proposed to be included within the proposed development do not constitute a storey for the purposes of the CBACP. On that basis, the height of the proposed building, at four storeys, is fully consistent with the Design Requirements of Element 3 of the CBACP.

3. *The proposal is considered to be inconsistent with Element 2 which requires site planning should avoid buildings which are likely to create excessively bulky elements both within a development site and as it relates to the surrounding development.*

The proposed development complies with the requirements of the CBACP and therefore is consistent with the Desired Outcome of Element 2 where site planning should avoid buildings which do not relate to the street, create excessively bulky single elements or comprise of overly repetitive elements both within the development site and as it relates to the surrounding development.

The external appearance of the development is well considered, with appropriate levels of articulation achieved so to avoid bulky single elements. This is further satisfied by the generous entrance feature which provides a high quality entry statement towards the street frontage, with the ground level change showing innovative design and creating an attractive space.

4. *The proposal is inconsistent with Element 3 which requires that development ensure the interfaces between zones are appropriately managed.*

The proposed development is a four storey building, and this complies with the height requirements of Element 3 of The CBACP. The reference in this reason for refusal to the interface between the zones being managed inappropriately cannot apply in the context of the subject, as the maximum building height is fully consistent with the CBACP.

5. *Insufficient information was available regarding the noise of the car stacker system to be satisfied as to its operation and potential impact on the locality.*

Car parking in the form of car stackers has been provided at ground floor level, screened from the street by the main building entrance and ground floor apartments. The car parking provisions are fully compliant with the Design Requirements of Element 18 of the CBACP.

In support of their development proposal, the applicant provided information regarding the noise levels associated with the operation of the car stacker system. This information suggests that the car stackers can be accommodated in a residential environment without any resultant adverse noise impact, as they are compliant with the Environmental Protection Act 1986 section 31(d).

The queuing of vehicles within the dual access driveway is unlikely to result in an adverse impact on the amenity of the adjoining residents. Noise associated with car vehicles is common place with urban residential environments such as this.

Further compliance of the proposed development against the relative statutory context is outlined below.

Street Setbacks

In accordance with Element 4 of the CBACP, all development within H4 zones in Q1 and Q2 shall have a minimum of 3 metre setback to street boundaries. A minimum setback of 3 metres to the street boundary has been provided in this case, and the proposed development may be supported on that basis.

Side and Rear Setbacks

Element 5 of the CBACP requires side and rear setbacks for all developments within the H4 zones to be a minimum of 4 metres for any lot which is equal to or greater than 16 metres in width, noting that setbacks do not apply to eaves and sun shading devices. Lot 270 (21) Kishorn Road has a lot width of 20.1 metres. The required setback of 4 metres has been applied to the side boundaries and rear boundary of the proposed dwelling. The proposed development may be supported on that basis.

Privacy and Solar Access

In accordance with Element 5 of CBACP, provisions of privacy and solar access and overshadowing do not apply within the CBACP area. The CBACP area is to undergo a significant change. New acceptable development parameters have been established by the CBACP, and it is acknowledged that this will result in new development sitting somewhat uncomfortably alongside existing development. Overtime, as the precinct is developed this balance will shift.

Conclusion:

For the reasons given above, it is concluded that the proposed development satisfies the applicable planning requirements. As such it is recommended that the Metro Central JDAP grant planning approval subject to the conditions of planning approval provided.

DRAWING LIST			
Sheet Number	Sheet Name	Current Revision	Current Revision Date
A000	COVER SHEET & NOTES	G	06.09.2016
A001	SURVEY	F	16.08.2016
A010	SITE PLAN - OVERALL	F	16.08.2016
A012	SITE PLAN - LANDSCAPE	G	06.09.2016
A100	FLOOR PLAN - BASEMENT	F	16.08.2016
A101	FLOOR PLAN - GROUND LEVEL	F	16.08.2016
A102	FLOOR PLAN - MEZZANINE LEVEL	F	16.08.2016
A103	FLOOR PLAN - LEVEL 1	F	16.08.2016
A104	FLOOR PLAN - LEVEL 2	F	16.08.2016
A105	FLOOR PLAN - LEVEL 3	F	16.08.2016
A106	FLOOR PLAN - ROOF GARDEN	F	16.08.2016
A200	ELEVATIONS	F	16.08.2016
A201	ELEVATIONS	F	16.08.2016

06.09.2016	G	LANDSCAPE ALTERATION
16.08.2016	F	INTERNAL ALTERATION
28.07.2016	E	ROOM ALTERATION
20.07.2016	D	DIMENSION ADDED
04.07.2016	C	ISSUED FOR OA
24.06.2016	B	ISSUED FOR REVIEW
26.05.2016	A	ISSUED FOR OA COMMENT
DATE	Rev	DESCRIPTION

REVISION SCHEDULE

Contractor to verify all dimensions on site before commencing work. MOOUS Design Pty Ltd is to be notified of any discrepancies in the dimensions and setting out of the work for resolution. Copyright of designs shown herein is retained by this office. Authority is requested for any reproduction.



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ABN 27 121 224 459 PO BOX 21
GAIL 121 224 459 GORDON MA 30

COVER SHEET & NOTES

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT 270 (#21) KISHORN RD.
APPLECROSS

MODUS PROJECT	D15-91
DESIGN	
DRAWN	
CHECKED	
SCALE	
DATE	MAY 20

A1
DWG



SITE & GENERAL NOTES:

ALL LEVELS, DIMENSIONS POSITIONS AND HEIGHTS TO BE VERIFIED
ON SITE BEFORE COMMENCING ANY BUILDING WORK. DATUM
PROVIDED IS AHD.

FIGURED DIMENSIONS ARE TO BE TAKEN AND NO SCALING OF DRAWINGS WILL BE ALLOWED.

FROM STRUCTURAL, ELECTRICAL, CIVIL, HYDRAULICS AND MECHANICAL ENGINEERS.

ANY DISCREPANCIES ARE TO BE REPORTED TO THE SUPERINTENDENT IMMEDIATELY.

ALL SETOUT WORK TO BE COMPLETED BY THE CONTRACTOR FOR ELECTRICAL, PLUMBING, BITUMEN, EARTHWORKS AND CONCRETE LABOUR WORKS

CONTRACTOR TO CORRECTION LOCATION, NATURE AND EXTENT OF ALL

CONTRACTOR TO CONFIRM GROUND WATER TABLE AND LEVEL

ALL NECESSARY APPROVALS FROM RELEVANT AUTHORITIES TO
BE OBTAINED PRIOR TO THE COMMENCEMENT OF ANY WORK

AS CONSTRUCTED SURVEY TO BE PROVIDED BY LICENSED SURVEYOR

FOR CONSTRUCTION / REMEDIATION INFORMATION REFER TO GEOLOGICAL REPORT

GEOTECHNICAL INVESTIGATIONS HAVE BEEN CARRIED OUT, THE INFORMATION CONTAINED IN THE REPORTS IS INFORMATION ON THE NATURE OF THE GROUND TESTED AT EACH TEST LOCATION - IT IS NOT A COMPLETE DESCRIPTION OF CONDITIONS EXISTING AT OR

FOR ALL SITE PREPARATION AND COMPACTION - REFER TO CIVIL
ENGINEERS DIMS AND SPECIFICATION

ALL EXISTING ESTABLISHED VERGES INCLUDING TREES AND ALL PLANTING RESOURCES, HERBACEOUS, MAJ. VEGETATION, AND/OR OTHER TO BE

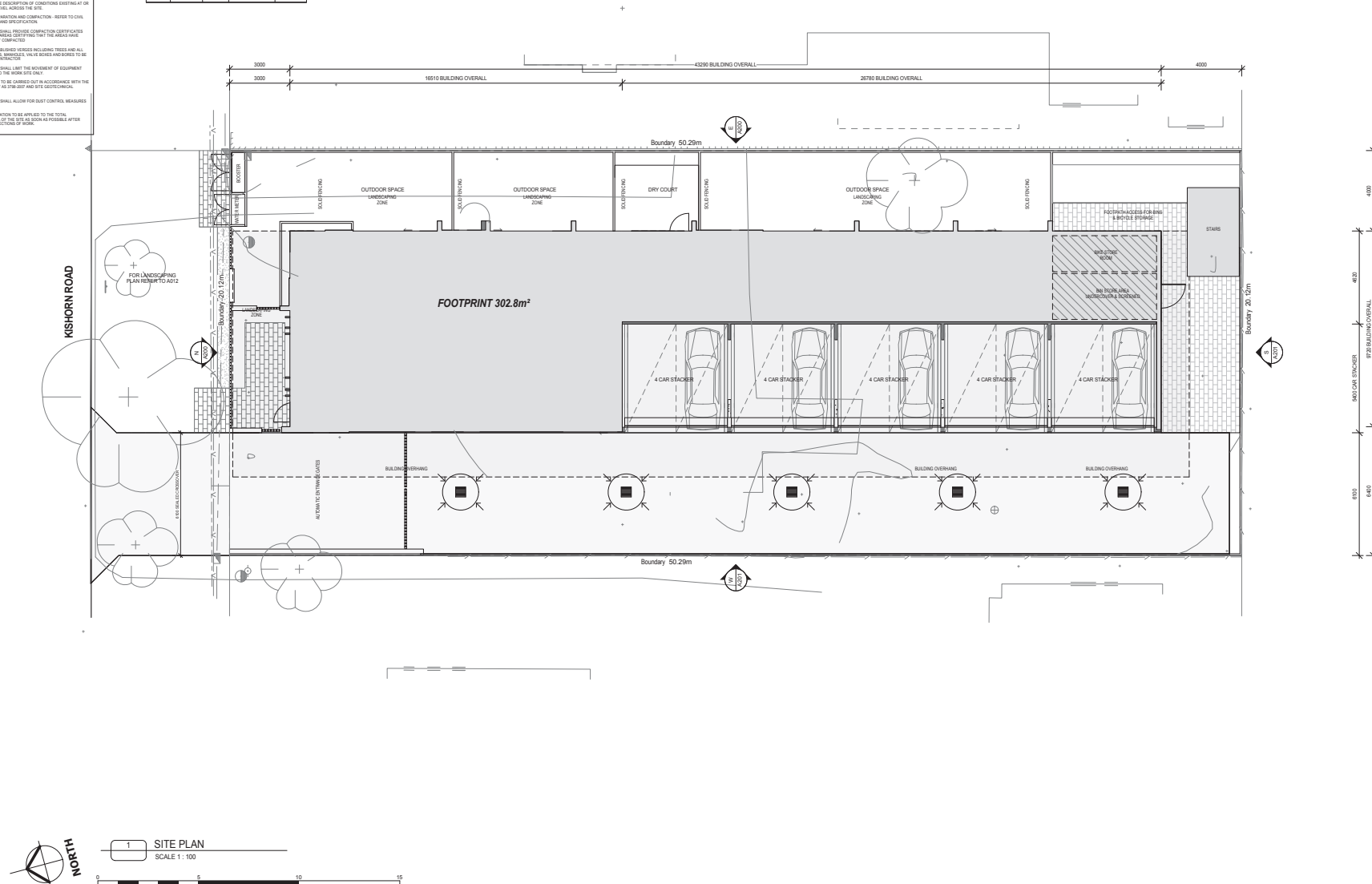
THE CONTRACTOR SHALL LIMIT THE MOVEMENT OF EQUIPMENT AND MANPOWER TO THE WORK SITE ONLY.

THE CONTRACTOR SHALL ALLOW FOR DUST CONTROL MEASURES.

SURFACE STABILISATION TO BE APPLIED TO THE TOTAL DISTRIBUTED AREA OF THE SITE AS SOON AS POSSIBLE AFTER COMPLETION OF SECTIONS OF WORK.

Site No.	Archaeological Zone	Stone Cling Area	Stone Area	Distance Difference Area	Stone Area
1	75.1m x 75.1m	60 Days	Clings	4.5m	4.5m
2	75.1m x 75.1m	60 Days	Clings	4.5m	4.5m
3	126.2m x 126.2m	110 Days	Clings	7.5m	7.5m
4	75.1m x 75.1m	60 Days	Clings	4.5m	4.5m
5	75.1m x 75.1m	60 Days	Clings	4.5m	4.5m
6	75.1m x 75.1m	60 Days	Clings	4.5m	4.5m
7	75.1m x 75.1m	60 Days	Clings	4.5m	4.5m
8	75.1m x 75.1m	60 Days	Clings	4.5m	4.5m
9	75.1m x 75.1m	60 Days	Clings	4.5m	4.5m
10	75.1m x 75.1m	60 Days	Clings	4.5m	4.5m
11	75.1m x 75.1m	60 Days	Clings	4.5m	4.5m
12	75.1m x 75.1m	60 Days	Clings	4.5m	4.5m
13	75.1m x 75.1m	60 Days	Clings	4.5m	4.5m
14	75.1m x 75.1m	60 Days	Clings	4.5m	4.5m
15	75.1m x 75.1m	60 Days	Clings	4.5m	4.5m
16	75.1m x 75.1m	60 Days	Clings	4.5m	4.5m
17	75.1m x 75.1m	60 Days	Clings	4.5m	4.5m
18	75.1m x 75.1m	60 Days	Clings	4.5m	4.5m
19	75.1m x 75.1m	60 Days	Clings	4.5m	4.5m
20	75.1m x 75.1m	60 Days	Clings	4.5m	4.5m
21	75.1m x 75.1m	60 Days	Clings	4.5m	4.5m

City of Melville Received 7 September 2016



16.08.2016	F	INTERNAL ALTERATION
20.07.2016	D	COMBINATION ADDED
24.07.2016	C	ISSUED FOR QA
24.05.2016	B	ISSUED FOR REVIEW
25.05.2016	A	ISSUED FOR QA COMMENT
DATE	No.	DESCRIPTION



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AEN 27 121 224 458 PO BOX

SITE PLAN - OVERALL

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT 270 (#21) KISHORN RD.
APPLICROSS

MODUS PROJECT D15-9

DESIGN
DRAWN
CHECKED
SCALE
DATE MAY 20

REVISION

A1 DWG A01



MODUS PROJECT	D15-91
DESIGN	
DRAWN	
CHECKED	
SCALE	
DATE	MAY 20
REVISION	
A1	A01

[illegible]

* ALL COMMON AREAS INCLUDING CORRIDORS, ACCESSWAYS, TRUNCATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS1428 - 2009 SECTION 6 - CONTINUOUS ACCESSIBLE PATHS OF TRAVEL.

This architectural floor plan depicts a large commercial building layout. The plan is oriented with North at the top, as indicated by the north arrow. The building is enclosed within a dashed rectangular boundary. The layout includes several key areas:

- Stores:** A row of 12 stores is located along the top edge of the building. They are labeled STORE 15 through STORE 26. Each store has a specific width dimensioned below it, ranging from 4' 0" to 4' 6".
- Car Stackers:** A row of 5 car stackers is located along the bottom edge of the building. Each car stacker is labeled "4 CAR STACKER" and has a width dimensioned below it, ranging from 4' 0" to 4' 6".
- Service Areas:**
 - A **LIFT** is located on the left side of the building.
 - CLEANERS** and **WASH ROOMS** are located near the top right corner.
 - A **STAIRS** area is located near the bottom right corner.
- Dimensions:** The overall width of the building is 115' 0". The overall length is 200' 0". The plan also includes various internal dimensions for the stores and car stackers.
- Orientation:** The plan includes a north arrow pointing towards the top right.



1 FFL (BASEMENT)
SCALE 1:100



YARAN
UNIVERSITY

Contractor to verify all dimensions on site before commencing work. MOOUI Design Pty Ltd is to be notified of any discrepancies in the dimensions and settling out of the way for resolution. Copyright of designs shown herein is retained by this office. Authority is required for any reproduction.



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e info@modus.net.au WEMBLEY
ABN 27 121 224 459 PO BOX

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT 270 (#21) KISHORN RD.
APPLICROSS

MODUS PROJECT	D15-9
DESIGN	
DRAWN	
CHECKED	
SCALE	1:
DATE	MAY 2

A1

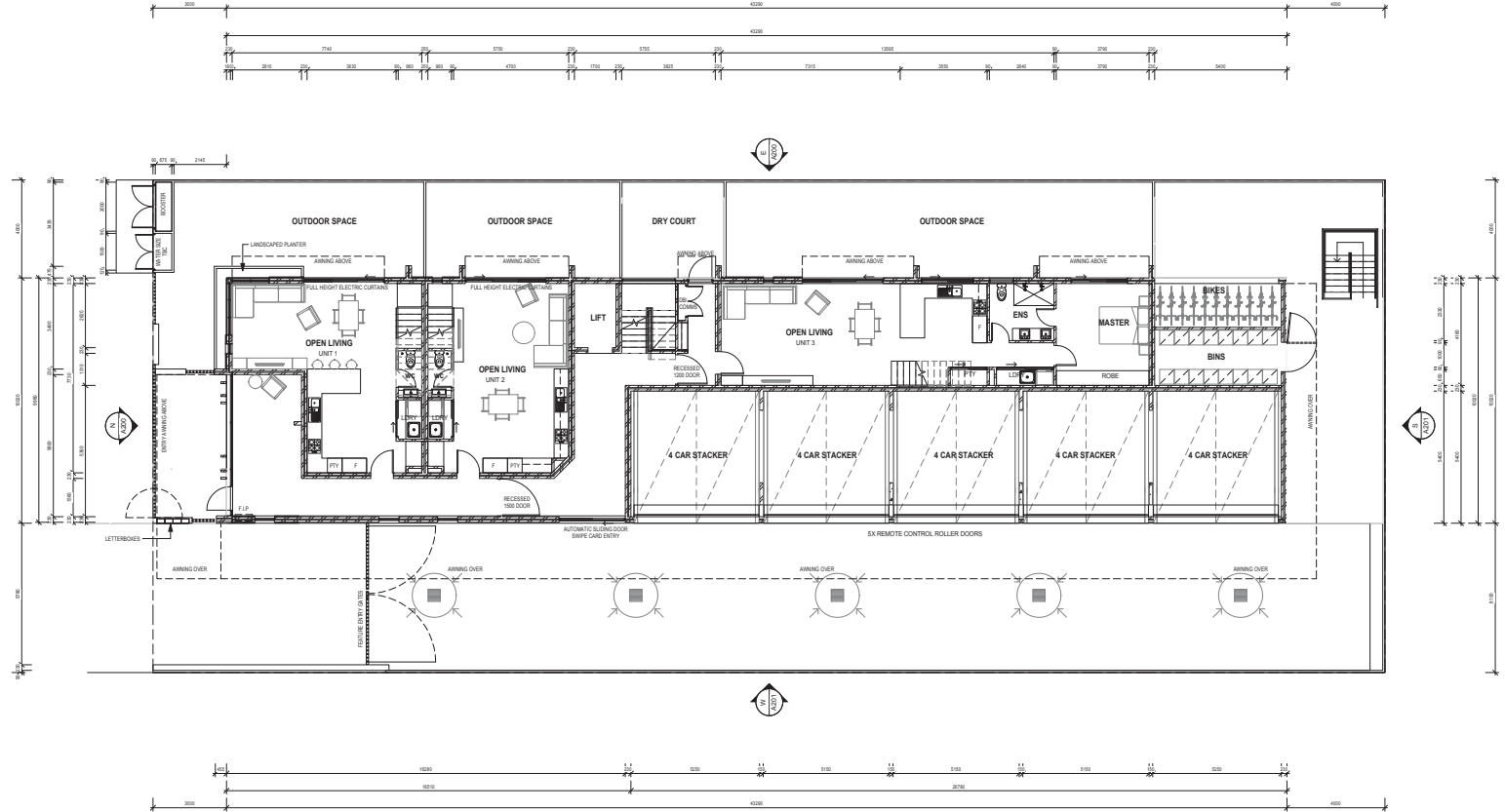
SITE & GENERAL NOTES:

- ALL LEVELS, DIMENSIONS POSITIONS AND HEIGHTS TO BE VERIFIED ON SITE BEFORE COMMENCING ANY PAVING WORK, AS FAR PROVIDED IS AND
- ISSUED DIMENSIONS ARE TO BE TAKEN AND NO SCALING OF DRAWINGS WILL BE ALLOWED
- ALL DIMENSIONAL DRAWINGS ARE TO BE MADE IN CONFORMANCE WITH SPECIFICATIONS AND ALL OTHER RELEVANT DRAWINGS, MECHANICAL, ELECTRICAL, CIVIL, THERMAL AND MECHANICAL, ETC.
- ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY
- ALL SETOUT WORK TO BE COMPLETED BY THE CONTRACTOR FOR ELECTRICAL, PLUMBING, BETWEEN EARTHWORKS AND CONCRETE WORKS WORK
- REFER TO ENGINEERS DRAWINGS FOR ALL STRUCTURAL WORKS
- LANDSCAPE DIMENSIONS ARE TO BE PROVIDED IN SEPARATE DRAWINGS
- CONTRACTOR TO CONSIDER LOCATION, DEPTH AND EXTENT OF ALL OTHER SERVICES AS SHOWN ON EXISTING LAYOUT PLANS PRIOR TO THE COMMENCEMENT OF ANY WORK, IN ORDER TO BE NOTIFIED UPON DISCREPANCIES
- CONTRACTOR TO CONSIDER GRAVEL WATER TABLE AND LEVELS PRIOR TO ANY WORK AND IF ANY DE-WATERING IS REQUIRED
- ALL NECESSARY APPROVALS FROM RELEVANT AUTHORITIES TO BE OBTAINED PRIOR TO THE COMMENCEMENT OF ANY WORK
- AS CONSTRUCTED SURVEY TO BE PROVIDED BY LICENSED SURVEYOR
- FOR CONSTRUCTION INFORMATION REFER TO GEOTECHNICAL REPORT
- GEOTECHNICAL INVESTIGATIONS HAVE BEEN CARRIED OUT, THE INFORMATION CONTAINED IN THE REPORT IS INTENDED FOR THE PURPOSE OF THE CURRENT TENDER AT EACH TEST LOCATION, IT IS NOT A COMPLETE DESCRIPTION OF CONDITIONS EXISTING AT OR BELOW SPECIAL LEVELS ACROSS THE SITE
- FOR ALL SITE INFORMATION AND CONSTRUCTION - REFER TO CIVIL ENGINEERS DINGS AND SPECIFICATION
- THE CONTRACTOR SHALL PROVIDE CONSTRUCTION CERTIFICATES FOR CUT AND ALL AREAS CERTIFYING THAT THE AREAS HAVE BEEN PROPERLY COMPLETED
- ALL EXISTING ESTABLISHED VEGETATION INCLUDING TREES AND ALL EXISTING SERVICES, MANHOLES, VAULTS, ROADS AND WORKS TO BE PROTECTED AND MAINTAINED
- THE CONTRACTOR SHALL LIMIT THE MOVEMENT OF EQUIPMENT AND MATERIALS TO THE WORK SITE ONLY
- ENVIRONMENTAL ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF AS 2748:2007 AND SITE GEOTECHNICAL REPORT
- THE CONTRACTOR SHALL ALLOW FOR OR EXIST CONTROL MEASURES AS REQUIRED
- SURFACE STABILISATION TO BE APPLIED TO THE TOTAL DISTURBED AREA OF THE SITE AS SOON AS POSSIBLE AFTER COMPLETION OF SECTIONS OF WORK

City of Melville Received 7 September 2016

- LEGEND**
- RWP ROOF - REFER TO ROOF PLAN FOR SIZE AND LOCATION
 - STC STRUCTURAL COLUMN - REFER TO STRUCTURAL ENGINEERS DRAWINGS FOR DETAIL
 - SLR LEVEL - REFER TO DETAIL
 - AC AIR CONDITIONING UNIT - REFER TO SPECIFICATION
 - TOILET PANS - REFER TO SPECIFICATION
 - UNIT BASES - REFER TO SPECIFICATION
 - FRIDGE - REFER TO BUILDERS SPECIFICATION
 - UNDER BENCH DRAIN UNITS WITH OR WITHOUT A RAINWATER OVER - REFER TO BUILDERS SPECIFICATION
 - RAINWATER DRAINAGE WITH DRAIN OVER - REFER TO SPECIFICATION
 - SHOWER - REFER TO SPECIFICATION
 - HOT WATER UNIT - REFER TO MECHANICAL SPECIFICATION
 - HOT WATER UNIT - REFER TO MECHANICAL SPECIFICATION
 - DSH - REFER TO BUILDERS SPECIFICATION
 - SWK - REFER TO BUILDERS SPECIFICATION
 - PAINT - REFER TO BUILDERS SPECIFICATION
 - LAUNDRY TROUGH - REFER TO BUILDERS SPECIFICATION
 - MECHANICAL - REFER TO BUILDERS SPECIFICATION
 - GALV STEEL BOLLARD - REFER TO DETAIL

- DESIGN FOR ACCESS AND MOBILITY:**
- ALL COMMON AREAS INCLUDING CORRIDORS, STAIRWAYS, TERRACES HAVE BEEN DESIGNED IN ACCORDANCE WITH AS 1428:2009 (M2) CONTINUOUS ACCESSIBLE ENTRY OF BUILDING



DATE	REVISION	DESCRIPTION
12.07.2016	1	ISSUED FOR TENDER
12.07.2016	2	ISSUED FOR TENDER
12.07.2016	3	ISSUED FOR TENDER
12.07.2016	4	ISSUED FOR TENDER
12.07.2016	5	ISSUED FOR TENDER
12.07.2016	6	ISSUED FOR TENDER
12.07.2016	7	ISSUED FOR TENDER
12.07.2016	8	ISSUED FOR TENDER
12.07.2016	9	ISSUED FOR TENDER
12.07.2016	10	ISSUED FOR TENDER



Contributor to verify all dimensions or site before commencing work. MODUS DESIGN PTY LTD is not responsible for any discrepancies in the information and setting out of the work, the responsibility of the contractor shall remain as intended by this office. Author's is not liable for any inaccuracies.



FLOOR PLAN - GROUND LEVEL

PROPOSED APARTMENT DEVELOPMENT FOR YARAN GROUP LOT 270 (#21) KISHORN RD. APPLEBOSS.

REVISION	DATE	BY	APP'D
1	12/07/2016	12/07/2016	12/07/2016
2	12/07/2016	12/07/2016	12/07/2016
3	12/07/2016	12/07/2016	12/07/2016
4	12/07/2016	12/07/2016	12/07/2016
5	12/07/2016	12/07/2016	12/07/2016
6	12/07/2016	12/07/2016	12/07/2016
7	12/07/2016	12/07/2016	12/07/2016
8	12/07/2016	12/07/2016	12/07/2016
9	12/07/2016	12/07/2016	12/07/2016
10	12/07/2016	12/07/2016	12/07/2016

SITE & GENERAL NOTES:

- [illegible]

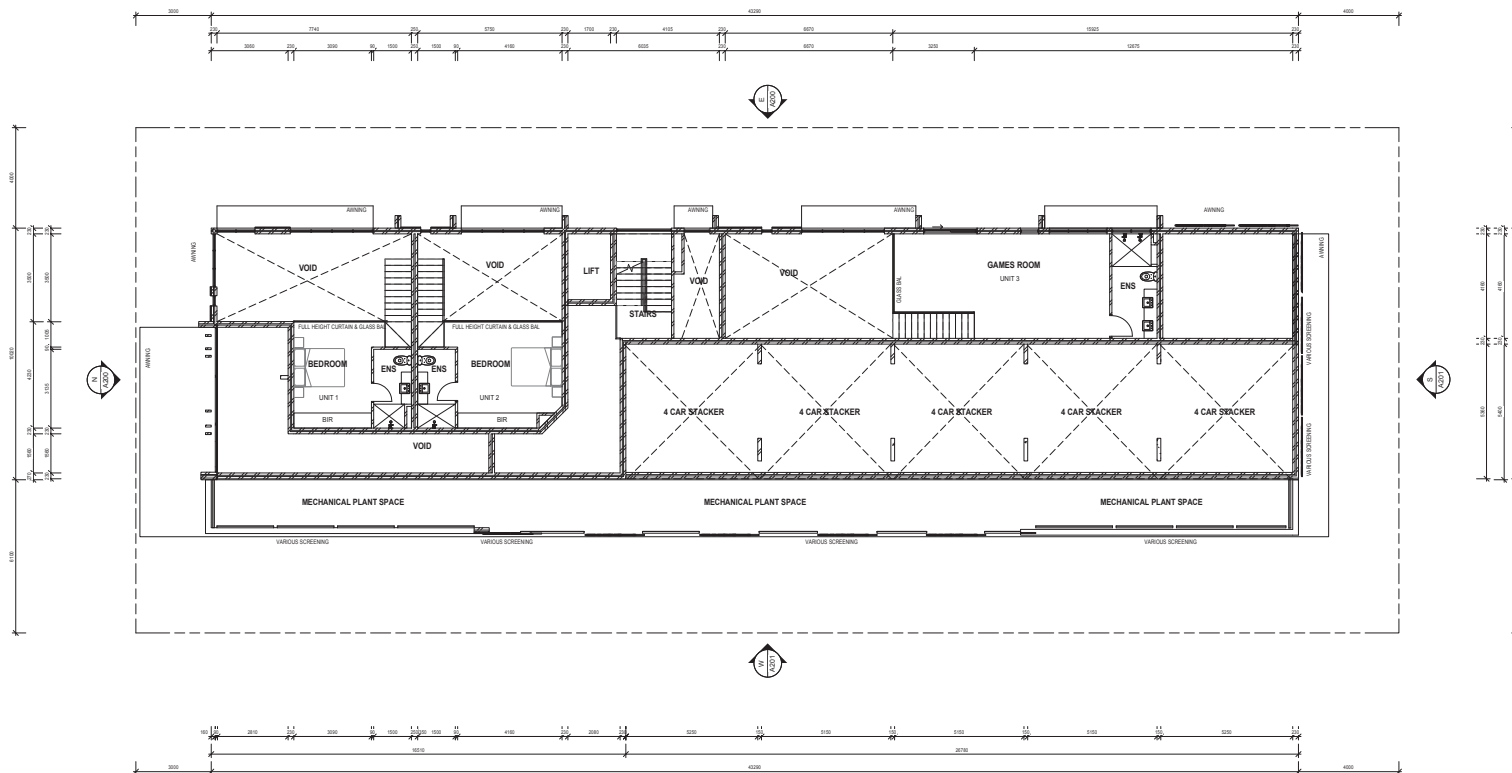
LEGEND

- | | |
|----------|--|
| REF | DWPP= REFER TO ROOF PLAN FOR SIZE AND LOCATION |
| AC | STRUCTURAL COLUMN= REFER TO STRUCTURAL ENGINEERS DRAWING |
| 17.00 | DESIGN LEVEL IN RELATION TO AHD |
| AC | AIR CONDITIONING UNIT= REFER TO SPECIFICATION |
| WC | TOILET PAN= REFER TO SPECIFICATION |
| WC | WASHY BASKIN= REFER TO SPECIFICATION |
| OVERHEAD | REFER TO BUILDERS SPECIFICATION |
| OVERHEAD | UNDER BENCH OVER WITH HOT PLATE & RANGES/OVEN= REFER TO BUILDERS SPECIFICATION |
| HW | WASHING MACHINE= REFER TO SPECIFICATION |
| HW | WASHER= REFER TO SPECIFICATION |
| SH | HOUSE COOK= REFER TO INFORMAL DWG |
| HW | HOT WATER UNIT= REFER TO INFORMAL SPECIFICATION |
| DW | DSH WASHER= REFER TO BUILDERS SPECIFICATION |
| P | PINK= REFER TO BUILDERS SPECIFICATION |
| P | PAINTED= REFER TO BUILDERS SPECIFICATION |
| W | WASH TROUGH= REFER TO BUILDERS SPECIFICATION |
| W | WASHING= REFER TO BUILDERS SPECIFICATION |
| B | GLASS STAIRS/GRAB= REFER TO DETAILS |

DESIGN FOR ACCESS AND MOBILITY

- * ALL COMMON AREAS INCLUDING CORRIDORS, ACCESSWAYS, TRUNCATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS1428.1 2009 SECTION 6, CONTINUOUS ACCESSIBLE PATHS OF TRAVEL.

City of Melville Received 7 September 2016



1 FFL (MEZZANINE LEVEL)
SCALE 1:100

16-08-2016	F	INTERNAL ALLOCATION
20-07-2016	D	MENTION ADDED
04-07-2016	C	ISSUED FOR QA
24-06-2016	B	ISSUED FOR REVIEW
26-05-2016	A	ISSUED FOR QA COMMENT
DATE	No.	DESCRIPTION



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f	9444 9522	127 HERDSMAN RD
e	info@modus.net.au	WEMBLEY 6
ABN	27 121 224 459	PO BOX
ACN	121 224 459	COMO WA 6

FLOOR PLAN - MEZZANINE
LEVEL

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT 270 (#21) KISHORN RD
APPLICROSS

MODUS PROJECT		D15-9
DESIGN	Design	
DRAWN	Auto	
CHECKED	Check	
SCALE	1 :	
DATE	MAY 2	
REVISION		
A1	DWG	A10

SITE & GENERAL NOTES:

- ALL LEVELS, DIMENSIONS POSITIONS AND HEIGHTS TO BE VERIFIED ON SITE BEFORE COMMENCING ANY BUILDING WORK, AS FAR AS PROVIDED IS AND
- ISSUED DIMENSIONS ARE TO BE TAKEN AND NO SCALING OF DRAWINGS WILL BE ALLOWED
- ALL DIMENSIONAL DRAWINGS ARE TO BE TAKEN IN CONFORMANCE WITH SPECIFICATIONS AND ALL OTHER RELEVANT DIMENSIONS (MECHANICAL, ELECTRICAL, CIVIL, THERMAL AND MECHANICAL)
- ANY DISCREPANCIES ARE TO BE REPORTED TO THE SUPERINTENDENT IMMEDIATELY
- ALL LAYOUT WORK TO BE COMPLETED BY THE CONTRACTOR FOR ELECTRICAL, PLUMBING, BETWEEN EARTHWORKS AND CONCRETE LAYOUT WORK
- REFER TO ENGINEERS DRAWINGS FOR ALL STRUCTURAL WORKS
- USING SCALE DRAWINGS AND SUPERSEDED DIMENSIONAL DRAWINGS
- CONTRACTOR TO CONSIDER LOCATION, DEPTH AND EXTENT OF ALL OTHER SERVICES AS SHOWN ON EXISTING LAYOUT PLANS AND PRIOR TO THE COMMENCEMENT OF ANY WORK, IN ORDER TO BE NOTIFIED UPON DISCREPANCIES
- CONTRACTOR TO CONSIDER GRAVEL WATER TABLE AND LEVELS PRIOR TO ANY WORK AND IF ANY DE-WATERING IS REQUIRED
- ALL NECESSARY APPROVALS FROM RELEVANT AUTHORITIES TO BE OBTAINED PRIOR TO THE COMMENCEMENT OF ANY WORK
- AS CONSTRUCTED SURVEY TO BE PROVIDED BY LICENSED SURVEYOR
- FOR CONSTRUCTION INFORMATION REFER TO GEOTECHNICAL REPORT
- GEOTECHNICAL INVESTIGATIONS HAVE BEEN CARRIED OUT, THE INFORMATION CONTAINED IN THE REPORT IS FOR INFORMATION ON THE PART OF THE CLIENT, THE REPORT IS NOT A BASIS FOR THE DESIGN OR CONSTRUCTION OF ANY WORK, THE REPORT IS NOT A BASIS FOR THE DESIGN OR CONSTRUCTION OF ANY WORK, THE REPORT IS NOT A BASIS FOR THE DESIGN OR CONSTRUCTION OF ANY WORK
- FOR ALL SITE INFORMATION AND CONSTRUCTION - REFER TO CIVIL ENGINEERS DOWNS AND SPECIFICATION
- THE CONTRACTOR SHALL PROVIDE CONSTRUCTION CERTIFICATES FOR CUT AND ALL AREAS CERTIFYING THAT THE AREAS HAVE BEEN ADEQUATELY COMPLETED
- ALL EXISTING ESTABLISHED VEGETATION TREES AND ALL EXISTING SERVICES, MANHOLES, WATER LINES AND WELLS TO BE PROTECTED BY CONTRACTOR
- THE CONTRACTOR SHALL LIMIT THE MOVEMENT OF EQUIPMENT AND MATERIALS TO THE WORK SITE ONLY
- EARTHWORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF AS 2875:2007 AND SITE GEOTECHNICAL REPORT
- THE CONTRACTOR SHALL ALLOW FOR EROSION CONTROL MEASURES AS REQUIRED
- SURFACE STABILIZATION TO BE APPLIED TO THE TOTAL DISTURBED AREA OF THE SITE AS SHOWN AS POSSIBLE AFTER COMPLETION OF SECTIONS OF WORK

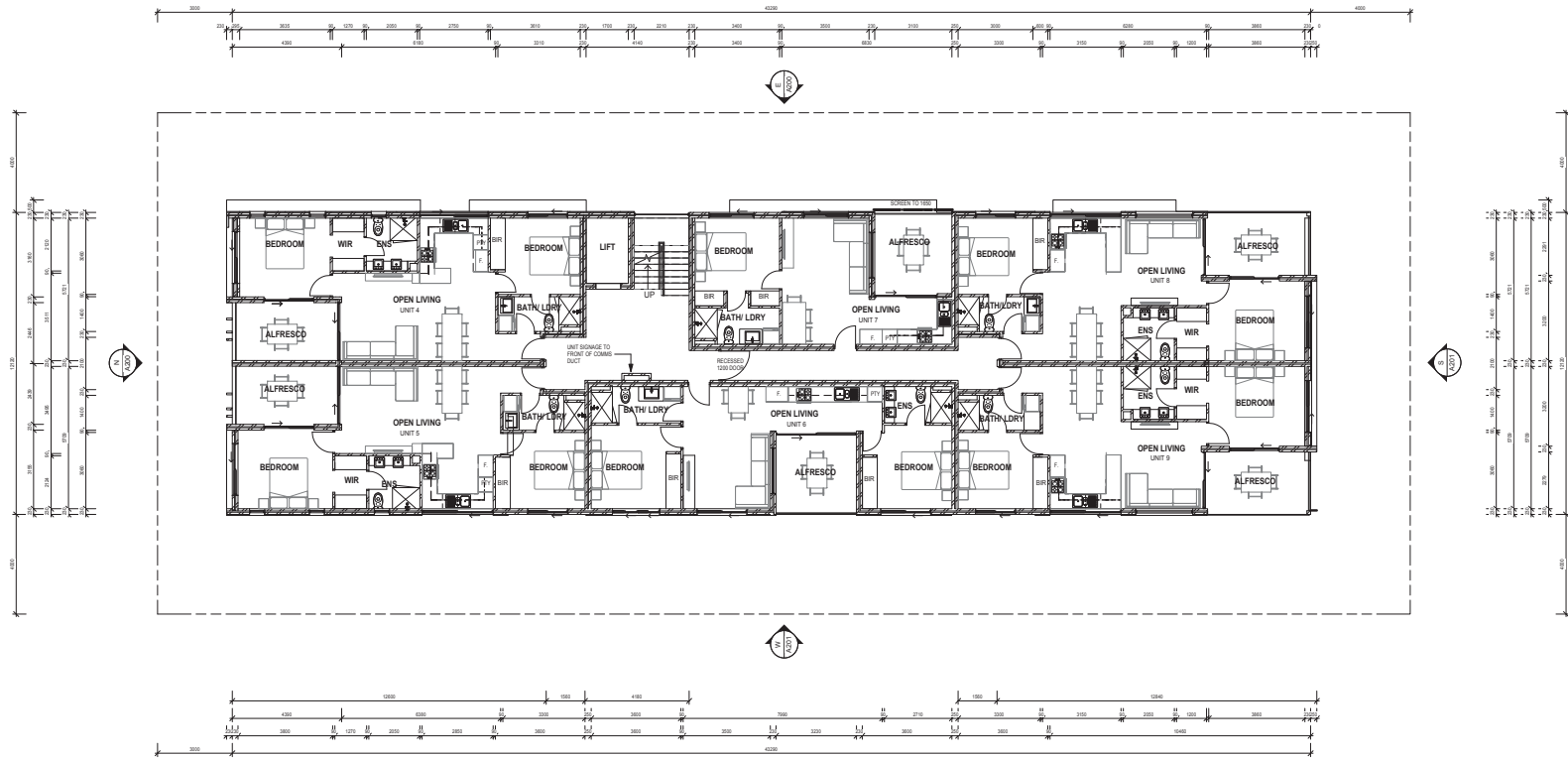
City of Melville Received 7 September 2016

LEGEND

- RAMP - REFER TO ROOF PLAN FOR SIZE AND LOCATION
- STRUCTURAL COLUMN - REFER TO STRUCTURAL ENGINEERS DOWNS FOR DETAIL
- DISCREPANCY IN RELATION TO AND:
- AC - AIR CONDITIONING UNIT - REFER TO SPECIFICATION
- HC - TOILET FAN - REFER TO SPECIFICATION
- WB - UNIT BASE - REFER TO SPECIFICATION
- F - FROST - REFER TO BUILDERS SPECIFICATION
- OVERDOOR - UNDER DOOR FAN AREA WHICH NOT PLATE A BATHROOM OVER - REFER TO BUILDERS SPECIFICATION
- SHOWER - SHOWER - REFER TO SPECIFICATION
- SHR - SHOWER - REFER TO SPECIFICATION
- HD - HOSE COCK - REFER TO INTERNAL DRAIN
- HP - HOT WATER UNIT - REFER TO THERMAL SPECIFICATION
- DSH - DSH SHOWER - REFER TO BUILDERS SPECIFICATION
- SW - SWIM - REFER TO BUILDERS SPECIFICATION
- PAINT - PAINT - REFER TO BUILDERS SPECIFICATION
- LAUNDRY TROUGH - REFER TO BUILDERS SPECIFICATION
- WB - MICROWAVE - REFER TO BUILDERS SPECIFICATION
- S - GULLY STEEL BOLLARD - REFER TO DETAIL

DESIGN FOR ACCESS AND MOBILITY:

- ALL COMMON AREAS INCLUDING CORRIDORS, ACCESSIBLE TRANSIT AREAS HAVE BEEN PROVIDED (ACCESSIBLE WITHIN 1000MM FROM ALL CONTINUOUS ACCESSIBLE ENTRY POINTS)



REVISION	NO.	DESCRIPTION
1	1	ISSUED FOR CONSTRUCTION
2	2	ISSUED FOR CONSTRUCTION
3	3	ISSUED FOR CONSTRUCTION
4	4	ISSUED FOR CONSTRUCTION
5	5	ISSUED FOR CONSTRUCTION
6	6	ISSUED FOR CONSTRUCTION
7	7	ISSUED FOR CONSTRUCTION
8	8	ISSUED FOR CONSTRUCTION
9	9	ISSUED FOR CONSTRUCTION
10	10	ISSUED FOR CONSTRUCTION



Contributor to verify all dimensions or site before commencing work. MODUS DESIGN Pty Ltd is not liable for any discrepancies in the information and setting out of the work, the responsibility of the contractor is to ensure that the work is carried out in accordance with the design and specifications.



NO.	DATE	DESCRIPTION
1	04/04/2014	ISSUED FOR CONSTRUCTION
2	04/04/2014	ISSUED FOR CONSTRUCTION
3	04/04/2014	ISSUED FOR CONSTRUCTION
4	04/04/2014	ISSUED FOR CONSTRUCTION
5	04/04/2014	ISSUED FOR CONSTRUCTION
6	04/04/2014	ISSUED FOR CONSTRUCTION
7	04/04/2014	ISSUED FOR CONSTRUCTION
8	04/04/2014	ISSUED FOR CONSTRUCTION
9	04/04/2014	ISSUED FOR CONSTRUCTION
10	04/04/2014	ISSUED FOR CONSTRUCTION

FLOOR PLAN - LEVEL 1

PROPOSED APARTMENT DEVELOPMENT FOR YARAN GROUP LOT 270 (M21) KISHORN RD. APPLEBOSS.

NO.	DATE	DESCRIPTION
1	04/04/2014	ISSUED FOR CONSTRUCTION
2	04/04/2014	ISSUED FOR CONSTRUCTION
3	04/04/2014	ISSUED FOR CONSTRUCTION
4	04/04/2014	ISSUED FOR CONSTRUCTION
5	04/04/2014	ISSUED FOR CONSTRUCTION
6	04/04/2014	ISSUED FOR CONSTRUCTION
7	04/04/2014	ISSUED FOR CONSTRUCTION
8	04/04/2014	ISSUED FOR CONSTRUCTION
9	04/04/2014	ISSUED FOR CONSTRUCTION
10	04/04/2014	ISSUED FOR CONSTRUCTION

A1 DWG A103

- [illegible]

LEGEND

- [illegible]

DESIGN FOR ACCESS AND MOBILITY:

- ALL COMMON AREAS INCLUDING CORRIDORS,
ACCESSWAYS, TRUNCATIONS HAVE BEEN DESIGNED
IN ACCORDANCE WITH ADA428.1-2000 SECTION 5.
CONTINUOUS ACCESSIBLE PATHS OF TRAVEL.

This is a detailed architectural floor plan of a residential building, showing 15 units. The plan is oriented with North at the top, indicated by a north arrow. The building is rectangular, with a dashed line indicating the overall footprint. The units are arranged in a grid-like fashion, with a central corridor and stairs. The plan includes dimensions for the building and individual units. The units are labeled as follows:

- UNIT 10: Open Living, Bedroom, Alfresco, Bath, WIR, ENS.
- UNIT 11: Open Living, Bedroom, Alfresco, Bath, WIR, ENS.
- UNIT 12: Open Living, Bedroom, Alfresco, Bath, WIR, ENS.
- UNIT 13: Open Living, Bedroom, Alfresco, Bath, WIR, ENS.
- UNIT 14: Open Living, Bedroom, Alfresco, Bath, WIR, ENS.
- UNIT 15: Open Living, Bedroom, Alfresco, Bath, WIR, ENS.

The plan also shows a central staircase and a lift. The dimensions are provided in millimeters (mm) and meters (m). The scale bar indicates a length of 10 meters. The plan is a technical drawing, showing the layout of the building and the placement of furniture and fixtures.



1 FFL (LEVEL 2)
SCALE 1 : 100

16.08.2016	F	INTERNAL ALTERATION
20.07.2016	D	DIMENTION ADDED
04.07.2016	C	ISSUED FOR QA
24.06.2016	B	ISSUED FOR REVIEW
26.05.2016	A	ISSUED FOR QA COMMENT
DATE	No.	DESCRIPTION



Contractor to verify all dimensions on site before commencing work. MOOUG Design Pty Ltd is to be notified of any discrepancies in the dimensions and setting out of the work for resolution. Copyright of designs shown herein is retained by this office. Authority is required for any reproduction.



1 9444 0511 SUITE 1
f 9444 0522 127 HERODMAN PC
e info@vocus.net.au WENLEY 60

FLOOR PLAN - LEVEL 2

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT 270 (#21) KISHORN RD.
APPLICROSS

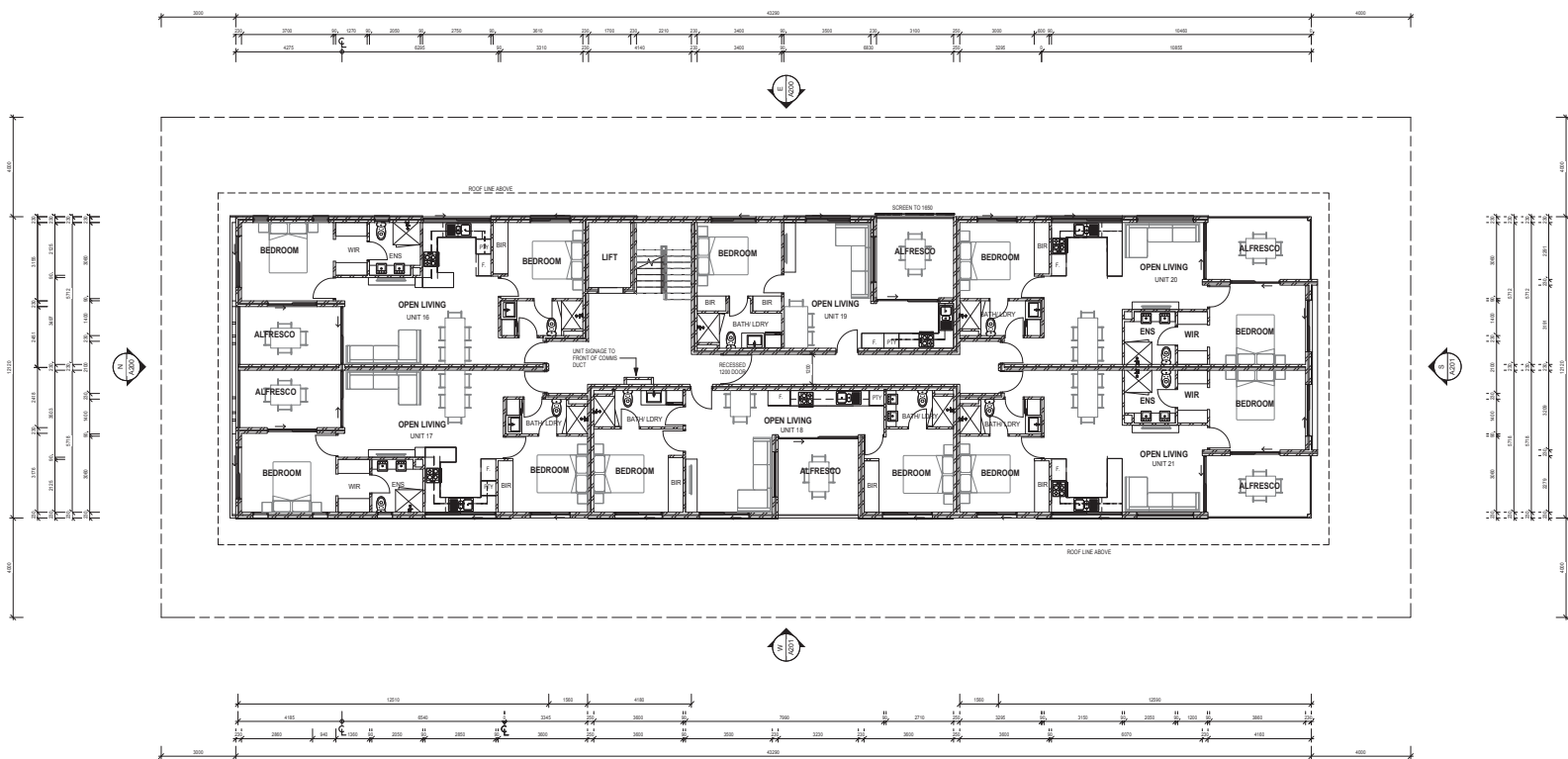
MOOUS PROJECT		D15-91
DESIGN		Design
DRAWN		Auth
CHECKED		Check
SCALE		1 : 10
DATE		MAY 20

A1
DWG

[illegible]

BRP	DOOR- REFER TO ROOF PLAN FOR SIZE AND LOCATION
CS	STRUCTURAL COLUMN- REFER TO STRUCTURAL SPECIFICATIONS
CS	DESIGN LEVEL IN RELATION TO AHD
72.0	AIR CONDITIONING UNIT- REFER TO SPECIFICATION
72.0	TILE/FAN- REFER TO SPECIFICATION
VC	VIBRY SINK- REFER TO SPECIFICATION
VC	REFER TO BUILDERS SPECIFICATION
CH/EN/SP	UNDER BENCH ONE UNDER WITH HOT PLATE & RANGHOVER- REFER TO BUILDERS SPECIFICATION
SH/ST/ST	SHOWER- REFER TO SPECIFICATION
SHB	SHOWER- REFER TO SPECIFICATION
SHB	HOCK- REFER TO HYDRAULIC DGN
SHW	HOT WATER UNIT- REFER TO HYDRAULIC SPECIFICATION
SHW	DISH WASHER- REFER TO BUILDERS SPECIFICATION
S	SINK- REFER TO BUILDERS SPECIFICATION
S	SINK- REFER TO BUILDERS SPECIFICATION
SL	LAUNDRY TROUGH- REFER TO BUILDERS SPECIFICATION
SL	WATERCOURSE- REFER TO BUILDERS SPECIFICATION
B	CAUL, CIST, BOLLARD- REFER TO DETAIL

* ALL COMMON AREAS INCLUDING CORRIDORS, ACCESSWAYS, TRUNCATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS1428.1-2004 SECTION 6: CONTINUOUS ACCESSIBLE PATHS OF TRAVEL.



1 FFL (LEVEL 3)
SCALE 1 : 100

16.08.2016	F	INTERNAL ALTERATION
20.07.2016	D	DIMENTION ADDED
04.07.2016	C	ISSUED FOR QA
24.06.2016	B	ISSUED FOR REVIEW
26.05.2016	A	ISSUED FOR QA COMMENT
DATE	No.	DESCRIPTION



Contractor to verify all dimensions on site before commencing work. MODUS Design Pty Ltd is to be notified of any discrepancies in the dimensions and setting out of the work, for resolution. Copyright of designs shown hereon is retained by this office. Authority is required for any reproduction.



1 0444 9511 SUITE 11
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e info@produs.net.au WEMBLEY 6014
ABN 27 121 224 459 PO BOX 222
ACN 121 224 459 COMO WA 6008

FLOOR PLAN - LEVEL 3

PROPOSED APARTMENT
DEVELOPMENT
FOR YARAN GROUP
LOT 270 (#21) KISHORN RD.
APPLECROSS

MODUS PROJECT	D15-914
DESIGN	Designer
DRAWN	Author
CHECKED	Checker
SCALE	1 : 100
DATE	MAY 2016

A1
REVISION
DWG
A105

SITE & GENERAL NOTES:

- ALL LEVELS, DIMENSIONS POSITIONS AND HEIGHTS TO BE VERIFIED ON SITE BEFORE COMMENCING ANY BUILDING WORK. (NOTES PROVIDED) IS AND
- ISSUED DIMENSIONS ARE TO BE TAKEN AND NO SCALING OF DRAWINGS WILL BE ALLOWED.
- ALL ARCHITECTURAL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH SPECIFICATIONS AND ALL OTHER RELEVANT DRAWINGS (MECHANICAL, ELECTRICAL, CIVIL, TYPICALS AND MECHANICAL).
- ANY DISCREPANCIES ARE TO BE REPORTED TO THE SUPERINTENDENT IMMEDIATELY.
- ALL SETOUT WORK TO BE COMPLETED BY THE CONTRACTOR FOR ELECTRICAL, PLUMBING, BITUMEN, EARTHWORKS AND CONCRETE LAYOUT WORKS.
- REFER TO ENGINEERS DRAWINGS FOR ALL STRUCTURAL WORKS.
- UNLESS SCALE DRAWINGS ARE SUPERSEDED SMALL SCALE DRAWINGS.
- CONTRACTOR TO CONSIDER LOCATION, DEPTH AND EXTENT OF ALL OTHER SERVICES AS SHOWN ON SERVICES LAYOUT PLANS PRIOR TO THE COMMENCEMENT OF ANY WORK. ADVISE THE SUPERINTENDENT UPON DISCREPANCIES.
- CONTRACTOR TO CONSIDER GRAVEL WATER TABLE AND LEVELS PRIOR TO ANY WORK AND IF ANY DE-WATERING IS REQUIRED.
- ALL NECESSARY APPROVALS FROM RELEVANT AUTHORITIES TO BE OBTAINED PRIOR TO THE COMMENCEMENT OF ANY WORK.
- AS CONSTRUCTED SURVEY TO BE PROVIDED BY LICENSED SURVEYOR.
- FOR CONSTRUCTION INFORMATION REFER TO GEOTECHNICAL REPORT.
- GEOTECHNICAL INVESTIGATIONS HAVE BEEN CARRIED OUT. THE INFORMATION CONTAINED IN THE REPORT IS FOR INFORMATION ON THE NATURE OF THE GROUND TYPED AT EACH TEST LOCATION. IT IS NOT A COMPLETE DESCRIPTION OF CONDITIONS EXISTING AT OR BELOW SPECIAL LEVELS ABOVE THE SITE.
- FOR ALL SITE PREPARATION AND CONSTRUCTION - REFER TO CIVIL ENGINEERS DRAWS AND SPECIFICATION.
- THE CONTRACTOR SHALL PROVIDE CONSTRUCTION IDENTIFICATION FOR CUT AND FILL AREAS CERTIFYING THAT THE AREAS HAVE BEEN NECESSARILY COMPLETED.
- ALL EXISTING ESTABLISHED VEGETATION INCLUDING TREES AND ALL EXISTING SERVICES, MANHOLES, WATER MAINS AND WELLS TO BE PROTECTED BY CONTRACTOR.
- THE CONTRACTOR SHALL LIMIT THE MOVEMENT OF EQUIPMENT AND MATERIALS TO THE WORK SITE ONLY.
- EARTHWORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF AS 2778-2012 AND SITE GEOTECHNICAL REPORT.
- THE CONTRACTOR SHALL ALLOW FOR EASE OF ACCESS MEASURES AS REQUIRED.
- SURFACE STABILIZATION TO BE APPLIED TO THE TOTAL DISTURBED AREA OF THE SITE AS SOON AS POSSIBLE AFTER COMPLETION OF SECTIONS OF WORK.

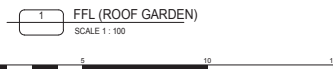
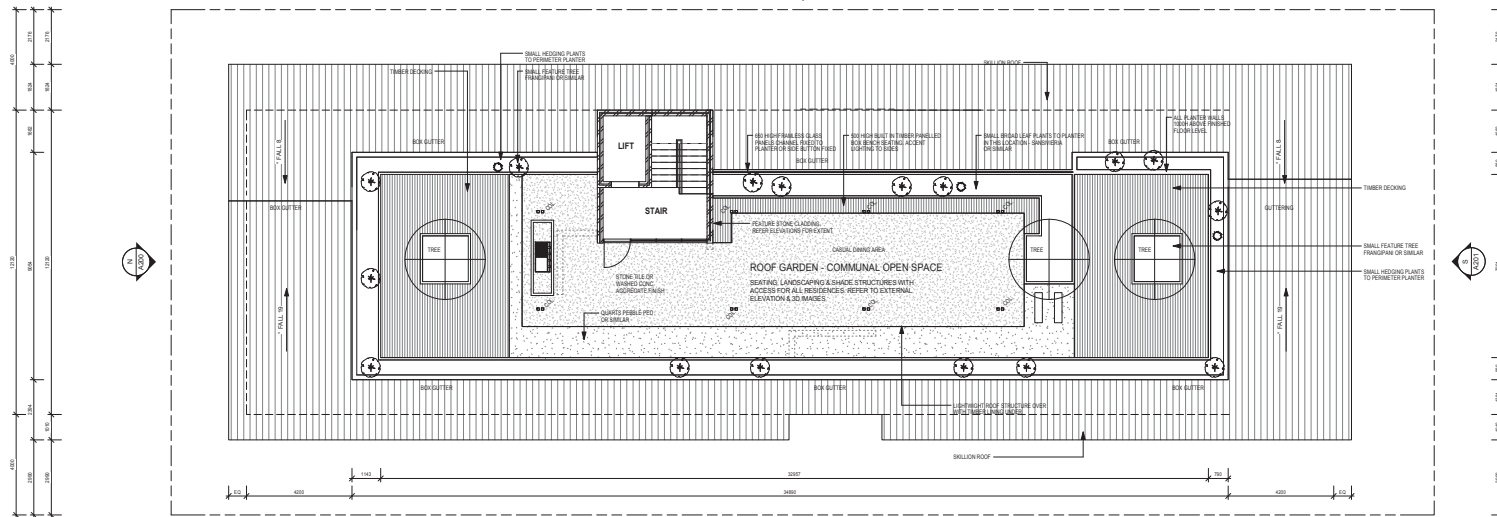
LEGEND

- ROOF: DOWNSPIPE - REFER TO ROOF PLAN FOR SIZE AND LOCATION
- STRUCTURAL COLUMN: REFER TO STRUCTURAL ENGINEERS DRAWS FOR DETAIL
- DOWN-PIPE: IN RELATION TO AND
- AC: AIR CONDITIONING UNIT - REFER TO SPECIFICATION
- HC: TOLLY FAN - REFER TO SPECIFICATION
- WB: UNITARY BASES - REFER TO SPECIFICATION
- F: FROGE - REFER TO BUILDERS SPECIFICATION
- DOWNPIPE: DOWNPIPE - REFER TO BUILDERS SPECIFICATION
- DOWNPIPE: DOWNPIPE WITH DRAIN COVER - REFER TO SPECIFICATION
- SWH: SWH - REFER TO SPECIFICATION
- HC: HOLE COVER - REFER TO INFORMATION DWS
- WPT: WATER UNIT - REFER TO INFORMATION SPECIFICATION
- DW: DOWN-PIPE - REFER TO BUILDERS SPECIFICATION
- S: SWH - REFER TO BUILDERS SPECIFICATION
- P: PUMP - REFER TO BUILDERS SPECIFICATION
- LAUNDRY TROUGH: LAUNDRY TROUGH - REFER TO BUILDERS SPECIFICATION
- WB: WIREMESH - REFER TO BUILDERS SPECIFICATION
- S: GALV STEEL BOLLARD - REFER TO DETAIL

DESIGN FOR ACCESS AND MOBILITY:

- ALL COMMON AREAS INCLUDING CORRIDORS, ACCESSWAYS, TRANSFORMERS HAVE BEEN DESIGNED TO BE ACCESSIBLE BY ALL PEOPLE INCLUDING DISABLED PEOPLE.

City of Melville Received 7 September 2016



REVISION	DATE	BY	DESCRIPTION
1	10/09/2016	Y. YARAN	ISSUED FOR PERMIT
2	10/09/2016	Y. YARAN	ISSUED FOR CONSTRUCTION
3	10/09/2016	Y. YARAN	ISSUED FOR CONSTRUCTION



Contributor to verify all dimensions or site before commencing work. MODUS Design Pty Ltd is not liable for any discrepancies in the dimensions and setting out of the work, the responsibility of the contractor is to ensure that the work is carried out in accordance with the design and specifications.



1	09/09/2016	09/09/2016
2	09/09/2016	09/09/2016
3	09/09/2016	09/09/2016
4	09/09/2016	09/09/2016
5	09/09/2016	09/09/2016
6	09/09/2016	09/09/2016
7	09/09/2016	09/09/2016
8	09/09/2016	09/09/2016
9	09/09/2016	09/09/2016
10	09/09/2016	09/09/2016

FLOOR PLAN - ROOF GARDEN

PROPOSED APARTMENT DEVELOPMENT FOR YARAN GROUP LOT 270 (21) KISHORN RD. APPLEBOSS.

REVISION	DATE	BY	DESCRIPTION
1	09/09/2016	Y. YARAN	ISSUED FOR PERMIT
2	09/09/2016	Y. YARAN	ISSUED FOR CONSTRUCTION
3	09/09/2016	Y. YARAN	ISSUED FOR CONSTRUCTION
4	09/09/2016	Y. YARAN	ISSUED FOR CONSTRUCTION
5	09/09/2016	Y. YARAN	ISSUED FOR CONSTRUCTION
6	09/09/2016	Y. YARAN	ISSUED FOR CONSTRUCTION
7	09/09/2016	Y. YARAN	ISSUED FOR CONSTRUCTION
8	09/09/2016	Y. YARAN	ISSUED FOR CONSTRUCTION
9	09/09/2016	Y. YARAN	ISSUED FOR CONSTRUCTION
10	09/09/2016	Y. YARAN	ISSUED FOR CONSTRUCTION

MODUS PROJECT: D15-914

DESIGN: Y. YARAN

CHECKED: Y. YARAN

SCALE: 1:100

DATE: 09/09/2016

REVISION: F

A1 DWG A106

A1 DWG A20



Form 1 - Responsible Authority Report (Regulation 12)

Application Details:	ADDITIONS & ALTERATIONS TO EDUCATIONAL ESTABLISHMENT
Property Location:	Lot: 1961 Plan: 67423, 28 Colombo Street VICTORIA PARK
DAP Name:	Metro Central JDAP
Applicant:	T & Z Architects
Owner:	Regent College Inc
LG Reference:	5.2017.385.1
Responsible Authority:	Town of Victoria Park
Authorising Officer:	Rochelle Lavery
Department of Planning File No:	DAP/17/01219
Report Date:	31 August 2017
Application Receipt Date:	18 May 2017
Application Process Days:	74
Attachment(s):	1: Plans received 29 August 2017 2: Revised Traffic Impact Assessment received 17 August 2017 3: Revised Traffic Management Plan received 17 August 2017 4: Acoustic Report - received 03 August 2017 5: Schedule of submissions 6: Consultation Plans (Superseded) 7: Consultation Document - Applicants Report 8: Consultation Letters 9: Public Transport Authority Comment 10: Danpalon information 11: Traffic Photos

Recommendation:

That the Metro Central JDAP resolves to:

Approve DAP Application reference DAP/17/01219 and accompanying amended plans received 29 August 2017 in accordance with Deemed Clause 68 of the *Planning and Development (Local Planning Schemes) Regulations 2015* and Clause 30 of the Metropolitan Region Scheme, subject to the following conditions:

1. The total number of student enrolments (not full time equivalents) being no greater than 420 students.
2. The total number of students on-site at any given time being no greater than 395 students.
3. The Traffic Management measures recommended on page 11 - 13 of the Traffic Management Plan prepared by Shawmac Consulting Civil and Traffic Engineers dated 17 August 2017, with the exception of any actions in relation to 'directing traffic' (see Advice Note 7), are to be implemented to the

satisfaction of the Town. In addition to these measures, the following Traffic Management measure indicated as 'non-essential' on page 14 of the Shawmac Traffic Management Plan is to be implemented:

- Staggering student start and finish times within the school (e.g. by surnames).
4. A Memorandum of Understanding between the School and the Town is to be prepared and executed by both parties to the satisfaction of the Town, which includes commitments from the school to implement the required traffic management measures, inform and educate staff and parents of the required traffic management measures and to work with the Town to resolve any issues that may arise (see Advice Note 8) and any recommended additional or modified measures for the future.
 5. At the earlier of 400 student enrolments or a period of 3 months after the occupation of the "New ELC/Teaching Block", the applicant is to submit documentation for the Town's approval analysing the effectiveness of the traffic management measures that have been implemented (refer Advice Note 9).
 6. A minimum of 42 car parking bays, including a universal access bay, shall be provided on site in accordance with the approved plans. These bays shall be marked and allocated in accordance with the approved plans. Car bays located adjacent to the boundary with 25 Geddes Street are to be solely used for staff carparking and shall be clearly signed and/or line marked accordingly.
 7. Prior to the first use of the carpark hereby approved, a new wall/fence shall be constructed along the entire length of the common boundary with No. 25 Geddes Street to help mitigate against the impact of noise from vehicles manoeuvring within the carpark. The wall is to comprise a masonry wall/fence to a height of 1.8 metres, and in consultation with adjoining landowners is to include a section of open style fencing above to a height of 2.4 metres above ground level. Details of fencing materials to be provided to the satisfaction of the Town.
 8. The surface of the boundary fence on the common boundary with 25 Geddes Street to be of face brick construction or have a rendered finish of matching colour to the remainder of the dwellings at 25 Geddes Street, unless otherwise approved in writing by the Town. All exposed surfaces of the boundary wall(s) are to be finished to a clean and tidy state of repair prior to the commencement or occupation of the development.
 9. Prior to the first occupation of the development hereby approved, all approved car parking spaces together with their access aisles shall be clearly paved, sealed, marked and drained in accordance with Australian Standards AS2890.1 and arranged so that all vehicles may at all times leave or enter the street in a forward gear. All parking bays and access aisles shall thereafter be maintained to the satisfaction of the Town.
 10. School sirens are not to operate on non-school days.
 11. Roof pitches of the proposed structures being increased to the satisfaction of the Town.

12. Use of the recreation deck being limited to daylight hours only. No lighting to the recreation deck is permitted.
13. The translucent material proposed for the privacy screen to the recreation deck to be of a non-reflective material to the satisfaction of the Town. Details of the translucent screen wall to the recreation deck being submitted to the satisfaction of the Town, prior to submission of an application for building permit.
14. The recreation deck is to be secured so it is not accessible during out of school hours to prevent unauthorised use, noise and nuisance for nearby residences.
15. Fencing to the recreation deck to be black chain link fencing to reduce visual impact.
16. Prior to the submission of an application for a building permit, a lighting plan for the site shall be submitted to and approved in writing by the Town, including the height, location, lux levels and operating hours of all external lighting, in accordance with Australian Standards. The lighting shall be installed in full accordance with the approved details (see Advice Note 11).
17. Complete details of the proposed external colours, finishes and materials to be used in the construction of the buildings are to be provided to the satisfaction of the Town prior to submission of an application for building permit. The development shall be constructed in accordance with the approved details and shall be thereafter maintained.
18. This approval does not include approval for any signage. Signage is to be the subject of separate approval from the Town.
19. Prior to the submission of an application for a building permit a Construction Management Plan shall be submitted to and approved in writing by the Town which includes the route that construction vehicles will take to and from the site, the temporary realignment of pedestrian access ways (including crossing points and lighting), vehicular access to the site during construction, unloading and loading areas, waste disposal, the location on site of building materials to be stored, safety and security fencing, sanitary facilities, temporary parking/transport arrangements for staff, cranes and any other details. Construction works shall take place in accordance with the approved details at all times.
20. Prior to the submission of an application for building permit, a landscaping plan detailing size, location and type of planting is to be provided to the satisfaction of the Town, including details of the proposed shade tree planting adjacent to the carpark and recreation deck.
21. Landscaping is to be completed prior to the occupation of the building(s) and thereafter maintained to the satisfaction of the Town.
22. Prior to the submission of an application for building permit, details demonstrating compliance with disability access requirements to be provided

to the satisfaction of the Town, including details of access to the recreation deck (see Advice Notes 11, 12 & 13).

23. All plant, equipment and external fixtures, including but not restricted to airconditioning units, satellite dishes and non-standard television aerials, but excluding solar collectors, are to be located such that they are not visible from the primary street or secondary street.
24. All building works to be carried out under this development approval are required to be contained within the boundaries of the subject lot.
25. The 'temporary administration building' being removed within 60 days of the 'New Admin/Teaching Block' being occupied.
26. The Town's street trees are to be protected from damage during all phases of development. Pruning of any street tree affected by the development on the subject site is to be undertaken by the Town, at the applicant's cost (see Advice Note 15)
27. Prior to the submission of an application for a building permit, a landscaping plan shall be submitted for the Town's approval detailing the proposed landscaping of the site and the verge adjoining the property. All on-site and verge landscaping is to be completed prior to occupancy and thereafter maintained to the satisfaction of the Town.
28. This approval is valid for a period of twenty four months only. If the subject development is not substantially commenced within the twenty four month period, the approval shall lapse and be of no further effect.

Advice to Applicant:

1. In order to confirm compliance with this development approval and all relevant Council requirements, approval is to be obtained from the following Council Business Units prior to the submission of a certified application for a building permit:
 - Urban Planning;
 - Street Life;
 - Park Life;
 - Environmental Health
2. Stormwater drainage design is to cater for a 1:100 year storm event. All stormwater drainage for commercial developments shall be designed and signed by a practicing Hydraulic Consultant. An overland flow path is to be included in the design to ensure diversion of stormwater from the developments during storm events.
3. Crossover location and construction shall comply with the Town's Specifications for Crossover Construction. A separate application must be made to the Town's Street Life Sub Program (tel 9311 8115) for approval prior to construction of a new crossover. Residential Vehicle crossovers shall be constructed from the following approved materials: Brick / Block Pavers, In-Situ

concrete, In-Situ Lime-Crete, In-Situ Exposed aggregate or any other material approved by the Town.

4. The owner or occupier is required to display the street number allocated to the property in a prominent location clearly visible from the street that the building faces.
5. Any modifications to the approved drawings, other than those authorised by this approval, may require the submission of an application for an Amendment to Planning Approval and reassessment of the proposal.
6. Should the applicant be aggrieved by this decision a right of appeal may exist under the provisions of the Town Planning Scheme or the Metropolitan Region Scheme and the applicant may apply for a review of the determination by the State Administrative Tribunal within 28 days of the date of this decision.
7. The direction of traffic should only be undertaken by suitably qualified individuals and should only be considered after a formal risk evaluation has been undertaken. Direction of traffic resulting in a collision/incident could lead to the individuals involved being held liable. The Town does not recommend, endorse or encourage school staff directing traffic. The Town does, however, recommend parents of students being informed/educated/reminded of traffic rules.
8. In relation to Condition 4, the Memorandum of Understanding should include the following commitments:
 - to implement the traffic management measures referred to in condition 3;
 - to submit relevant documentation referred to in condition 5;
 - the measures that the school employ to inform and educate staff and parents of the traffic management measures that have been implemented and need to adhere to these ;
 - to provide evidence of total enrolment and actual attendance numbers for students when requested by Council;
 - to work with the Town to resolve any traffic related concerns that may arise from the operation of the School; and
 - to continually monitor the management of traffic in and around the school and where necessary implement any modified or additional measures.
9. In relation to Condition 5, the documentation should include at a minimum a section acknowledging any traffic/congestion complaints received by the Town and School in relation to the School within the previous 12 months, identification of practices that have or have not been effective at minimising congestion, and detailing what (if any) actions were or need to be undertaken.
10. In relation to Condition 16, lighting design should minimise light spill onto nearby residential properties, and should not result in buildings visible from the road or nearby properties being highly illuminated.
11. Attention is drawn to the need to comply with the requirements of Part D3 of the Building Code of Australia - Access for People with Disabilities, including parking, sanitary facilities and tactile indicators in accordance with AS 1428.1, AS 1428.4, AS 1428.5 and AS/NZS 2890.6.

12. Plans are to be assessed by a practicing qualified disability Access Consultant who is an accredited member of the Association of Consultants in Access, Australia Inc (ACAA) to confirm compliance with the Disability (Access to Premises – Building) Standards, Building Code of Australia and relevant Australian Standards. A Copy of the certified plans is to be provided as part of the building permit application.
13. In addition to the disabled access and facility requirements of the Building Code of Australia, it is the responsibility of the building owner/developer to ensure the development complies with the Disability Discrimination Act 1992. Further information may be obtained from the Disability Services Commission.
14. Unauthorised verge tree pruning or removal is subject to a penalty under the *Activities on Thoroughfares and Public Places Local Law 2000, Division 1 – General, 2.1 General Prohibitions*.

Background:

Insert Property Address:	Lot: 1961 Pln: 67423, 28 Colombo Street VICTORIA PARK
Insert Zoning MRS:	Urban
TPS:	Residential – R30
Insert Use Class:	Educational Establishment - 'AA' Discretionary Use
Insert Strategy Policy:	Precinct Plan P5 – Raphael Precinct
Insert Development Scheme:	Town of Victoria Park Town Planning Scheme No. 1
Insert Lot Size:	5054m ²
Insert Existing Land Use:	Educational Establishment
Value of Development:	\$4,205,000.00

The subject site is currently occupied by Regent College, an Educational Establishment (Primary School).

On 28 November 2006 planning approval (DA 06/0596) was granted for the construction of a two storey building within the school grounds, comprising changing room and toilet facilities, a uniform shop and three classrooms. Amongst other conditions of approval, the total number of student enrolments were limited to being no greater than 230.

On 15 December 2009 planning approval (DA 09/0665) was granted for the construction of a two storey building within the school grounds, comprising a Multi-Purpose/Assembly area, Arts/Gymnasium area and ancillary areas in addition to a carpark to be accessed from Geddes Street. Conditions of approval for this development included the following noteworthy conditions:

- The total number of student enrolments (not full time equivalents) being limited to no greater than 256;
- A 1.8 metre masonry wall being erected along the common boundary to No. 25 Geddes Street to mitigate noise generated by the proposed car parking area; and
- A Traffic Management Plan being prepared and implemented to the satisfaction of the Town.

In 2014 the Town provided advice to Regent College indicating that, notwithstanding the condition in the previous approval, 268 students being enrolled was acceptable given that a maximum number of 248 students would attend the school on any given day. An adjoining neighbour has stated the current enrolment figure of the school is 279 students. Advice provided by the School's Principal indicates a current total enrolment of 274 students.

Details: outline of development application

A development application has been received that proposes the demolition of older parts of Regent College, and the construction of new teaching, administration, recreation and parking facilities. The proposed additions are intended to facilitate an increase in student numbers from 256 to 420 total enrolments.

The proposed development is summarised as follows:

- An increase to the maximum number of students, from 256 to 420 total enrolments. A maximum of 395 students are proposed to be on site at any given time.
- Demolition of the existing single storey Administration and classroom blocks addressing Colombo and Hordern Streets.
- A new two storey teaching building on the corner of Colombo and Hordern Streets comprising three (3) Kindergarten/Pre-primary classrooms on the ground floor, with General Learning Areas on the first floor.
- A new two storey building addressing Street comprising Administration spaces on the ground floor, with General Learning Areas and Staff Common Room on the first floor.
- 30 new on-site car bays (Increasing the total on-site parking to a total of 43 bays).
- Conversion of an existing playing court addressing Geddes Street to car parking, with a new recreation space on an open deck above the carpark.
- A new enclosure to accommodate firefighting equipment (water storage tanks and pumps).
- Refurbishment and internal works to the existing two storey classroom blocks.
- A Temporary Administration Building.

Further details of the proposed development are contained in relevant Attachments to this report, including technical reports such as a Transport Impact Assessment and Acoustic Report.

Legislation & policy:

Legislation

- *Planning and Development Act 2005*;
- *Planning and Development (Local Planning Schemes) Regulations 2015*; Schedule 2, Clause 67;
- Town Planning Scheme No. 1 (TPS1); and
- TPS1 Precinct Plan P5 'Raphael Precinct';
- Metropolitan Region Scheme Text Clause 32.

State Government Policies

- State Planning Policy 3.1 – Residential Design Codes (R-Codes);

Local Policies

- Local Planning Policy 3 “Non-Residential Uses in or adjacent to Residential Areas”
- Local Planning Policy 23 “Parking”
- Local Planning Policy 25 “Streetscape”
- Local Planning Policy 36 “Climate Control (Energy Efficiency)”

Consultation:

Public Consultation

In accordance with the Town of Victoria Park Local Planning Policy (LPP) 37, the development application was identified as a ‘significant application’. Accordingly, it was publicly advertised for a period of 21 days with letters sent directly to the owners and occupiers of properties within a 200m radius of the subject site. Letters to the most affected owners at 25A, 25B and 25C Geddes Street outlined issues regarding overshadowing and the proposed setback variation. A follow-up letter to these owners was sent on 6 July 2017 to correct an error contained in the original consultation letter. These letters have been compiled as Attachment 8.

The consultation period commenced on Tuesday, 4 July 2017, and closed on Wednesday, 26 July 2017. During this period, two signs displaying the public consultation notice were erected on the site in prominent locations. Newspaper Notices were published in the Southern Gazette local newspaper once a week for three consecutive weeks (Tuesday 4 July 2017, 11 July 2017 and 18 July 2017). Plans/details of the proposed development were made available to be viewed online via the Town’s website www.victoriapark.wa.gov.au.

During the consultation period, 32 submissions were received in relation to the subject development proposal. 31 submissions object to the proposal, while one (1) supports it. The submissions received are summarised as follows:

	Comments received	Officer’s Comments
1.	<p>26 submissions objecting to increased congestion resulting from the proposal.</p> <ul style="list-style-type: none"> • Other schools are located in close proximity to Regent College. These include Victoria Park Christian School (27 Colombo Street) and Victoria Park Primary. • Parent’s vehicles, seeking to use the kiss and ride facility located on Hordern Street, queue through the Geddes Street intersection. The resulting queue on Geddes St often 	<p>Noted. See Comments Section further below</p>

	<p>backs up to more than 100m, blocking driveways located at 25 and 27 Geddes Street.</p> <ul style="list-style-type: none"> • Other parents, seeking to enter the Kiss and Ride, queue on Hordern Street opposite the intersection – holding up other traffic. 	
2.	<p>22 submissions objecting to the proposal's impact on Traffic Safety.</p> <ul style="list-style-type: none"> • With street parking to either side of Geddes street, a single car queuing for the kiss and ride can cause congestion. This prompts some people to take risks such as overtaking via the wrong side of the road. 	Noted. See Comments Section below.
3.	<p>12 submissions objecting to the shortage of parking in the area in relation to the proposed development.</p>	<p>Details of the proposed development as consulted indicated an increase in the enrolment to 423 Students. With the number of car bays proposed, this resulted in non-compliance with the Town's Car Parking Policy (LPP23).</p> <p>Revised details of the proposal state that the total number students being permitted on site at any given time shall not exceed 395. This results in the proposal complying with the Town's car parking requirements.</p>
4.	<p>11 submissions objecting to the proposed recreation deck being out of character with area.</p>	<p>Noted. Of the proposed structures in this development application, the recreation deck is recognised as being the least 'residential' in character. Council Officers acknowledge, however, that the subject site is a school and that not every structure is capable of, or suited for, traditional architectural detailing and materials.</p> <p>The proposed recreation deck is set back more than 13 metres from Geddes Street and only 2.7 metres tall when measured to the top of the concrete deck. The solid portions of the structure are considered to pose relatively little visual impact on the street. The 'bulk' of the recreation</p>

		deck is actually open space, being under croft parking or an open air recreation area enclosed by chain link fencing and, on one side, translucent screening.
5.	<p>10 submissions objecting to overshadowing/loss of light</p> <ul style="list-style-type: none"> • LPP 36 - Climate Control (Energy Efficiency) also states that <i>"New development should not deny solar access to neighbours' primary outdoor living areas"</i>. • The claim by the applicant that the proposed Danpalon cladding <i>"allows for natural light transmission to the adjoining property"</i> is questionable. Danpalon multicell cladding, at the thickness proposed is far from a clear and uninterrupted transmission of sunlight and thermal benefits that access to direct winter sun unequivocally provides. It is also noted that the transmission of 'visible Light' (as described by the manufacture of Danpalon) is in no way comparable to the benefits of direct winter sunlight. It is also not possible to replace the Danpalon cladding with clear glazing or fencing, as this would be non-compliant with privacy requirements 	<p>The proposed development plans as consulted (Attachment 6) depicted the recreation deck having a 1.5m setback to the common boundary with 25 Geddes Street. Assessment of the shadow cast by the deck with this setback found it substantially overshadowed the outdoor living areas of the adjacent property. Consultation letters sent out reflected this (Attachment 8).</p> <p>To lessen the impact of the adjacent structure, the applicant had proposed to use a translucent material for the privacy screen, allowing for light to be transmitted while still ensuring privacy. A sample of this material was provided to the Town for inspection. Testing of how much light is transmitted (Attachment 10) has validated concerns by neighbours that the light transmitted would be much weaker. This measure alone was not considered to satisfactorily address overshadowing issues.</p> <p>Revised plans have increased the recreation deck setback which is now located 5m from the lot boundary and does not overshadow the adjoining property when measured at Midday, 21 June.</p> <p>The translucent screen material, while less crucial due to the revised plans, is still considered to be a valuable design element of the recreation deck as it allows for (albeit filtered) morning light to reach the residences at 25 Geddes Street earlier than it would otherwise.</p> <p>Concerns, however, have been raised by Council regarding the potential for</p>

		<p>this material to cause glare issues. A non-reflective finish is available to the material chosen, but this poses a trade-off between glare and efficacy at transmittance. "Details of the screen wall being provided to the Town's satisfaction" is a recommended condition of approval, allowing for this issue to be investigated and resolved.</p>
6.	<p>10 submissions objecting to general noise.</p> <p>Concerns include noise generated from:</p> <ul style="list-style-type: none"> • Slamming of car doors, manoeuvring, revving, idling engines etc from proposed car parking adjacent to 25 Geddes Street • The bouncing of basketballs and/or foot traffic reverberating through the raised recreation deck. • Unauthorised use of the recreation area at night-time due to inadequate security practices • Noise from children. 	<p>Council Officers previously had concerns that the recreation deck would serve to direct noise generated from vehicles sideways to the dwellings at 25 Geddes Street, rather than dissipating skywards. Revised plans have increased the recreation deck setback from 1.5m to 5m off the common boundary with 25 Geddes Street and have served to address this particular concern.</p> <p>An acoustic report has been prepared in relation to the proposed parking area, fire pump and recreation deck. The acoustic report assesses the proposal in terms of the Environmental Protection (Noise) Regulations and concludes that each noise source complies with the assigned noise level.</p> <p>To assist in mitigating any noise from the carpark, a solid 1.8m tall masonry fence is required to be erected along the entire length of the boundary with 25 Geddes Street. A condition of approval had previously required a similar wall for the existing carpark accessed off Geddes. This previous condition, however, did not require it to be built along the entire length of the boundary.</p> <p>To ensure that the recreation deck is not used after dark, a condition of approval is recommended that requires the school to secure the recreation deck outside of school hours.</p> <p>Overall, issues relating to noise are considered to be satisfactorily</p>

		addressed.
7.	9 submissions contending that the traffic impact assessment is inaccurate and unrealistic.	<p>Noted.</p> <p>The Traffic Impact Assessment has been prepared in accordance with the relevant guidelines.</p> <p>Notwithstanding the critique that the assessment appears to be based off modelling, congestion issues are considered to be able to be addressed through management of transport behaviour, with particular emphasis being placed on distributing the peak load of pick-up and drop-off activity over a wider range of time.</p>
8.	8 submissions objecting to loss of privacy resulting from the proposed recreation deck.	The proposed recreation deck is screened to the SW elevation, preventing overlooking to adjoining residential properties. The screening is designed such that the deck, if assessed as a Balcony under the R-Codes, would comply.
9.	8 submissions objecting to the proposed density/intensification of use Educational Establishment is an 'AA' (Discretionary) Use. Notwithstanding the existing use on this property – the proposed development requires similar matters applicable to a new school be considered	The proposed intensification of the use is considered to adequately minimise its impacts and is consistent with the broader strategic planning framework, acknowledging the need for addition student spaces in the area as the population increases. See Comments Section below.
10.	7 submissions objecting to the setback of the recreation deck and issues regarding and scale.	Since consultation was undertaken, revised plans have been provided which increase the recreation deck setback from 1.5m to 5m off the common boundary with 25 Geddes Street. This is considered to have adequately addressed these issues of setback, bulk and scale.
11.	<p>7 submissions objecting to the proximity of parking to residences.</p> <p>“Principles of LPP23 – Car Parking include:</p> <ul style="list-style-type: none"> • The amenity of areas surrounding parking facilities should be safeguarded. Parking facilities should complement their surroundings and provide a convenient service, without causing undue disruption to surrounding 	<p>The proposed car parking areas are considered to be appropriately located, do not dominate their surroundings or cause undue disruption to adjacent residential uses.</p> <p>To assist in mitigating any noise from the carpark, a solid 1.8 metre tall masonry fence is required to be erected along the entire length of the boundary with 25 Geddes Street prior to use of the carpark. Discussion with</p>

	<p>uses.</p> <ul style="list-style-type: none"> • Parking facilities should be located so they do not dominate the surroundings or intrude into residential areas.” 	<p>some of the adjoining residents indicate a preference for existing chain link fencing (approximately 3.6 metres high) to be retained along this boundary for security purposes, in addition to the masonry fence. To ensure a neater outcome, the recommended condition of approval requires an open style fence to be located atop the 1.8 metre masonry wall.</p>
12.	<p>7 submissions stating the proposal is inconsistent with planning framework.</p> <p>The statement of intent for the Raphael Precinct includes the following:</p> <ul style="list-style-type: none"> • “The Raphael Precinct shall remain as a residential precinct...” • “The Precinct is and should remain a low to medium density housing area...” • “The precinct should remain a visually attractive area and have a pleasant atmosphere characterised by low to medium scale architecture, buildings facing the street in the traditional manner and set in landscaped surrounds.” • “Priority will be given to ensuring that new development, particularly infill development at higher densities, does not result in undue loss of privacy or amenity for existing residents”. 	<p>This reports recommendation for approval reflects the Town’s position that the proposal is consistent with the planning framework. Educational Establishment is an “AA” discretionary use considered to be appropriate in a residential area subject to Council consideration and approval.</p> <p>If the proposed development is approved, Raphael Park will remain a residential precinct that is predominantly a low to medium density housing area. It will also remain a visually attractive area characterised by low to medium scale architecture. In particular, the new teaching and administrative blocks are considered to have been successfully designed to complement and be sympathetic to the character of the area.</p> <p>With appropriate conditions of approval, the proposed development is not considered to result in undue loss of amenity for existing residents.</p>
13.	<p>6 submissions objecting to loss of outlook/views.</p>	<p>Loss of views from private property are not a valid planning consideration.</p>
14.	<p>6 submissions objecting to potential injury from balls</p> <p>Residents located adjacent to the existing ground level basketball court area have had balls thrown (over an existing 3.4 metre chain link fence) into their outdoor living areas. Concerns submitted outline that the additional height of the recreation deck will worsen this situation, by increasing the height from which</p>	<p>Since consultation was undertaken, revised plans have been provided which increase the recreation deck setback from 1.5 metres to 5 metres off the common boundary with 25 Geddes Street. This is considered to have adequately addressed these concerns.</p>

	objects (particularly basketballs) may fall.	
15.	5 submissions objecting to Loss of property value	Not a valid planning consideration
16.	4 submissions objecting to Light Spillage	No lighting to the recreation deck is proposed. Furthermore, a recommended condition of approval will require details of proposed lighting to be approved by the Town prior to a building permit being issued. This is considered to satisfactorily address the issue.
17.	4 submissions objecting to afterhours activities	<p>Within reason, the Town supports after hours school activities as a means by which the pick-up and drop-off traffic may be staggered.</p> <p>In relation to the recreation deck, a condition is recommended that limits its use to daylight hours only. To ensure that it is not used by unauthorized people(s) a condition is also recommended that will require it to be secured when not in use.</p>
18.	4 submissions objecting to insufficient outdoor play areas	The proposal complies with the applicable plot ratio requirement and minimum amount of open space under the R-Codes. Aside from these statutory requirements, the Town has no planning guidance on what is an appropriate minimum amount of outdoor play area. The School's Principal has also advised there are no applicable education regulatory requirements for primary schools in this regard.
19.	3 submissions objecting to the teaching blocks being out of character with area.	Addressed in comment to point 12 above.
20.	8 submissions objecting to construction noise.	<p>A construction management plan is a recommended condition of approval that will seek to minimize the impact of construction works on the area.</p> <p>Unfortunately, there will be noise during construction as there would also be for construction of residential properties.</p>
21.	3 submissions raising concern regarding non-compliance with previous conditions of approval, and likelihood of non-compliance with	Development Applications must be considered and determined on their own merits, and non-compliance with previous conditions would not be held

	future conditions of approval.	as valid grounds for refusal. Matters of non-compliance with planning approval can be adequately dealt with under the provision of the Planning and Development Act when identified.
22.	3 submissions objecting to Antenna Blockage.	Not a valid planning consideration.
23.	3 submissions suggesting an internal kiss and ride.	This option was investigated, but not pursued further when the likely impact on adjoining residences was recognised. Changes to pick up and drop off behaviour are considered to be the primary means by which congestion issues can be addressed in regards to both existing and proposed student numbers.
24.	1 submission stating concern regarding the lack of disability access to the recreation deck	This has been acknowledged in discussions with the applicant. A condition of approval requires details (such as a lift, or access way from the adjacent) demonstrating compliance with disability access requirements to be provided prior to the lodgement of a building permit.
25.	1 submission supporting the proposal.	Noted.

In regards to the above table:

- Multiple submissions by the same person have been counted as a single submission.
- Submissions which were signed by two individuals (usually couples) have been counted as two submissions.
- A submission sent to the Town on behalf of a resident in the area (eg – a politician submitting on behalf of one of their constituents) has been counted as a separate submission in its own right.

Consultation with other Agencies or Consultants

As the subject site abuts the Route 72 and 75 bus services which operate on Geddes Street, comment was sought from the Public Transport Authority (PTA). Its response (Attachment 9) expressed no concern for the proposed development, stating-

“The PTA has no objection to the partial redevelopment of Regent College and finds the proposal to be generally conducive to the operation and growth of the Transperth network”

Planning assessment:

Local Planning Policy 3 – Non-Residential Uses in or adjacent to Residential Areas

The property is on and adjacent to land zoned Residential and therefore is subject to Policy 3.5 "Non-Residential Uses in or Adjacent to Residential Areas". This Policy seeks to ensure that non-residential uses do not adversely affect the amenity of surrounding residential properties. Clause 3.5.3(b) of the Policy requires non-residential development to comply with the setback and plot ratio development standards for grouped dwellings of the relevant Residential Planning Code, as follows:

*"...Non-residential development in residential areas is **required to comply with the setback and plot ratio development standards for grouped dwellings of the relevant R-Code**. For the purposes of this Policy a major opening is a window, door or other opening which can affect privacy of nearby residences or future residences. For the purposes of this policy a plot ratio of 0.5:1 shall apply in the R20, 30 and 40 Code areas."*

28 Colombo Street is located within a Residential R30 zoned area.

Item	Requirement	Proposed	Compliance
Plot Ratio (LPP3)	The plot ratio shall not exceed 0.5:1 (2527m ²).	Plot ratio 0.487 (2464.5m ²)	Compliant.
Street Setbacks (LPP25 Streetscape Policy)	Colombo Street: Minimum 3m, Average of 6m.	Colombo Street: Minimum 4m, Average of 8.08m	Compliant.
	Hordern Street: Minimum 3m.	Hordern Street: Minimum 4.65m.	Compliant.
	Geddes Street: Minimum 3m.	Geddes Street: 13m+.	Compliant.
Recreation Deck - Boundary Setbacks (R-Codes: Table 2a)	3.3m setback to No. 25 Geddes Street (2.3m if excluding chain link fence)	5m setback to No. 25 Geddes Street	Compliant.
	2.8m setback to No. 19 Geddes Street (1.5m if excluding chain link fence)	Nil setback to No. 19 Geddes Street.	Non-Compliant. See discussion below
Height (LPP3)	Wall height: 6m Ridge height: 9m	Wall height: 6.8m Ridge height: 9.7m	Non-Compliant. See discussion below

(Note – total plot ratio has excluded the plot ratio area of the temporary administration building, which is to be removed from site upon the occupation of the last stage of the construction. If it was included in the total plot ratio area, the proposal would exceed the permitted plot ratio by only 7.8m², or 0.15%)

The Table below outlines the assessment of the development under the R-Codes.

Item	Requirement	Proposed	Compliance
Open Space CI 5.1.4	45% of site area (site area is 5054m ²) = 2274m ²	60.94% = 3080m ² open space.	Compliant.
CI 5.4.1	Below R50	The recreation deck	Compliant.

Visual Privacy	Outdoor Habitable Spaces -(Balcony) 7.5m minimum	has translucent privacy screening along its south western edge that is approximately 1.7m above the deck FFL. From the un-screened ends of the recreation deck, the cone of vision (measured at a 45 degree angle) does not extend to adjoining residential properties.	
Over-shadowing / Solar Access CI 5.4.2	R30 zoning-overshadowing not to exceed 35% of the adjoining lot's area (at Midday, 21 June).	Adjoining property has 0% of its area overshadowed by the proposed recreation deck (at Midday, 21 June).	Compliant.

(Note – Visual Privacy has only been assessed in relation to adjoining residential properties, and not the adjoining place of worship at 19 Geddes Street)

Local Planning Policy 23 – Parking Policy

Item	Requirement	Proposed	Compliance
Local Planning Policy 23 – Parking Policy	<p>14 bays per 100 students, plus staff car parking at a rate of 0.07 bays per student.</p> <p>The proposed Development seeks 139 additional students (this being the total number of additional students on site at any given time). 29 Additional bays are therefore required.</p>	<p>30 additional bays</p> <p>(43 on site bays provided in total)</p> <p>Note: The Traffic Impact Assessment attached states that 33 additional bays are proposed. This is due to changes made to the plans since it was prepared.</p>	<p>Compliant.</p> <p>It should be noted, that a universal access bay will need to be provided. This will likely decrease the number of bays provided by one, due to a universal bay requiring twice the width of a regular bay. Should this be necessary, the number of car bays provided will still comply with the Town's parking policy.</p> <p>It should also be noted that if assessing the school without regard for the existing approved</p>

			shortfall, 395 students would require 83 bays to be provided, however it is acknowledged that the shortfall has been approved. The current proposal wholly caters for the additional student numbers.
	<p>CI 6.12.2-landscaping:</p> <p>a) Shade trees generally at a rate of one tree for every four bays.</p> <p>And</p> <p>c) The perimeter of all parking areas should be landscaped by a planting strip of at least 1.5 metres in width. In some circumstances a greater area of landscaping may be required, particularly where a parking area adjoins a residential property”</p>	<p>a) Small trees are indicated between each set of three (3) car bays along the common boundary with 25 Geddes Street</p> <p>c) A landscaping strip, between 0.8m and 1m in width, is proposed for the length of the common boundary with 25 Geddes Street</p>	<p>Non-Compliant.</p> <p>See discussion below.</p>

Setback variation proposed to 19 Geddes Street

The proposed recreation deck seeks a nil setback to 19 Geddes Street. 19 Geddes St is occupied by the Seventh Day Adventist Church located on the corner of Hordern and Geddes Street. The area of land against which the nil setback would be located is an open grassed space that is leased by Regent College for recreation space. The majority of this ‘lot boundary wall’ actually consists of chain link fence. The solid portion of the recreation deck structure is approximately 2.7m high. It is noted that no submission has been received from the owners of 19 Geddes Street in relation to this proposal.

Given the above considerations, Council Officers are of the opinion that the proposed setback variation does not adversely impact the adjoining landowner and is appropriate in this context

Traffic Safety and Congestion

Concerns regarding the Geddes and Hordern Street Intersection in relation to the operation of the Kiss and Drive facility are acknowledged by Council Officers. A recurring issue stated in many of the submissions is that parents who seek to use the Kiss and Drive facility located on Hordern Street queue through the Geddes Street intersection. The resulting queue on Geddes St often backs up to more than 100m, blocking driveways located at 25 and 27 Geddes Street. Other parents, also seek to enter the Kiss and Drive, queue on Hordern Street opposite the intersection – holding up other traffic. With tight gaps in vehicles and congestion, submitters indicate that some drivers have resorted to potentially unsafe manoeuvres.

The Traffic Management Plan provided has proposed traffic management measures to mitigate these issues, including the following:

- a) Staff members who are supervising the Kiss and Drive area are to ensure that no parents queue within the intersection areas or along the traffic lanes on Hordern Street south of Geddes Street. If the Kiss and Drive is full and there is nowhere to wait without blocking the intersection or traffic lanes, staff are to ask parents to move away from the area to loop around the block and return to join the queue when there is room to do so.
- b) Additional staff being made available to supervise the Kiss and Drive during the peak periods. At least two staff should be available to assist children to the cars and one or two staff to direct vehicles and ensure the intersection and traffic lanes are not obstructed. The periods that staff are available to supervise student arrivals and departures will be extended (8:00 to 8:30 am for the drop off period and 2:50 to 3:30 pm).
- c) Removal of the 15 minute parking along Geddes Street fronting the school and the church during the school peak periods to free up this area for vehicles to queue. Parents are to be encouraged to approach the Kiss and Drive from this direction to minimise impact on other streets. At this stage, a No Parking Zone would be sufficient. However, consideration could be given to converting this area to an extension of the Kiss and Drive, potentially just for peak times. It is understood that formalising this area as a Kiss and Drive will require public consultation.
- d) Encouraging parents to avoid the busiest periods during the school peaks by dropping off their children slightly earlier in the morning and picking up their children slightly later in the afternoon.
- e) There is a significant amount of street parking on the roads surrounding the school. Parents will be encouraged to park a short distance from the school and walk their children to and from the school to avoid queuing. There is a free public car park on the Gloucester Street frontage of Raphael Park approximately 350m walking distance from the school. The informal verge parking on the school side of Colombo Street will also be allowed to continue. The street parking plan will be included in the traffic management plan to be

distributed to parents and staff. The plan should be updated regularly to reflect any changes to street parking.

- f) Encouraging more students to participate in the before and after school programs.
- g) Encouraging carpooling.

(Note – the above actions were provided as dot points in the Traffic Management Plan. This has been changed here for ease of referencing individual actions)

The intensity of informal verge parking on the school side of Colombo Street on an ongoing basis is not supported. There is a standard requirement for the verges in residential areas of the Town to be landscaped, reticulated and maintained by the landowner and is recommended in this instance. It is important that this parking does not occur on a daily basis following the construction of the carparking bays on site.

In regards to point c), any changes to street parking and associated line marking and signage if considered by the Town, would be need to be addressed through a separate consultation process that is independent of this Development Application. Given that the changes proposed are far from certain, these changes cannot be relied upon when determining this application.

Notwithstanding the above disclaimer, the removal of the '15 minute parking' bays adjacent to the 19 Geddes Street is considered to have many merits and may be a possible solution to many traffic safety concerns raised by submitters. As highlighted by photos taken of the Geddes Street and Hordern Street intersection (Attachment 11), the on street parking to either side of Geddes street results in a narrow space that can quickly become blocked by a parent queuing for the Kiss and Ride, a bus and other traffic. The removal of these bays, the changing of signage to prohibit their use during pickup/drop off hours or the extension of the Kiss and Ride into this area would result in a greater width of road being able to be used by general traffic.

In regards to points a) and b), it is noted that directing traffic should only be undertaken by suitably qualified individuals and should only be considered after a formal risk evaluation has been undertaken. Direction of traffic resulting in a collision/incident could lead to the individuals involved being held liable. The Town does not recommend, endorse or encourage school staff directing traffic. The Town does, however, recommend parents of students being informed/educated/reminded of traffic rules. Behaviour change in regards to 'not blocking the intersection' is considered viable even without the direction of traffic by school staff.

Aside from educating parents to not block the intersection and changing car bays and line marking, Officers are of the opinion that the greatest means by which traffic safety can improved is by reducing the quantity of parents arriving via car at the same time. Points g) and e) encourage walking from street parking in nearby streets and carpooling respectively. Points d) and f) both promote a broader pickup time to stagger the departure of students from the school. Observations by Council Officers of the Kiss and Ride facility made on site visits during end of school hours indicate that the staggering of departure times appears to be successful in reducing congestion issues.

The School's Principal, at a meeting with Council officers regarding congestion issues, has proposed staggering pickup times by surname. As siblings generally have identical surnames, each family unit would have a single drop off timeslot and pickup timeslot to coordinate their schedules around. The staggering of pickup and drop off times is a concept that the Town believes has great potential to reduce congestion issues associated with schools. A condition therefore requires this management action to be implemented.

Council Officers are satisfied that traffic and congestion may adequately be addressed within the confines of existing infrastructure through management of transport behaviour, with particular emphasis being placed on distributing the peak load of pick-up and drop-off of students over a wider range of time.

Parking

In regards to the quantity of car parking bays provided by the proposed development, the standards set out in the Town's car parking policy are satisfied.

It should be noted, that a universal access bay will need to be provided. This will likely decrease the number of bays provided by one, due to a universal bay requiring twice the width of a regular bay. Should this be necessary, the number of car bays provided will still comply with the Town's parking policy.

It should also be noted that if assessing the school without regard for the existing approved shortfall, 395 students would require 83 bays to be provided, however it is acknowledged that the shortfall has been approved. The current proposal wholly caters for the additional student numbers.

Strategic Planning Direction

In response to previous State government planning strategies such as Network City and Directions 2031, the Town has previously established a general strategic planning position of accommodating additional density in areas such as the Burswood Peninsula, the Causeway Precinct, Albany Highway, and Bentley/Technology Park, so as to minimise the density pressures upon the Town's residential character areas.

In more recent times, the State Government has released the strategic planning document Perth and Peel @ 3.5 million, which anticipates a population within the region of 3.5 million by 2050. In this respect, the document outlines infill housing targets for each local government authority, with the Town required to plan for an additional 19,400 dwellings by this time.

As Identified in Council's 'Future Trends' document (used for the 'Evolve' Project), in 2011 the population of the Town of Victoria Park was dominated by the 20-34 age bracket, which made up 34.1% of the population. In 2036, this age range is still expected to be the dominant group and will account for 29.8% of the population.

The study document further states that young lone persons and young couple households make up the dominant group in the Town, with couples increasingly remaining in the area after having children. In this regard, it is anticipated that there will be increased demand for schools within the Town. We are currently seeing this

with increased pressure on existing schools in the area as the numbers of primary school age children continues to increase resulting in demountable classrooms and amenities being added to schools in the Town.

The Draft Central Sub-Regional Planning Framework that forms part of the Perth and Peel @ 3.5 million strategic land-use planning documents discusses schools in the context of infrastructure capacity for urban consolidation:

“The expected population growth within the Central sub-region will necessitate the development of a number of new public schools or the provision of additional accommodation at existing sites. The Department of Education is therefore undertaking a detailed assessment to establish the extent and general location of these schools. Part of the solution will involve ensuring that there is a sufficient number of land holdings across the Perth and Peel regions available for educational facility purposes and investigating new approaches to the built form of new school buildings and facilities”

With the exception of a site (yet to be specified) earmarked for a future Primary School through the Burswood Peninsula Structure Plan, the Town has no information to indicate that any land holdings will be acquired for the purpose of new schools. In the absence of such information, it appears that further primary school capacity may need to be met through increasing the capacity of existing school sites.

Objections received regarding “Density and Intensification of use” are acknowledged. The intensification of this land use, where it can be done in a way that minimises its impacts on the locality, is consistent with the planning framework.

Character of Area

Unlike the new teaching and administration building proposed, the recreation deck does not have built form characteristics that complement the residential character of the area. There is no planning requirement that states a minimum amount of active space must be provided for primary schools. From the standpoint of reducing the impact of the development on the locality, removing this structure from the proposal would achieve this outcome however it is likely that as inner city schools grow there will need to be more creative options for providing outdoor spaces. Physical activity and social sport, however, has a lengthy list of positive social, mental and physical benefits and is widely recognised as a crucial aspect of the school curriculum. Removal the recreation deck from the proposal is therefore not considered to be a desirable outcome.

As previously noted, the proposed recreation deck is set back more than 13 metres from Geddes Street and is only 2.7 metres tall when measured to the top of the concrete deck. The solid portions of the structure are considered to pose relatively little visual impact when viewed from the street. The ‘bulk’ of the recreation deck is actually open space, being under croft parking or an open air recreation area enclosed by chain link fencing and, on one side, translucent screening. The recommendation for approval reflects the assessment that this structure, while not being similar in appearance to most dwellings in the Raphael Precinct, is considered by Council officers to be appropriate in school setting and does not pose a substantial visual impact on the streetscape or the character of the precinct as a whole.

Options/Alternatives

If the JDAP is of the opinion that the proposed recreation deck is too visually obtrusive and out of character with the area, the recommended conditions of approval may be modified such that the recreation deck is to be deleted and not form part of the approval

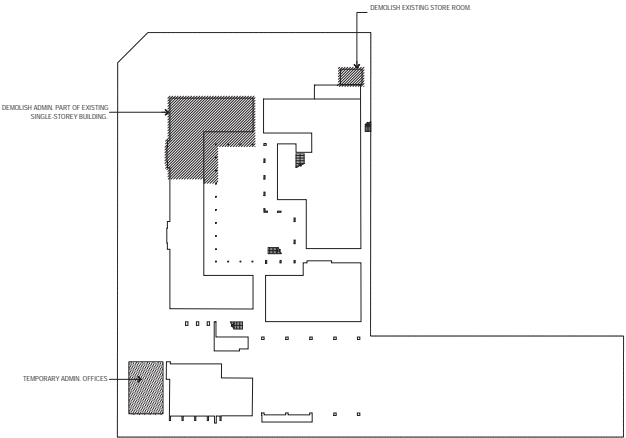
Conclusion:

Having regard to the provisions of Town Planning Scheme No.1 and relevant Local Planning Policies, it is considered that the proposed additions and alterations to the existing Educational Establishment at 28 Colombo Street are generally acceptable. It is considered that traffic and congestion issues resulting from the proposed increase in student numbers may adequately be addressed through management of transport behaviours.

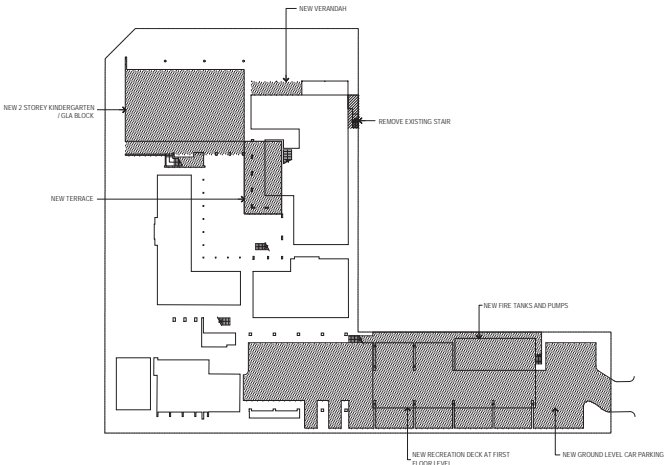
On this basis it is recommended that the application be approved subject to conditions.

Attachment 1

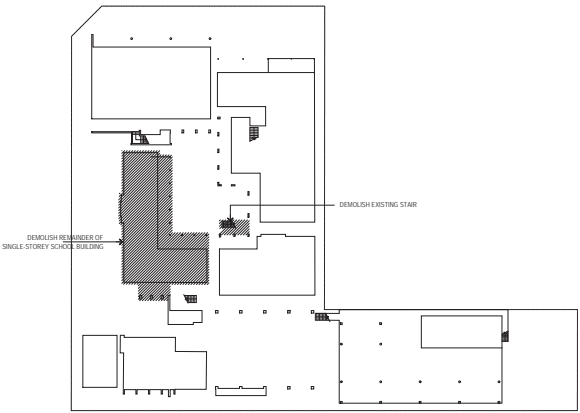
Plans received 29 August 2017



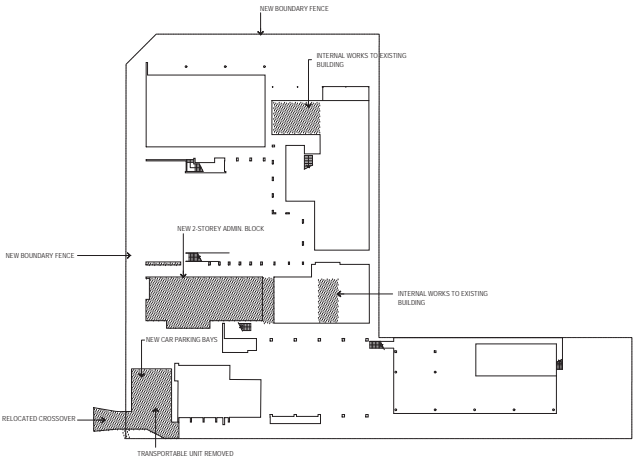
PHASE 1



PHASE 2



PHASE 3



PHASE 4

REGENT COLLEGE

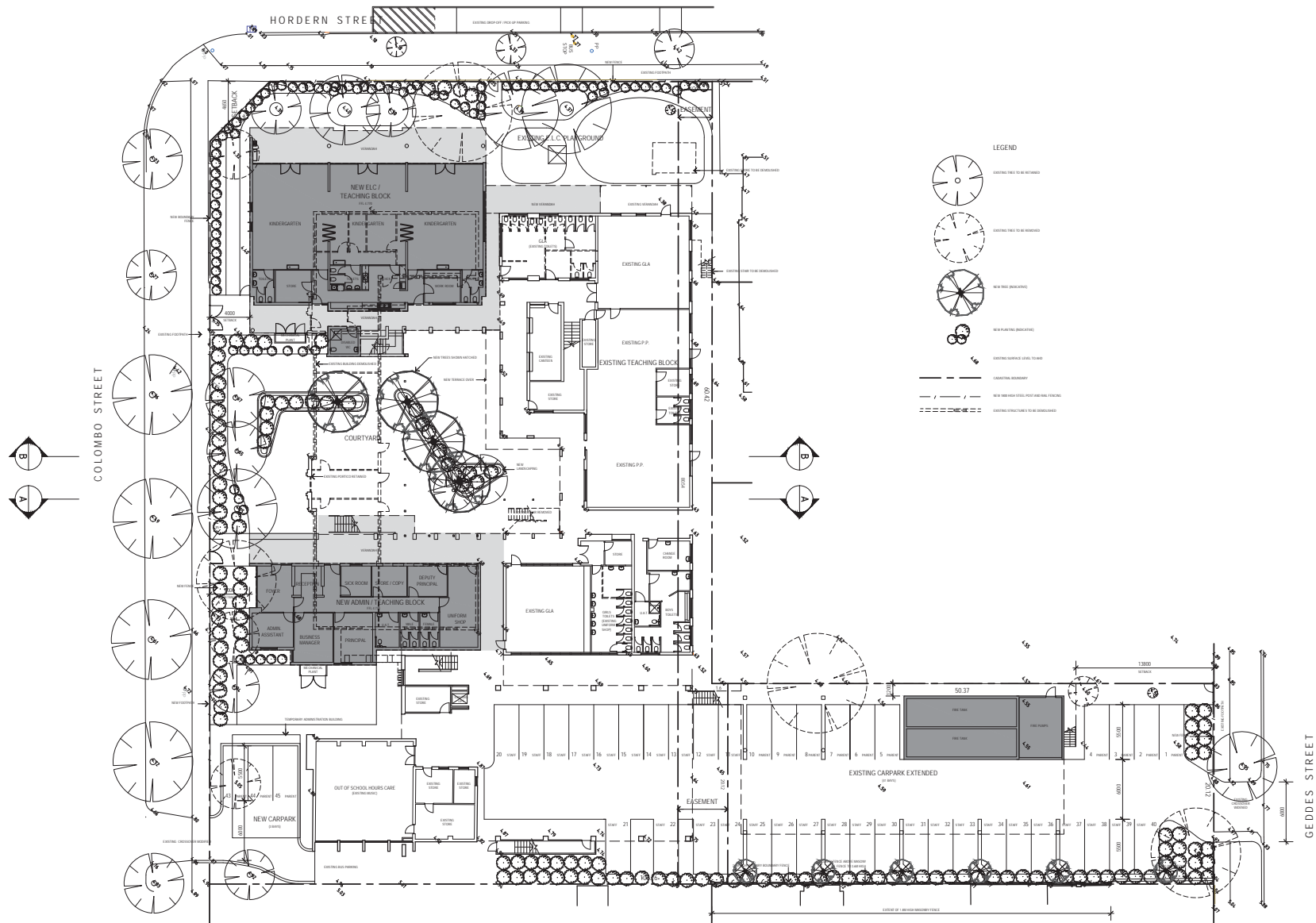
STAGING DIAGRAM



SCALE: 1 : 500 @ A1
DATE: 29.08.2017
DRAWN: BQ
JOB NO: 414055
DRAWING NO: A12 revC



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REGENT COLLEGE

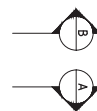
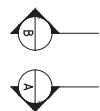
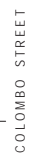
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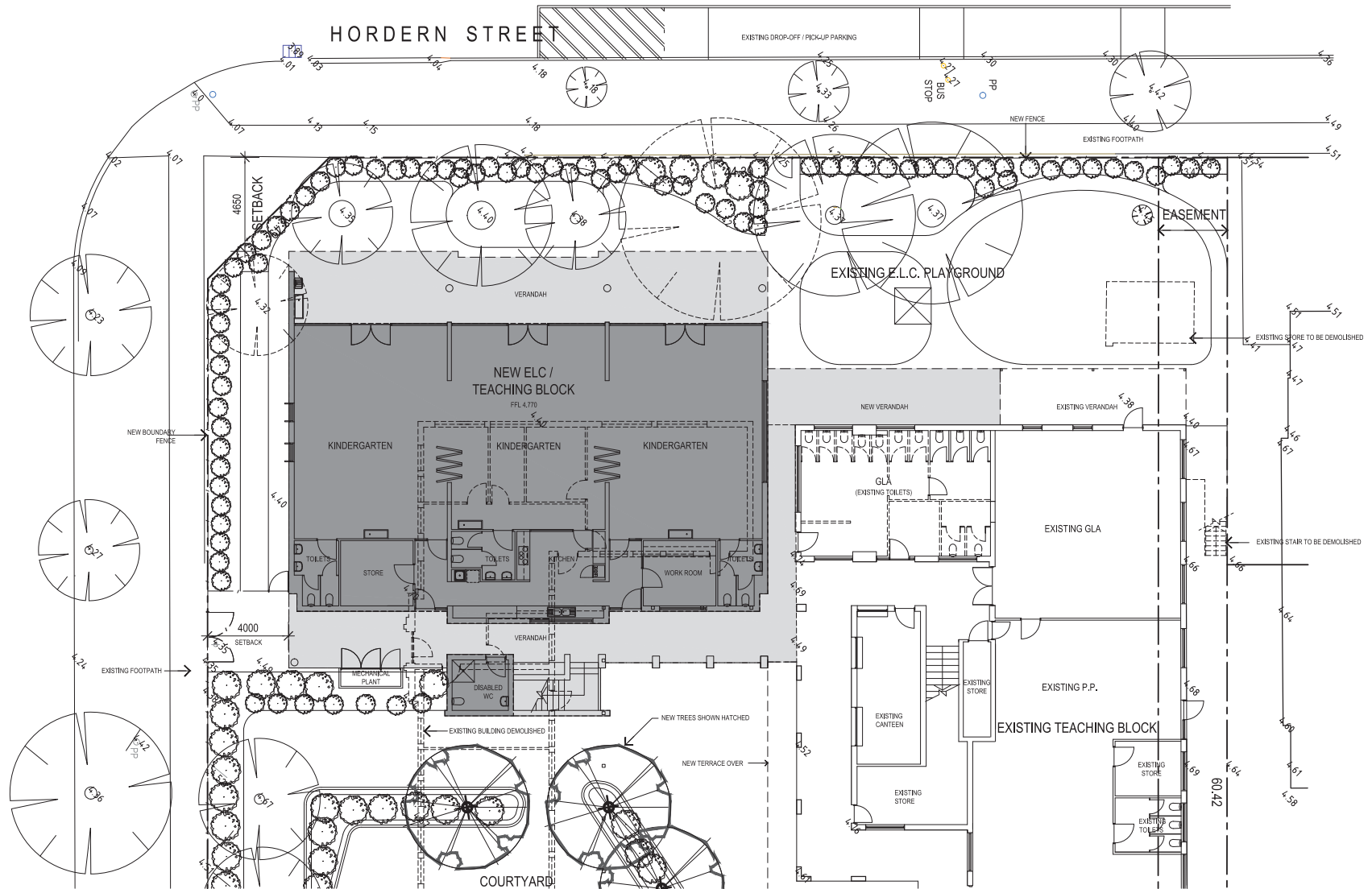


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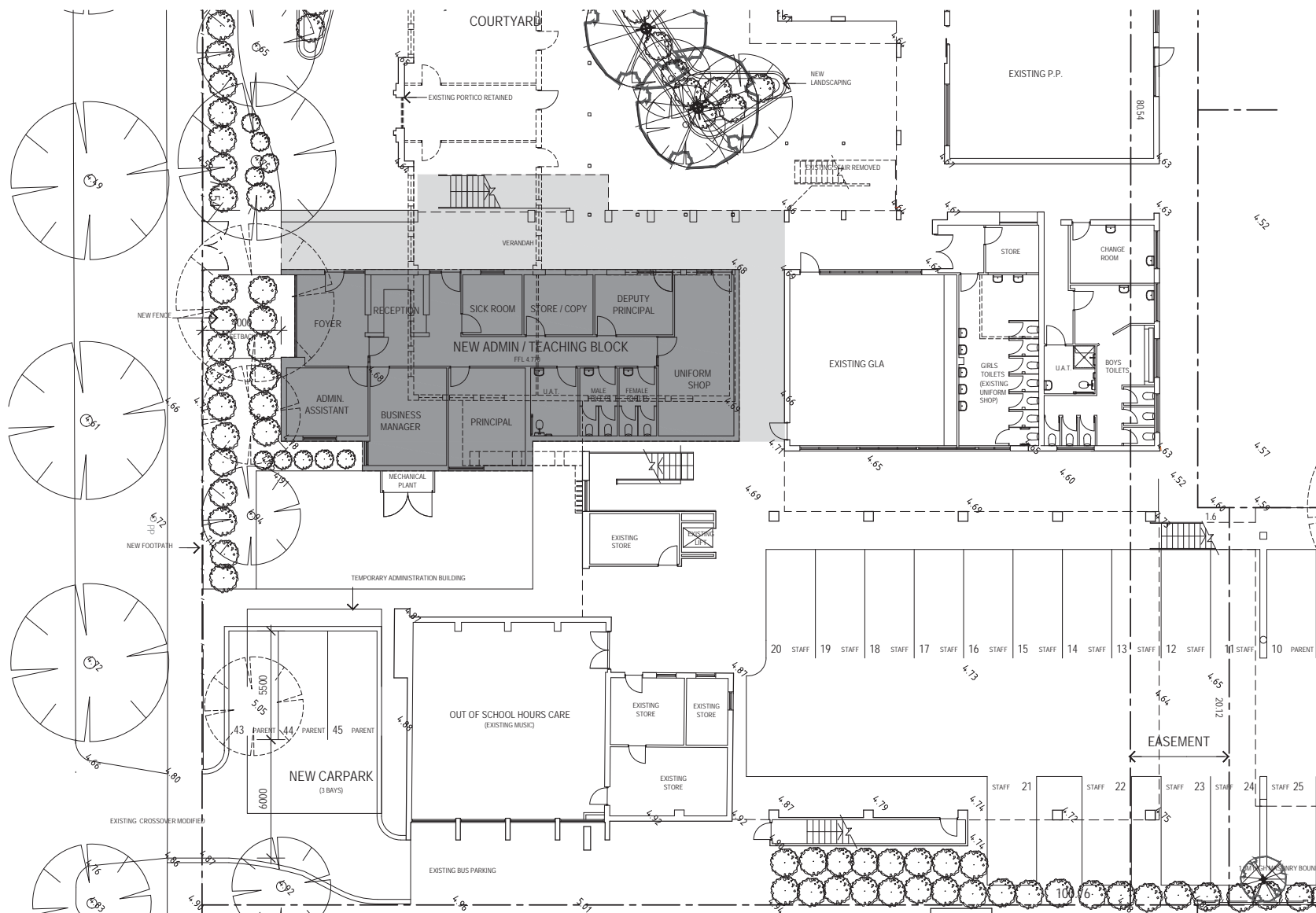
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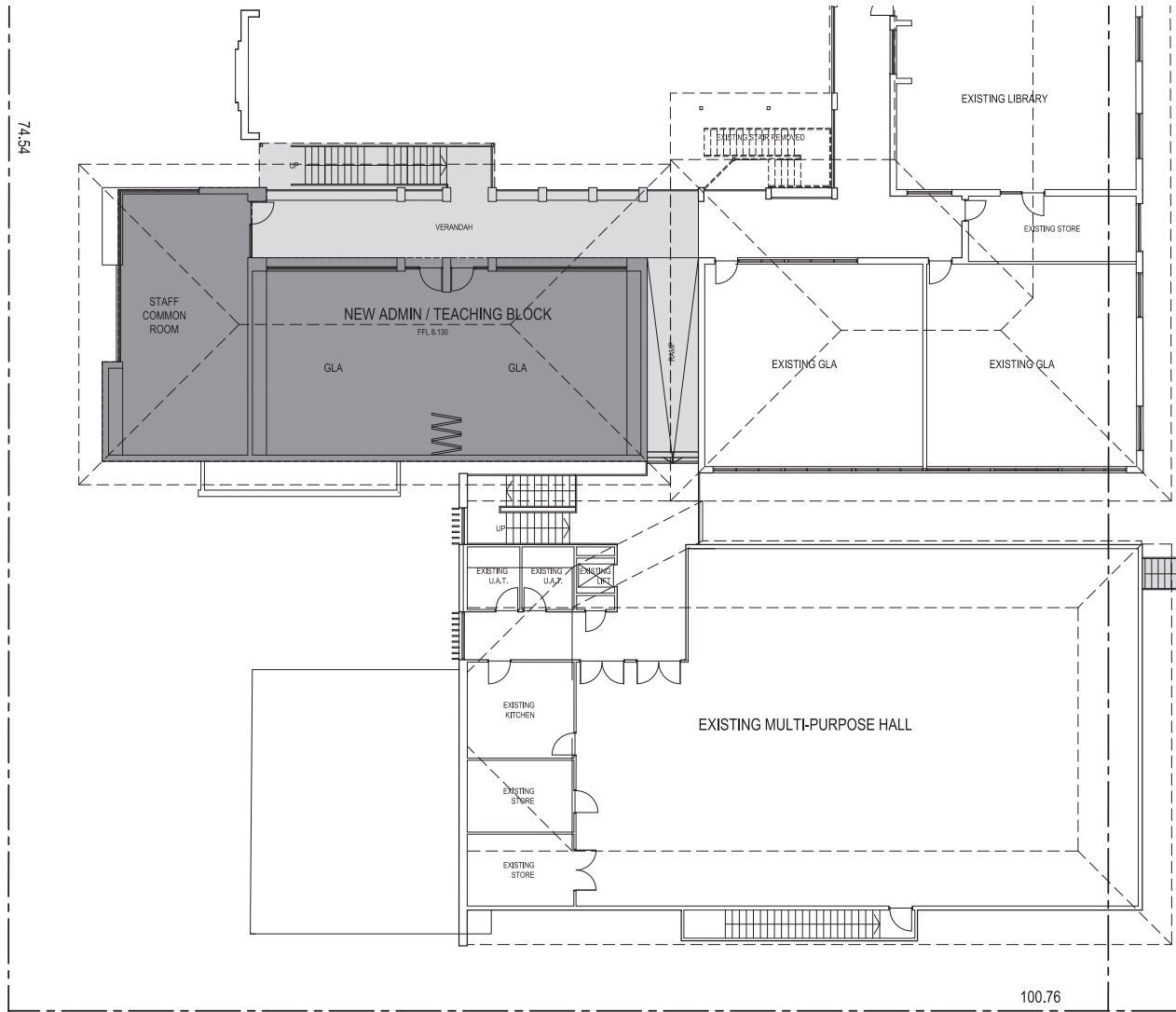


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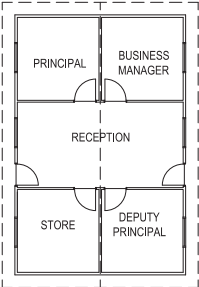
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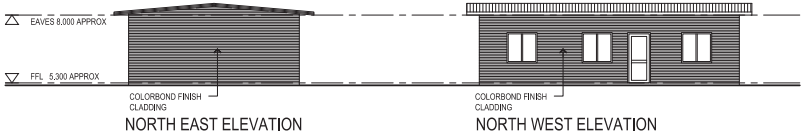
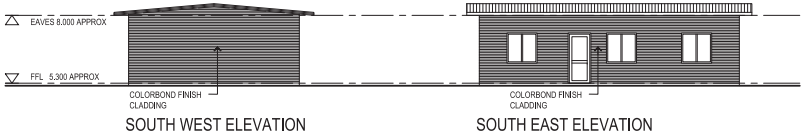
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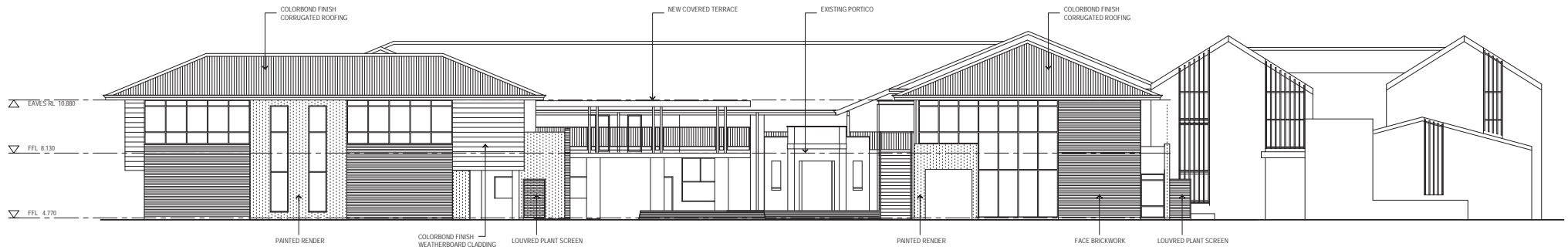
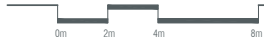
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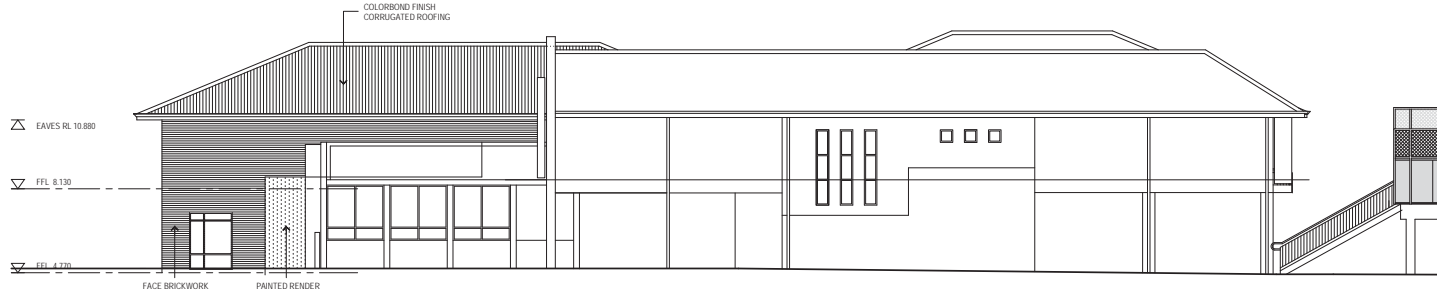
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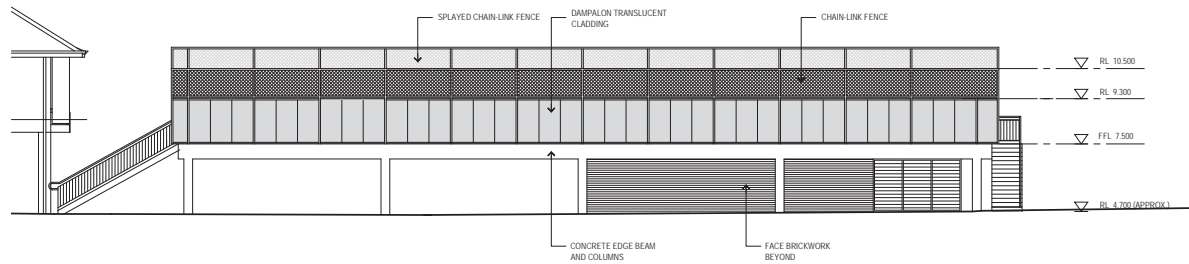
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COLOMBO STREET ELEVATION



SOUTH WEST ELEVATION



SOUTH WEST ELEVATION CONTINUED

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ELEVATIONS



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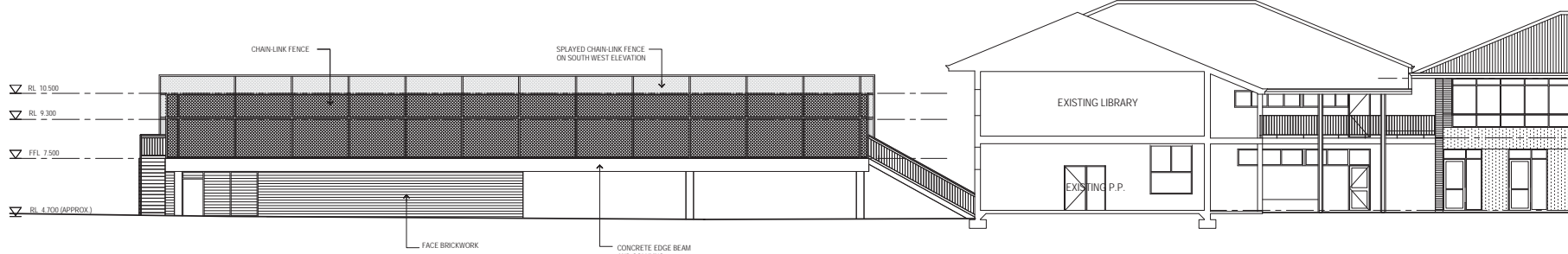
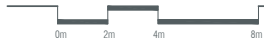
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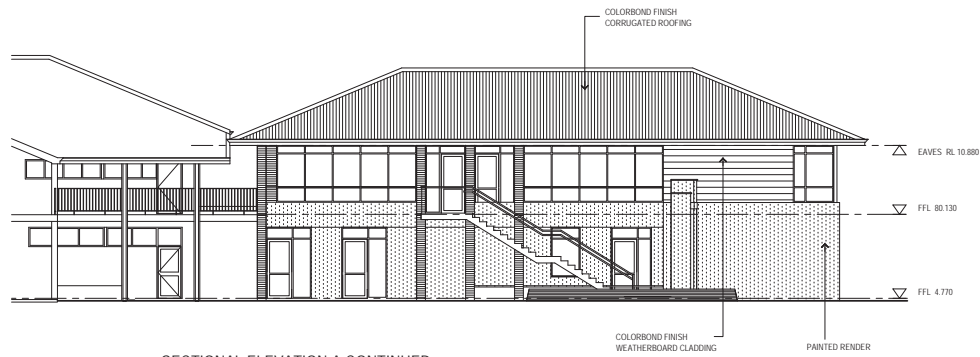
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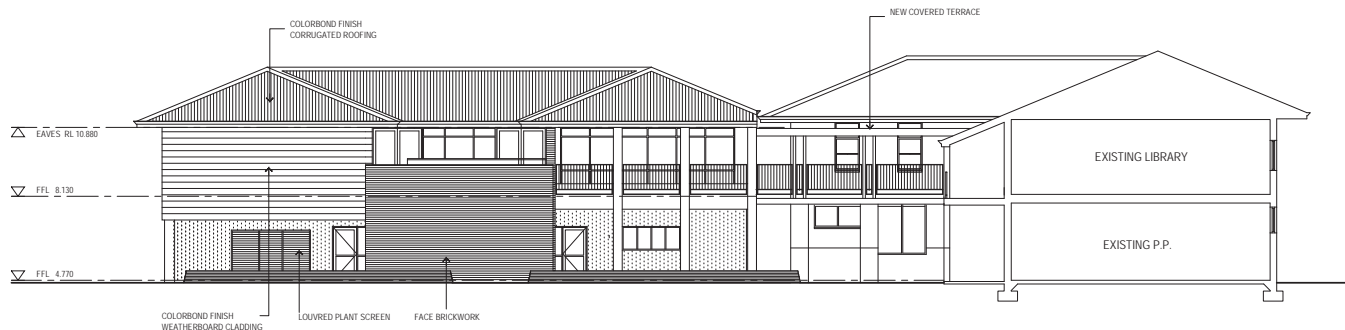
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SECTIONAL ELEVATION A



SECTIONAL ELEVATION A CONTINUED



SECTIONAL ELEVATION B

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SECTIONAL ELEVATIONS



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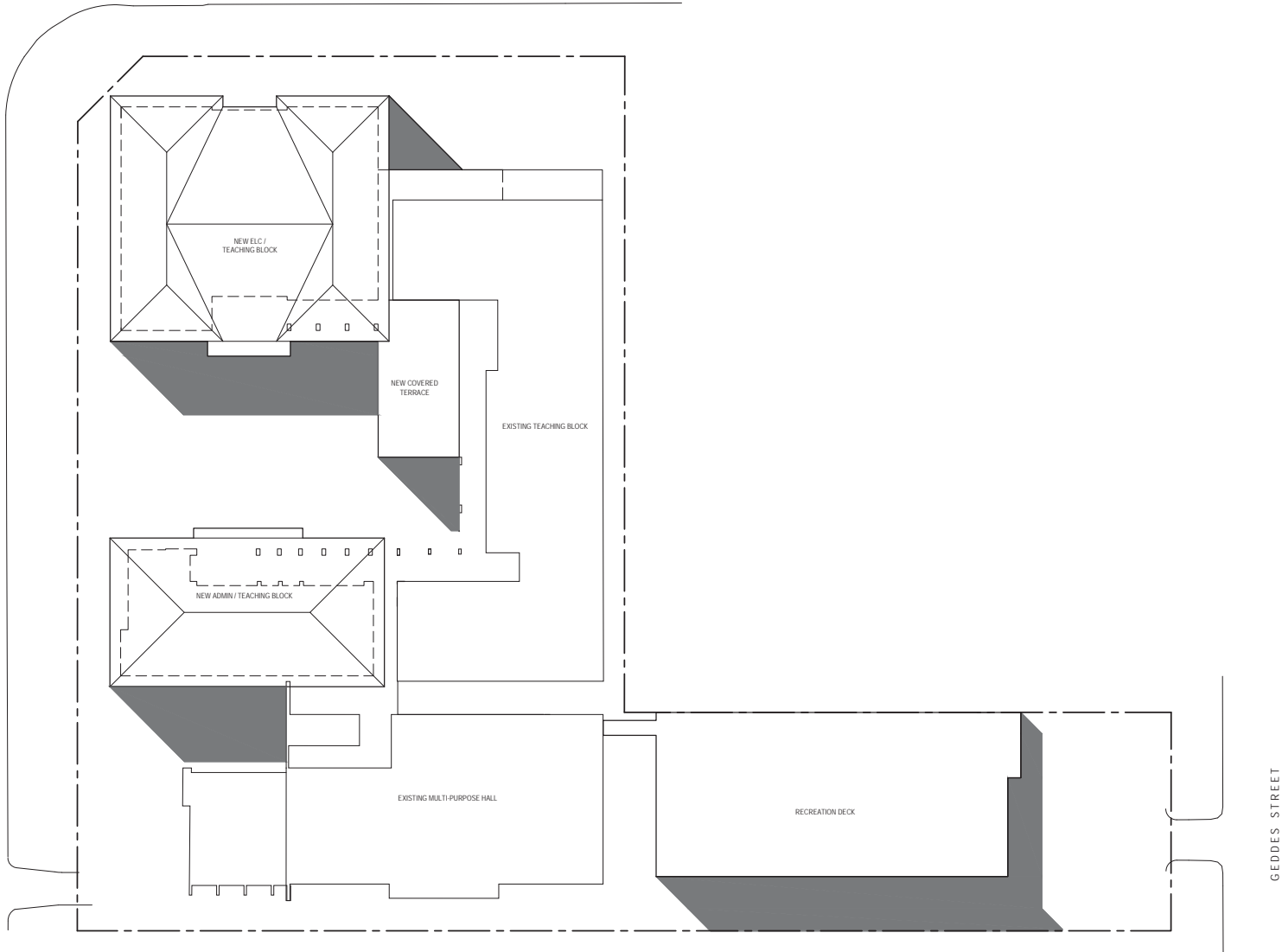


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HORDERN STREET

COLOMBO STREET



GEDDES STREET

REGENT COLLEGE

OVERSHADOWING SITE PLAN



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REGENT COLLEGE

PERSPECTIVE VIEW CORNER COLOMBO & HORDERN STREETS

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PERSPECTIVE VIEW FROM COLOMBO STREET

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PERSPECTIVE VIEW GEDDES STREET

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Attachment 2

Revised TIA received 17 August



Transport Impact Assessment

Project:	Regent College Proposed Expansion
Client:	T & Z Architects
Author:	Paul Nguyen
Date:	17 th August 2017
Document #	1601020-V5

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1. Introduction

1.1. Proponent

Shawmac Pty Ltd has been commissioned by T & Z Architects on behalf of Regent College to review the proposed development at the existing Regent College site located 28 Colombo Street and 19 Geddes Street, Victoria Park, in the Town of Victoria Park.

1.2. Site Location and Land Use

The existing site is a private primary school catering for 256 students from kindergarten to year 6. The existing site together with the surrounding area is shown on the aerial photograph on **Figure 1**.



Figure 1: Site Location

1.3. Proposed Development

This development proposal seeks to increase the maximum school population to 395 students and approximately 30 staff. The proposed development of the site includes the demolition of the existing administration building and classrooms on the northwest side of the property fronting Colombo Street, construction of a new two storey administration building and teaching block, additional off-street parking to provide a total of 44 bays, and a new hard court above the extended car park. The existing crossover on Geddes Street will be widened to 6.0m to

accommodate two-way vehicle movement. Two of the existing car bays will need to be removed to protect the existing verge tree adjacent to the existing crossover. Figure 2 shows the proposed site plan.

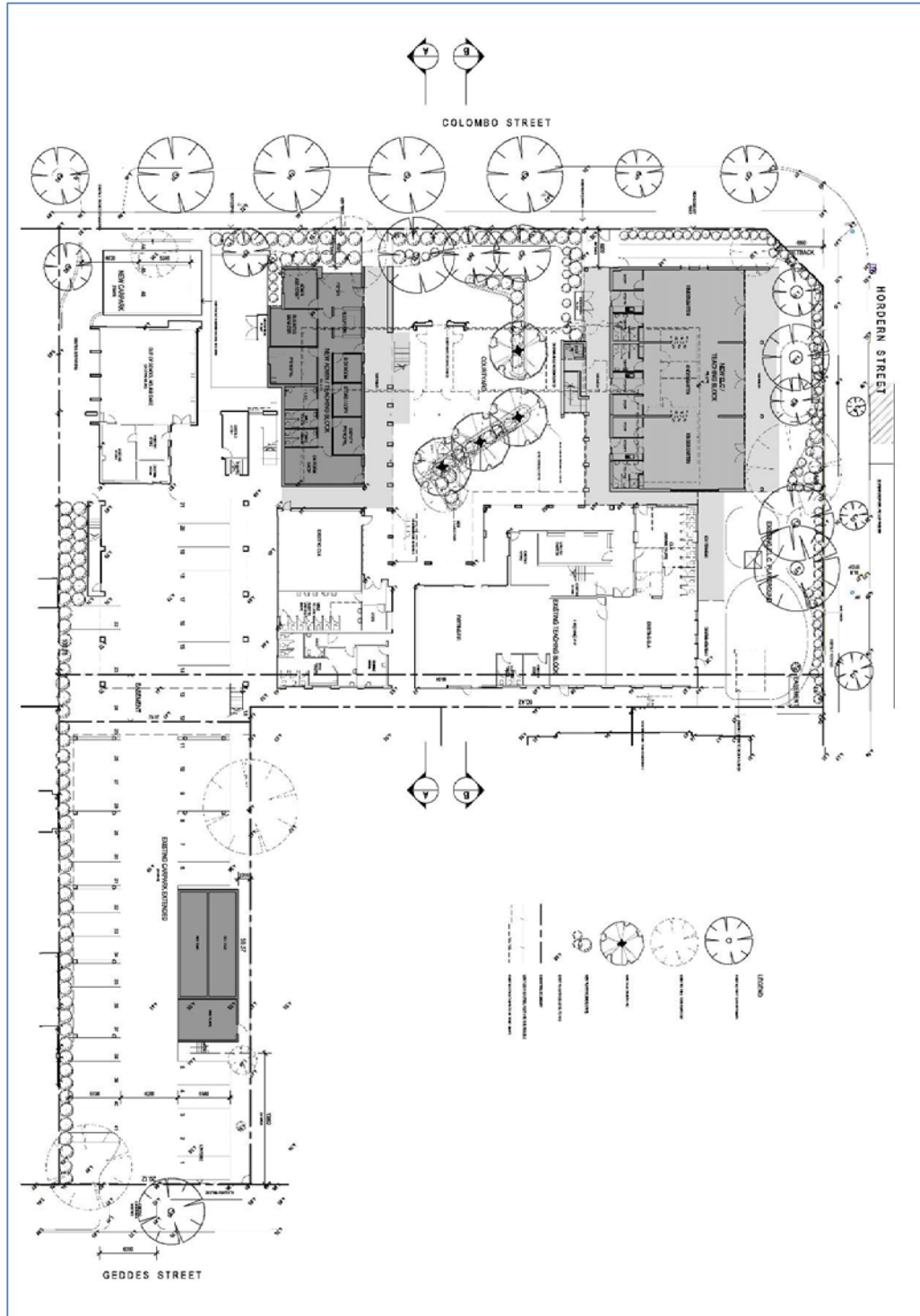


Figure 2: Site Plan

2. Existing Situation

2.1. Traffic Volumes

The latest available traffic data for the adjacent road network was obtained from the Town of Victoria Park as attached in **Appendix A**. The data ranges from May 2014 to May 2016. There have been no major changes to surrounding development in the past 3 years that would result in significant changes in traffic flows on the road network. A comparison of the average weekday traffic (AWT) along Geddes Street in 2013 and 2016 is shown in **Table 1**. It is reasonable to assume that the traffic data from 2014 is still relevant and therefore no growth factors have been applied.

Table 1: Traffic Growth

Location	AWT 2013	AWT 2016
Geddes Street - between Hordern Street and Albany Highway	1,973 vpd	1,937 vpd
Geddes Street - between Washington Street and Hordern Street	1,842 vpd	1,858 vpd

The latest weekday daily and peak hour traffic volumes on the adjacent road network are summarised in **Figure 3**.

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3. Transport Impact Assessment

3.1. Assessment Years

The development is assessed on the ultimate development of the primary school.

3.2. Time Periods for Assessment

The time periods for assessment include the weekday morning peak period (7:30 to 9:00 am) and afternoon peak period (2:30 to 4:00 pm) for the school. The morning peak broadly coincides with the typical peak hour on the road network. The afternoon peak for the school typically finishes before the typical peak hour on the road network.

3.3. School Traffic Generation

The Western Australian Planning Commission Transport Assessment Guidelines recommends that school traffic generation be based upon data from the PARTS (Perth and Regions Travel Survey) surveys that indicate around 65% - 70% of children are driven to primary school, with an average occupancy of around 1.4 - 1.5 children per car. This equates to 0.5 trips per child to school and 0.5 trips per child from school in each of the AM and PM peak hours.

The school trip generation is summarised in **Table 2**. It is noted that the kindergarten students will be split into three streams of 18 students with a maximum of 2 streams attending on any one day and so the typical maximum number of students on the school site on any school day will be 377 students. However, the assessment conservatively assumes that the full population of 395 students will be on site as a worst-case scenario.

Table 2: School Trip Generation

Streams	Units (existing)	Units (future)	Increase
Student Numbers	256	395	139
Staff Numbers	20	30	10
Vehicle Trip Generation (Students)	1 trip per student / per peak, 2 trips per student daily		
Peak Trips (Students & Staff)	276	425	149
Total Daily Vehicle Trips (Staff & Students)	552	850	298

Results of the traffic generation exercise indicate that the school will generate a total of 850 vehicular trips during the day with 425 vehicular trips in the morning and afternoon peak periods, respectively. It has been assumed that all staff trips (morning arrivals and afternoon departures) are generated during the peak periods for simplicity.

The increase in traffic from the existing is 298 vehicular trips per day with 149 additional trips in the morning peak and afternoon peak hour.

3.4. Trip Distribution

As Regent College is a private school, the school catchment will be slightly broader than a local intake school. The predicted distribution to and from external areas are as shown in **Figure 4**.

The distribution of the additional trips on the surrounding roads has been based on the layout of the road network, the most logical routes to the school site from external locations and the location of available parking and pick-up / drop-off areas. Observations from an afternoon pick up period and comments from the school staff indicated that approximately 40% of car trips use the Kiss and Drive facility along Hordern Street while the remaining car trips will involve parents parking on the surrounding roads and walking to the school to collect students. As there is street parking along both Colombo Street and Geddes Street, it has been assumed that half of the remaining trips will be generated to each of these streets (30% each).

The current Kiss and Drive has several staff members managing the children and accompanying them to the parents' vehicles as they arrive. When students are not at the pick-up location, parents and carers are directed to do a lap of the block, in an anti-clockwise direction along Colombo Street, Washington Street and Geddes Street before joining the queue again on Hordern Street.

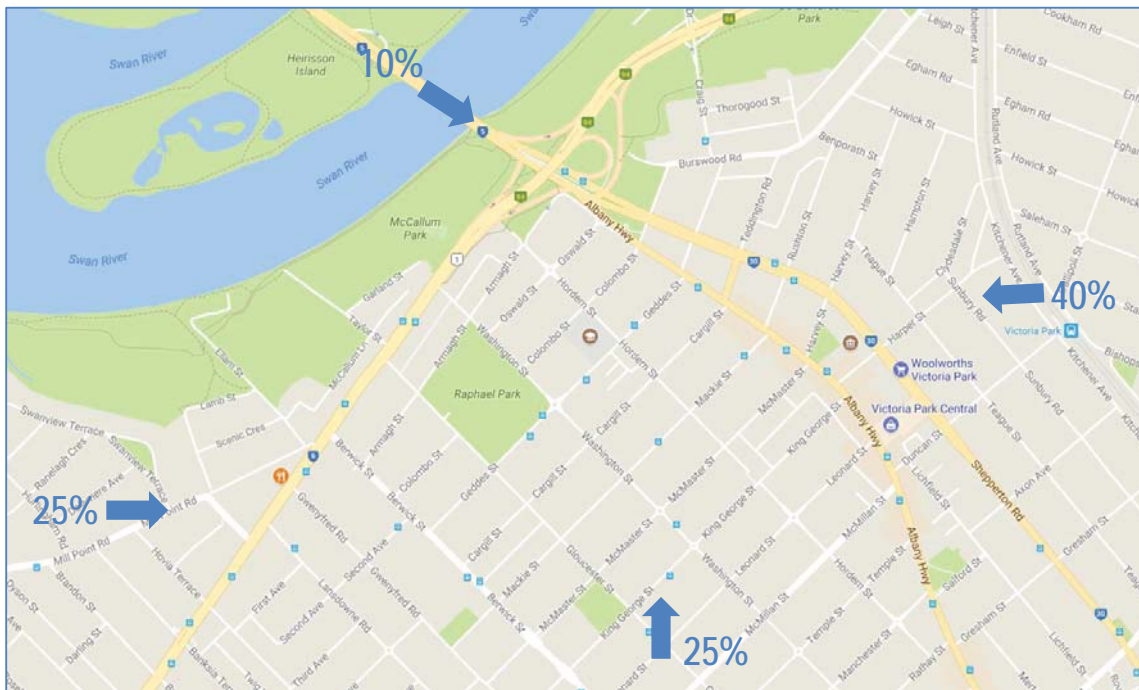


Figure 4: School Trip Distribution

The increases in daily and peak hour traffic volumes associated with the increased school population are shown in **Figure 5**. The predicted future traffic volumes (existing + additional Regent College trips) are shown in **Figure 6**.

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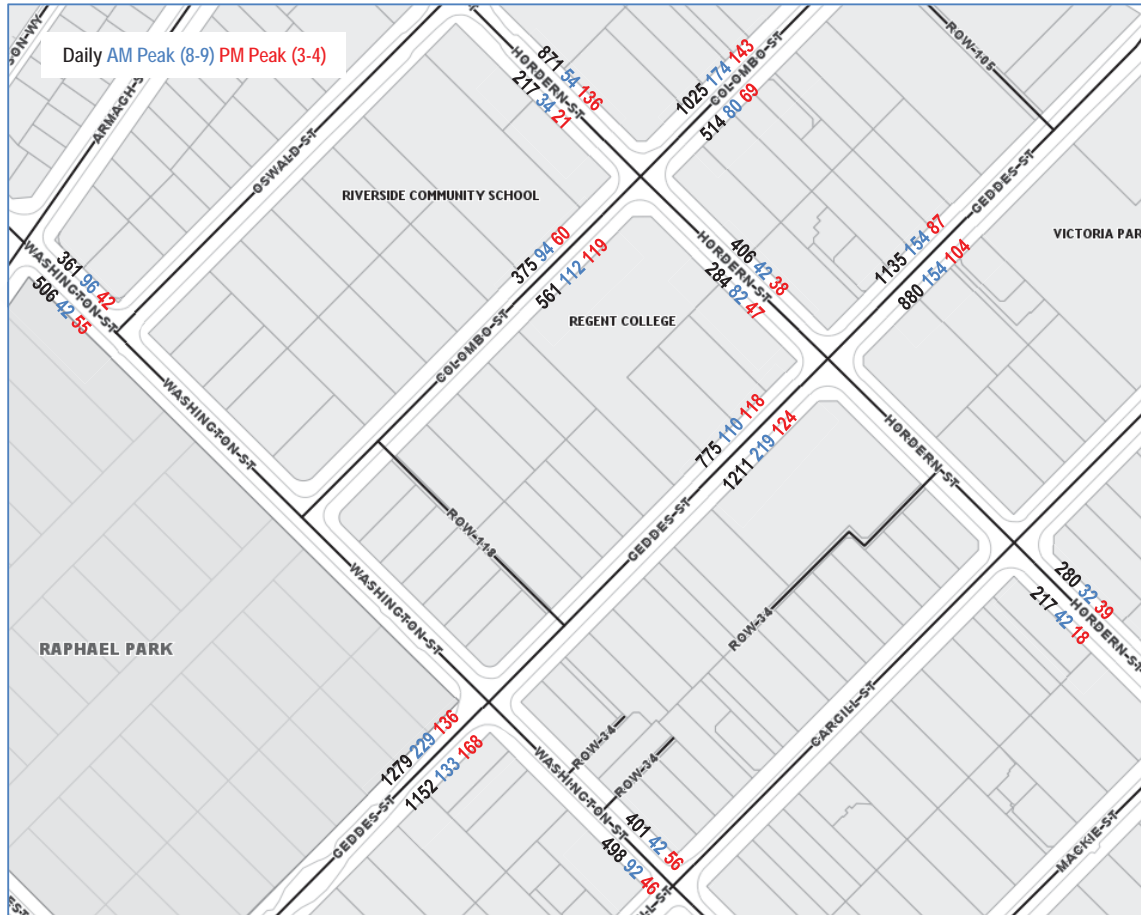


Figure 6: Design Traffic Volumes (Existing + Additional Regent College Trips)

3.5. Impact on Surrounding Roads

According to Austroads *Guide to Traffic Management Part 3: Traffic Studies and Analysis*, the typical mid-block capacity per lane of urban roads with interrupted flow is between 900 and 1,000 vph. The resulting morning and afternoon peak hour flows on the road network do not exceed this capacity based on the existing number of lanes. In terms of mid-block road capacity, the existing road cross section have sufficient capacity to accommodate the increase in traffic associated with the school expansion.

3.6. Impact on Intersections

The following three intersections were considered to be most affected by the increase in school generated traffic:

- Colombo Street / Hordern Street
- Geddes Street / Hordern Street
- Washington Street / Geddes Street

The operation of these three intersections before and after the proposed school expansion has been assessed using SIDRA Intersection 7.0 in order to quantify the impact of the proposal on the intersections.

SIDRA is a commonly used intersection modelling tool used by traffic engineers for all types of intersections. Outputs for four standard measures of operational performance can be obtained, being Degree of Saturation (DoS), Average Delay, Queue Length, and Level of Service (LoS).

- Degree of Saturation is a measure of how much physical capacity is being used with reference to the full capability of the particular movement, approach, or overall intersection. A DoS of 1.0 equates to full theoretical capacity although in some instances this level is exceeded in practice. SIDRA uses maximum acceptable DoS of 0.90 for signalised intersections for its Design Life analysis. Design engineers typically set a maximum DoS threshold of 0.95 for new intersection layouts or modifications.
- Average Delay reports the average delay per vehicle in seconds experienced by all vehicles in a particular lane, approach, or for the intersection as a whole. For severely congested intersections the average delay begins to climb exponentially.
- Queue Length measures the length of approach queues. In this document we have reported queue length in terms of the length of queue at the 95th percentile (the maximum queue length that will not be exceeded for 95 percent of the time). Queue lengths provide a useful indication of the impact of signals on network performance. It also enables the traffic engineer to consider the likely impact of queues blocking back and impacting on upstream intersections and accesses.
- Level of Service is a combined appreciation of queuing incidence and delay time incurred, producing an alphanumeric ranking of A through F. A LoS of A indicates an excellent level of service whereby drivers delay is at a minimum and they clear the intersection at each change of signals or soon after arrival with little if any queuing. Values of B through D are acceptable in normal traffic conditions. Whilst values of E and F are typically considered undesirable, within central business district areas with significant vehicular and pedestrian numbers, corresponding delays/queues are unavoidable and hence, are generally accepted by road users.

The existing peak hour intersection traffic and the additional peak hour trips generated by school are shown in **Figure 7**. The existing intersection flows were derived from the traffic data provided by the Town of Victoria Park.

As the school peaks typically occur within a relatively short time period, the peak flow period has been set at 20 minutes which conservatively assumes the full peak hour traffic (school and non-school traffic) occurs within 20 minutes.

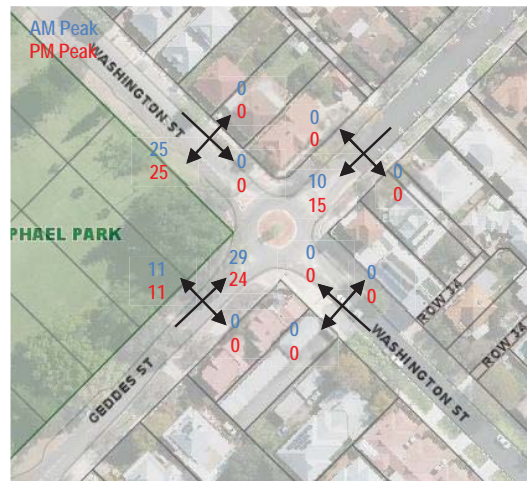
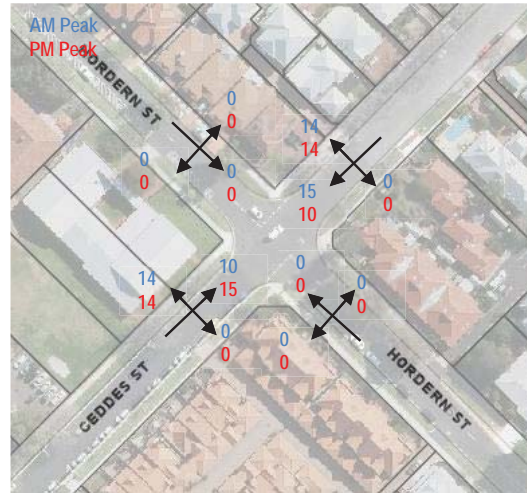
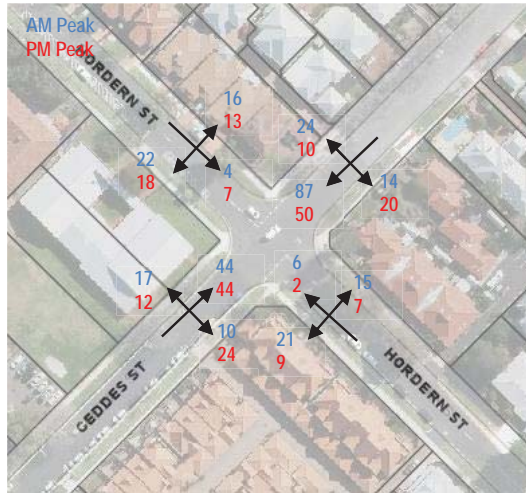
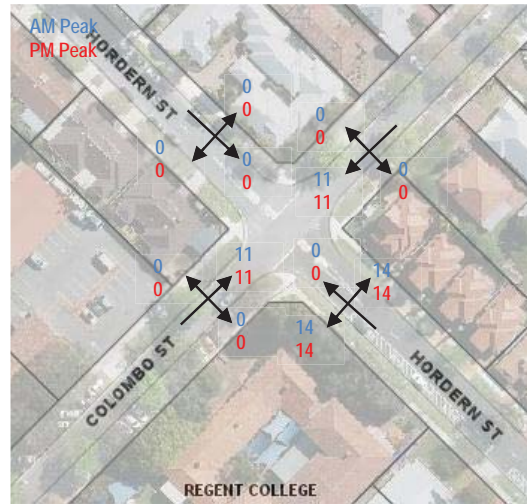
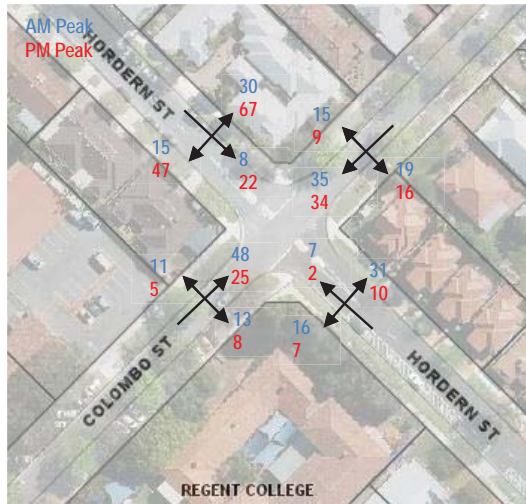


Figure 7: Peak Hour Intersection Traffic Flows - Existing (Left) vs. Additional Regent College Trips (Right)

The results of the SIDRA intersection analysis are attached in **Appendix B** and summarised in **Table 3**.

The results indicate that the nearby intersections are currently operating within capacity. While the proposed school expansion will increase the traffic volumes and peak hour flows on the road network, there is adequate capacity in the existing road network to accommodate additional traffic.

Table 3: SIDRA Results Summary

Intersection / Access	Peak Period	Scenario	DoS	Average Delay (s)	Maximum Queue (m)	Average LoS
Hordern Street / Colombo Street	AM Peak	Existing	0.146	5.2	3.5	A
		Future	0.223	5.4	5.7	A
	PM Peak	Existing	0.322	6.1	9.8	A
		Future	0.334	6.2	10.2	A
Hordern Street / Geddes Street	AM Peak	Existing	0.193	3.5	3.8	A
		Future	0.240	3.7	6.1	A
	PM Peak	Existing	0.124	3.4	3.3	A
		Future	0.170	3.5	3.9	A
Washington Street / Geddes Street	AM Peak	Existing	0.590	8.1	36.3	A
		Future	0.676	9.6	51.6	A
	PM Peak	Existing	0.259	6.2	10.3	A
		Future	0.335	6.6	14.7	A

It is noted that the SIDRA assessment is unable to capture the existing queuing associated with the Kiss and Drive on Hordern Street that has been observed during the school peak periods. It is understood that the queue will sometimes extend back along Hordern Street past Geddes Street as well as around the corner onto Geddes Street (south of Hordern Street). It is proposed to implement a combination of traffic management measures to address the existing queuing and to mitigate any potential additional queueing that could be caused by increasing the student population. These measures are outlined in the proposed Regent College School Traffic Management Plan (TMP) attached as **Appendix D**.

3.7. Interaction with Nearby Schools

Regent College is located close to two other existing primary schools including Victoria Park Primary School to the east and Victoria Park Christian School directly opposite the school on the opposite side of Colombo Street. The current enrolment details and school start and end times are summarised in **Table 4**.

Table 4: Adjacent School Summary

School Name	Number of Students	Starting Time	End Time
Regent College	395 (proposed)	8.30 am	2.50 pm (K-PP) 3:00 pm (Y1-Y6)
Victoria Park Primary School	473 (456 Full Time)	8.50 am	3.05 pm
Victoria Park Christian School	92 (2016)	8.50 am	3.10 pm

The differing start and finish times help to reduce the overlap between the pick-up and drop-off traffic of the schools. There may be provision to further stagger the start and end times of Regent College to improve traffic flows during pick-up and drop-off which is discussed in the School TMP (**Appendix D**).

3.7.1. Victoria Park Christian School

The interaction between Regent College and Victoria Park Christian School is considered to be minimal for the following additional reasons:

- Victoria Park Christian School has a relatively low student population;
- The school offers a private bus pick-up / drop-off service for students which would reduce the number of single student / family vehicle trips.
- There are 7 bays on the south side of Oswald Street which are restricted to 15 minutes during the school peak periods and there are plenty of other street parking bays.

3.7.2. Victoria Park Primary School

Victoria Park Primary School is located on the west side of Albany Highway between Geddes Street and Cargill Street.

This school faces towards Cargill Street and the on-site car parking is accessible from Cargill Street. There are Kiss and Drive zones along the school side of both Geddes Street and Cargill Street and plenty of street parking on the surrounding streets.

While there is a 20 minute stagger between the start times and a 10-20 minute stagger between the finish times of Victoria Park Primary School and Regent College, there will be some interaction between traffic generated by the two schools, particularly from vehicles using Geddes Street and Hordern Street.

Several traffic management measures have been outlined in the School TMP (**Appendix D**) to maximise the efficiency of traffic movement during the school peak periods and to minimise the interaction between traffic generated by the neighbouring schools.

4. Assessment of Development Access

4.1. Access Vehicle Sight Distance

The existing crossover to Geddes Street will be modified and widened to 6.0 metres to accommodate additional two-way traffic movement

The sight distance at this crossover has been assessed in accordance with Australian Standards AS2890.1-2004 *Parking Facilities - Off-street car parking*. Figure 3.2 of AS2890.1 outlining the sight distance requirements is shown in Figure 8.

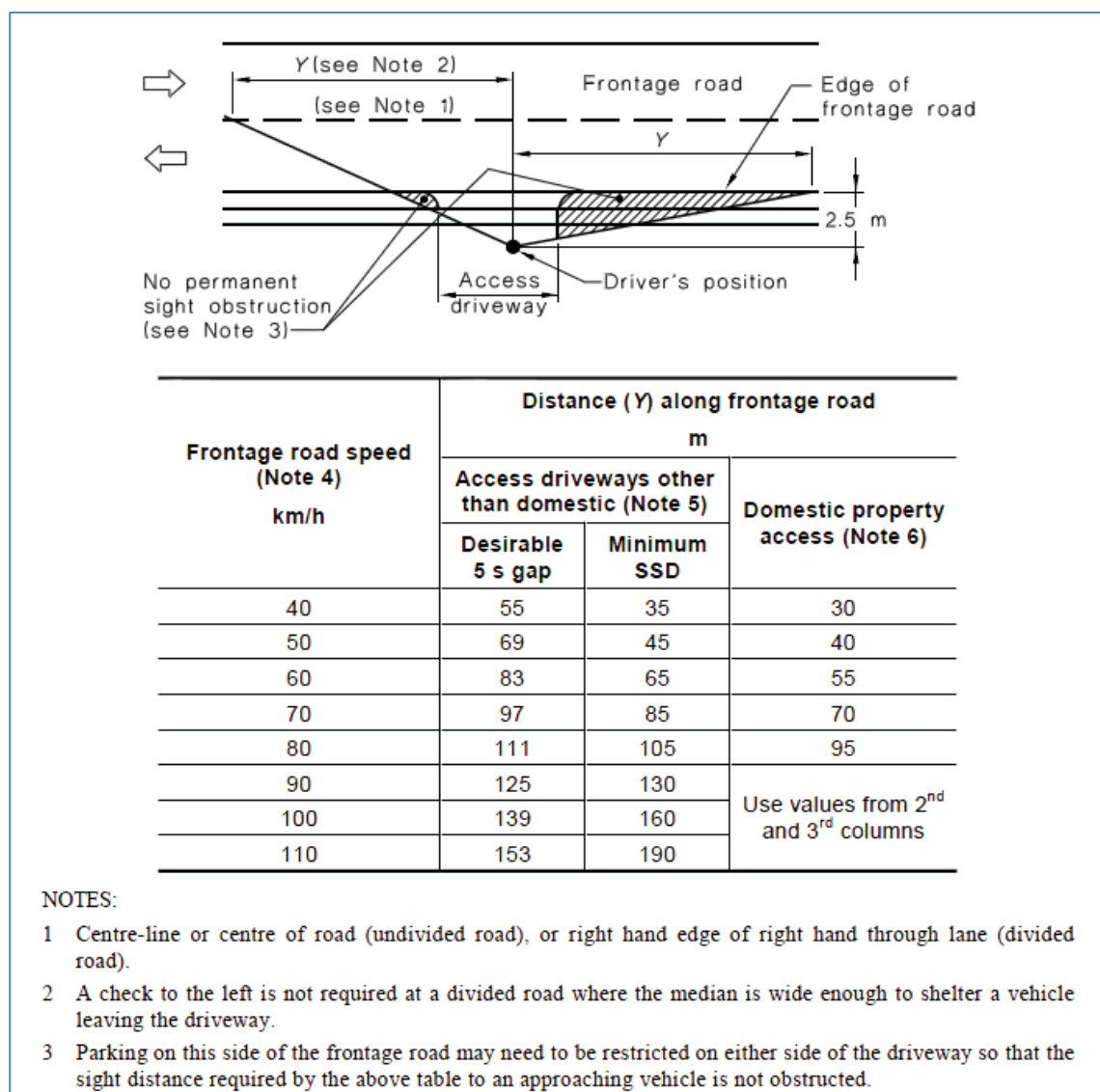


Figure 8: Access Sight Distance Requirements (Australian Standards AS2890.1)

Based on the 50 km/h speed limit along Geddes Street, the minimum required sight distance is 45 metres (69 metres desirable). During the 40km/hr school zone times the desirable sight distance is 55m with a minimum of 35m required.

The available sight distance from this access is shown in **Figure 9**. Sight distance is restricted when cars are parked on the northbound lane of Geddes Street, either side of the driveway. This is consistent with other access driveways along Geddes Street, in particular the grouped dwellings located at 22 Geddes Street, which would have significantly more traffic than the proposed car park.



Figure 9: Minimum Sight Distance Requirements at 50 km/hr

A review of the 5 year crash history of Geddes Street from January 2012 to December 2016 indicated that there have been no crashes involving driveways (refer **Section 5** and **Appendix C** for crash history). Given that the cars exiting the car park will be in the forward gear and will generally be staff departing after the school pick up period, the risk associated with the sight distance is low.

Notwithstanding this, the sight distance could be improved by removing parking bays from either side of the car park access driveway.

4.2. Access Pedestrian Sight Distance

The sight distance requirements to pedestrians from driveways in accordance with AS2890.1 is shown in **Figure 10**. The off-street parking area on Geddes Street has permeable gates with adequate vision to the street boundary so that there is no unacceptable hazard to pedestrians.

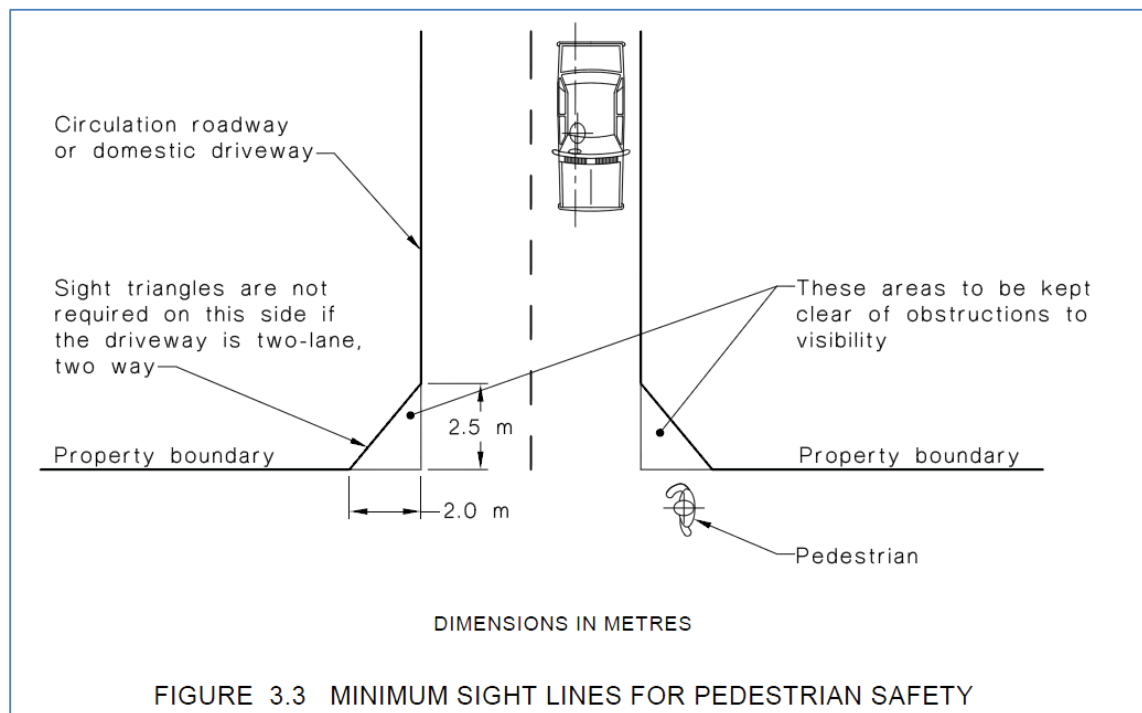


Figure 10: Pedestrian Sight Distance Requirements (Australian Standards AS2890.1)

The proposed modified crossover to Colombo Street was also assessed for vehicle and pedestrian sight distance. There are no stopping areas on either side of the Colombo Street access and so the available sight distance at this crossover is sufficient. The crossover is slightly offset from the property boundary such that there is adequate sight distance to pedestrians. As this crossover provides access to only 3 bays, the risk associated with exiting vehicles is considered to be minimal.

5. Road Safety

The detailed crash history of the adjacent road network for the five year period from January 2012 to December 2016 was obtained from Main Roads WA as attached in **Appendix C** and summarised in **Table 5**.

It is noted that 10 of the 14 recorded crashes occurred in 2012 and the overall occurrence of crashes is reducing from 19 recorded crashes (2010 - 2014) to 14 recorded crashes (2012 - 2016).

Table 5: Crash Summary

Location	Total Crashes	Crash Types	Severity
Geddes Street / Hordern Street	3	3 right angle crashes	PDO Major (all)
Geddes Street / Washington Street	1	1 sideswipe (same direction)	Hospital
Colombo Street / Hordern Street	6	4 right angle crashes 2 right turn thru	PDO Major (all)
Washington Street / Colombo Street	No crashes recorded		
Hordern Street	No crashes recorded		
Colombo Street	2	1 right angle crash 1 sideswipe (same direction)	PDO Minor (all)
Geddes Street	2	2 rear end crashes	PDO Minor
Washington Street	No crashes recorded		

Of the 14 recorded crashes, 2 occurred during the school peak periods. The details of the 2 incidents are below.

1. Tuesday, 2nd April 2013, 8:24am - Car turning left at the Washington Street / Geddes Street roundabout sideswiping a bicycle travelling straight.
2. Wednesday, 26th February 2014, 3:00pm - Right angle crash between a station wagon and a bus at the Hordern Street / Geddes Street intersection.

There is no way to determine whether either of these incidents are related to Regent College traffic. Considering that no incidents have occurred during the school peak periods in the last 3 years, the risk associated with the current Regent College traffic is considered to be low. While it is acknowledged that the likelihood of crashes will increase with the proposed additional school traffic, the risk of crashes is not expected to increase to unacceptable levels. It is noted that the existing queueing through the Hordern Street / Geddes Street intersection observed during the school peaks is undesirable and the proposed traffic management measures in the School TMP are intended to improve the existing traffic flows around the school and to minimise the likelihood of any future crashes.

6. Public Transport

The school is considered to have excellent access to existing public transport services. There are bus stops located on Geddes Street north and south of Hordern Street within very short walking distance from the school. The stops to the north of Hordern Street have a shelter and seating. Services available from these stops are Transperth Bus Routes 72 (Perth - Cannington Station via Victoria Park and Curtin University) and 75 (Perth - Canning Vale via Victoria Park and Curtin University).

In addition, the Victoria Park Bus Transfer Station is located approximately 450 metres walking distance from the school. From here, there are numerous other bus services operating to many other locations around the metropolitan area.

The existing available public transport services are sufficient to accommodate the increased public transport demand of the proposed school expansion.

7. Pedestrian / Cyclist Access

The adjacent road network including the network of footpaths has been well established. All access roads surrounding the site have paths on at least one side with most roads having paths along both sides. The footpath network is shown in Figure 11.

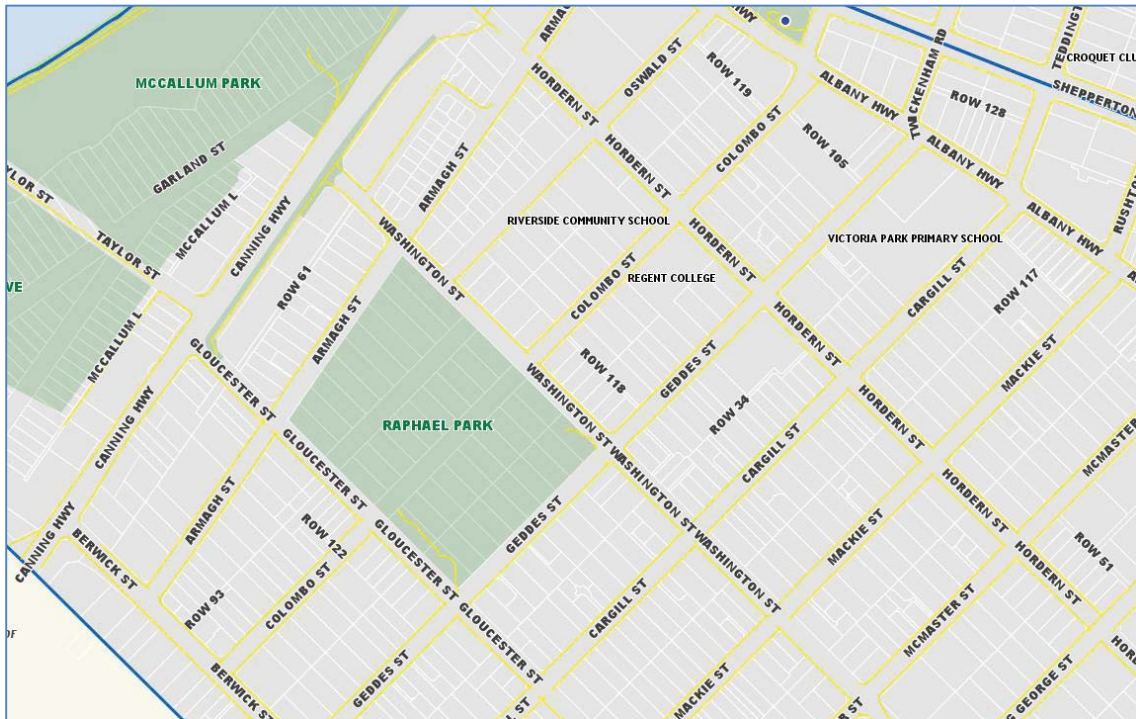


Figure 11: Existing Footpath (Yellow) (Town of Victoria Park IntraMaps)

The ability for pedestrians and cyclists (particularly students) to cross roads and intersections in the vicinity of the site has been reviewed in accordance with Table 3 of the WAPC *Transport Impact Assessment Guidelines*. The majority of roads within walkable distance to the site are two lane undivided roads. The peak hour traffic flows on all nearby roads are well below the thresholds outlined in Table 3 of the WAPC guidelines and are not considered to adversely impact the efficiency and safety for pedestrians or cyclist wishing to cross these roads. The nearby roundabout intersections also have splitter islands and the majority of these islands have pedestrian refuges.

For students wishing to walk to the Victoria Park Bus Transfer Station, there are signalised pedestrian crossings to assist with crossing Albany Highway.

8. Car Parking Assessment

8.1. Parking Supply

The car parking requirement for private schools according to the Town of Victoria Park *Local Planning Policy 23 - Parking Policy* is outlined in **Table 6**.

Table 6: Town of Victoria Park - Parking Requirements for Private Schools - Total Population

Group	Parking Ratio	Number of Students	Required Bays
Students	14 bays per 100 students	395	55 bays
Staff	0.07 bays per student	395	28 bays
Total			83 bays

The existing site has 13 off-street car parking bays. In order to accommodate the widened crossover on Geddes Street without affecting the existing verge trees, two of the existing car bays will be removed. An additional 33 car bays will be constructed on the site bringing the total off-street car parking supply to 44 bays. The proposed 44 bays is 39 short of the minimum parking requirement according to the Town's policy.

The car parking requirement has also been calculated based on the additional 139 students only, considering that the provision of only 13 off-street bays has served the existing school population.

Table 7: Town of Victoria Park - Parking Requirements for Private Schools - Additional Students Only

Group	Parking Ratio	Number of Students	Required Bays
Students	14 bays per 100 students	139	19 bays
Staff	0.07 bays per student	139	10 bays
Total			29 bays

From this perspective, an additional 29 off-street parking bays are required with a total of 42 (29 new plus 13 existing) bays to be provided overall. The proposed 44 bays meets this requirement.

Either way, any shortfall in off-street parking is considered to be adequately compensated as follows:

- There is an existing Kiss and Drive area on Hordern Street accommodating up to 12 cars at any time.
- The abundance of on street parking surrounding the school including 12 bays along the school (north) side of Geddes Street which are restricted to 15 minutes during the morning and afternoon school peak periods on school days. The available street parking surrounding the school is detailed in **Table 8**.
- The informal verge parking areas along both sides of Colombo Street.
- It is typical for many parents and guardians to park on nearby streets, walk to the school and escort

their children back to the car. It was observed during a site visit to the school that some parents and guardians park at Raphael Park and walk their children to and from the school.

- The excellent available public transport services within the vicinity of the site and the comprehensive network of footpaths in the surrounding area.
- The well-established pedestrian and cyclist network of the area.

Table 8: Existing Available Street Parking Near Regent College

Location	Number of Bays	Restrictions
Hordern Street - school frontage	12 bays	On school days: Kiss & Drive only between 7:30 - 9am and 2:30 - 4pm Bus Bay during school hours
Geddes Street - school frontage	12 bays	On school days: 15 minutes between 7:30 - 9am and 2:30 - 4pm No restriction all other times
Geddes Street, north side between Washington Street and Regent College	6 bays	All day parking
Geddes Street, south side between Washington Street and Hordern Street	16 bays	All day parking
Colombo Street - between Washington Street and Hordern Street	Multiple	2 hour parking area between 8am and 5:30pm Mon - Fri No stopping/standing between 7:30am and 5:30pm on school days in some areas
Washington Street - between Geddes Street and Oswald Street	Multiple	2 hour parking area between 8am and 5:30pm Mon - Fri No parking on Raphael Park side between 8am and 5:30pm Mon - Fri

8.2. Kiss and Drive

A Kiss and Drive facility is currently in operation along Hordern Street. The area can accommodate approximately 12 vehicles. Regent College staff currently manage the facility and assist students to get into their parent or carer's vehicle as they arrive, and move on vehicles to do a lap of the school block if students are not waiting at the gate. Cars access the Kiss and Drive via Geddes Street from the north and south, and from Hordern Street from the east. Efficient management of the Kiss and Drive and cooperation from parents in moving on when instructed minimises queuing on these access streets.



9. School Traffic Management Plan

A Traffic Management Plan has been prepared as attached in **Appendix D**.



10. Conclusions

A detailed assessment of the proposal to increase the student population at Regent College concluding the following:

- The additional traffic generated by the increased population can be accommodated into all adjacent roads practical capacity and will be limited to morning and afternoon drop-off and pick-up times.
- The location of the proposed access is considered acceptable and the risk of conflict due to lack of sight distance is low. Street parking could be removed either side of the access or the driveway could be extended to further reduce this risk.
- A review of the crash statistics for the intersection of Colombo Street and Hordern Street indicated a high number of right angled crashes during the afternoon peak hour, indicating forced flow may occur during the school pick up period. All other adjacent intersections are expected to perform satisfactorily in both the AM peak and PM peak periods.
- A School Traffic Management Plan has been formulated to help mitigate congestion during the school peak periods as the school population increases.
- The proposed on-site and on-street car parking supply is considered to be sufficient to meet to the parking demand of the increase in school population.



Appendix A: Traffic Counts



MetroCount Traffic Executive

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-23 -- English (ENU)

Datasets:

Site: [610019] HORDERN ST BTW COLOMBO ST & OSWALD ST
Direction: 7 - North bound A>B, South bound B>A. **Lane:** 2
Survey Duration: 20:28 Monday, May 5, 2014 => 11:18 Monday, May 12, 2014
File: 610019 0 2014-05-12 1119.EC2 (PlusB)
Identifier: CD19Z84Z MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm: Factory default
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 0:00 Tuesday, May 6, 2014 => 0:00 Monday, May 12, 2014
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/h.
Direction: North (bound)
Separation: All - (Headway)
Name: Default Profile
Scheme: Vehicle classification (ARX)
Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile: Vehicles = 1154 / 5846 (19.74%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-23

Site: 610019.2NS

Description: HORDERN ST BTW COLOMBO ST & OSWALD ST

Filter time: 0:00 Tuesday, May 6, 2014 => 0:00 Monday, May 12, 2014

Scheme: Vehicle classification (ARX)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(N) Sp(10,160) Headway(>0)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
								1 - 5	1 - 7
Hour									
0000-0100	*	1.0	3.0	0.0	0.0	1.0	3.0	1.0	1.3
0100-0200	*	1.0	2.0	1.0	0.0	1.0	0.0	1.0	0.8
0200-0300	*	0.0	0.0	1.0	0.0	0.0	1.0	0.3	0.3
0300-0400	*	2.0	1.0	2.0	1.0	1.0	0.0	1.5	1.2
0400-0500	*	1.0	1.0	1.0	2.0	2.0	4.0	1.3	1.8
0500-0600	*	2.0	3.0	3.0	1.0	1.0	1.0	2.3	1.8
0600-0700	*	8.0	6.0	5.0	9.0	5.0	7.0	7.0	6.7
0700-0800	*	32.0	20.0	18.0	26.0	2.0	4.0	24.0	17.0
0800-0900	*	35.0<	37.0<	33.0<	29.0<	9.0	8.0	33.5<	25.2<
0900-1000	*	10.0	14.0	5.0	15.0	10.0	9.0	11.0	10.5
1000-1100	*	11.0	13.0	9.0	10.0	17.0<	10.0	10.8	11.7
1100-1200	*	11.0	11.0	12.0	12.0	13.0	12.0<	11.5	11.8
1200-1300	*	15.0	9.0	10.0	9.0	14.0<	13.0	10.8	11.7
1300-1400	*	10.0	8.0	9.0	23.0<	9.0	8.0	12.5	11.2
1400-1500	*	14.0	9.0	16.0	16.0	6.0	8.0	13.8	11.5
1500-1600	*	22.0<	17.0<	26.0<	17.0	9.0	8.0	20.5<	16.5<
1600-1700	*	16.0	11.0	15.0	14.0	5.0	13.0<	14.0	12.3
1700-1800	*	16.0	8.0	7.0	8.0	13.0	5.0	9.8	9.5
1800-1900	*	9.0	8.0	4.0	8.0	10.0	6.0	7.3	7.5
1900-2000	*	12.0	10.0	12.0	9.0	9.0	2.0	10.8	9.0
2000-2100	*	6.0	2.0	3.0	5.0	7.0	5.0	4.0	4.7
2100-2200	*	2.0	1.0	7.0	3.0	2.0	1.0	3.3	2.7
2200-2300	*	2.0	5.0	4.0	4.0	4.0	3.0	3.8	3.7
2300-2400	*	1.0	1.0	3.0	1.0	2.0	4.0	1.5	2.0
Totals									
0700-1900	*	201.0	165.0	164.0	187.0	117.0	104.0	179.3	156.3
0600-2200	*	229.0	184.0	191.0	213.0	140.0	119.0	204.3	179.3
0600-0000	*	232.0	190.0	198.0	218.0	146.0	126.0	209.5	185.0
0000-0000	*	239.0	200.0	206.0	222.0	152.0	135.0	216.8	192.3
AM Peak	*	0800	0800	0800	0800	1000	1100		
	*	35.0	37.0	33.0	29.0	17.0	12.0		
PM Peak	*	1500	1500	1500	1300	1200	1600		
	*	22.0	17.0	26.0	23.0	14.0	13.0		

* - No data.

MetroCount Traffic Executive

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-24 -- English (ENU)

Datasets:

Site: [610019] HORDERN ST BTW COLOMBO ST & OSWALD ST
Direction: 7 - North bound A>B, South bound B>A. **Lane:** 2
Survey Duration: 20:28 Monday, May 5, 2014 => 11:18 Monday, May 12, 2014
File: 610019 0 2014-05-12 1119.EC2 (PlusB)
Identifier: CD19Z84Z MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm: Factory default
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 0:00 Tuesday, May 6, 2014 => 0:00 Monday, May 12, 2014
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/h.
Direction: South (bound)
Separation: All - (Headway)
Name: Default Profile
Scheme: Vehicle classification (ARX)
Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile: Vehicles = 4327 / 5846 (74.02%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-24

Site: 610019.2NS

Description: HORDERN ST BTW COLOMBO ST & OSWALD ST

Filter time: 0:00 Tuesday, May 6, 2014 => 0:00 Monday, May 12, 2014

Scheme: Vehicle classification (ARX)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(S) Sp(10,160) Headway(>0)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
								1 - 5	1 - 7
Hour									
0000-0100	*	2.0	2.0	1.0	3.0	8.0	8.0	2.0	4.0
0100-0200	*	1.0	3.0	4.0	1.0	2.0	3.0	2.3	2.3
0200-0300	*	0.0	1.0	2.0	0.0	2.0	2.0	0.8	1.2
0300-0400	*	2.0	0.0	2.0	1.0	1.0	1.0	1.3	1.2
0400-0500	*	4.0	4.0	4.0	5.0	2.0	2.0	4.3	3.5
0500-0600	*	12.0	6.0	7.0	6.0	3.0	2.0	7.8	6.0
0600-0700	*	14.0	15.0	22.0	11.0	3.0	9.0	15.5	12.3
0700-0800	*	50.0	49.0	49.0	44.0	12.0	5.0	48.0	34.8
0800-0900	*	52.0<	58.0<	53.0	52.0	17.0	22.0	53.8	42.3
0900-1000	*	45.0	54.0	35.0	53.0	34.0	15.0	46.8	39.3
1000-1100	*	51.0	51.0	51.0	41.0	49.0<	23.0	48.5	44.3
1100-1200	*	50.0	45.0	61.0<	62.0<	45.0	44.0<	54.5<	51.2<
1200-1300	*	57.0	83.0	71.0	74.0	41.0	43.0<	71.3	61.5
1300-1400	*	48.0	39.0	37.0	75.0	44.0<	27.0	49.8	45.0
1400-1500	*	55.0	45.0	48.0	63.0	38.0	25.0	52.8	45.7
1500-1600	*	70.0	77.0	77.0	74.0	42.0	17.0	74.5	59.5
1600-1700	*	140.0<	137.0<	131.0<	137.0<	27.0	19.0	136.3<	98.5<
1700-1800	*	104.0	78.0	93.0	87.0	19.0	18.0	90.5	66.5
1800-1900	*	40.0	47.0	38.0	44.0	28.0	17.0	42.3	35.7
1900-2000	*	27.0	33.0	26.0	23.0	21.0	21.0	27.3	25.2
2000-2100	*	13.0	14.0	9.0	17.0	12.0	11.0	13.3	12.7
2100-2200	*	16.0	8.0	18.0	12.0	15.0	11.0	13.5	13.3
2200-2300	*	5.0	4.0	9.0	18.0	13.0	8.0	9.0	9.5
2300-2400	*	4.0	4.0	7.0	6.0	9.0	4.0	5.3	5.7
Totals									
0700-1900	*	762.0	763.0	744.0	806.0	396.0	275.0	768.8	624.3
0600-2200	*	832.0	833.0	819.0	869.0	447.0	327.0	838.3	687.8
0600-0000	*	841.0	841.0	835.0	893.0	469.0	339.0	852.5	703.0
0000-0000	*	862.0	857.0	855.0	909.0	487.0	357.0	870.8	721.2
AM Peak	*	0800	0800	1100	1100	1000	1100		
	*	52.0	58.0	61.0	62.0	49.0	44.0		
PM Peak	*	1600	1600	1600	1600	1300	1200		
	*	140.0	137.0	131.0	137.0	44.0	43.0		

* - No data.

MetroCount Traffic Executive

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-25 -- English (ENU)

Datasets:

Site: [610026] WASHINGTON ST BTW OSWALD ST & ARMAGH ST
Direction: 7 - North bound A>B, South bound B>A. **Lane:** 2
Survey Duration: 19:13 Monday, May 5, 2014 => 11:36 Monday, May 12, 2014
File: 610026 0 2014-05-12 1137.EC2 (PlusB)
Identifier: GT68DRV5 MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm: Factory default
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 0:00 Tuesday, May 6, 2014 => 0:00 Monday, May 12, 2014
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/h.
Direction: North (bound)
Separation: All - (Headway)
Name: Default Profile
Scheme: Vehicle classification (ARX)
Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile: Vehicles = 2699 / 6631 (40.70%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-25

Site: 610026.2NS

Description: WASHINGTON ST BTW OSWALD ST & ARMAGH ST

Filter time: 0:00 Tuesday, May 6, 2014 => 0:00 Monday, May 12, 2014

Scheme: Vehicle classification (ARX)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(N) Sp(10,160) Headway(>0)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
								1 - 5	1 - 7
Hour									
0000-0100	*	0.0	2.0	1.0	0.0	0.0	3.0	0.8	1.0
0100-0200	*	2.0	0.0	0.0	1.0	1.0	3.0	0.8	1.2
0200-0300	*	0.0	3.0	0.0	1.0	1.0	1.0	1.0	1.0
0300-0400	*	1.0	0.0	2.0	1.0	2.0	4.0	1.0	1.7
0400-0500	*	1.0	1.0	1.0	3.0	2.0	1.0	1.5	1.5
0500-0600	*	6.0	6.0	4.0	4.0	2.0	1.0	5.0	3.8
0600-0700	*	12.0	12.0	15.0	17.0	9.0	6.0	14.0	11.8
0700-0800	*	26.0	29.0	27.0	27.0	7.0	11.0	27.3	21.2
0800-0900	*	51.0<	28.0	44.0<	46.0<	20.0	14.0	42.3<	33.8<
0900-1000	*	30.0	36.0<	31.0	32.0	25.0	17.0	32.3	28.5
1000-1100	*	24.0	21.0	26.0	26.0	25.0	24.0	24.3	24.3
1100-1200	*	23.0	28.0	33.0	33.0	45.0<	38.0<	29.3	33.3
1200-1300	*	31.0	38.0	45.0	32.0	41.0<	24.0	36.5	35.2
1300-1400	*	27.0	25.0	34.0	28.0	20.0	24.0	28.5	26.3
1400-1500	*	32.0	36.0	35.0	27.0	22.0	25.0	32.5	29.5
1500-1600	*	53.0	49.0	63.0<	56.0<	27.0	27.0	55.3<	45.8<
1600-1700	*	53.0<	52.0	50.0	46.0	32.0	30.0<	50.3	43.8
1700-1800	*	50.0	52.0<	47.0	41.0	22.0	14.0	47.5	37.7
1800-1900	*	36.0	26.0	26.0	25.0	22.0	12.0	28.3	24.5
1900-2000	*	11.0	12.0	21.0	14.0	10.0	10.0	14.5	13.0
2000-2100	*	9.0	11.0	18.0	16.0	9.0	10.0	13.5	12.2
2100-2200	*	6.0	11.0	12.0	14.0	5.0	6.0	10.8	9.0
2200-2300	*	9.0	2.0	2.0	5.0	5.0	6.0	4.5	4.8
2300-2400	*	5.0	3.0	2.0	9.0	9.0	1.0	4.8	4.8
Totals									
0700-1900	*	436.0	420.0	461.0	419.0	308.0	260.0	434.0	384.0
0600-2200	*	474.0	466.0	527.0	480.0	341.0	292.0	486.8	430.0
0600-0000	*	488.0	471.0	531.0	494.0	355.0	299.0	496.0	439.7
0000-0000	*	498.0	483.0	539.0	504.0	363.0	312.0	506.0	449.8
AM Peak	*	0800	0900	0800	0800	1100	1100		
	*	51.0	36.0	44.0	46.0	45.0	38.0		
PM Peak	*	1600	1700	1500	1500	1200	1600		
	*	53.0	52.0	63.0	56.0	41.0	30.0		

* - No data.

MetroCount Traffic Executive

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-26 -- English (ENU)

Datasets:

Site: [610026] WASHINGTON ST BTW OSWALD ST & ARMAGH ST
Direction: 7 - North bound A>B, South bound B>A. **Lane:** 2
Survey Duration: 19:13 Monday, May 5, 2014 => 11:36 Monday, May 12, 2014
File: 610026 0 2014-05-12 1137.EC2 (PlusB)
Identifier: GT68DRV5 MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm: Factory default
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 0:00 Tuesday, May 6, 2014 => 0:00 Monday, May 12, 2014
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/h.
Direction: South (bound)
Separation: All - (Headway)
Name: Default Profile
Scheme: Vehicle classification (ARX)
Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile: Vehicles = 3374 / 6631 (50.88%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-26

Site: 610026.2NS

Description: WASHINGTON ST BTW OSWALD ST & ARMAGH ST

Filter time: 0:00 Tuesday, May 6, 2014 => 0:00 Monday, May 12, 2014

Scheme: Vehicle classification (ARX)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(S) Sp(10,160) Headway(>0)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
								1 - 5	1 - 7
Hour									
0000-0100	*	0.0	2.0	1.0	1.0	6.0	9.0	1.0	3.2
0100-0200	*	2.0	1.0	2.0	1.0	3.0	0.0	1.5	1.5
0200-0300	*	0.0	1.0	0.0	2.0	2.0	1.0	0.8	1.0
0300-0400	*	0.0	0.0	3.0	2.0	1.0	2.0	1.3	1.3
0400-0500	*	2.0	2.0	1.0	1.0	4.0	2.0	1.5	2.0
0500-0600	*	2.0	6.0	3.0	1.0	3.0	2.0	3.0	2.8
0600-0700	*	23.0	23.0	26.0	27.0	3.0	1.0	24.8	17.2
0700-0800	*	99.0<	94.0	90.0	94.0	13.0	11.0	94.3	66.8
0800-0900	*	88.0	111.0<	92.0<	94.0<	24.0	14.0	96.3<	70.5<
0900-1000	*	33.0	49.0	34.0	39.0	28.0	29.0	38.8	35.3
1000-1100	*	24.0	29.0	31.0	38.0	35.0	17.0	30.5	29.0
1100-1200	*	23.0	34.0	35.0	28.0	37.0<	31.0<	30.0	31.3
1200-1300	*	33.0	40.0	32.0	32.0	30.0	28.0	34.3	32.5
1300-1400	*	28.0	38.0	30.0	44.0	27.0	27.0	35.0	32.3
1400-1500	*	39.0	49.0	42.0	45.0	19.0	21.0	43.8	35.8
1500-1600	*	52.0	41.0	37.0	36.0	24.0	25.0	41.5	35.8
1600-1700	*	41.0	58.0<	38.0	51.0	32.0<	41.0<	47.0	43.5
1700-1800	*	63.0<	50.0	60.0<	51.0<	31.0	34.0	56.0<	48.2<
1800-1900	*	41.0	31.0	27.0	31.0	22.0	32.0	32.5	30.7
1900-2000	*	7.0	16.0	15.0	21.0	13.0	10.0	14.8	13.7
2000-2100	*	7.0	7.0	12.0	9.0	4.0	12.0	8.8	8.5
2100-2200	*	5.0	9.0	13.0	5.0	11.0	8.0	8.0	8.5
2200-2300	*	9.0	5.0	8.0	10.0	7.0	2.0	8.0	6.8
2300-2400	*	4.0	2.0	2.0	7.0	7.0	2.0	3.8	4.0
Totals									
0700-1900	*	564.0	624.0	548.0	583.0	322.0	310.0	579.8	491.8
0600-2200	*	606.0	679.0	614.0	645.0	353.0	341.0	636.0	539.7
0600-0000	*	619.0	686.0	624.0	662.0	367.0	345.0	647.8	550.5
0000-0000	*	625.0	698.0	634.0	670.0	386.0	361.0	656.8	562.3
AM Peak	*	0700	0800	0800	0800	1100	1100		
	*	99.0	111.0	92.0	94.0	37.0	31.0		
PM Peak	*	1700	1600	1700	1700	1600	1600		
	*	63.0	58.0	60.0	51.0	32.0	41.0		

* - No data.

MetroCount Traffic Executive

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-27 -- English (ENU)

Datasets:

Site: [610027] HORDERN ST BTW GEDDES ST & COLOMBO ST
Direction: 7 - North bound A>B, South bound B>A. **Lane:** 2
Survey Duration: 20:46 Monday, May 5, 2014 => 11:14 Monday, May 12, 2014
File: 610027 0 2014-05-12 1115.EC2 (PlusB)
Identifier: CJ66AS5F MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm: Factory default
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 0:00 Tuesday, May 6, 2014 => 0:00 Monday, May 12, 2014
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/h.
Direction: North (bound)
Separation: All - (Headway)
Name: Default Profile
Scheme: Vehicle classification (ARX)
Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile: Vehicles = 1134 / 3375 (33.60%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-27

Site: 610027.2NS

Description: HORDERN ST BTW GEDDES ST & COLOMBO ST

Filter time: 0:00 Tuesday, May 6, 2014 => 0:00 Monday, May 12, 2014

Scheme: Vehicle classification (ARX)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(N) Sp(10,160) Headway(>0)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
								1 - 5	1 - 7
Hour									
0000-0100	*	1.0	2.0	0.0	0.0	0.0	2.0	0.8	0.8
0100-0200	*	1.0	1.0	0.0	0.0	1.0	0.0	0.5	0.5
0200-0300	*	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.2
0300-0400	*	2.0	2.0	1.0	1.0	1.0	1.0	1.5	1.3
0400-0500	*	1.0	1.0	0.0	1.0	0.0	3.0	0.8	1.0
0500-0600	*	2.0	0.0	1.0	0.0	0.0	1.0	0.8	0.7
0600-0700	*	4.0	1.0	1.0	4.0	2.0	4.0	2.5	2.7
0700-0800	*	16.0	12.0	14.0	16.0	3.0	3.0	14.5	10.7
0800-0900	*	57.0<	50.0<	46.0<	61.0<	6.0	3.0	53.5<	37.2<
0900-1000	*	11.0	24.0	12.0	12.0	16.0	9.0	14.8	14.0
1000-1100	*	11.0	15.0	6.0	10.0	19.0<	11.0<	10.5	12.0
1100-1200	*	9.0	11.0	14.0	13.0	16.0	5.0	11.8	11.3
1200-1300	*	7.0	10.0	7.0	9.0	13.0	2.0	8.3	8.0
1300-1400	*	11.0	8.0	6.0	43.0<	7.0	6.0	17.0	13.5
1400-1500	*	30.0<	25.0<	22.0	26.0	11.0	4.0	25.8<	19.7<
1500-1600	*	12.0	19.0	29.0<	15.0	15.0<	4.0	18.8	15.7
1600-1700	*	11.0	13.0	11.0	9.0	4.0	6.0<	11.0	9.0
1700-1800	*	23.0	13.0	10.0	8.0	7.0	4.0	13.5	10.8
1800-1900	*	7.0	8.0	6.0	10.0	10.0	3.0	7.8	7.3
1900-2000	*	6.0	8.0	7.0	8.0	4.0	0.0	7.3	5.5
2000-2100	*	0.0	1.0	0.0	6.0	8.0	3.0	1.8	3.0
2100-2200	*	1.0	1.0	0.0	3.0	3.0	0.0	1.3	1.3
2200-2300	*	1.0	2.0	0.0	4.0	2.0	0.0	1.8	1.5
2300-2400	*	1.0	1.0	3.0	2.0	0.0	1.0	1.8	1.3
Totals									
0700-1900	*	205.0	208.0	183.0	232.0	127.0	60.0	207.0	169.2
0600-2200	*	216.0	219.0	191.0	253.0	144.0	67.0	219.8	181.7
0600-0000	*	218.0	222.0	194.0	259.0	146.0	68.0	223.3	184.5
0000-0000	*	225.0	228.0	196.0	261.0	149.0	75.0	227.5	189.0
AM Peak	*	0800	0800	0800	0800	1000	1000		
	*	57.0	50.0	46.0	61.0	19.0	11.0		
PM Peak	*	1400	1400	1500	1300	1500	1600		
	*	30.0	25.0	29.0	43.0	15.0	6.0		

* - No data.

MetroCount Traffic Executive

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-28 -- English (ENU)

Datasets:

Site: [610027] HORDERN ST BTW GEDDES ST & COLOMBO ST
Direction: 7 - North bound A>B, South bound B>A. **Lane:** 2
Survey Duration: 20:46 Monday, May 5, 2014 => 11:14 Monday, May 12, 2014
File: 610027 0 2014-05-12 1115.EC2 (PlusB)
Identifier: CJ66AS5F MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm: Factory default
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 0:00 Tuesday, May 6, 2014 => 0:00 Monday, May 12, 2014
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/h.
Direction: South (bound)
Separation: All - (Headway)
Name: Default Profile
Scheme: Vehicle classification (ARX)
Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile: Vehicles = 2010 / 3375 (59.56%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-28

Site: 610027.2NS

Description: HORDERN ST BTW GEDDES ST & COLOMBO ST

Filter time: 0:00 Tuesday, May 6, 2014 => 0:00 Monday, May 12, 2014

Scheme: Vehicle classification (ARX)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(S) Sp(10,160) Headway(>0)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
								1 - 5	1 - 7
Hour									
0000-0100	*	1.0	1.0	0.0	3.0	2.0	3.0	1.3	1.7
0100-0200	*	0.0	1.0	2.0	0.0	2.0	1.0	0.8	1.0
0200-0300	*	0.0	2.0	2.0	0.0	0.0	1.0	1.0	0.8
0300-0400	*	0.0	0.0	1.0	0.0	1.0	1.0	0.3	0.5
0400-0500	*	1.0	2.0	2.0	2.0	0.0	0.0	1.8	1.2
0500-0600	*	5.0	2.0	2.0	0.0	1.0	1.0	2.3	1.8
0600-0700	*	3.0	4.0	7.0	3.0	1.0	5.0	4.3	3.8
0700-0800	*	16.0	22.0	16.0	18.0	4.0	5.0	18.0	13.5
0800-0900	*	36.0<	53.0<	36.0	41.0<	6.0	12.0	41.5<	30.7<
0900-1000	*	30.0	33.0	20.0	22.0	17.0	9.0	26.3	21.8
1000-1100	*	25.0	21.0	28.0	22.0	21.0	14.0	24.0	21.8
1100-1200	*	12.0	19.0	38.0<	36.0	26.0<	18.0<	26.3	24.8
1200-1300	*	31.0	34.0	21.0	26.0	22.0	18.0<	28.0	25.3
1300-1400	*	23.0	19.0	13.0	34.0	23.0	11.0	22.3	20.5
1400-1500	*	33.0	32.0	32.0	31.0	15.0	13.0	32.0	26.0
1500-1600	*	34.0	45.0	37.0	36.0	23.0<	5.0	38.0	30.0
1600-1700	*	52.0<	61.0<	39.0<	61.0<	11.0	8.0	53.3<	38.7<
1700-1800	*	47.0	36.0	36.0	34.0	7.0	6.0	38.3	27.7
1800-1900	*	18.0	21.0	11.0	25.0	12.0	9.0	18.8	16.0
1900-2000	*	16.0	7.0	14.0	14.0	6.0	12.0	12.8	11.5
2000-2100	*	5.0	4.0	0.0	9.0	4.0	8.0	4.5	5.0
2100-2200	*	7.0	1.0	0.0	9.0	8.0	4.0	4.3	4.8
2200-2300	*	3.0	3.0	0.0	9.0	4.0	2.0	3.8	3.5
2300-2400	*	3.0	1.0	3.0	5.0	1.0	2.0	3.0	2.5
Totals									
0700-1900	*	357.0	396.0	327.0	386.0	187.0	128.0	366.5	296.8
0600-2200	*	388.0	412.0	348.0	421.0	206.0	157.0	392.3	322.0
0600-0000	*	394.0	416.0	351.0	435.0	211.0	161.0	399.0	328.0
0000-0000	*	401.0	424.0	360.0	440.0	217.0	168.0	406.3	335.0
AM Peak	*	0800	0800	1100	0800	1100	1100		
	*	36.0	53.0	38.0	41.0	26.0	18.0		
PM Peak	*	1600	1600	1600	1600	1500	1200		
	*	52.0	61.0	39.0	61.0	23.0	18.0		

* - No data.

MetroCount Traffic Executive

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-29 -- English (ENU)

Datasets:

Site: [610031] COLOMBO ST BTW HORDERN ST & WASHINGTON ST
Direction: 8 - East bound A>B, West bound B>A. **Lane:** 2
Survey Duration: 12:45 Monday, May 12, 2014 => 10:49 Monday, May 19, 2014
File: 610031 0 2014-05-19 1049.EC2 (PlusB)
Identifier: CD31FEXT MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm: Factory default
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 0:00 Tuesday, May 13, 2014 => 0:00 Monday, May 19, 2014
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/h.
Direction: West (bound)
Separation: All - (Headway)
Name: Default Profile
Scheme: Vehicle classification (ARX)
Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile: Vehicles = 2292 / 4673 (49.05%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-29

Site: 610031.2EW

Description: COLOMBO ST BTW HORDERN ST & WASHINGTON ST

Filter time: 0:00 Tuesday, May 13, 2014 => 0:00 Monday, May 19, 2014

Scheme: Vehicle classification (ARX)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(W) Sp(10,160) Headway(>0)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
								1 - 5	1 - 7
Hour									
0000-0100	*	0.0	1.0	0.0	1.0	2.0	2.0	0.5	1.0
0100-0200	*	0.0	0.0	0.0	0.0	2.0	4.0	0.0	1.0
0200-0300	*	0.0	1.0	0.0	1.0	1.0	3.0	0.5	1.0
0300-0400	*	0.0	1.0	1.0	0.0	0.0	2.0	0.5	0.7
0400-0500	*	3.0	2.0	2.0	1.0	0.0	1.0	2.0	1.5
0500-0600	*	3.0	1.0	2.0	3.0	2.0	2.0	2.3	2.2
0600-0700	*	2.0	3.0	4.0	4.0	2.0	1.0	3.3	2.7
0700-0800	*	12.0	12.0	6.0	8.0	7.0	2.0	9.5	7.8
0800-0900	*	89.0<	73.0<	68.0<	72.0<	8.0	14.0<	75.5<	54.0<
0900-1000	*	18.0	26.0	23.0	31.0	16.0	9.0	24.5	20.5
1000-1100	*	19.0	20.0	23.0	20.0	34.0<	10.0	20.5	21.0
1100-1200	*	12.0	23.0	18.0	23.0	30.0	12.0	19.0	19.7
1200-1300	*	18.0	32.0	24.0	27.0	38.0<	10.0	25.3	24.8
1300-1400	*	14.0	15.0	29.0	25.0	15.0	17.0<	20.8	19.2
1400-1500	*	43.0	40.0	40.0	56.0	18.0	13.0	44.8	35.0
1500-1600	*	73.0<	76.0<	93.0<	88.0<	23.0	13.0	82.5<	61.0<
1600-1700	*	37.0	50.0	31.0	35.0	10.0	12.0	38.3	29.2
1700-1800	*	51.0	51.0	40.0	28.0	11.0	12.0	42.5	32.2
1800-1900	*	14.0	16.0	18.0	20.0	7.0	10.0	17.0	14.2
1900-2000	*	3.0	27.0	4.0	17.0	4.0	6.0	12.8	10.2
2000-2100	*	8.0	13.0	11.0	12.0	10.0	4.0	11.0	9.7
2100-2200	*	13.0	10.0	5.0	7.0	2.0	6.0	8.8	7.2
2200-2300	*	4.0	3.0	2.0	5.0	2.0	4.0	3.5	3.3
2300-2400	*	5.0	3.0	3.0	4.0	3.0	1.0	3.8	3.2
Totals									
0700-1900	*	400.0	434.0	413.0	433.0	217.0	134.0	420.0	338.5
0600-2200	*	426.0	487.0	437.0	473.0	235.0	151.0	455.8	368.2
0600-0000	*	435.0	493.0	442.0	482.0	240.0	156.0	463.0	374.7
0000-0000	*	441.0	499.0	447.0	488.0	247.0	170.0	468.8	382.0
AM Peak	*	0800	0800	0800	0800	1000	0800		
	*	89.0	73.0	68.0	72.0	34.0	14.0		
PM Peak	*	1500	1500	1500	1500	1200	1300		
	*	73.0	76.0	93.0	88.0	38.0	17.0		

* - No data.

MetroCount Traffic Executive

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-30 -- English (ENU)

Datasets:

Site: [610031] COLOMBO ST BTW HORDERN ST & WASHINGTON ST
Direction: 8 - East bound A>B, West bound B>A. **Lane:** 2
Survey Duration: 12:45 Monday, May 12, 2014 => 10:49 Monday, May 19, 2014
File: 610031 0 2014-05-19 1049.EC2 (PlusB)
Identifier: CD31FEXT MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm: Factory default
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 0:00 Tuesday, May 13, 2014 => 0:00 Monday, May 19, 2014
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/h.
Direction: East (bound)
Separation: All - (Headway)
Name: Default Profile
Scheme: Vehicle classification (ARX)
Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile: Vehicles = 1629 / 4673 (34.86%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-30

Site: 610031.2EW

Description: COLOMBO ST BTW HORDERN ST & WASHINGTON ST

Filter time: 0:00 Tuesday, May 13, 2014 => 0:00 Monday, May 19, 2014

Scheme: Vehicle classification (ARX)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(E) Sp(10,160) Headway(>0)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
								1 - 5	1 - 7
Hour									
0000-0100	*	1.0	2.0	1.0	1.0	0.0	1.0	1.3	1.0
0100-0200	*	1.0	0.0	1.0	0.0	2.0	0.0	0.5	0.7
0200-0300	*	1.0	0.0	0.0	0.0	2.0	3.0	0.3	1.0
0300-0400	*	1.0	1.0	0.0	0.0	0.0	1.0	0.5	0.5
0400-0500	*	2.0	3.0	0.0	0.0	1.0	0.0	1.3	1.0
0500-0600	*	3.0	1.0	3.0	3.0	1.0	0.0	2.5	1.8
0600-0700	*	5.0	9.0	5.0	7.0	1.0	3.0	6.5	5.0
0700-0800	*	37.0	27.0	26.0	27.0	5.0	0.0	29.3	20.3
0800-0900	*	70.0<	78.0<	67.0<	71.0<	21.0<	7.0	71.5<	52.3<
0900-1000	*	15.0	14.0	15.0	18.0	17.0	17.0	15.5	16.0
1000-1100	*	6.0	14.0	7.0	12.0	18.0	18.0<	9.8	12.5
1100-1200	*	13.0	16.0	15.0	12.0	16.0	9.0	14.0	13.5
1200-1300	*	16.0	20.0	25.0	18.0	14.0	4.0	19.8	16.2
1300-1400	*	5.0	22.0	9.0	15.0	17.0<	6.0	12.8	12.3
1400-1500	*	26.0	25.0	32.0	35.0	10.0	9.0	29.5	22.8
1500-1600	*	40.0<	37.0<	33.0<	41.0<	11.0	12.0<	37.8<	29.0<
1600-1700	*	21.0	34.0	22.0	22.0	12.0	8.0	24.8	19.8
1700-1800	*	19.0	24.0	14.0	25.0	9.0	11.0	20.5	17.0
1800-1900	*	20.0	14.0	6.0	16.0	6.0	5.0	14.0	11.2
1900-2000	*	5.0	7.0	6.0	9.0	5.0	2.0	6.8	5.7
2000-2100	*	4.0	8.0	4.0	3.0	3.0	4.0	4.8	4.3
2100-2200	*	2.0	5.0	2.0	3.0	2.0	2.0	3.0	2.7
2200-2300	*	2.0	2.0	4.0	5.0	4.0	2.0	3.3	3.2
2300-2400	*	2.0	3.0	0.0	1.0	2.0	2.0	1.5	1.7
Totals									
0700-1900	*	288.0	325.0	271.0	312.0	156.0	106.0	299.0	243.0
0600-2200	*	304.0	354.0	288.0	334.0	167.0	117.0	320.0	260.7
0600-0000	*	308.0	359.0	292.0	340.0	173.0	121.0	324.8	265.5
0000-0000	*	317.0	366.0	297.0	344.0	179.0	126.0	331.0	271.5
AM Peak	*	0800	0800	0800	0800	0800	1000		
	*	70.0	78.0	67.0	71.0	21.0	18.0		
PM Peak	*	1500	1500	1500	1500	1300	1500		
	*	40.0	37.0	33.0	41.0	17.0	12.0		

* - No data.

MetroCount Traffic Executive

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-31 -- English (ENU)

Datasets:

Site: [610034] HORDERN ST BTW MACKIE ST & CARGILL ST
Direction: 7 - North bound A>B, South bound B>A. **Lane:** 2
Survey Duration: 21:09 Monday, May 5, 2014 => 10:47 Monday, May 12, 2014
File: 610034 0 2014-05-12 1048.EC2 (PlusB)
Identifier: CC48E3C9 MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm: Factory default
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 0:00 Tuesday, May 6, 2014 => 0:00 Monday, May 12, 2014
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/h.
Direction: North (bound)
Separation: All - (Headway)
Name: Default Profile
Scheme: Vehicle classification (ARX)
Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile: Vehicles = 1144 / 2904 (39.39%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-31

Site: 610034.2NS

Description: HORDERN ST BTW MACKIE ST & CARGILL ST

Filter time: 0:00 Tuesday, May 6, 2014 => 0:00 Monday, May 12, 2014

Scheme: Vehicle classification (ARX)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(N) Sp(10,160) Headway(>0)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
								1 - 5	1 - 7
Hour									
0000-0100	*	1.0	0.0	0.0	0.0	0.0	2.0	0.3	0.5
0100-0200	*	0.0	1.0	0.0	0.0	1.0	0.0	0.3	0.3
0200-0300	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0300-0400	*	2.0	1.0	1.0	1.0	1.0	0.0	1.3	1.0
0400-0500	*	0.0	0.0	0.0	2.0	0.0	1.0	0.5	0.5
0500-0600	*	3.0	2.0	1.0	1.0	0.0	0.0	1.8	1.2
0600-0700	*	4.0	5.0	5.0<	7.0	3.0	2.0	5.3	4.3
0700-0800	*	26.0	22.0	4.0	22.0	3.0	3.0	18.5	13.3
0800-0900	*	60.0<	51.0<	0.0	58.0<	4.0	9.0	42.3<	30.3<
0900-1000	*	15.0	9.0	0.0	16.0	10.0	13.0	10.0	10.5
1000-1100	*	12.0	11.0	0.0	18.0	17.0	17.0	10.3	12.5
1100-1200	*	13.0	16.0	0.0	16.0	25.0<	20.0<	11.3	15.0
1200-1300	*	11.0	15.0	0.0	14.0	18.0<	9.0	10.0	11.2
1300-1400	*	17.0	13.0	0.0	14.0	11.0	11.0	11.0	11.0
1400-1500	*	26.0	24.0	0.0	25.0<	11.0	10.0	18.8<	16.0<
1500-1600	*	24.0	28.0<	0.0	20.0	11.0	9.0	18.0	15.3
1600-1700	*	30.0<	23.0	7.0	14.0	5.0	11.0<	18.5	15.0
1700-1800	*	14.0	9.0	9.0<	10.0	6.0	5.0	10.5	8.8
1800-1900	*	5.0	11.0	5.0	9.0	7.0	4.0	7.5	6.8
1900-2000	*	6.0	9.0	7.0	8.0	2.0	2.0	7.5	5.7
2000-2100	*	5.0	4.0	5.0	7.0	6.0	2.0	5.3	4.8
2100-2200	*	3.0	4.0	5.0	5.0	1.0	1.0	4.3	3.2
2200-2300	*	2.0	2.0	2.0	5.0	1.0	1.0	2.8	2.2
2300-2400	*	2.0	1.0	0.0	3.0	1.0	0.0	1.5	1.2
Totals									
0700-1900	*	253.0	232.0	25.0	236.0	128.0	121.0	186.5	165.8
0600-2200	*	271.0	254.0	47.0	263.0	140.0	128.0	208.8	183.8
0600-0000	*	275.0	257.0	49.0	271.0	142.0	129.0	213.0	187.2
0000-0000	*	281.0	261.0	51.0	275.0	144.0	132.0	217.0	190.7
AM Peak	*	0800	0800	0600	0800	1100	1100		
	*	60.0	51.0	5.0	58.0	25.0	20.0		
PM Peak	*	1600	1500	1700	1400	1200	1600		
	*	30.0	28.0	9.0	25.0	18.0	11.0		

* - No data.

MetroCount Traffic Executive

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-32 -- English (ENU)

Datasets:

Site: [610034] HORDERN ST BTW MACKIE ST & CARGILL ST
Direction: 7 - North bound A>B, South bound B>A. **Lane:** 2
Survey Duration: 21:09 Monday, May 5, 2014 => 10:47 Monday, May 12, 2014
File: 610034 0 2014-05-12 1048.EC2 (PlusB)
Identifier: CC48E3C9 MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm: Factory default
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 0:00 Tuesday, May 6, 2014 => 0:00 Monday, May 12, 2014
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/h.
Direction: South (bound)
Separation: All - (Headway)
Name: Default Profile
Scheme: Vehicle classification (ARX)
Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile: Vehicles = 1506 / 2904 (51.86%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-32

Site: 610034.2NS

Description: HORDERN ST BTW MACKIE ST & CARGILL ST

Filter time: 0:00 Tuesday, May 6, 2014 => 0:00 Monday, May 12, 2014

Scheme: Vehicle classification (ARX)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(S) Sp(10,160) Headway(>0)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
								1 - 5	1 - 7
Hour									
0000-0100	*	2.0	1.0	0.0	1.0	4.0	7.0	1.0	2.5
0100-0200	*	0.0	1.0	0.0	1.0	2.0	2.0	0.5	1.0
0200-0300	*	0.0	1.0	1.0	0.0	0.0	0.0	0.5	0.3
0300-0400	*	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.2
0400-0500	*	1.0	1.0	2.0	2.0	1.0	0.0	1.5	1.2
0500-0600	*	1.0	1.0	1.0	1.0	0.0	0.0	1.0	0.7
0600-0700	*	4.0	5.0	7.0<	4.0	1.0	1.0	5.0	3.7
0700-0800	*	18.0	19.0	1.0	19.0	4.0	4.0	14.3	10.8
0800-0900	*	51.0<	35.0<	0.0	43.0<	2.0	14.0	32.3<	24.2<
0900-1000	*	22.0	21.0	0.0	24.0	16.0	14.0	16.8	16.2
1000-1100	*	22.0	21.0	0.0	20.0	19.0	10.0	15.8	15.3
1100-1200	*	18.0	12.0	0.0	32.0	31.0<	28.0<	15.5	20.2
1200-1300	*	19.0	22.0	0.0	27.0	19.0	19.0<	17.0	17.7
1300-1400	*	18.0	21.0	0.0	13.0	12.0	7.0	13.0	11.8
1400-1500	*	20.0	14.0	0.0	18.0	21.0<	11.0	13.0	14.0
1500-1600	*	57.0<	48.0<	0.0	49.0<	19.0	6.0	38.5<	29.8<
1600-1700	*	32.0	31.0	25.0<	33.0	10.0	12.0	30.3	23.8
1700-1800	*	25.0	25.0	19.0	23.0	9.0	10.0	23.0	18.5
1800-1900	*	18.0	21.0	14.0	20.0	14.0	8.0	18.3	15.8
1900-2000	*	12.0	7.0	9.0	10.0	12.0	8.0	9.5	9.7
2000-2100	*	4.0	4.0	2.0	6.0	4.0	3.0	4.0	3.8
2100-2200	*	4.0	2.0	3.0	6.0	6.0	4.0	3.8	4.2
2200-2300	*	0.0	1.0	1.0	7.0	5.0	1.0	2.3	2.5
2300-2400	*	3.0	2.0	2.0	7.0	4.0	1.0	3.5	3.2
Totals									
0700-1900	*	320.0	290.0	59.0	321.0	176.0	143.0	247.5	218.2
0600-2200	*	344.0	308.0	80.0	347.0	199.0	159.0	269.8	239.5
0600-0000	*	347.0	311.0	83.0	361.0	208.0	161.0	275.5	245.2
0000-0000	*	351.0	316.0	87.0	366.0	215.0	171.0	280.0	251.0
AM Peak	*	0800	0800	0600	0800	1100	1100		
	*	51.0	35.0	7.0	43.0	31.0	28.0		
PM Peak	*	1500	1500	1600	1500	1400	1200		
	*	57.0	48.0	25.0	49.0	21.0	19.0		

* - No data.

MetroCount Traffic Executive

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-34 -- English (ENU)

Datasets:

Site: [610038] WASHINGTON ST BTW CARGILL ST & GEDDES ST
Direction: 7 - North bound A>B, South bound B>A. **Lane:** 2
Survey Duration: 18:32 Monday, May 5, 2014 => 11:53 Monday, May 12, 2014
File: 610038 0 2014-05-12 1153.EC2 (PlusB)
Identifier: CJ28CQX0 MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm: Factory default
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 0:00 Tuesday, May 6, 2014 => 0:00 Monday, May 12, 2014
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/h.
Direction: North (bound)
Separation: All - (Headway)
Name: Default Profile
Scheme: Vehicle classification (ARX)
Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile: Vehicles = 2620 / 5142 (50.95%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-34

Site: 610038.2NS

Description: WASHINGTON ST BTW CARGILL ST & GEDDES ST

Filter time: 0:00 Tuesday, May 6, 2014 => 0:00 Monday, May 12, 2014

Scheme: Vehicle classification (ARX)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(N) Sp(10,160) Headway(>0)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
								1 - 5	1 - 7
Hour									
0000-0100	*	1.0	0.0	1.0	0.0	4.0	1.0	0.5	1.2
0100-0200	*	1.0	1.0	0.0	1.0	4.0	0.0	0.8	1.2
0200-0300	*	0.0	0.0	0.0	0.0	2.0	3.0	0.0	0.8
0300-0400	*	0.0	0.0	1.0	1.0	1.0	0.0	0.5	0.5
0400-0500	*	4.0	1.0	2.0	1.0	1.0	0.0	2.0	1.5
0500-0600	*	8.0	8.0	4.0	7.0	5.0	0.0	6.8	5.3
0600-0700	*	12.0	15.0	14.0	19.0	4.0	7.0	15.0	11.8
0700-0800	*	58.0	63.0	41.0	43.0	16.0	11.0	51.3	38.7
0800-0900	*	85.0<	114.0<	84.0<	84.0<	10.0	20.0	91.8<	66.2<
0900-1000	*	16.0	32.0	25.0	32.0	20.0	16.0	26.3	23.5
1000-1100	*	15.0	17.0	13.0	21.0	30.0<	25.0<	16.5	20.2
1100-1200	*	14.0	22.0	24.0	19.0	29.0	20.0	19.8	21.3
1200-1300	*	23.0	26.0	26.0	24.0	43.0<	27.0<	24.8	28.2
1300-1400	*	23.0	24.0	31.0	23.0	21.0	25.0	25.3	24.5
1400-1500	*	35.0	41.0	30.0	38.0	31.0	21.0	36.0	32.7
1500-1600	*	43.0	45.0<	38.0	56.0<	22.0	26.0	45.5<	38.3<
1600-1700	*	45.0<	42.0	29.0	34.0	30.0	19.0	37.5	33.2
1700-1800	*	37.0	37.0	38.0<	33.0	19.0	17.0	36.3	30.2
1800-1900	*	25.0	27.0	19.0	22.0	19.0	14.0	23.3	21.0
1900-2000	*	10.0	12.0	21.0	19.0	12.0	14.0	15.5	14.7
2000-2100	*	10.0	6.0	12.0	12.0	5.0	7.0	10.0	8.7
2100-2200	*	9.0	10.0	8.0	2.0	5.0	7.0	7.3	6.8
2200-2300	*	5.0	1.0	3.0	3.0	6.0	6.0	3.0	4.0
2300-2400	*	1.0	1.0	2.0	6.0	4.0	0.0	2.5	2.3
Totals									
0700-1900	*	419.0	490.0	398.0	429.0	290.0	241.0	434.0	377.8
0600-2200	*	460.0	533.0	453.0	481.0	316.0	276.0	481.8	419.8
0600-0000	*	466.0	535.0	458.0	490.0	326.0	282.0	487.3	426.2
0000-0000	*	480.0	545.0	466.0	500.0	343.0	286.0	497.8	436.7
AM Peak	*	0800	0800	0800	0800	1000	1000		
	*	85.0	114.0	84.0	84.0	30.0	25.0		
PM Peak	*	1600	1500	1700	1500	1200	1200		
	*	45.0	45.0	38.0	56.0	43.0	27.0		

* - No data.

MetroCount Traffic Executive

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-35 -- English (ENU)

Datasets:

Site: [610038] WASHINGTON ST BTW CARGILL ST & GEDDES ST
Direction: 7 - North bound A>B, South bound B>A. **Lane:** 2
Survey Duration: 18:32 Monday, May 5, 2014 => 11:53 Monday, May 12, 2014
File: 610038 0 2014-05-12 1153.EC2 (PlusB)
Identifier: CJ28CQX0 MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm: Factory default
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 0:00 Tuesday, May 6, 2014 => 0:00 Monday, May 12, 2014
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/h.
Direction: South (bound)
Separation: All - (Headway)
Name: Default Profile
Scheme: Vehicle classification (ARX)
Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile: Vehicles = 2024 / 5142 (39.36%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-35

Site: 610038.2NS

Description: WASHINGTON ST BTW CARGILL ST & GEDDES ST

Filter time: 0:00 Tuesday, May 6, 2014 => 0:00 Monday, May 12, 2014

Scheme: Vehicle classification (ARX)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(S) Sp(10,160) Headway(>0)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
								1 - 5	1 - 7
Hour									
0000-0100	*	0.0	1.0	1.0	1.0	4.0	3.0	0.8	1.7
0100-0200	*	2.0	1.0	2.0	1.0	0.0	1.0	1.5	1.2
0200-0300	*	0.0	0.0	0.0	1.0	4.0	0.0	0.3	0.8
0300-0400	*	0.0	0.0	1.0	1.0	0.0	2.0	0.5	0.7
0400-0500	*	1.0	1.0	0.0	0.0	3.0	0.0	0.5	0.8
0500-0600	*	1.0	0.0	0.0	0.0	0.0	1.0	0.3	0.3
0600-0700	*	3.0	3.0	0.0	6.0	1.0	2.0	3.0	2.5
0700-0800	*	26.0	28.0	18.0	19.0	6.0	8.0	22.8	17.5
0800-0900	*	53.0<	31.0<	44.0<	41.0<	10.0	4.0	42.3<	30.5<
0900-1000	*	18.0	21.0	17.0	16.0	18.0	12.0	18.0	17.0
1000-1100	*	21.0	22.0	18.0	23.0	17.0	18.0	21.0	19.8
1100-1200	*	11.0	26.0	19.0	22.0	20.0<	19.0<	19.5	19.5
1200-1300	*	22.0	21.0	27.0	33.0	17.0	17.0	25.8	22.8
1300-1400	*	28.0	14.0	18.0	12.0	22.0<	12.0	18.0	17.7
1400-1500	*	22.0	24.0	22.0	25.0	12.0	12.0	23.3	19.5
1500-1600	*	49.0	58.0<	64.0<	52.0<	19.0	20.0	55.8<	43.7<
1600-1700	*	40.0	47.0	37.0	48.0	14.0	24.0<	43.0	35.0
1700-1800	*	62.0<	50.0	49.0	48.0	18.0	18.0	52.3	40.8
1800-1900	*	36.0	26.0	27.0	16.0	13.0	8.0	26.3	21.0
1900-2000	*	6.0	9.0	10.0	13.0	6.0	5.0	9.5	8.2
2000-2100	*	8.0	4.0	2.0	5.0	3.0	5.0	4.8	4.5
2100-2200	*	3.0	7.0	5.0	4.0	4.0	3.0	4.8	4.3
2200-2300	*	7.0	3.0	2.0	8.0	6.0	3.0	5.0	4.8
2300-2400	*	0.0	0.0	1.0	10.0	5.0	0.0	2.8	2.7
Totals									
0700-1900	*	388.0	368.0	360.0	355.0	186.0	172.0	367.8	304.8
0600-2200	*	408.0	391.0	377.0	383.0	200.0	187.0	389.8	324.3
0600-0000	*	415.0	394.0	380.0	401.0	211.0	190.0	397.5	331.8
0000-0000	*	419.0	397.0	384.0	405.0	222.0	197.0	401.3	337.3
AM Peak	*	0800	0800	0800	0800	1100	1100		
	*	53.0	31.0	44.0	41.0	20.0	19.0		
PM Peak	*	1700	1500	1500	1500	1300	1600		
	*	62.0	58.0	64.0	52.0	22.0	24.0		

* - No data.

MetroCount Traffic Executive

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-36 -- English (ENU)

Datasets:

Site: [610040] GEDDES ST BTW GLOUCESTER ST & WASHINGTON ST
Direction: 8 - East bound A>B, West bound B>A. **Lane:** 2
Survey Duration: 12:28 Monday, May 12, 2014 => 10:41 Monday, May 19, 2014
File: 610040 0 2014-05-19 1042.EC2 (PlusB)
Identifier: CJ28CQX0 MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm: Factory default
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 0:00 Tuesday, May 13, 2014 => 0:00 Monday, May 19, 2014
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/h.
Direction: West (bound)
Separation: All - (Headway)
Name: Default Profile
Scheme: Vehicle classification (ARX)
Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile: Vehicles = 5697 / 13870 (41.07%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-36

Site: 610040.2EW

Description: GEDDES ST BTW GLOUCESTER ST & WASHINGTON ST

Filter time: 0:00 Tuesday, May 13, 2014 => 0:00 Monday, May 19, 2014

Scheme: Vehicle classification (ARX)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(W) Sp(10,160) Headway(>0)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
								1 - 5	1 - 7
Hour									
0000-0100	*	3.0	6.0	8.0	3.0	10.0	14.0	5.0	7.3
0100-0200	*	2.0	1.0	3.0	1.0	3.0	12.0	1.8	3.7
0200-0300	*	1.0	0.0	3.0	1.0	4.0	2.0	1.3	1.8
0300-0400	*	2.0	3.0	2.0	1.0	4.0	5.0	2.0	2.8
0400-0500	*	2.0	5.0	4.0	3.0	2.0	1.0	3.5	2.8
0500-0600	*	7.0	12.0	8.0	5.0	6.0	3.0	8.0	6.8
0600-0700	*	23.0	26.0	17.0	18.0	12.0	6.0	21.0	17.0
0700-0800	*	41.0	48.0	33.0	35.0	26.0	13.0	39.3	32.7
0800-0900	*	98.0<	98.0<	107.0<	89.0<	43.0	42.0	98.0<	79.5<
0900-1000	*	61.0	57.0	43.0	60.0	51.0	43.0	55.3	52.5
1000-1100	*	32.0	54.0	42.0	51.0	65.0	64.0<	44.8	51.3
1100-1200	*	46.0	41.0	43.0	57.0	71.0<	57.0	46.8	52.5
1200-1300	*	43.0	59.0	53.0	58.0	86.0<	39.0	53.3	56.3
1300-1400	*	53.0	53.0	48.0	53.0	73.0	46.0	51.8	54.3
1400-1500	*	64.0	62.0	59.0	59.0	61.0	40.0	61.0	57.5
1500-1600	*	121.0	113.0	127.0	126.0	55.0	45.0	121.8	97.8
1600-1700	*	139.0	128.0	118.0	128.0<	41.0	49.0<	128.3	100.5
1700-1800	*	149.0<	136.0<	128.0<	122.0	45.0	34.0	133.8<	102.3<
1800-1900	*	74.0	75.0	74.0	69.0	37.0	31.0	73.0	60.0
1900-2000	*	27.0	52.0	33.0	52.0	18.0	17.0	41.0	33.2
2000-2100	*	24.0	41.0	20.0	23.0	16.0	15.0	27.0	23.2
2100-2200	*	39.0	34.0	23.0	26.0	18.0	19.0	30.5	26.5
2200-2300	*	14.0	15.0	24.0	17.0	20.0	9.0	17.5	16.5
2300-2400	*	12.0	10.0	9.0	14.0	14.0	4.0	11.3	10.5
Totals									
0700-1900	*	921.0	924.0	875.0	907.0	654.0	503.0	906.8	797.3
0600-2200	*	1034.0	1077.0	968.0	1026.0	718.0	560.0	1026.3	897.2
0600-0000	*	1060.0	1102.0	1001.0	1057.0	752.0	573.0	1055.0	924.2
0000-0000	*	1077.0	1129.0	1029.0	1071.0	781.0	610.0	1076.5	949.5
AM Peak	*	0800	0800	0800	0800	1100	1000		
	*	98.0	98.0	107.0	89.0	71.0	64.0		
PM Peak	*	1700	1700	1700	1600	1200	1600		
	*	149.0	136.0	128.0	128.0	86.0	49.0		

* - No data.

MetroCount Traffic Executive

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-37 -- English (ENU)

Datasets:

Site: [610040] GEDDES ST BTW GLOUCESTER ST & WASHINGTON ST
Direction: 8 - East bound A>B, West bound B>A. **Lane:** 2
Survey Duration: 12:28 Monday, May 12, 2014 => 10:41 Monday, May 19, 2014
File: 610040 0 2014-05-19 1042.EC2 (PlusB)
Identifier: CJ28CQX0 MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm: Factory default
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 0:00 Tuesday, May 13, 2014 => 0:00 Monday, May 19, 2014
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/h.
Direction: East (bound)
Separation: All - (Headway)
Name: Default Profile
Scheme: Vehicle classification (ARX)
Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile: Vehicles = 6254 / 13870 (45.09%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-37

Site: 610040.2EW

Description: GEDDES ST BTW GLOUCESTER ST & WASHINGTON ST

Filter time: 0:00 Tuesday, May 13, 2014 => 0:00 Monday, May 19, 2014

Scheme: Vehicle classification (ARX)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(E) Sp(10,160) Headway(>0)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
								1 - 5	1 - 7
Hour									
0000-0100	*	4.0	7.0	6.0	2.0	9.0	9.0	4.8	6.2
0100-0200	*	0.0	3.0	5.0	3.0	2.0	5.0	2.8	3.0
0200-0300	*	2.0	0.0	0.0	0.0	4.0	3.0	0.5	1.5
0300-0400	*	2.0	2.0	3.0	3.0	5.0	2.0	2.5	2.8
0400-0500	*	2.0	4.0	6.0	3.0	1.0	2.0	3.8	3.0
0500-0600	*	15.0	7.0	9.0	12.0	4.0	3.0	10.8	8.3
0600-0700	*	40.0	44.0	37.0	33.0	11.0	9.0	38.5	29.0
0700-0800	*	116.0	130.0	118.0	109.0	32.0	9.0	118.3	85.7
0800-0900	*	192.0<	201.0<	171.0<	191.0<	45.0	26.0	188.8<	137.7<
0900-1000	*	55.0	52.0	53.0	47.0	59.0	42.0	51.8	51.3
1000-1100	*	54.0	53.0	56.0	49.0	84.0<	57.0<	53.0	58.8
1100-1200	*	45.0	58.0	63.0	45.0	77.0	51.0	52.8	56.5
1200-1300	*	61.0	61.0	62.0	70.0	63.0	51.0	63.5	61.3
1300-1400	*	46.0	61.0	51.0	61.0	66.0	60.0	54.8	57.5
1400-1500	*	93.0	86.0	89.0	82.0	40.0	51.0	87.5	73.5
1500-1600	*	97.0	104.0	109.0<	95.0	35.0	38.0	101.3<	79.7
1600-1700	*	71.0	118.0<	75.0	96.0	67.0<	46.0	90.0	78.8
1700-1800	*	101.0<	92.0	100.0	107.0<	47.0	62.0<	100.0	84.8<
1800-1900	*	68.0	66.0	74.0	62.0	48.0	38.0	67.5	59.3
1900-2000	*	27.0	47.0	38.0	45.0	23.0	29.0	39.3	34.8
2000-2100	*	25.0	42.0	46.0	25.0	26.0	21.0	34.5	30.8
2100-2200	*	14.0	26.0	15.0	24.0	19.0	11.0	19.8	18.2
2200-2300	*	9.0	8.0	17.0	17.0	14.0	9.0	12.8	12.3
2300-2400	*	9.0	8.0	7.0	9.0	9.0	2.0	8.3	7.3
Totals									
0700-1900	*	999.0	1082.0	1021.0	1014.0	663.0	531.0	1029.0	885.0
0600-2200	*	1105.0	1241.0	1157.0	1141.0	742.0	601.0	1161.0	997.8
0600-0000	*	1123.0	1257.0	1181.0	1167.0	765.0	612.0	1182.0	1017.5
0000-0000	*	1148.0	1280.0	1210.0	1190.0	790.0	636.0	1207.0	1042.3
AM Peak	*	0800	0800	0800	0800	1000	1000		
	*	192.0	201.0	171.0	191.0	84.0	57.0		
PM Peak	*	1700	1600	1500	1700	1600	1700		
	*	101.0	118.0	109.0	107.0	67.0	62.0		

* - No data.

MetroCount Traffic Executive

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-38 -- English (ENU)

Datasets:

Site: [RD_0096_01] COLOMBO ST btw ALBANY HWY & HORDERN ST_VICTORIA PARK <50>
Direction: 8 - East bound A>B, West bound B>A. **Lane:** 0
Survey Duration: 10:34 Thursday, April 28, 2016 => 9:31 Monday, May 9, 2016
File: RD_0096_01 0 2016-05-09 0931.EC0 (PlusB)
Identifier: CJ32YBND MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm: Factory default
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 0:00 Friday, April 29, 2016 => 0:00 Monday, May 9, 2016
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/h.
Direction: West (bound)
Separation: All - (Headway)
Name: Default Profile
Scheme: Vehicle classification (ARX)
Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile: Vehicles = 3855 / 12680 (30.40%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-38

Site: RD_0096_01.0EW

Description: COLOMBO ST btw ALBANY HWY & HORDERN ST_VICTORIA PARK <50>

Filter time: 0:00 Friday, April 29, 2016 => 0:00 Monday, May 9, 2016

Scheme: Vehicle classification (ARX)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(W) Sp(10,160) Headway(>0)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
								1 - 5	1 - 7
Hour									
0000-0100	0.0	0.0	0.0	0.0	1.5	2.5	1.5	0.5	1.1
0100-0200	0.0	1.0	1.0	1.0	1.0	1.5	3.0	0.8	1.4
0200-0300	0.0	1.0	1.0	1.0	0.0	2.0	3.0	0.5	1.3
0300-0400	0.0	1.0	1.0	0.0	0.0	0.5	0.5	0.3	0.4
0400-0500	3.0	1.0	0.0	1.0	1.5	0.5	3.0	1.3	1.5
0500-0600	3.0	3.0	3.0	2.0	2.5	1.5	0.5	2.7	2.0
0600-0700	11.0	12.0	15.0	14.0	8.0	3.0	2.0	11.3	7.8
0700-0800	36.0	30.0	43.0	28.0	22.5	3.0	1.5	30.3	19.1
0800-0900	60.0<	73.0<	69.0<	61.0<	76.5<	16.5	8.5	69.3<	46.6<
0900-1000	18.0	19.0	21.0	24.0	24.5	17.5	11.0	21.8	18.8
1000-1100	18.0	23.0	26.0	28.0	28.0	24.0	17.5<	25.2	23.4
1100-1200	19.0	19.0	29.0	37.0	29.5	28.0<	13.5	27.2	24.6
1200-1300	22.0	21.0	30.0	39.0	31.0	23.5<	17.0	29.0	25.5
1300-1400	27.0	20.0	27.0	24.0	35.0	20.0	18.5	28.0	24.5
1400-1500	42.0	60.0	53.0	52.0	44.5	13.0	18.0	49.3	35.8
1500-1600	57.0<	60.0<	58.0<	61.0<	55.0<	19.0	19.5<	57.7<	42.3<
1600-1700	37.0	42.0	41.0	36.0	41.5	16.0	15.5	39.8	30.2
1700-1800	43.0	54.0	52.0	39.0	39.5	14.5	15.0	44.5	32.6
1800-1900	24.0	16.0	37.0	20.0	14.0	8.0	13.5	20.8	16.8
1900-2000	5.0	10.0	7.0	6.0	5.5	9.0	6.5	6.5	7.0
2000-2100	5.0	7.0	10.0	8.0	4.5	4.5	5.0	6.5	5.8
2100-2200	2.0	7.0	13.0	6.0	14.0	6.5	3.0	9.3	7.5
2200-2300	5.0	7.0	6.0	3.0	5.0	8.5	4.5	5.2	5.7
2300-2400	3.0	2.0	5.0	3.0	5.0	4.5	3.0	3.8	3.8
Totals									
0700-1900	403.0	437.0	486.0	449.0	441.5	203.0	169.0	443.0	340.2
0600-2200	426.0	473.0	531.0	483.0	473.5	226.0	185.5	476.7	368.3
0600-0000	434.0	482.0	542.0	489.0	483.5	239.0	193.0	485.7	377.8
0000-0000	440.0	489.0	548.0	494.0	490.0	247.5	204.5	491.8	385.5
AM Peak	0800	0800	0800	0800	0800	1100	1000		
	60.0	73.0	69.0	61.0	76.5	28.0	17.5		
PM Peak	1500	1500	1500	1500	1500	1200	1500		
	57.0	60.0	58.0	61.0	55.0	23.5	19.5		

* - No data.

MetroCount Traffic Executive

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-39 -- English (ENU)

Datasets:

Site: [RD_0096_01] COLOMBO ST btw ALBANY HWY & HORDERN ST_VICTORIA PARK <50>
Direction: 8 - East bound A>B, West bound B>A. **Lane:** 0
Survey Duration: 10:34 Thursday, April 28, 2016 => 9:31 Monday, May 9, 2016
File: RD_0096_01 0 2016-05-09 0931.EC0 (PlusB)
Identifier: CJ32YBND MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm: Factory default
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 0:00 Friday, April 29, 2016 => 0:00 Monday, May 9, 2016
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/h.
Direction: East (bound)
Separation: All - (Headway)
Name: Default Profile
Scheme: Vehicle classification (ARX)
Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile: Vehicles = 7435 / 12680 (58.64%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-39

Site: RD_0096_01.0EW

Description: COLOMBO ST btw ALBANY HWY & HORDERN ST_VICTORIA PARK <50>

Filter time: 0:00 Friday, April 29, 2016 => 0:00 Monday, May 9, 2016

Scheme: Vehicle classification (ARX)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(E) Sp(10,160) Headway(>0)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
								1 - 5	1 - 7
Hour									
0000-0100	4.0	0.0	2.0	2.0	1.0	5.0	5.0	1.7	3.0
0100-0200	1.0	0.0	0.0	1.0	2.5	0.5	4.0	1.2	1.6
0200-0300	2.0	0.0	1.0	1.0	1.0	1.0	1.5	1.0	1.1
0300-0400	0.0	3.0	2.0	2.0	2.0	6.0	1.0	1.8	2.5
0400-0500	7.0	2.0	1.0	1.0	1.0	1.5	2.0	2.2	2.0
0500-0600	9.0	6.0	12.0	9.0	11.5	1.5	2.0	9.8	6.6
0600-0700	21.0	21.0	15.0	18.0	12.5	3.0	3.5	16.7	11.3
0700-0800	59.0	61.0	58.0	60.0	57.0	19.5	7.5	58.7	40.6
0800-0900	156.0<	140.0<	127.0<	168.0<	152.0<	30.0	11.0	149.2<	97.7<
0900-1000	38.0	52.0	75.0	53.0	49.5	34.0<	37.0<	52.8	45.9
1000-1100	29.0	37.0	38.0	56.0	41.0	31.5	23.0	40.3	35.1
1100-1200	39.0	43.0	49.0	51.0	44.0	32.0	34.5	45.0	40.3
1200-1300	55.0	38.0	47.0	60.0	69.5	46.5<	36.0<	56.5	50.4
1300-1400	53.0	38.0	44.0	45.0	39.0	32.0	31.0	43.0	38.4
1400-1500	68.0	45.0	42.0	48.0	60.5	34.5	26.0	54.0	44.5
1500-1600	114.0	118.0	123.0	126.0<	112.5	25.0	24.5	117.7	80.5
1600-1700	126.0<	127.0<	125.0<	125.0	132.0<	19.0	21.0	127.8<	84.7<
1700-1800	105.0	88.0	101.0	102.0	74.0	17.0	29.5	90.7	63.7
1800-1900	38.0	53.0	52.0	42.0	34.0	21.0	18.5	42.2	33.2
1900-2000	15.0	29.0	22.0	14.0	25.5	18.5	16.5	21.8	20.1
2000-2100	10.0	11.0	14.0	21.0	14.5	12.5	15.0	14.2	14.0
2100-2200	10.0	9.0	32.0	12.0	15.5	10.5	13.0	15.7	14.1
2200-2300	3.0	7.0	8.0	5.0	5.5	11.0	5.0	5.7	6.6
2300-2400	6.0	2.0	1.0	3.0	9.0	8.0	5.0	5.0	5.6
Totals									
0700-1900	880.0	840.0	881.0	936.0	865.0	342.0	299.5	877.8	655.0
0600-2200	936.0	910.0	964.0	1001.0	933.0	386.5	347.5	946.2	714.5
0600-0000	945.0	919.0	973.0	1009.0	947.5	405.5	357.5	956.8	726.7
0000-0000	968.0	930.0	991.0	1025.0	966.5	421.0	373.0	974.5	743.5
AM Peak	0800	0800	0800	0800	0800	0900	0900		
	156.0	140.0	127.0	168.0	152.0	34.0	37.0		
PM Peak	1600	1600	1600	1500	1600	1200	1200		
	126.0	127.0	125.0	126.0	132.0	46.5	36.0		

* - No data.

MetroCount Traffic Executive

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-40 -- English (ENU)

Datasets:

Site: [RD_0098_03] GEDDES ST btw WASHINGTON ST & HORDERN ST_VICTORIA PARK <50>
Direction: 8 - East bound A>B, West bound B>A. **Lane:** 0
Survey Duration: 11:31 Thursday, April 28, 2016 => 9:48 Monday, May 9, 2016
File: RD_0098_03 0 2016-05-09 0948.EC0 (PlusB)
Identifier: CH59S53G MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm: Factory default
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 0:00 Friday, April 29, 2016 => 0:00 Monday, May 9, 2016
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/h.
Direction: West (bound)
Separation: All - (Headway)
Name: Default Profile
Scheme: Vehicle classification (ARX)
Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile: Vehicles = 6060 / 17666 (34.30%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-40

Site: RD_0098_03.0EW

Description: GEDDES ST btw WASHINGTON ST & HORDERN ST_VICTORIA PARK <50>

Filter time: 0:00 Friday, April 29, 2016 => 0:00 Monday, May 9, 2016

Scheme: Vehicle classification (ARX)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(W) Sp(10,160) Headway(>0)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
								1 - 5	1 - 7
Hour									
0000-0100	2.0	4.0	2.0	3.0	3.0	8.0	5.5	2.8	4.4
0100-0200	2.0	1.0	0.0	3.0	1.5	2.0	2.0	1.5	1.7
0200-0300	1.0	1.0	1.0	1.0	2.0	4.5	3.0	1.3	2.3
0300-0400	0.0	2.0	0.0	2.0	0.5	3.5	1.5	0.8	1.5
0400-0500	4.0	3.0	1.0	0.0	1.5	2.5	1.5	1.8	1.9
0500-0600	4.0	7.0	3.0	5.0	4.0	0.5	2.0	4.5	3.2
0600-0700	5.0	11.0	9.0	12.0	12.0	4.5	5.0	10.2	8.0
0700-0800	38.0	42.0	40.0	39.0	32.0	9.5	8.0	37.2	25.8
0800-0900	72.0<	75.0<	59.0<	73.0<	72.5<	25.0	20.0	70.7<	51.4<
0900-1000	33.0	35.0	42.0	39.0	41.0	40.5	30.5	38.5	37.3
1000-1100	29.0	29.0	33.0	32.0	33.0	41.0	44.0<	31.5	35.9
1100-1200	32.0	34.0	33.0	28.0	38.5	44.5<	36.0	34.0	36.5
1200-1300	35.0	24.0	43.0	38.0	36.0	57.0<	32.0	35.3	39.0
1300-1400	32.0	38.0	39.0	31.0	39.0	45.5	36.5	36.3	38.2
1400-1500	36.0	39.0	44.0	38.0	51.0	37.0	30.0	43.2	39.3
1500-1600	70.0	92.0<	70.0<	73.0	85.5<	36.0	29.5	79.3<	60.7<
1600-1700	74.0	58.0	57.0	71.0	62.5	31.0	37.0<	64.2	52.1
1700-1800	77.0<	91.0	64.0	85.0<	65.0	38.5	26.0	74.5	57.6
1800-1900	42.0	51.0	58.0	62.0	35.5	28.5	21.5	47.3	38.4
1900-2000	19.0	23.0	37.0	25.0	27.5	21.0	14.0	26.5	22.9
2000-2100	18.0	20.0	21.0	17.0	19.0	9.0	13.5	19.0	15.9
2100-2200	7.0	16.0	24.0	18.0	19.0	14.0	6.0	17.2	14.3
2200-2300	12.0	9.0	10.0	7.0	16.0	8.5	7.0	11.7	10.1
2300-2400	8.0	5.0	9.0	2.0	11.0	12.0	3.0	7.7	7.6
Totals									
0700-1900	570.0	608.0	582.0	609.0	591.5	434.0	351.0	592.0	512.2
0600-2200	619.0	678.0	673.0	681.0	669.0	482.5	389.5	664.8	573.3
0600-0000	639.0	692.0	692.0	690.0	696.0	503.0	399.5	684.2	591.0
0000-0000	652.0	710.0	699.0	704.0	708.5	524.0	415.0	697.0	606.0
AM Peak	0800	0800	0800	0800	0800	1100	1000		
	72.0	75.0	59.0	73.0	72.5	44.5	44.0		
PM Peak	1700	1500	1500	1700	1500	1200	1600		
	77.0	92.0	70.0	85.0	85.5	57.0	37.0		

* - No data.

MetroCount Traffic Executive

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-41 -- English (ENU)

Datasets:

Site: [RD_0098_03] GEDDES ST btw WASHINGTON ST & HORDERN ST_VICTORIA PARK <50>
Direction: 8 - East bound A>B, West bound B>A. **Lane:** 0
Survey Duration: 11:31 Thursday, April 28, 2016 => 9:48 Monday, May 9, 2016
File: RD_0098_03 0 2016-05-09 0948.EC0 (PlusB)
Identifier: CH59S53G MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm: Factory default
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 0:00 Friday, April 29, 2016 => 0:00 Monday, May 9, 2016
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/h.
Direction: East (bound)
Separation: All - (Headway)
Name: Default Profile
Scheme: Vehicle classification (ARX)
Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile: Vehicles = 9861 / 17666 (55.82%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-41

Site: RD_0098_03.0EW

Description: GEDDES ST btw WASHINGTON ST & HORDERN ST_VICTORIA PARK <50>

Filter time: 0:00 Friday, April 29, 2016 => 0:00 Monday, May 9, 2016

Scheme: Vehicle classification (ARX)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(E) Sp(10,160) Headway(>0)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
								1 - 5	1 - 7
Hour									
0000-0100	3.0	4.0	1.0	2.0	3.5	7.0	9.5	2.8	5.0
0100-0200	2.0	2.0	2.0	2.0	1.5	3.5	4.5	1.8	2.7
0200-0300	2.0	1.0	1.0	1.0	2.0	6.0	5.5	1.5	3.2
0300-0400	2.0	3.0	1.0	1.0	3.0	1.0	3.0	2.2	2.1
0400-0500	4.0	5.0	5.0	3.0	3.5	3.5	2.5	4.0	3.6
0500-0600	19.0	14.0	21.0	18.0	17.0	2.0	2.5	17.7	11.5
0600-0700	26.0	26.0	23.0	27.0	32.0	9.0	4.0	27.7	19.2
0700-0800	89.0	83.0	92.0	99.0	90.0	37.5	11.5	90.5	64.1
0800-0900	198.0<	185.0<	209.0<	179.0<	197.0<	44.0	33.5	194.2<	132.0<
0900-1000	64.0	48.0	60.0	53.0	74.5	63.5	35.0	62.3	57.1
1000-1100	40.0	52.0	49.0	54.0	50.5	57.0	53.0	49.3	51.6
1100-1200	52.0	43.0	59.0	52.0	55.0	69.0<	57.5<	52.7	56.9
1200-1300	48.0	50.0	66.0	62.0	57.0	69.5<	69.5<	56.7	61.8
1300-1400	47.0	53.0	48.0	62.0	66.0	54.5	54.0	57.0	55.9
1400-1500	93.0<	118.0<	98.0	92.0	84.5	50.5	47.0	95.0	76.5
1500-1600	75.0	90.0	104.0	108.0<	109.5<	53.5	41.5	99.3<	78.6<
1600-1700	71.0	79.0	106.0	88.0	95.0	54.0	55.0	89.0	75.2
1700-1800	79.0	78.0	108.0<	85.0	74.5	60.0	50.0	83.2	71.9
1800-1900	47.0	58.0	70.0	82.0	57.0	51.5	33.5	61.8	54.1
1900-2000	32.0	32.0	53.0	40.0	53.5	32.5	26.0	44.0	38.1
2000-2100	21.0	21.0	18.0	32.0	23.5	25.0	19.0	23.2	22.7
2100-2200	16.0	22.0	26.0	17.0	24.0	24.0	12.5	21.5	20.2
2200-2300	9.0	11.0	12.0	15.0	21.0	17.5	7.5	14.8	13.9
2300-2400	7.0	2.0	8.0	6.0	14.5	11.0	4.0	8.7	8.2
Totals									
0700-1900	903.0	937.0	1069.0	1016.0	1010.5	664.5	541.0	991.0	835.7
0600-2200	998.0	1038.0	1189.0	1132.0	1143.5	755.0	602.5	1107.3	935.9
0600-0000	1014.0	1051.0	1209.0	1153.0	1179.0	783.5	614.0	1130.8	958.0
0000-0000	1046.0	1080.0	1240.0	1180.0	1209.5	806.5	641.5	1160.8	986.1
AM Peak	0800	0800	0800	0800	0800	1100	1100		
	198.0	185.0	209.0	179.0	197.0	69.0	57.5		
PM Peak	1400	1400	1700	1500	1500	1200	1200		
	93.0	118.0	108.0	108.0	109.5	69.5	69.5		

* - No data.

MetroCount Traffic Executive

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-42 -- English (ENU)

Datasets:

Site: [RD_0098_04] GEDDES ST btw HORDERN ST & ALBANY HWY_VICTORIA PARK <50>
Direction: 8 - East bound A>B, West bound B>A. **Lane:** 0
Survey Duration: 11:18 Thursday, April 28, 2016 => 9:44 Monday, May 9, 2016
File: RD_0098_04 0 2016-05-09 0944.EC0 (PlusB)
Identifier: CC28R4B7 MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm: Factory default
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 0:00 Friday, April 29, 2016 => 0:00 Monday, May 9, 2016
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/h.
Direction: West (bound)
Separation: All - (Headway)
Name: Default Profile
Scheme: Vehicle classification (ARX)
Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile: Vehicles = 7111 / 18938 (37.55%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-42

Site: RD_0098_04.0EW

Description: GEDDES ST btw HORDERN ST & ALBANY HWY_VICTORIA PARK <50>

Filter time: 0:00 Friday, April 29, 2016 => 0:00 Monday, May 9, 2016

Scheme: Vehicle classification (ARX)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(W) Sp(10,160) Headway(>0)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
								1 - 5	1 - 7
Hour									
0000-0100	1.0	6.0	0.0	7.0	4.5	10.0	9.0	3.8	6.1
0100-0200	2.0	1.0	0.0	3.0	2.5	3.5	3.0	1.8	2.4
0200-0300	1.0	0.0	0.0	1.0	1.0	5.5	2.5	0.7	2.0
0300-0400	0.0	2.0	0.0	3.0	0.0	3.0	1.5	0.8	1.4
0400-0500	3.0	2.0	0.0	3.0	4.0	3.5	1.0	2.7	2.5
0500-0600	3.0	7.0	0.0	8.0	5.0	1.5	2.0	4.7	3.5
0600-0700	2.0	11.0	0.0	11.0	11.0	5.5	5.0	7.7	6.7
0700-0800	43.0	47.0	47.0	41.0	40.0	12.0	8.0	43.0	29.8
0800-0900	127.0<	119.0<	111.0<	126.0<	133.5<	27.0	17.5	125.0<	83.9<
0900-1000	41.0	33.0	39.0	43.0	45.5	49.5	35.5	41.2	41.7
1000-1100	30.0	35.0	30.0	30.0	34.5	51.5	37.5<	32.3	37.2
1100-1200	38.0	43.0	36.0	33.0	49.5	51.5<	35.5	41.5	42.3
1200-1300	41.0	33.0	50.0	43.0	39.5	51.5<	34.5	41.0	41.8
1300-1400	48.0	42.0	38.0	38.0	54.5	45.0	42.0	45.8	44.9
1400-1500	55.0	74.0	57.0	0.0	76.0	46.0	33.5	56.3	49.7
1500-1600	104.0<	104.0<	52.0	0.0	110.0<	44.5	36.5	80.0	64.2
1600-1700	71.0	64.0	70.0	62.0	65.0	33.5	45.5<	66.2	55.5
1700-1800	80.0	100.0	84.0<	98.0<	75.0	43.0	33.5	85.3<	66.5<
1800-1900	58.0	48.0	70.0	69.0	49.5	36.5	26.5	57.3	47.0
1900-2000	25.0	0.0	44.0	29.0	33.0	24.5	20.0	27.3	25.3
2000-2100	23.0	0.0	26.0	22.0	29.0	15.0	13.5	21.5	18.6
2100-2200	15.0	0.0	31.0	25.0	22.5	16.5	12.0	19.3	17.3
2200-2300	17.0	0.0	13.0	12.0	23.0	11.5	9.0	14.7	12.9
2300-2400	8.0	0.0	8.0	5.0	11.0	14.0	4.0	7.2	7.9
Totals									
0700-1900	736.0	742.0	684.0	583.0	772.5	491.5	386.0	715.0	604.5
0600-2200	801.0	753.0	785.0	670.0	868.0	553.0	436.5	790.8	672.4
0600-0000	826.0	753.0	806.0	687.0	902.0	578.5	449.5	812.7	693.2
0000-0000	836.0	771.0	806.0	712.0	919.0	605.5	468.5	827.2	711.1
AM Peak	0800	0800	0800	0800	0800	1100	1000		
	127.0	119.0	111.0	126.0	133.5	51.5	37.5		
PM Peak	1500	1500	1700	1700	1500	1200	1600		
	104.0	104.0	84.0	98.0	110.0	51.5	45.5		

* - No data.

MetroCount Traffic Executive

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-43 -- English (ENU)

Datasets:

Site: [RD_0098_04] GEDDES ST btw HORDERN ST & ALBANY HWY_VICTORIA PARK <50>
Direction: 8 - East bound A>B, West bound B>A. **Lane:** 0
Survey Duration: 11:18 Thursday, April 28, 2016 => 9:44 Monday, May 9, 2016
File: RD_0098_04 0 2016-05-09 0944.EC0 (PlusB)
Identifier: CC28R4B7 MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm: Factory default
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 0:00 Friday, April 29, 2016 => 0:00 Monday, May 9, 2016
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/h.
Direction: East (bound)
Separation: All - (Headway)
Name: Default Profile
Scheme: Vehicle classification (ARX)
Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile: Vehicles = 9776 / 18938 (51.62%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-43

Site: RD_0098_04.0EW

Description: GEDDES ST btw HORDERN ST & ALBANY HWY_VICTORIA PARK <50>

Filter time: 0:00 Friday, April 29, 2016 => 0:00 Monday, May 9, 2016

Scheme: Vehicle classification (ARX)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(E) Sp(10,160) Headway(>0)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
								1 - 5	1 - 7
Hour									
0000-0100	2.0	3.0	0.0	3.0	3.5	7.0	11.5	2.5	5.2
0100-0200	2.0	1.0	0.0	2.0	1.5	4.0	5.5	1.3	2.7
0200-0300	2.0	3.0	0.0	1.0	2.0	5.0	6.0	1.7	3.2
0300-0400	3.0	2.0	0.0	2.0	1.5	2.0	3.0	1.7	2.0
0400-0500	4.0	9.0	0.0	11.0	5.5	3.5	2.5	5.8	4.7
0500-0600	23.0	20.0	0.0	25.0	21.0	5.0	4.0	18.3	12.8
0600-0700	9.0	32.0	0.0	32.0	33.0	13.0	5.0	23.2	17.5
0700-0800	92.0	93.0	106.0	103.0	104.5	40.0	13.0	100.5	70.9
0800-0900	157.0<	132.0<	149.0<	133.0<	145.0<	52.0	36.0	143.5<	103.7<
0900-1000	80.0	62.0	77.0	65.0	91.5	55.5	39.5	77.8	65.7
1000-1100	44.0	64.0	61.0	62.0	59.0	62.5	63.5<	58.2	60.1
1100-1200	51.0	55.0	67.0	59.0	70.0	72.5<	60.5	62.0	63.8
1200-1300	54.0	59.0	80.0	73.0	68.0	93.5<	72.0<	67.0	73.3
1300-1400	50.0	61.0	50.0	68.0	66.5	61.0	53.5	60.3	59.1
1400-1500	67.0	87.0	56.0	0.0	66.5	58.5	55.5	57.2	57.1
1500-1600	85.0	71.0	65.0	0.0	105.5<	51.0	45.0	72.0	62.4
1600-1700	83.0	88.0<	114.0<	86.0	103.0	56.0	57.5	96.2<	80.4<
1700-1800	87.0<	77.0	112.0	91.0<	79.5	60.0	52.0	87.7	75.0
1800-1900	53.0	46.0	74.0	88.0	62.5	50.5	37.0	64.3	56.1
1900-2000	33.0	0.0	62.0	47.0	58.0	36.0	22.5	43.0	37.5
2000-2100	24.0	0.0	32.0	40.0	25.5	26.0	15.0	24.5	22.9
2100-2200	14.0	0.0	26.0	16.0	30.0	23.5	15.5	19.3	19.4
2200-2300	10.0	0.0	14.0	15.0	19.5	22.5	7.5	13.0	13.8
2300-2400	6.0	0.0	9.0	8.0	14.5	12.5	3.0	8.7	8.3
Totals									
0700-1900	903.0	895.0	1011.0	828.0	1021.5	713.0	585.0	946.7	827.6
0600-2200	983.0	927.0	1131.0	963.0	1168.0	811.5	643.0	1056.7	924.9
0600-0000	999.0	927.0	1154.0	986.0	1202.0	846.5	653.5	1078.3	947.0
0000-0000	1035.0	965.0	1154.0	1030.0	1237.0	873.0	686.0	1109.7	977.6
AM Peak	0800	0800	0800	0800	0800	1100	1000		
	157.0	132.0	149.0	133.0	145.0	72.5	63.5		
PM Peak	1700	1600	1600	1700	1500	1200	1200		
	87.0	88.0	114.0	91.0	105.5	93.5	72.0		

* - No data.



Appendix B: SIDRA Intersection Assessment Results

MOVEMENT SUMMARY

STOP Site: 1 [Hordern / Colombo - Existing AM]

Hordern Street / Colombo Street

Stop (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Deg. Satn HV % v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South-east: Hordern Street										
4	L2	48	0.0 0.146	8.4	LOS A	0.5	3.5	0.26	0.94	39.2
5	T1	21	0.0 0.146	8.8	LOS A	0.5	3.5	0.26	0.94	33.8
6	R2	93	0.0 0.146	9.0	LOS A	0.5	3.5	0.26	0.94	38.0
Approach		162	0.0 0.146	8.8	LOS A	0.5	3.5	0.26	0.94	37.9
Northeast: Minor Road										
7	L2	57	0.0 0.107	5.8	LOS A	0.3	2.2	0.17	0.26	45.0
8	T1	105	0.0 0.107	0.2	LOS A	0.3	2.2	0.17	0.26	52.5
9	R2	45	0.0 0.107	5.9	LOS A	0.3	2.2	0.17	0.26	46.1
Approach		207	0.0 0.107	3.0	NA	0.3	2.2	0.17	0.26	49.3
North West: Hordern Street										
10	L2	90	0.0 0.136	8.6	LOS A	0.5	3.5	0.27	0.92	39.4
11	T1	24	0.0 0.136	8.8	LOS A	0.5	3.5	0.27	0.92	34.1
12	R2	45	0.0 0.136	8.8	LOS A	0.5	3.5	0.27	0.92	39.1
Approach		159	0.0 0.136	8.7	LOS A	0.5	3.5	0.27	0.92	38.6
South-west: Colombo Street										
1	L2	33	0.0 0.111	5.8	LOS A	0.3	1.9	0.14	0.18	49.5
2	T1	144	0.0 0.111	0.1	LOS A	0.3	1.9	0.14	0.18	54.5
3	R2	39	0.0 0.111	5.9	LOS A	0.3	1.9	0.14	0.18	46.7
Approach		216	0.0 0.111	2.0	NA	0.3	1.9	0.14	0.18	52.5
All Vehicles		744	0.0 0.146	5.2	NA	0.5	3.5	0.20	0.53	45.2



MOVEMENT SUMMARY

STOP Site: 1 [Hordern / Colombo - Future AM]

Hordern Street / Colombo Street

Stop (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South-east: Hordern Street											
4	L2	102	0.0	0.254	8.7	LOS A	1.0	6.7	0.32	0.94	38.8
5	T1	21	0.0	0.254	9.3	LOS A	1.0	6.7	0.32	0.94	33.5
6	R2	147	0.0	0.254	9.5	LOS A	1.0	6.7	0.32	0.94	37.7
Approach		270	0.0	0.254	9.2	LOS A	1.0	6.7	0.32	0.94	37.9
NorthEast: Minor Road											
7	L2	57	0.0	0.131	5.8	LOS A	0.3	2.4	0.17	0.22	45.9
8	T1	150	0.0	0.131	0.2	LOS A	0.3	2.4	0.17	0.22	53.5
9	R2	45	0.0	0.131	6.1	LOS A	0.3	2.4	0.17	0.22	47.0
Approach		252	0.0	0.131	2.5	NA	0.3	2.4	0.17	0.22	50.8
NorthWest: Hordern Street											
10	L2	90	0.0	0.145	8.8	LOS A	0.5	3.7	0.31	0.92	39.1
11	T1	24	0.0	0.145	9.1	LOS A	0.5	3.7	0.31	0.92	33.8
12	R2	45	0.0	0.145	9.3	LOS A	0.5	3.7	0.31	0.92	38.9
Approach		159	0.0	0.145	9.0	LOS A	0.5	3.7	0.31	0.92	38.4
SouthWest: Colombo Street											
1	L2	33	0.0	0.133	5.9	LOS A	0.3	2.1	0.14	0.16	50.1
2	T1	186	0.0	0.133	0.1	LOS A	0.3	2.1	0.14	0.16	55.1
3	R2	39	0.0	0.133	6.0	LOS A	0.3	2.1	0.14	0.16	47.3
Approach		258	0.0	0.133	1.8	NA	0.3	2.1	0.14	0.16	53.5
All Vehicles		939	0.0	0.254	5.3	NA	1.0	6.7	0.23	0.53	45.3



MOVEMENT SUMMARY

STOP Site: 1 [Hordern / Colombo - Existing PM]

Hordern Street / Colombo Street

Stop (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Hordern Street											
4	L2	21	0.0	0.051	8.4	LOS A	0.2	1.2	0.22	0.93	39.2
5	T1	6	0.0	0.051	8.3	LOS A	0.2	1.2	0.22	0.93	33.9
6	R2	30	0.0	0.051	9.0	LOS A	0.2	1.2	0.22	0.93	38.1
Approach		57	0.0	0.051	8.7	LOS A	0.2	1.2	0.22	0.93	38.1
NorthEast: Minor Road											
7	L2	48	0.0	0.091	5.6	LOS A	0.2	1.3	0.08	0.24	46.4
8	T1	102	0.0	0.091	0.1	LOS A	0.2	1.3	0.08	0.24	54.0
9	R2	27	0.0	0.091	5.7	LOS A	0.2	1.3	0.08	0.24	47.5
Approach		177	0.0	0.091	2.4	NA	0.2	1.3	0.08	0.24	51.2
NorthWest: Hordern Street											
10	L2	201	0.0	0.322	8.4	LOS A	1.4	9.8	0.22	0.92	39.6
11	T1	66	0.0	0.322	8.6	LOS A	1.4	9.8	0.22	0.92	34.3
12	R2	141	0.0	0.322	8.5	LOS A	1.4	9.8	0.22	0.92	39.3
Approach		408	0.0	0.322	8.5	LOS A	1.4	9.8	0.22	0.92	38.7
SouthWest: Colombo Street											
1	L2	15	0.0	0.058	5.8	LOS A	0.2	1.1	0.14	0.19	49.4
2	T1	75	0.0	0.058	0.1	LOS A	0.2	1.1	0.14	0.19	54.4
3	R2	24	0.0	0.058	5.8	LOS A	0.2	1.1	0.14	0.19	46.6
Approach		114	0.0	0.058	2.1	NA	0.2	1.1	0.14	0.19	52.3
All Vehicles		756	0.0	0.322	6.1	NA	1.4	9.8	0.17	0.65	43.4



MOVEMENT SUMMARY

STOP Site: 1 [Hordern / Colombo - Future PM]

Hordern Street / Colombo Street

Stop (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Hordern Street											
4	L2	75	0.0	0.155	8.6	LOS A	0.6	3.9	0.28	0.93	38.9
5	T1	6	0.0	0.155	8.6	LOS A	0.6	3.9	0.28	0.93	33.6
6	R2	84	0.0	0.155	9.5	LOS A	0.6	3.9	0.28	0.93	37.8
Approach		165	0.0	0.155	9.1	LOS A	0.6	3.9	0.28	0.93	38.2
NorthEast: Minor Road											
7	L2	48	0.0	0.113	5.7	LOS A	0.2	1.4	0.09	0.19	47.3
8	T1	144	0.0	0.113	0.1	LOS A	0.2	1.4	0.09	0.19	54.9
9	R2	27	0.0	0.113	5.8	LOS A	0.2	1.4	0.09	0.19	48.4
Approach		219	0.0	0.113	2.0	NA	0.2	1.4	0.09	0.19	52.6
NorthWest: Hordern Street											
10	L2	201	0.0	0.344	8.6	LOS A	1.5	10.5	0.29	0.93	39.3
11	T1	66	0.0	0.344	9.0	LOS A	1.5	10.5	0.29	0.93	33.9
12	R2	141	0.0	0.344	9.0	LOS A	1.5	10.5	0.29	0.93	39.0
Approach		408	0.0	0.344	8.8	LOS A	1.5	10.5	0.29	0.93	38.4
SouthWest: Colombo Street											
1	L2	15	0.0	0.080	5.9	LOS A	0.2	1.2	0.12	0.14	50.6
2	T1	117	0.0	0.080	0.1	LOS A	0.2	1.2	0.12	0.14	55.6
3	R2	24	0.0	0.080	5.9	LOS A	0.2	1.2	0.12	0.14	47.7
Approach		156	0.0	0.080	1.6	NA	0.2	1.2	0.12	0.14	54.0
All Vehicles		948	0.0	0.344	6.1	NA	1.5	10.5	0.21	0.63	43.8



MOVEMENT SUMMARY

▽ Site: 1v [Hordern / Geddes - Existing AM]

Hordern Street / Geddes Street

Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Hordern Street											
4	L2	63	0.0	0.104	6.4	LOS A	0.4	2.5	0.34	0.64	41.6
5	T1	18	0.0	0.104	5.4	LOS A	0.4	2.5	0.34	0.64	37.4
6	R2	45	0.0	0.104	6.8	LOS A	0.4	2.5	0.34	0.64	40.4
Approach		126	0.0	0.104	6.4	LOS A	0.4	2.5	0.34	0.64	40.6
NorthEast: Geddes Street											
7	L2	42	0.0	0.193	5.9	LOS A	0.5	3.8	0.16	0.17	47.1
8	T1	261	0.0	0.193	0.2	LOS A	0.5	3.8	0.16	0.17	54.7
9	R2	72	0.0	0.193	6.0	LOS A	0.5	3.8	0.16	0.17	48.2
Approach		375	0.0	0.193	1.9	NA	0.5	3.8	0.16	0.17	52.8
NorthWest: Hordern Street											
10	L2	48	0.0	0.103	6.0	LOS A	0.3	2.4	0.25	0.62	42.0
11	T1	12	0.0	0.103	5.4	LOS A	0.3	2.4	0.25	0.62	37.8
12	R2	66	0.0	0.103	6.8	LOS A	0.3	2.4	0.25	0.62	41.6
Approach		126	0.0	0.103	6.4	LOS A	0.3	2.4	0.25	0.62	41.4
SouthWest: Geddes Street											
1	L2	51	0.0	0.127	6.1	LOS A	0.4	3.1	0.26	0.24	47.2
2	T1	132	0.0	0.127	0.4	LOS A	0.4	3.1	0.26	0.24	52.3
3	R2	57	0.0	0.127	6.3	LOS A	0.4	3.1	0.26	0.24	44.7
Approach		240	0.0	0.127	3.0	NA	0.4	3.1	0.26	0.24	49.6
All Vehicles		867	0.0	0.193	3.5	NA	0.5	3.8	0.23	0.32	48.4



MOVEMENT SUMMARY

▽ Site: 1v [Hordern / Geddes - Future AM]

Hordern Street / Geddes Street

Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Hordern Street											
4	L2	63	0.0	0.114	6.6	LOS A	0.4	2.7	0.38	0.67	41.3
5	T1	18	0.0	0.114	6.1	LOS A	0.4	2.7	0.38	0.67	37.0
6	R2	45	0.0	0.114	7.2	LOS A	0.4	2.7	0.38	0.67	40.1
Approach		126	0.0	0.114	6.8	LOS A	0.4	2.7	0.38	0.67	40.4
NorthEast: Geddes Street											
7	L2	42	0.0	0.251	6.3	LOS A	1.0	7.1	0.28	0.21	45.4
8	T1	306	0.0	0.251	0.4	LOS A	1.0	7.1	0.28	0.21	53.0
9	R2	132	0.0	0.251	6.4	LOS A	1.0	7.1	0.28	0.21	46.6
Approach		480	0.0	0.251	2.6	NA	1.0	7.1	0.28	0.21	50.8
NorthWest: Hordern Street											
10	L2	48	0.0	0.114	6.1	LOS A	0.4	2.6	0.30	0.65	41.4
11	T1	12	0.0	0.114	6.0	LOS A	0.4	2.6	0.30	0.65	37.1
12	R2	66	0.0	0.114	7.4	LOS A	0.4	2.6	0.30	0.65	41.0
Approach		126	0.0	0.114	6.8	LOS A	0.4	2.6	0.30	0.65	40.8
SouthWest: Geddes Street											
1	L2	105	0.0	0.179	6.0	LOS A	0.5	3.7	0.23	0.25	47.1
2	T1	174	0.0	0.179	0.4	LOS A	0.5	3.7	0.23	0.25	52.2
3	R2	57	0.0	0.179	6.5	LOS A	0.5	3.7	0.23	0.25	44.6
Approach		336	0.0	0.179	3.2	NA	0.5	3.7	0.23	0.25	49.5
All Vehicles		1068	0.0	0.251	3.7	NA	1.0	7.1	0.28	0.33	47.9



MOVEMENT SUMMARY

▽ Site: 1v [Hordern / Geddes - Existing PM]

Hordern Street / Geddes Street

Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Deg. Satn HV % v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Hordern Street										
4	L2	27	0.0 0.040	6.0	LOS A	0.1	0.9	0.24	0.58	42.1
5	T1	6	0.0 0.040	5.0	LOS A	0.1	0.9	0.24	0.58	38.0
6	R2	21	0.0 0.040	6.3	LOS A	0.1	0.9	0.24	0.58	40.9
Approach		54	0.0 0.040	6.0	LOS A	0.1	0.9	0.24	0.58	41.3
NorthEast: Geddes Street										
7	L2	60	0.0 0.124	5.7	LOS A	0.2	1.6	0.11	0.21	46.8
8	T1	150	0.0 0.124	0.1	LOS A	0.2	1.6	0.11	0.21	54.3
9	R2	30	0.0 0.124	5.9	LOS A	0.2	1.6	0.11	0.21	47.9
Approach		240	0.0 0.124	2.2	NA	0.2	1.6	0.11	0.21	51.9
NorthWest: Hordern Street										
10	L2	39	0.0 0.086	5.9	LOS A	0.3	2.0	0.24	0.60	42.3
11	T1	21	0.0 0.086	5.0	LOS A	0.3	2.0	0.24	0.60	38.1
12	R2	54	0.0 0.086	6.3	LOS A	0.3	2.0	0.24	0.60	41.9
Approach		114	0.0 0.086	6.0	LOS A	0.3	2.0	0.24	0.60	41.5
SouthWest: Geddes Street										
1	L2	36	0.0 0.124	6.0	LOS A	0.5	3.3	0.24	0.24	47.4
2	T1	132	0.0 0.124	0.3	LOS A	0.5	3.3	0.24	0.24	52.5
3	R2	72	0.0 0.124	6.0	LOS A	0.5	3.3	0.24	0.24	44.8
Approach		240	0.0 0.124	2.9	NA	0.5	3.3	0.24	0.24	49.6
All Vehicles		648	0.0 0.124	3.4	NA	0.5	3.3	0.19	0.32	48.3



MOVEMENT SUMMARY

▽ Site: 1v [Hordern / Geddes - Future PM]

Hordern Street / Geddes Street

Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Hordern Street											
4	L2	27	0.0	0.044	6.1	LOS A	0.1	1.0	0.28	0.60	41.9
5	T1	6	0.0	0.044	5.5	LOS A	0.1	1.0	0.28	0.60	37.7
6	R2	21	0.0	0.044	6.7	LOS A	0.1	1.0	0.28	0.60	40.7
Approach		54	0.0	0.044	6.3	LOS A	0.1	1.0	0.28	0.60	41.0
NorthEast: Geddes Street											
7	L2	60	0.0	0.176	6.1	LOS A	0.6	4.5	0.25	0.23	45.0
8	T1	192	0.0	0.176	0.3	LOS A	0.6	4.5	0.25	0.23	52.6
9	R2	84	0.0	0.176	6.2	LOS A	0.6	4.5	0.25	0.23	46.1
Approach		336	0.0	0.176	2.8	NA	0.6	4.5	0.25	0.23	49.8
NorthWest: Hordern Street											
10	L2	39	0.0	0.094	6.1	LOS A	0.3	2.1	0.29	0.63	42.0
11	T1	21	0.0	0.094	5.5	LOS A	0.3	2.1	0.29	0.63	37.8
12	R2	54	0.0	0.094	6.7	LOS A	0.3	2.1	0.29	0.63	41.6
Approach		114	0.0	0.094	6.3	LOS A	0.3	2.1	0.29	0.63	41.2
SouthWest: Geddes Street											
1	L2	90	0.0	0.176	5.9	LOS A	0.6	4.1	0.22	0.25	47.1
2	T1	174	0.0	0.176	0.3	LOS A	0.6	4.1	0.22	0.25	52.3
3	R2	72	0.0	0.176	6.2	LOS A	0.6	4.1	0.22	0.25	44.6
Approach		336	0.0	0.176	3.1	NA	0.6	4.1	0.22	0.25	49.4
All Vehicles		840	0.0	0.176	3.6	NA	0.6	4.5	0.25	0.32	47.9



MOVEMENT SUMMARY

 **Site: 1vv [Washington / Geddes - Existing AM]**

Washington Street / Geddes Street

Roundabout

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total	HV				Vehicles	Distance			
		veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Washington Street											
4	L2	126	0.0	0.330	6.6	LOS A	2.0	13.9	0.69	0.76	48.7
5	T1	54	0.0	0.330	6.7	LOS A	2.0	13.9	0.69	0.76	47.7
6	R2	90	0.0	0.330	12.4	LOS B	2.0	13.9	0.69	0.76	51.5
Approach		270	0.0	0.330	8.6	LOS A	2.0	13.9	0.69	0.76	49.5
NorthEast: Geddes Street											
7	L2	135	0.0	0.590	7.0	LOS A	5.2	36.3	0.72	0.75	48.6
8	T1	312	0.0	0.590	7.2	LOS A	5.2	36.3	0.72	0.75	53.9
9	R2	135	0.0	0.590	12.8	LOS B	5.2	36.3	0.72	0.75	53.1
Approach		582	0.0	0.590	8.4	LOS A	5.2	36.3	0.72	0.75	52.8
NorthWest: Washington Street											
10	L2	96	0.0	0.327	6.1	LOS A	1.9	13.4	0.64	0.74	50.7
11	T1	57	0.0	0.327	6.2	LOS A	1.9	13.4	0.64	0.74	43.9
12	R2	135	0.0	0.327	11.9	LOS B	1.9	13.4	0.64	0.74	53.0
Approach		288	0.0	0.327	8.8	LOS A	1.9	13.4	0.64	0.74	50.9
SouthWest: Geddes Street											
1	L2	153	0.0	0.537	5.6	LOS A	4.1	28.6	0.64	0.64	51.5
2	T1	261	0.0	0.537	5.7	LOS A	4.1	28.6	0.64	0.64	54.5
3	R2	153	0.0	0.537	11.4	LOS B	4.1	28.6	0.64	0.64	47.4
Approach		567	0.0	0.537	7.2	LOS A	4.1	28.6	0.64	0.64	52.1
All Vehicles		1707	0.0	0.590	8.1	LOS A	5.2	36.3	0.67	0.71	51.9



MOVEMENT SUMMARY

Site: 1vv [Washington / Geddes - Future AM]

Washington Street / Geddes Street

Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Deg. Satn HV % v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
SouthEast: Washington Street											
4	L2	126	0.0 0.364	7.4	LOS A	2.3	16.1	0.76	0.82	48.0	
5	T1	54	0.0 0.364	7.5	LOS A	2.3	16.1	0.76	0.82	46.8	
6	R2	90	0.0 0.364	13.1	LOS B	2.3	16.1	0.76	0.82	50.7	
Approach		270	0.0 0.364	9.3	LOS A	2.3	16.1	0.76	0.82	48.8	
NorthEast: Geddes Street											
7	L2	135	0.0 0.668	8.9	LOS A	7.1	50.0	0.82	0.87	47.4	
8	T1	354	0.0 0.668	9.0	LOS A	7.1	50.0	0.82	0.87	53.1	
9	R2	135	0.0 0.668	14.7	LOS B	7.1	50.0	0.82	0.87	52.1	
Approach		624	0.0 0.668	10.2	LOS B	7.1	50.0	0.82	0.87	51.9	
NorthWest: Washington Street											
10	L2	96	0.0 0.424	7.1	LOS A	2.8	19.7	0.75	0.83	49.7	
11	T1	57	0.0 0.424	7.3	LOS A	2.8	19.7	0.75	0.83	42.5	
12	R2	183	0.0 0.424	12.9	LOS B	2.8	19.7	0.75	0.83	51.8	
Approach		336	0.0 0.424	10.3	LOS B	2.8	19.7	0.75	0.83	50.1	
SouthWest: Geddes Street											
1	L2	195	0.0 0.661	6.9	LOS A	6.8	47.5	0.74	0.73	51.0	
2	T1	357	0.0 0.661	7.0	LOS A	6.8	47.5	0.74	0.73	54.0	
3	R2	153	0.0 0.661	12.7	LOS B	6.8	47.5	0.74	0.73	46.8	
Approach		705	0.0 0.661	8.2	LOS A	6.8	47.5	0.74	0.73	52.0	
All Vehicles		1935	0.0 0.668	9.4	LOS A	7.1	50.0	0.77	0.80	51.3	



MOVEMENT SUMMARY

 **Site: 1vv [Washington / Geddes - Existing PM]**

Washington Street / Geddes Street

Roundabout

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total	HV				Vehicles	Distance			
		veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Washington Street											
4	L2	66	0.0	0.130	4.6	LOS A	0.6	4.2	0.40	0.57	50.6
5	T1	30	0.0	0.130	4.7	LOS A	0.6	4.2	0.40	0.57	50.4
6	R2	42	0.0	0.130	10.4	LOS B	0.6	4.2	0.40	0.57	53.6
Approach		138	0.0	0.130	6.4	LOS A	0.6	4.2	0.40	0.57	51.5
NorthEast: Geddes Street											
7	L2	72	0.0	0.259	4.4	LOS A	1.5	10.3	0.39	0.52	50.9
8	T1	156	0.0	0.259	4.6	LOS A	1.5	10.3	0.39	0.52	55.7
9	R2	69	0.0	0.259	10.2	LOS B	1.5	10.3	0.39	0.52	55.2
Approach		297	0.0	0.259	5.8	LOS A	1.5	10.3	0.39	0.52	54.7
NorthWest: Washington Street											
10	L2	39	0.0	0.117	4.5	LOS A	0.5	3.7	0.37	0.58	51.9
11	T1	27	0.0	0.117	4.6	LOS A	0.5	3.7	0.37	0.58	45.6
12	R2	60	0.0	0.117	10.2	LOS B	0.5	3.7	0.37	0.58	54.2
Approach		126	0.0	0.117	7.2	LOS A	0.5	3.7	0.37	0.58	52.2
SouthWest: Geddes Street											
1	L2	87	0.0	0.253	4.2	LOS A	1.4	10.1	0.35	0.52	52.8
2	T1	126	0.0	0.253	4.3	LOS A	1.4	10.1	0.35	0.52	55.7
3	R2	90	0.0	0.253	10.0	LOS A	1.4	10.1	0.35	0.52	48.8
Approach		303	0.0	0.253	6.0	LOS A	1.4	10.1	0.35	0.52	53.2
All Vehicles		864	0.0	0.259	6.2	LOS A	1.5	10.3	0.37	0.54	53.4



MOVEMENT SUMMARY

 **Site: 1vv [Washington / Geddes - Future PM]**

Washington Street / Geddes Street

Roundabout

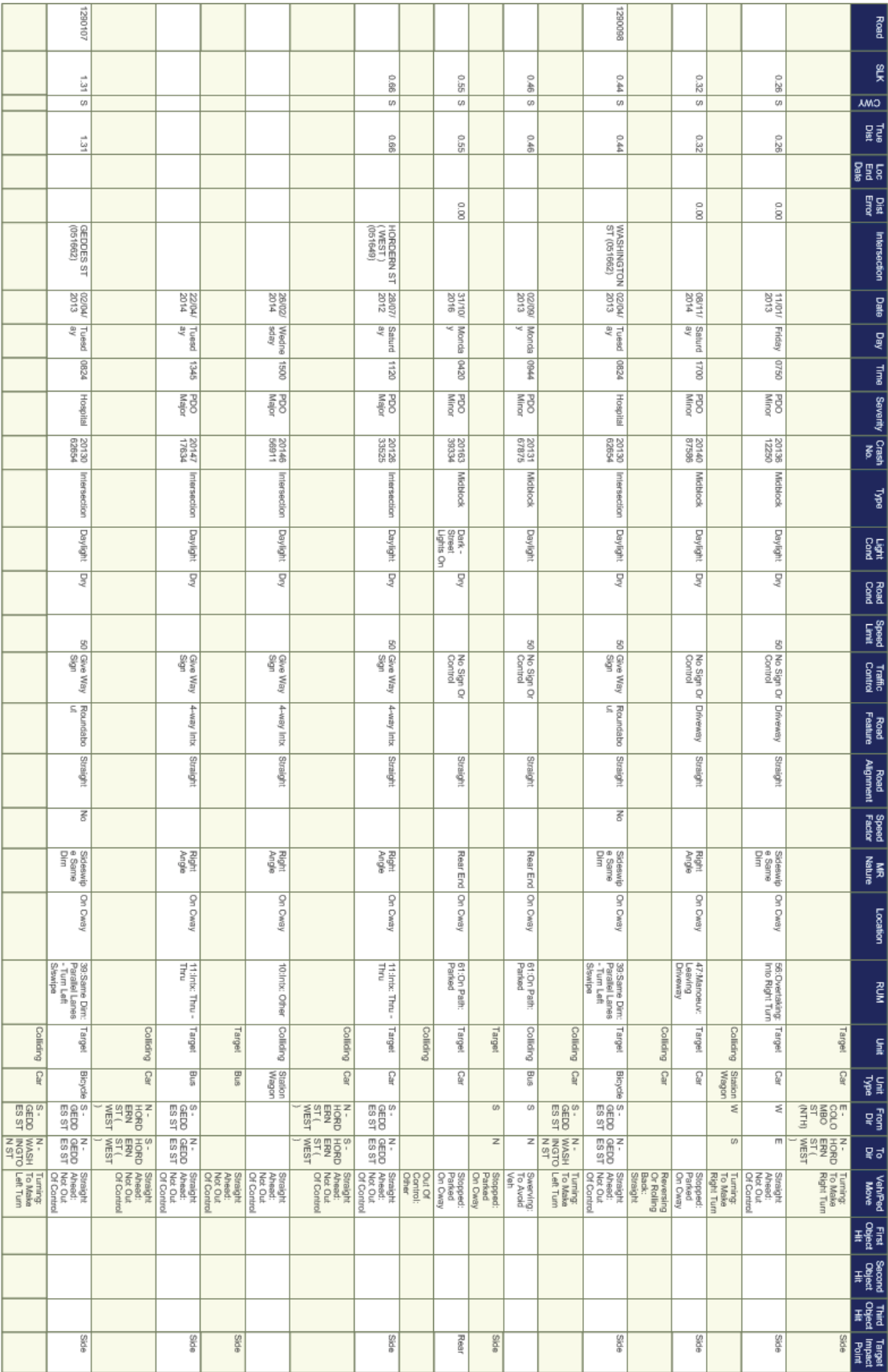
Movement Performance - Vehicles

Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Washington Street											
4	L2	66	0.0	0.139	5.0	LOS A	0.7	4.6	0.46	0.60	50.3
5	T1	30	0.0	0.139	5.1	LOS A	0.7	4.6	0.46	0.60	49.9
6	R2	42	0.0	0.139	10.8	LOS B	0.7	4.6	0.46	0.60	53.2
Approach		138	0.0	0.139	6.8	LOS A	0.7	4.6	0.46	0.60	51.1
NorthEast: Geddes Street											
7	L2	72	0.0	0.312	4.8	LOS A	1.9	13.1	0.47	0.55	50.5
8	T1	198	0.0	0.312	4.9	LOS A	1.9	13.1	0.47	0.55	55.4
9	R2	69	0.0	0.312	10.6	LOS B	1.9	13.1	0.47	0.55	54.9
Approach		339	0.0	0.312	6.1	LOS A	1.9	13.1	0.47	0.55	54.5
NorthWest: Washington Street											
10	L2	39	0.0	0.173	5.0	LOS A	0.8	5.8	0.46	0.65	50.9
11	T1	27	0.0	0.173	5.1	LOS A	0.8	5.8	0.46	0.65	44.3
12	R2	108	0.0	0.173	10.7	LOS B	0.8	5.8	0.46	0.65	53.1
Approach		174	0.0	0.173	8.6	LOS A	0.8	5.8	0.46	0.65	51.7
SouthWest: Geddes Street											
1	L2	129	0.0	0.360	4.3	LOS A	2.3	16.2	0.38	0.50	53.0
2	T1	222	0.0	0.360	4.4	LOS A	2.3	16.2	0.38	0.50	55.8
3	R2	90	0.0	0.360	10.1	LOS B	2.3	16.2	0.38	0.50	49.0
Approach		441	0.0	0.360	5.5	LOS A	2.3	16.2	0.38	0.50	54.0
All Vehicles		1092	0.0	0.360	6.3	LOS A	2.3	16.2	0.43	0.55	53.5



Appendix C: Detailed Crash History

[illegible]



Road	SLK	CWY	True Dist	Loc End Date	Dist Error	Intersection	Date	Day	Time	Severity	Crash No.	Type	Light Cond	Road Cond	Speed Limit	Traffic Control	Road Feature	Road Alignment	Speed Factor	M/R Nature	Location	RUM	Unit	Unit Type	From Dir	To Dir	Way/Ped Move	First Object Hit	Second Object Hit	Third Object Hit	Target Impact Point		
							160601 2016	Tuesd ay	1800	PDO Major	201601 76972	Intersection	Daylight	Dry			No Sign Or Control	4-way h/wk	Straight			Right Thru	On Onway	22 Opposite Thru - Right	Colliding	Car	W - C/O MBO ST (NTH)	E - C/O MBO ST (NTH)	Straight Ahead: Nxt Out Or Control				
																							Target	Car	E - C/O MBO ST (NTH)	N - H/O To Make Right turn	Turning: N - H/O To Make Right turn					Side	



Appendix D: Traffic Management Plan

Attachment 3

Revised TMP received 17 August 2017



Traffic Management Plan

Project:	Regent College
Client:	Regent College c/o T&Z Architects
Author:	Paul Nguyen
Date:	17 th August 2017

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1. Introduction and Background

1.1. Purpose

This Traffic Management Plan (TMP) has been prepared on behalf of Regent College for submission to the Town of Victoria Park. The key objectives of the TMP are as follows:

- To minimise the impact of school generated traffic on the surrounding area by improving the flow of vehicular traffic around the school site during the morning drop-off and afternoon pick-up periods.
- To maximise safety for students, staff and other road users.
- To minimise interaction of traffic between the school and neighbouring schools.
- To encourage the use of sustainable transport modes to travel to and from the school.

The TMP proposes various traffic management measures that can be implemented by the school, the Town of Victoria Park and parents / guardians (noted as 'parents' for simplicity) to achieve the above objectives.

1.2. School Details

1.2.1. Student Numbers

Regent College is a private primary school catering to students from kindergarten to year 6. There are currently 256 students enrolled and 20 staff. The school population is proposed to increase to 395 students and approximately 30 staff.

1.2.2. Operating Hours

The school day starts at 8.30 am for all students. Kindergarten and pre-primary students finish at 2.50 pm and year 1 to 6 students finish at 3:00 pm. Regent College also offers before and after school care Monday to Friday from 7:00 to 8:30 am in the morning and from 3:00 to 6:00 pm in the afternoon. There is a run club that meets each Monday morning at Raphael Park at 8:00 am. There are also several after school club options in addition to after school care including chess clubs and music groups which are held at the school, three mixed netball teams at The Park Centre and swimming club at the Aqualife Centre.

1.2.3. Location and Surrounding Development

The school address is 28 Colombo Street, Victoria Park. The site is located on the south-west side of Hordern Street between Colombo Street and Geddes Street as shown in **Figure 1**. Victoria Park Christian School is located opposite Regent College on the north side of Colombo Street and Victoria Park Primary School is located towards the east on the east side of Geddes Street. The current enrolment details and school start and end times are summarised in **Table 1**.

Table 1: Adjacent School Summary

School Name	Number of Students	Starting Time	End Time
Regent College	395 (proposed)	8.30 am	2.50 pm (K-PP) 3:00 pm (Y1-Y6)
Victoria Park Primary School	473 (456 Full Time)	8.50 am	3.05 pm
Victoria Park Christian School	92 (2016)	8.50 am	3.10 pm

The Victoria Park Seventh-Day Adventist Church is located on the adjacent lots to the south and west. Services at the church are only held on Saturday and Sunday. The remainder of surrounding development is primarily residential.

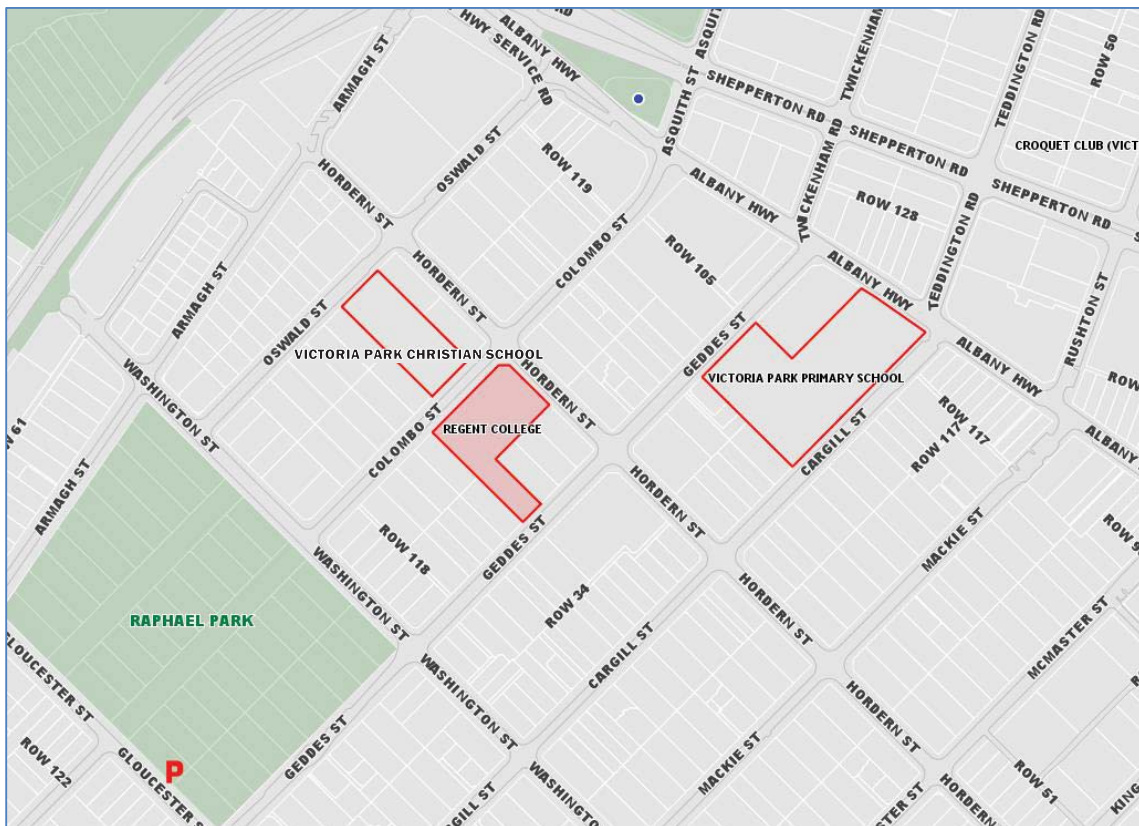


Figure 1: Site Location

1.2.4. On-Site Parking

There are currently 13 on-site car parking bays accessible from Geddes Street. The car parking supply is proposed to increase to 44 bays including 3 bays provided within a small car park on Colombo Street.

1.2.5. Kiss and Drive

There is an existing Kiss and Drive zone along the school side of Hordern Street with a capacity of about 12 cars.

The Kiss and Drive is supervised during the morning drop-off and afternoon pick-up periods by staff to assist the movement of students to and from the school.

1.2.6. Pedestrian / Cyclist Access

There are pedestrian access points on all three roads fronting the school including two on Colombo Street, one on Hordern Street and one on Geddes Street. All three frontage streets also have footpaths along both verges.

1.2.7. Public Transport Access

There are bus stops located on Geddes Street north and south of Hordern Street within very short walking distance from the school. The stops to the north of Hordern Street have a shelter and seating. Services available from these stops include Transperth Bus Routes 72 (Perth - Cannington Station via Victoria Park and Curtin University) and 75 (Perth - Canning Vale via Victoria Park and Curtin University). The route maps and timetables for these services are attached in **Appendix A**.

In addition, the Victoria Park Bus Transfer Station is located approximately 450 metres walking distance from the school. From here, there are numerous other bus services operating to many other locations around the metropolitan area.

The access layout (vehicle and pedestrian) and bus stop locations are shown in **Figure 2**.

1.2.8. Street Parking

There is a significant amount of on street parking available on the roads surrounding Regent College. An overview of the existing street parking restrictions close to the school is shown in **Figure 3**. It is noted that the streets not highlighted have no parking restriction subject to the Town of Victoria parking laws. The broader street parking plan is included in **Appendix B**.

There is also informal parking within the verge along the school side of Colombo Street which is currently used by parents.



Figure 2: Access Layout and Bus Stop Locations

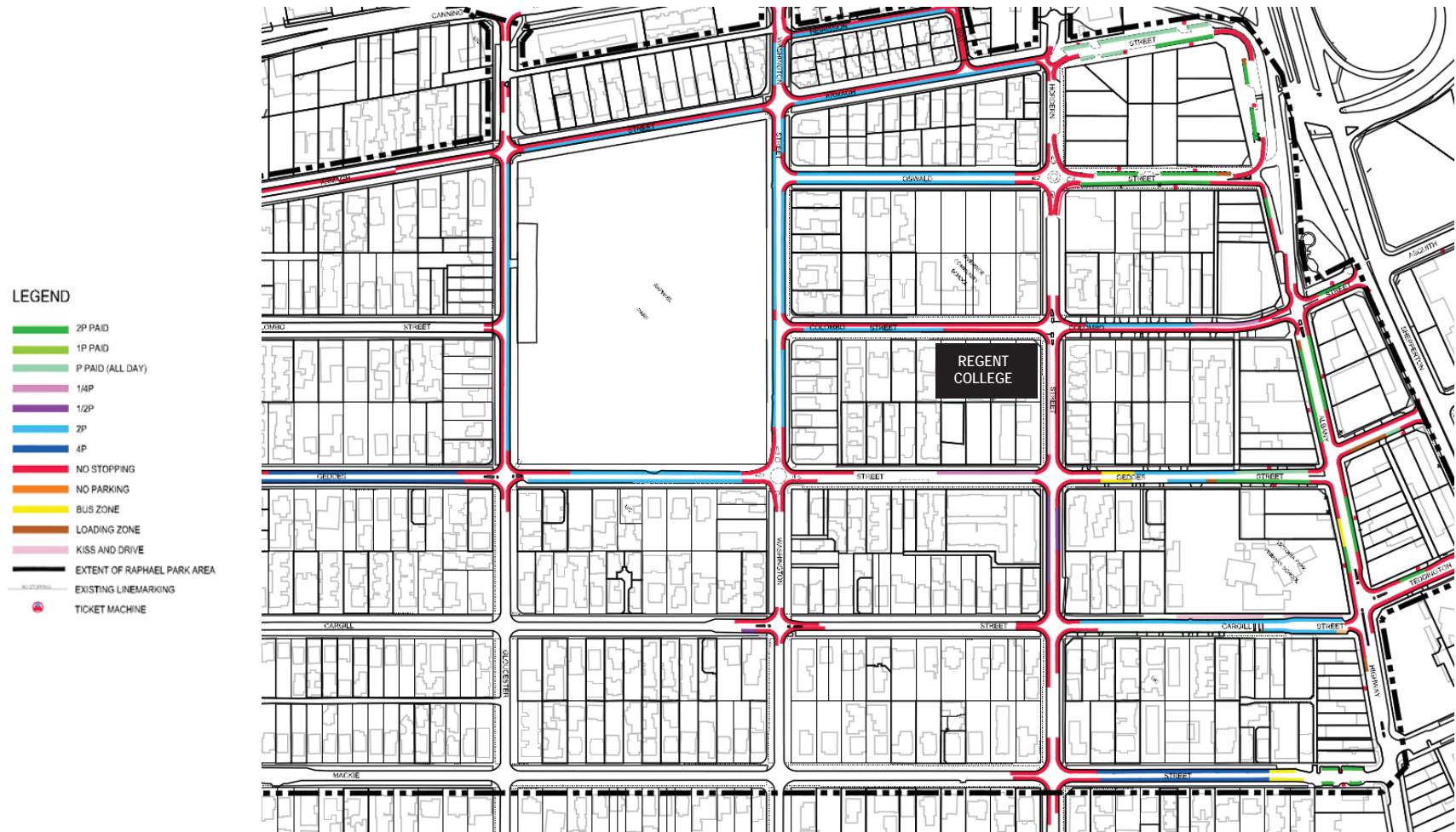


Figure 3: Existing Street Parking Restrictions

2. Existing Traffic Issues

2.1. Kiss and Drive Queueing

One of the key issues and concerns relates to queueing beyond the extent of the Kiss and Drive on Hordern Street particularly during the afternoon peak period as many parents arrive slightly before the school finish time and wait to pick up their children. Cars have been observed queueing around the corner onto Geddes Street (as shown in **Figure 4**) and back along Hordern Street to the south of Geddes Street. There is existing 15 minute parking during the school peak periods (7:30 - 9:30 am, 2:30 - 4:00pm) along the school side of Geddes Street south of Hordern Street and vehicles queueing back from the Kiss and Drive are queueing around the parked vehicles and blocking the northbound lane on Geddes Street.



Figure 4: Observed Queueing from Kiss and Drive (Photo by Town of Victoria Park)

3. Traffic Management Plan

The flow of school traffic during the peak periods can be improved through three key strategies listed below.

1. Improved use of the existing Kiss and Drive.
2. Encouraging the use of alternative transport modes for both staff and students.
3. Periodic review of the school traffic management.

It is recommended that the proposed traffic management measures outlined in the plan are communicated to parents and staff on a regular basis (every 3 to 6 months) and that any positive or negative feedback is given to encourage improved behaviour. This could be in the form of a newsletter, information posted online or emailed and incorporated into the induction of new students and parents. An example newsletter outlining these measures that could be distributed is attached in **Appendix C**.

The proposed traffic management strategies are outlined in the following sections.

3.1. Improving Kiss and Drive

The key issue associated with the Kiss and Drive is the queueing of vehicles beyond the designated Kiss and Drive area onto other streets and within intersection areas, particularly during the afternoon pick-up period. The proposed management measures to mitigate this issue includes the following:

- Staff members who are supervising the Kiss and Drive area are to ensure that no parents queue within the intersection areas or along the traffic lanes on Hordern Street south of Geddes Street. If the Kiss and Drive is full and there is nowhere to wait without blocking the intersection or traffic lanes, staff are to direct parents away from the area to loop around the block and return to join the queue when there is room to do so.
- Additional staff being made available to supervise the Kiss and Drive during the peak periods. At least two staff should be available to assist children to the cars and one or two staff to direct vehicles and ensure the intersection and traffic lanes are not obstructed. The periods that staff are available to supervise student arrivals and departures will be extended (8:00 to 8:30 am for the drop off period and 2:50 to 3:30 pm).
- Removal of the 15 minute parking along Geddes Street fronting the school and the church during the school peak periods to free up this area for vehicles to queue as shown in **Figure 5**. Parents are to be encouraged to approach the Kiss and Drive from this direction to minimise impact on other streets. At this stage, a No Parking Zone would be sufficient. However, consideration could be given to converting this area to an extension of the Kiss and Drive. It is understood that formalising this area as a Kiss and Drive will require public consultation.



- Encouraging parents to avoid the busiest periods during the school peaks by dropping off their children slightly earlier in the morning and picking up their children slightly later in the afternoon.



Figure 5: Proposed removal of 15min street parking

- There is a significant amount of street parking on the roads surrounding the school. Parents will be encouraged to park a short distance from the school and walk their children to and from the school to avoid queuing. There is a free public car park on the Gloucester Street frontage of Raphael Park approximately 350m walking distance from the school. The informal verge parking on the school side of Colombo Street will also be allowed to continue. The street parking plan shown in **Figure 3** will be included in the traffic management plan to be distributed to parents and staff. The plan should be updated regularly to reflect any changes to street parking.
- Encouraging more students to participate in the before and after school programs.
- Encouraging carpooling.

3.2. Promoting Alternative Transport Modes

The increased use of alternative modes of travel (walking, cycling, and public transport) will help to manage congestion on the roads during the school peak periods. Parents, students and staff should all be encouraged to minimise car travel where possible.



The Department of Transport runs the Your Move program which provides tailored information on how to get to and from work, school and around the local community using alternative modes of transport. There are resources, competitions, events and rewards aimed at promoting active transport.

Regent College is now registered on the Your Move website. Parents, students and staff can register individually, join the schools network, learn about different ways to travel to and from school and earn points and rewards for the school by participating.

3.3. Traffic Management Reviews

The management of school traffic should be reviewed regularly to measure the effectiveness of the proposed measures and to identify areas that need to be improved, particularly as the school population increases. Staff supervising the pick-up and drop-off periods can informally observe the traffic on a daily basis and report to the principal. A more formal review shall be implemented into staff or management meetings. As a start, the management of school traffic should be discussed internally every 3 months and as required.

If traffic management issues are reported regularly, a traffic consultant will be engaged to review and advise.





4. Additional Measures

It is acknowledged that the successful management of traffic is dependent on the cooperation of parents, students, staff and other road users. If required, additional traffic management measures that could be considered are listed below. At this stage, the below measures are not considered essential and the strategies listed in the TMP above would be sufficient.

1. Extension of the Kiss and Drive area along the Geddes Street frontage.
2. Further staggering of the school operating hours away from the hours of the other schools nearby.
3. Staggering the start and finish times within the school (e.g. by surnames).
4. Operating a private school bus service.

Appendix A: Transperth Bus Route 72 and 75 - Map and Timetable





Route 72, 75 - To Perth

Timed Stops	22018	20204	20276	27102	20134	11700	12004	10070	12197
Stop No.	Bannister Rd / Canning Vale Depot	Vellgrove Av / Willeri Dr	Riverton Forum	Cannington Stn	Bungaree Rd / Westlake St	Curtin University Bus Stn	Sussex St / Berwick St	Victoria Park Transfer Stn	Elizabeth Quay Bus Stn
Route No.									
Monday to Friday									
am	72	-	-	-	5:20	5:25	5:31	5:37	5:51
	72 N	-	-	-	-	5:40	5:46	5:52	6:07
	75	5:30	5:36	5:41	-	5:50	5:55	6:01	6:23
	72 N	-	-	5:56	6:05	6:10	6:16	6:23	6:39
	75	5:59	6:05	6:10	-	6:20	6:25	6:31	6:55
	72 N	-	-	-	-	6:40	6:47	6:55	7:12
	72 N	-	-	-	-	6:48	6:55	7:03	7:20
	72	-	-	6:40	6:50	6:55	7:02	7:10	7:28
	75	6:35	6:41	6:47	-	6:57	7:03	7:10	7:36
	72 N	-	-	-	-	7:10	7:17	7:25	7:44
	72	-	-	7:01	7:12	7:18	7:25	7:34	7:54
	72	-	-	-	-	7:25	7:32	7:41	8:01
	75	6:59	7:06	7:12	-	7:24	7:30	7:37	8:06
	72	-	-	7:17	7:29	7:35	7:42	7:51	8:11
	72	-	-	-	-	7:40	7:47	7:56	8:16
	72	-	-	-	7:39	7:45	7:52	8:02	8:23
	72 N	-	-	-	-	7:50	7:57	8:07	8:28
	72 N	-	-	7:33	7:48	7:55	8:02	8:12	8:33
	75	7:28	7:35	7:41	-	7:53	8:00	8:07	8:38
	72	-	-	-	-	8:05	8:12	8:22	8:43
	72 N	-	-	-	-	8:10	8:17	8:27	8:47
	75	7:42	7:49	7:55	-	8:08	8:15	8:22	8:52
	72	-	-	-	-	8:20	8:27	8:37	8:57
	72	-	-	-	-	8:27	8:34	8:44	9:04
	72	-	-	8:14	8:28	8:35	8:42	8:52	9:12
	75	8:12	8:19	8:25	-	8:38	8:45	8:52	9:21
	72	-	-	8:39	8:53	9:00	9:07	9:16	9:35
	75	8:44	8:51	8:57	-	9:09	9:15	9:22	9:49
	72	-	-	9:13	9:25	9:31	9:38	9:45	10:03
	75	9:16	9:23	9:29	-	9:40	9:46	9:53	10:18
	72	-	-	9:43	9:54	10:00	10:07	10:14	10:32
	75	9:46	9:52	9:58	-	10:09	10:15	10:22	10:47
	72	-	-	10:13	10:24	10:30	10:37	10:44	11:02
	75	10:17	10:23	10:28	-	10:39	10:45	10:52	11:17
	72	-	-	10:42	10:54	11:00	11:07	11:14	11:32
	75	10:47	10:53	10:58	-	11:09	11:15	11:22	11:47
	72	-	-	11:12	11:24	11:30	11:37	11:44	12:02
	75	11:17	11:23	11:28	-	11:39	11:45	11:52	12:17
	72	-	-	11:42	11:54	12:00	12:07	12:14	12:32
	75	11:48	11:54	11:59	-	12:09	12:15	12:22	12:47
pm	72	-	-	12:12	12:24	12:30	12:37	12:44	1:02
	75	12:18	12:24	12:29	-	12:39	12:45	12:52	1:17
	72	-	-	12:43	12:54	1:00	1:07	1:14	1:32
	75	12:48	12:54	12:59	-	1:09	1:15	1:22	1:47
	72	-	-	1:13	1:24	1:30	1:37	1:44	2:02
	75	1:17	1:24	1:29	-	1:39	1:45	1:52	2:17
	72	-	-	1:43	1:54	2:00	2:07	2:14	2:33
	75	1:47	1:54	1:59	-	2:09	2:15	2:22	2:49
	72	-	-	2:12	2:24	2:30	2:37	2:44	3:04
	75	2:17	2:24	2:29	-	2:39	2:45	2:52	3:20
	72 N	-	-	2:40	2:54	3:00	3:07	3:19	3:39
	75	2:42	2:49	2:54	-	3:04	3:10	3:17	3:45
	72 N	-	-	-	-	3:17	3:24	3:32	3:51
	72	-	-	3:05	3:19	3:25	3:32	3:40	3:59
pm	72	-	-	-	-	3:32	3:39	3:46	4:05
	75	3:12	3:19	3:24	-	3:34	3:40	3:47	4:13
	72 N	-	-	-	-	3:47	3:54	4:01	4:20
	72	-	-	3:36	3:49	3:55	4:02	4:09	4:28
	72 N	-	-	-	-	4:02	4:09	4:16	4:35
	75	3:42	3:49	3:54	-	4:04	4:10	4:17	4:43
	72	-	-	-	-	4:17	4:24	4:31	4:50
	72	-	-	4:06	4:19	4:25	4:32	4:40	5:00
	72 N	-	-	-	-	4:32	4:39	4:46	5:06
	72	-	-	-	-	4:40	4:47	4:54	5:15
	75	4:19	4:26	4:31	-	4:41	4:47	4:54	5:22
	72	-	-	4:35	4:49	4:55	5:02	5:09	5:31
	72	-	-	-	-	5:05	5:12	5:19	5:40
	75	4:47	4:54	4:59	-	5:09	5:15	5:22	5:50
	72	-	-	5:11	5:24	5:30	5:37	5:44	6:04
	75	5:17	5:24	5:29	-	5:39	5:45	5:52	6:18
	72	-	-	5:42	5:54	6:00	6:07	6:14	6:32
	72 N	-	-	-	-	6:15	6:21	6:27	6:45
	72	-	-	6:13	6:24	6:30	6:36	6:42	6:59
	72	-	-	-	-	6:46	6:52	6:58	7:14
	72	-	-	6:44	6:54	7:00	7:06	7:12	7:28
	72	-	-	-	-	7:15	7:21	7:27	7:42
	72	-	-	7:24	7:34	7:40	7:46	7:52	8:07
	72	-	-	-	-	8:10	8:15	8:21	8:36
	72	-	-	8:25	8:35	8:40	8:45	8:51	9:06
	72	-	-	-	-	9:10	9:15	9:21	9:36
	72	-	-	9:25	9:35	9:40	9:45	9:51	10:06
	72	-	-	-	-	10:35	10:40	10:45	10:59
	72	-	-	-	-	11:35	11:40	11:45	11:57

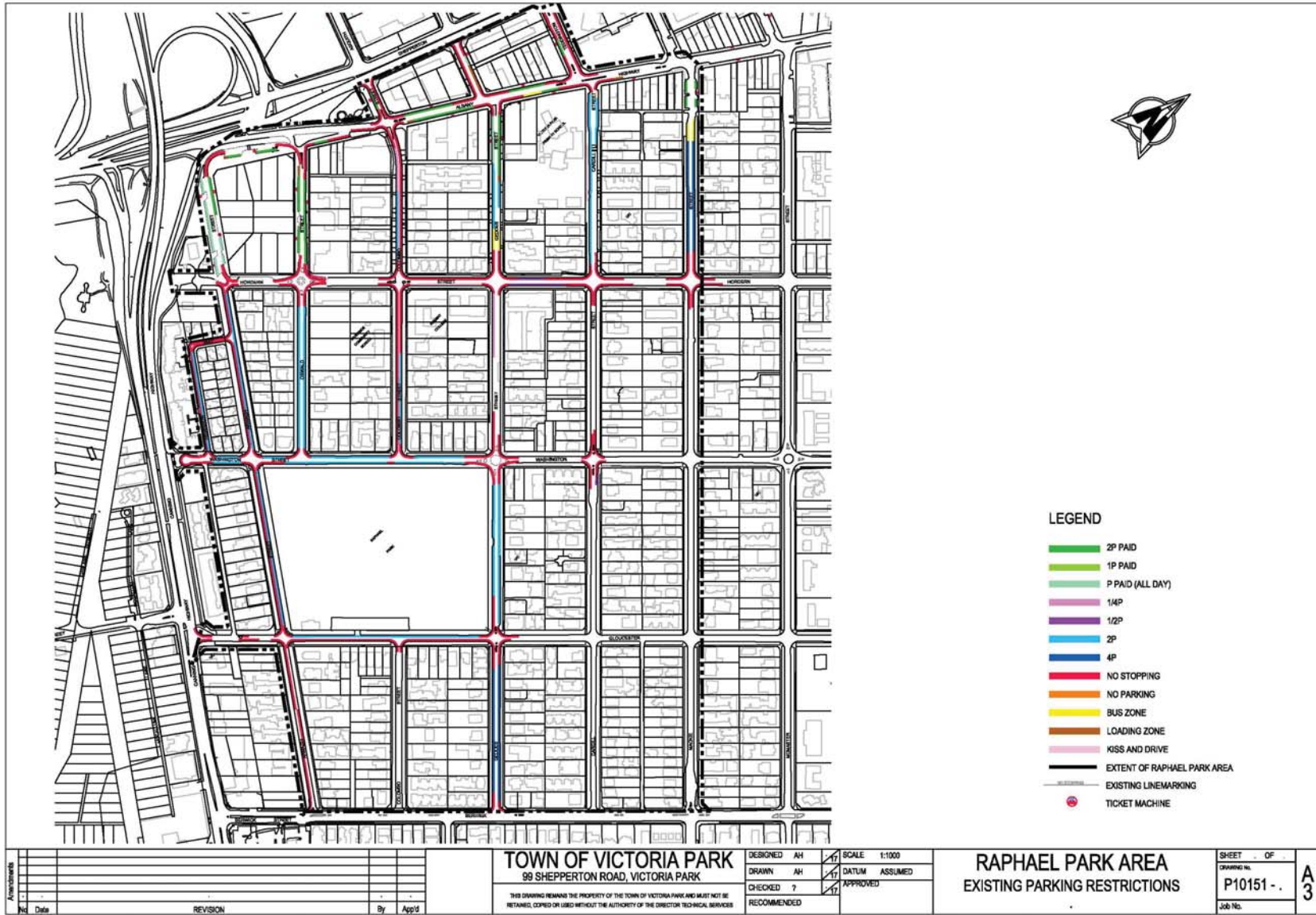
Route 72, 75 - From Perth

Timed Stops	12197	10140	12005	11698	20127	12180	20272	20203	22019
Stop No.	Elizabeth Quay Bus Stn	Victoria Park Transfer Stn	Sussex St / Berwick St	Curtin University Bus Stn	Bungaree Rd / Westlake St	Cannington Stn	Riverton Forum	Vellgrove Av / Willeri Dr	Bannister Rd / Canning Vale Depot
Route No.	Elizabeth Quay Bus Stn	Victoria Park Transfer Stn	Sussex St / Berwick St	Curtin University Bus Stn	Bungaree Rd / Westlake St	Cannington Stn	Riverton Forum	Vellgrove Av / Willeri Dr	Bannister Rd / Canning Vale Depot
Monday to Friday									
am 75	6:00	6:11	6:17	6:23	6:27	-	6:37	6:41	6:52
72 D	6:15	6:27	6:33	6:42	-	-	-	-	-
75	6:30	6:42	6:49	6:56	7:00	-	7:10	7:14	7:25
72 N	6:45	6:57	7:05	7:12	7:17	7:33	-	-	-
75	7:00	7:13	7:22	7:30	7:35	-	7:46	7:51	8:02
72 D	7:15	7:30	7:39	7:50	-	-	-	-	-
72 C	7:22	7:37	7:46	7:57	-	-	-	-	-
72 D	7:30	7:45	7:55	8:06	-	-	-	-	-
72 C	7:37	7:52	8:02	8:13	-	-	-	-	-
72	7:45	8:01	8:11	8:20	8:25	8:43	-	-	-
72 D	7:52	8:08	8:18	8:28	-	-	-	-	-
72 C	8:00	8:16	8:27	8:37	-	-	-	-	-
75	8:07	8:23	8:33	8:42	8:47	-	8:57	9:02	9:14
72	8:14	8:30	8:40	8:49	8:54	9:11	-	-	-
72 A	8:22	8:38	8:48	8:58	-	-	-	-	-
72 D	8:30	8:46	8:56	9:06	-	-	-	-	-
72 A	8:37	8:53	9:02	9:12	-	-	-	-	-
72	8:45	9:01	9:09	9:17	9:22	9:39	-	-	-
72 A	8:52	9:08	9:16	9:26	-	-	-	-	-
75	9:00	9:15	9:23	9:31	9:36	-	9:46	9:51	10:02
72 A	9:07	9:22	9:30	9:40	-	-	-	-	-
72	9:15	9:30	9:38	9:46	9:51	10:07	-	-	-
75	9:30	9:45	9:53	10:01	10:06	-	10:16	10:21	10:32
72	9:45	10:00	10:08	10:16	10:21	10:37	-	-	-
75	10:00	10:15	10:23	10:31	10:36	-	10:46	10:51	11:02
72	10:15	10:30	10:38	10:46	10:51	11:07	-	-	-
75	10:30	10:45	10:53	11:01	11:06	-	11:16	11:21	11:31
72	10:45	11:00	11:08	11:16	11:21	11:37	-	-	-
75	11:00	11:15	11:23	11:31	11:36	-	11:46	11:51	12:01
72	11:15	11:31	11:39	11:47	11:52	12:08	-	-	-
75	11:30	11:46	11:54	12:02	12:07	-	12:18	12:23	12:34
72	11:45	12:01	12:09	12:17	12:22	12:38	-	-	-
pm 75	12:00	12:16	12:24	12:32	12:37	-	12:48	12:53	1:04
72	12:15	12:31	12:39	12:47	12:52	1:08	-	-	-
75	12:30	12:46	12:54	1:02	1:07	-	1:18	1:23	1:34
72	12:45	1:01	1:09	1:17	1:22	1:39	-	-	-
75	1:00	1:16	1:25	1:33	1:38	-	1:49	1:54	2:05
72	1:15	1:31	1:40	1:48	1:53	2:10	-	-	-
75	1:30	1:46	1:55	2:03	2:08	-	2:19	2:24	2:35
72	1:45	2:01	2:10	2:18	2:24	2:41	-	-	-
75	2:00	2:16	2:25	2:34	2:40	-	2:51	2:56	3:08
72	2:15	2:31	2:40	2:49	2:55	3:12	-	-	-
75	2:30	2:46	2:55	3:04	3:10	-	3:22	3:27	3:39
72	2:45	3:02	3:12	3:22	3:28	3:46	-	-	-
75	3:00	3:17	3:27	3:38	3:44	-	3:56	4:02	4:14
72	3:15	3:32	3:42	3:52	3:58	4:16	-	-	-
75	3:30	3:47	3:57	4:07	4:13	-	4:25	4:31	4:43
72	3:45	4:02	4:12	4:21	4:27	4:45	-	-	-
72 D	3:52	4:09	4:19	4:29	-	-	-	-	-
75	4:00	4:17	4:27	4:36	4:42	-	4:54	5:00	5:12
72	4:10	4:27	4:37	4:46	4:52	5:09	-	-	-
72 C	4:20	4:37	4:47	4:58	-	-	-	-	-
72 D	4:25	4:42	4:52	5:02	-	-	-	-	-
75	4:30	4:48	4:58	5:07	5:14	-	5:26	5:32	5:44
72 C	4:35	4:53	5:03	5:13	-	-	-	-	-
pm 72 N	4:40	4:58	5:08	5:17	5:23	5:40	-	-	-
72 C	4:45	5:03	5:13	5:23	-	-	-	-	-
72 C	4:50	5:08	5:18	5:28	-	-	-	-	-
72 C	4:55	5:13	5:23	5:33	-	-	-	-	-
75	5:00	5:19	5:29	5:38	5:44	-	5:55	6:00	6:11
72 C	5:05	5:25	5:35	5:45	-	-	-	-	-
72 N	5:10	5:30	5:40	5:48	5:53	6:09	-	-	-
72 B	5:15	5:35	5:45	5:53	6:03	-	-	-	-
72 C	5:20	5:39	5:49	5:59	-	-	-	-	-
72 D	5:25	5:44	5:53	6:03	-	-	-	-	-
75	5:30	5:48	5:57	6:05	6:11	-	6:22	6:27	6:38
72	5:40	5:58	6:07	6:15	6:20	6:35	-	-	-
72 C	5:50	6:07	6:16	6:26	-	-	-	-	-
75	6:00	6:17	6:26	6:34	6:39	-	6:49	6:54	7:04
72 C	6:10	6:25	6:34	6:44	-	-	-	-	-
72	6:20	6:35	6:44	6:52	6:57	7:11	-	-	-
75	6:30	6:45	6:53	7:01	7:06	-	7:16	7:21	7:30
72 C	6:40	6:54	7:02	7:12	-	-	-	-	-
72 N	6:50	7:04	7:12	7:19	7:24	7:38	-	-	-
72	7:05	7:18	7:26	7:33	7:38	7:52	-	-	-
72 C	7:20	7:33	7:41	7:50	-	-	-	-	-
72	7:35	7:48	7:56	8:03	8:07	8:20	-	-	-
72 C	7:50	8:02	8:10	8:19	-	-	-	-	-
72 C	8:05	8:17	8:24	8:33	-	-	-	-	-
72 C	8:20	8:32	8:39	8:48	-	-	-	-	-
72	8:35	8:47	8:54	9:01	9:05	9:18	-	-	-
72 C	8:50	9:02	9:09	9:18	-	-	-	-	-
72 B	9:10	9:22	9:29	9:36	9:45	-	-	-	-
72	9:40	9:51	9:58	10:05	10:09	10:22	-	-	-
72 C	10:05	10:16	10:22	10:31	-	-	-	-	-
72 C	10:35	10:46	10:52	11:01	-	-	-	-	-
72 C	11:05	11:15	11:21	11:30	-	-	-	-	-
am 72 B	12:05	12:15	12:21	12:27	12:35	-	-	-	-



Appendix B: Raphael Park Area - Existing Street Parking Restrictions







Appendix C: School Traffic Management Plan Newsletter



Regent College Traffic Management Plan

Kiss and Drive

1. Please follow any instructions from staff.
2. Please do not queue within the intersection or within the through lanes.
3. The 15 minutes parking along Geddes Street fronting the school and the church has been removed and this area can be used for queueing while waiting to join the Kiss and Drive. If the Kiss and Drive and this area is full, either loop around the block or park away from the Kiss and Drive (where it is legal and safe to do so) and walk to the school to pick up your child.
4. If using the Kiss and Drive, please consider avoiding the busy periods. You can either drop off your child slightly earlier in the morning and pick-up your child slightly later in the afternoon. (i.e. turn up after the siren when the Kiss and Drive is operating rather than joining the queue before the siren) Staff will be available for longer periods to assist with pick-up and drop-off.

Parking and Walking

5. There is plenty of free street parking available on the surrounding streets during the school peak periods. Please consider parking a short distance from the school and walk your child to and from school. Please refer to the attached plan showing the available street parking.
6. Verge parking along the school side of Colombo Street is still permitted for small to medium sized vehicles. Please park in a perpendicular pattern and do not encroach over the footpath or onto the road.

Carpooling and Out of School Care Programs

7. Please consider carpooling or enrolling your children in the before and after school care programs. The school offers many programs including the run club on Monday mornings and music and sporting clubs after school. Please contact the school for more information.

Alternative Transport

8. The school will be participating in the Department of Transport's *Your Move* program. This program is aimed at increasing the use of alternative, active ways to travel to and from school, work and around the community. Parents, staff and students are encouraged to sign up, join the Regent College community and participate in the program. There is plenty of information and support available on the site. You can read more about this program and sign up at <https://yourmove.org.au/>.



LEGEND

- 2P PAID
- 1P PAID
- P PAID (ALL DAY)
- 1/4P
- 1/2P
- 2P
- 4P
- NO STOPPING
- NO PARKING
- BUS ZONE
- LOADING ZONE
- KISS AND DRIVE
- EXTENT OF RAPHAEL PARK AREA
- EXISTING LINEMARKING
- TICKET MACHINE

Amendments			
No	Date	REVISION	By App'd

TOWN OF VICTORIA PARK 99 SHEPPERTON ROAD, VICTORIA PARK

THIS DRAWING REMAINS THE PROPERTY OF THE TOWN OF VICTORIA PARK AND MUST NOT BE
RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF THE DIRECTOR TECHNICAL SERVICES

DESIGNED	AH	17
DRAWN	AH	17
CHECKED	?	17
RECOMMENDED		

SCALE	1:1000
DATUM	ASSUMED
APPROVED	

RAPHAEL PARK AREA EXISTING PARKING RESTRICTIONS

SHEET	OF
DRAWING NO.	P10151 -
Job No.	

A3

Attachment 4

Acoustic Report - received 03 August 2017

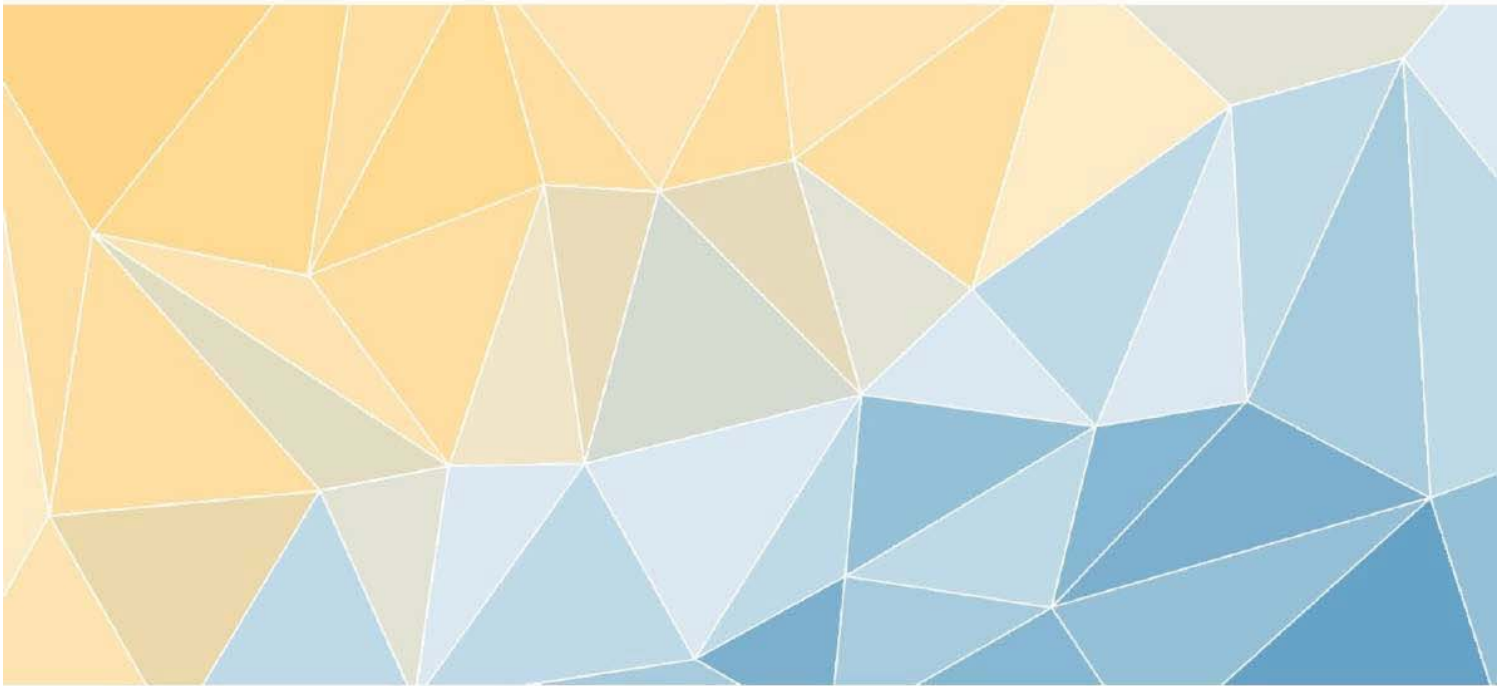


ARCHITECTURAL ACOUSTICS

DEVELOPMENT APPROVAL REPORT

**REGENT COLLEGE
ELEVATED PLAY AREA**

03rd August 2017



For

BRAD QUARTERMAINE ARCHITECT

27 Charles Street
SOUTH PERTH WA 6151

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Report Version	Author	Notes	Date
Initial Report	Michael Ferguson		11 th May 2017
Rev A	Michael Ferguson	Updated information of noise sources	11 th May 2017
Rev B	Michael Ferguson	Created thorough acoustic assessment report	02 nd August 2017
Rev C	Michael Ferguson	Minor conclusion & diagram adjustments	03 rd August 2017



Gabriels Hearne Farrell Pty Ltd is a Member Firm of the Association of Australasian Acoustical Consultants. The report author is a full member of the Australian Acoustical Society.

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1. INTRODUCTION

As requested, this report summarises the potential noise emissions from the elevation of an external playing court at Regent College, Victoria Park. The purpose of this report is to conduct a thorough assessment of these noise emissions, comparing the existing noise experienced by the neighbouring noise sensitive premises to the likely noise emissions once this development is completed.

This report is based upon drawings received from the architect on the 27th July, 2017. This report outlines the following:

- Demonstrates that the project team is aware of their Regulatory obligations with regards to noise emissions,
- Establishes the project specific Assigned Noise Level criteria in accordance with the Regulations,
- Identifies the relevant Noise Sources and the Assigned Noise Levels applicable to each source,
- Identifies acoustic issues that will be addressed in detail during design and documentation stages, to ensure compliance with the Environmental Protection (Noise) Regulations (EPNR),
- Provides an initial assessment and recommendations to ensure compliance with the EPNR where required,
- Provides an assessment of potential noise emissions in comparison to the existing emissions, including:
 - Vehicle movements
 - Vehicle door closes
 - Use of outdoor playing court

2. ENVIRONMENTAL NOISE EMISSIONS

2.1 Background

Noise emissions generated by the use of the proposed facilities must comply with the Environmental Protection (Noise) Regulations, 1997 (as amended Dec 2013). The criteria for noise emissions from this development to neighbouring premises are called the Assigned Noise Levels, and vary depending on time of day, receiver location, duration of the noise source etc.

However it must be noted that most activity noise emissions from schools are considered to be Community Noise and are therefore technically exempt from compliance with the regulatory Assigned Noise Levels. According to Regulation 16 and Schedule 2 (Item 4), the "exempt noise" applies to:

"Noise emitted from a recreational or educational activity on educational premises under the control of the principal. The activity may include musical instruments, but not mechanical equipment"

For the purposes of this report, the noise emissions that are required to meet the EPNR are:

- Vehicle movements
- Vehicle door closes
- Fire pump (during testing periods)

The noise emissions from the use of the playing courts is technically not required to achieve compliance, however this is largely up to the discretion of the local council. The purpose of this report is to simply compare the current noise emissions with the predicted future emissions.

2.2 Noise Sensitive Receivers

The neighbouring highly noise sensitive premises are:

- Residences located to the South West of the proposed development. These are a line of predominately single storey units with the rear North Western units being 2 storey units. These units share a common boundary line with the proposed car parking / playing court area.
- There are some double storey townhouses located to the South East of the proposed development, across the other side of Geddes Street.

Our current calculations and recommendations are based upon these above mentioned properties.

2.3 Influencing Factor

The site specific Assigned Noise Level criteria takes into account the land zoning and traffic flows within 100m and 450m of the relevant receiver locations. This has been based on the satellite imagery provided by Google Earth, as well as the traffic flow information provided by the Mains Roads WA website.

Land Zoning Influencing Factor

There is no commercial land within the inner circle, and approximately 10% of the outer circle is deemed to be commercial in nature. Therefore the Influencing Factor for land use is a +1dB(A) adjustment to the Assigned Noise Levels.

Transport Influencing Factor

Typically, the amount of traffic on nearby roads has an influencing factor on the assigned noise levels. In this instance there are two major roads within the outer 450m radius, however only one of these roads can be accounted for. Therefore there is a +2dB(A) influencing factor applied for traffic.

These areas and roads can be seen in the Assigned Noise Level image below:



Image 01 – Relevant Assigned Noise Level Influencing Factors for the most effected Noise Sensitive Receivers

2.4 Assigned Noise Levels

Based on the above, there is an Influencing Factor +3dB(A) relevant to the residences in the surrounding area to the proposed development. On this basis, the regulatory Assigned Noise Level criteria to be applied to this development are:

Type of premises receiving noise	Time of day	Assigned Noise Level (dB)		
		L _{A10}	L _{A1}	L _{Amax}
Noise sensitive premises; highly sensitive area. (i.e. within 15m of a residential building)	0700 to 1900 hours Monday to Saturday	48	58	68
	0900 to 1900 hours Sunday and public holidays	43	53	68
	1900 to 2200 hours all days	43	53	58
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and public holidays.	38	48	58

Table 01 -Assigned Noise Levels

The sound level parameters used for the various environmental noise criteria are described below, based on an assessment period of 15 minutes up to 4 hours:

- L_{A10}** is the 'A' weighted noise level which is not to be exceeded for more than 10% of the time, e.g. for more than 10 minutes in 100 minutes. This is the parameter relevant to most HVAC equipment, and emissions from other longer term noise sources that run for extended duration (such as crowd noise, music, etc.).
- L_{A1}** is the 'A' weighted noise level which is not to be exceeded for more than 1% of the time, e.g. for more than 1 minute in 100 minutes, or up to 24 minutes in 4 hours. This is the parameter relevant to noise sources that only occur occasionally, for short durations, (e.g. vehicle movements).
- L_{Amax}** is the 'A' weighted noise level for individual events (e.g. car door closes) which is not to be exceeded at any time.

2.5 Adjustments for Noise Character

In accordance with Regulation 9, sounds with tonal, modulating or impulsive characteristics are deemed to be more annoying, and therefore an adjustment of +5dB is required to be added to the measured level for tonal and modulating characteristics, and +10dB for impulsive characteristics; where measurable at the point of reception.

In accordance with the noise assessment techniques described in the Regulations, noise emissions from most mechanical equipment such as condensing units etc. are considered tonal and therefore a +5dB adjustment is required to be added the measured (or predicted) level.

Based on the documentation, we have also assumed that the car parking bays are for the sole use of the school staff. Thus, any noise emissions from car activities, such as doors closing and car start-ups / vehicle movements, must also be assessed against the Regulations. In our experience there is no penalty applied to vehicle movements, however there is a +10 penalty for impulsiveness applied to vehicle door closes.

3. NOISE SOURCES

As discussed above, noise emissions required to achieve compliance with the EPNR are as follows:

- Vehicle movements
- Vehicle door closes
- Fire pump (during testing periods)

It is assumed that the above noise sources are only relevant to the daytime period of between 7am and 7pm Monday to Saturday. Usage outside of these hours for a school is generally atypical.

Any new mechanical equipment provided to the proposed building must also achieve compliance. However with the reduced information available at this stage, and the distance to neighbouring noise sensitive properties, we expect the units to achieve compliance. This must be assessed and confirmed in the later stages of this project.

Based on the above, the relevant EPNR criteria are shown against typical times of the proposed activities. The most stringent Assigned Noise Level criteria applicable to these periods will therefore be applied (as seen below).

Noise Emissions from Proposed Development		
	Time of Day	Relevant Assigned Noise Level
Vehicle Movements	7am to 7pm	L _{A1} 58dB(A)
Vehicle Door Closes	7am to 7pm	L _{AMAX} 68dB(A)
Fire Pump Testing	7am to 7pm	L _{A1} 58dB(A)

Table 01 – Noise Emissions and their Relevant Assigned Noise Levels

The noise assessment calculations below have been performed with SoundPLAN 7.4 noise modelling software and is based upon the following assumptions:

- The proposed construction of the elevated playing courts have a height of 2.8m above ground level and is constructed of a concrete slab.
- The South Western barrier wall on the elevated playing court is to be constructed from a clear / frosted piece of Danpalon or similar material and is solid up to 1.8m in height. (Note, 16mm danpalon or similar has an estimated performance of R_w 21. Whilst not much, this is efficient enough for this situation as the barrier only needs to perform as well as the noise flanking over the barrier extents).
- Testing of fire pump equipment will only be undertaken during daytime periods for less than 24 minutes in a 4 hour window.

Concerns have also been raised by the council specifically to the noise emissions from bouncing balls on a raised playing court slab, with the reradiated noise below carrying over to neighbouring noise sensitive receivers. Previous indicative measurements have actually been undertaken below a basketball court slab, and it was subjectively noted that the basketball impacts were barely audible. It is therefore expected that the noise level *above* the slab of the balls impacting the ground will noticeably outweigh the noise level of the same balls penetrating the slab.

3.1 Noise Sources Used in Modelling

Mechanical Noise

As discussed above, at this early stage of this documentation, the exact nature and location of the condensing units etc. are unknown. However it is not expected that this will pose a great degree of concern in achieving compliance due to likely distances to neighbours.

The testing of fire pumps however can be particularly problematic in achieving compliance with the regulations. This is largely due to the need to ventilate particularly noise pump equipment. Information regarding noise levels are spectrums are more readily available for typical fire pumps, and the location is currently indicated on the site plan. The spectrum for these units are as follows:

Sound Power Level of Fire Pump								
	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	dB(A)
Allied Pump set (Class 1)	82.1	90.1	96.3	99.3	93.4	92.7	87.0	100.0

Table 03 - Sound Power Levels of Fire Pump used in EPNR Assessment

Vehicle Noise

As discussed above, the noise emission from vehicle movements and car door closes have been included in the acoustic modelling of the proposed development. The noise levels used in this assessment are as follows:

Sound Power Level of Cars								
	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	dB(A)
Car driving slowly	81.9	79.1	73.4	68.6	68.7	65.6	61.4	73.6
Car door slamming	93.6	92.3	84.8	81.4	79.6	74.2	70.2	84.7

Table 04 - Sound Power Levels of Cars used in EPNR Assessment

Children Playing

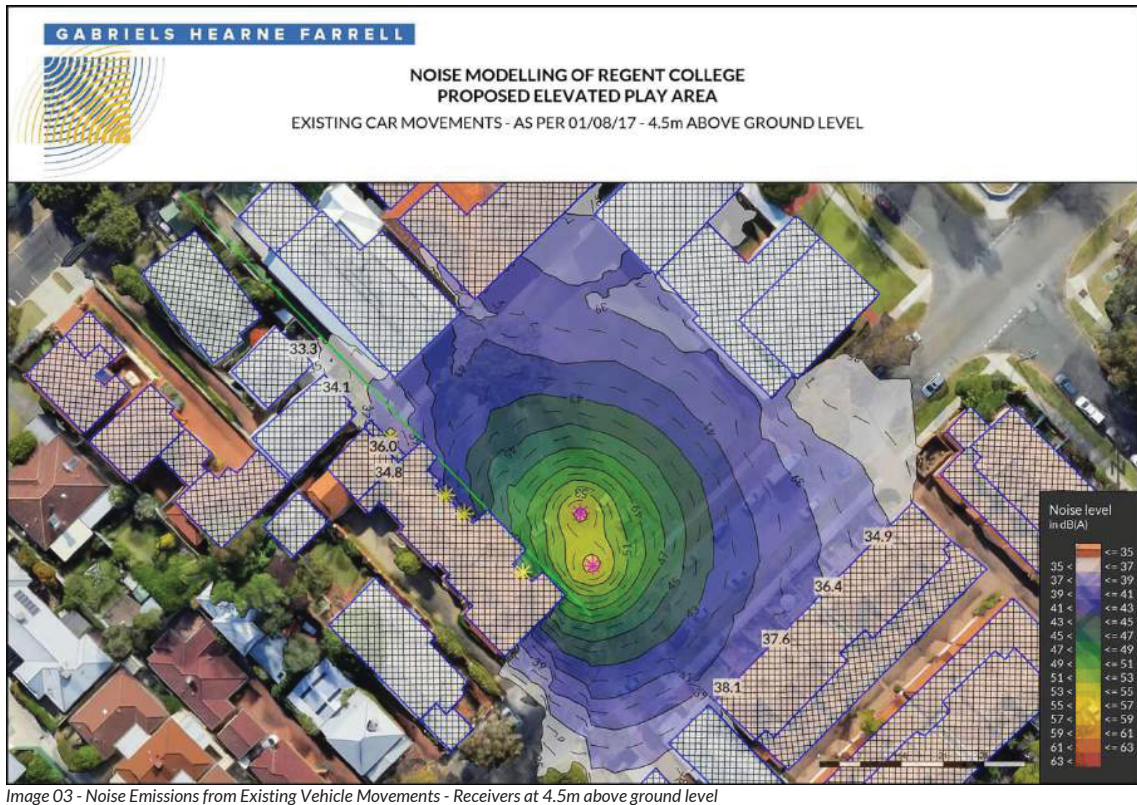
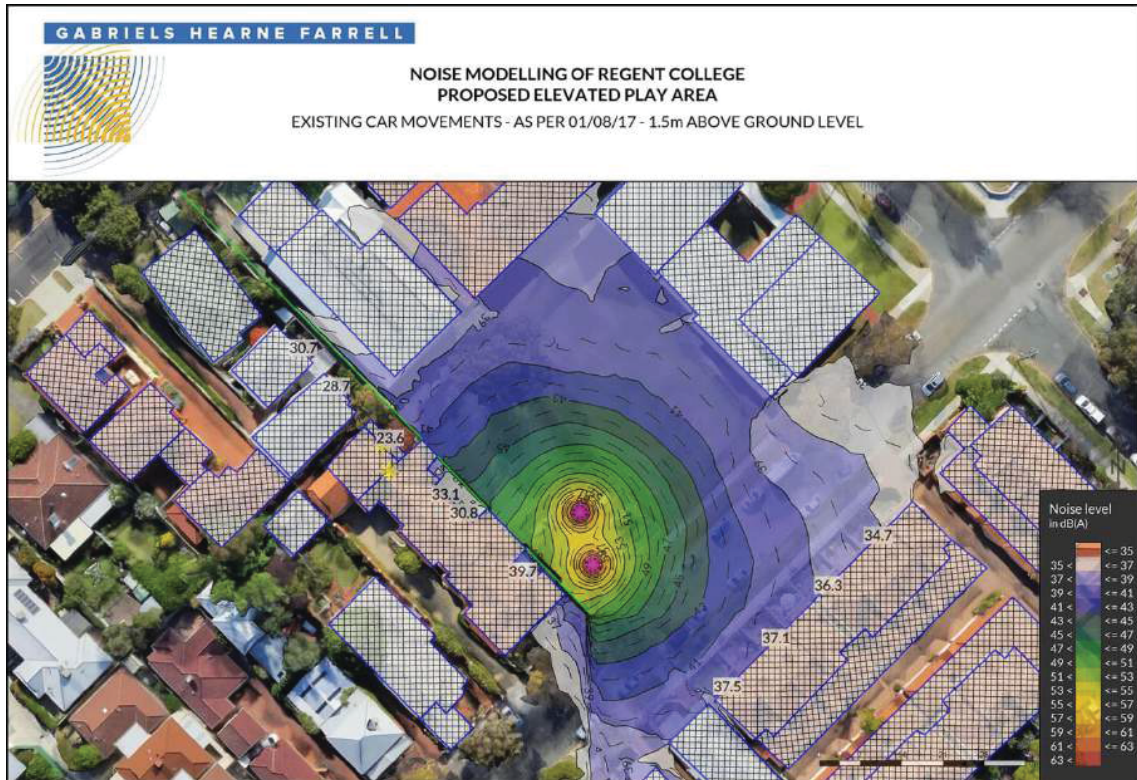
As discussed above the noise emissions from children using the playing courts is technically exempt from meeting the EPNR. However in assessing the expected noise levels in comparison to the existing levels, 6 children with a raised / shouting noise level were played on the court in the model. Each child has the same spectrum of:

Sound Power Level of Children on Playing Courts								
	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	dB(A)
Background noise	70.0	75.0	79.0	81.0	81.0	73.0	63.0	83.6

Table 05 - Sound Power Levels of Children used in EPNR Assessment

4. RESULTS OF ACOUSTIC MODELLING

4.1 Noise Emissions from Existing Vehicle Movements



4.2 Noise Emissions from New Vehicles Movements



Image 04 - Noise Emissions from New Vehicle Movements - Receivers at 1.5m above ground level

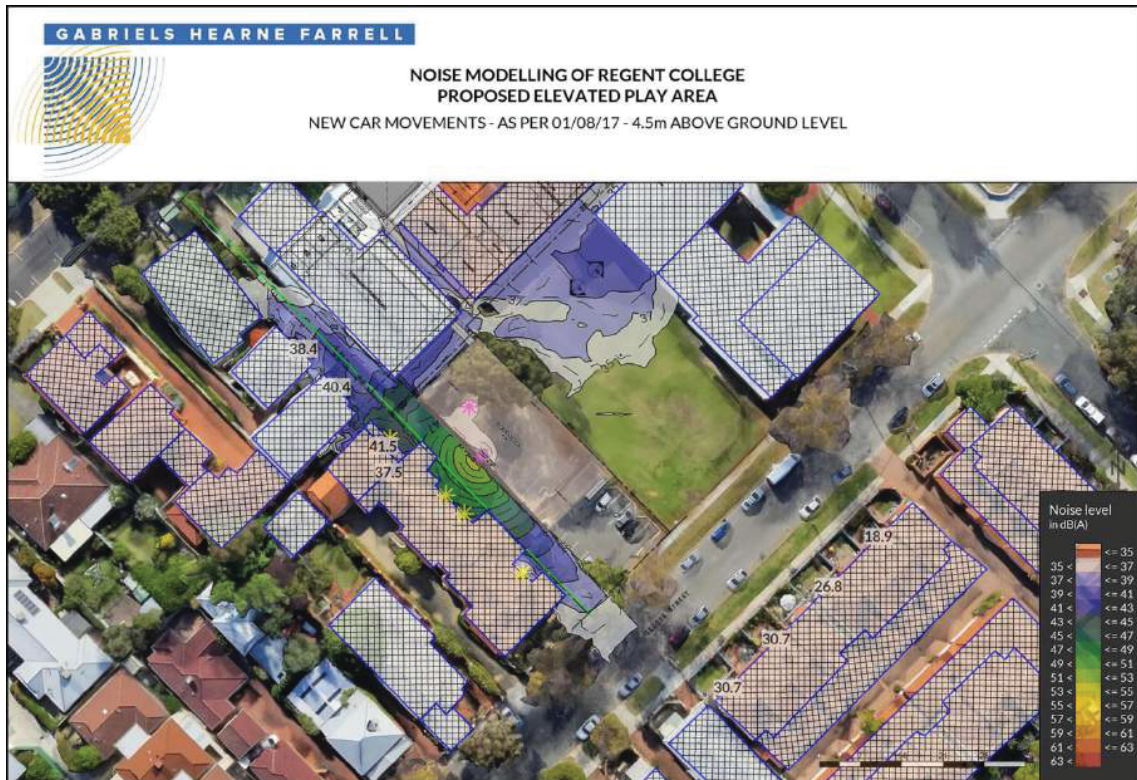


Image 05 - Noise Emissions from New Vehicle Movements - Receivers at 4.5m above ground level

Observations and Conclusions

As discussed above, both the vehicle movements and car door closes must comply with the Environmental Regulations. Due to these noise emissions being for a limited period of time, these are assessed against a less stringent criteria of L_{A1} and L_{Amax} respectively. The results of the acoustic modelling based on current documentation can be seen in the previous images.

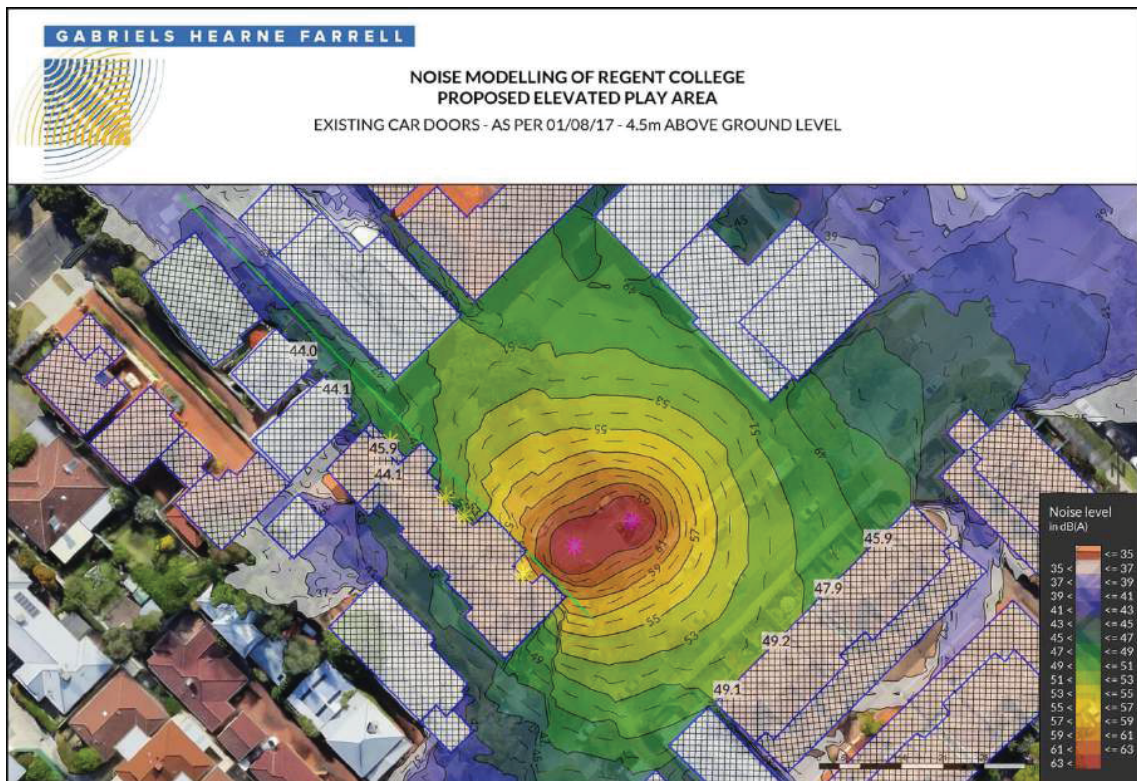
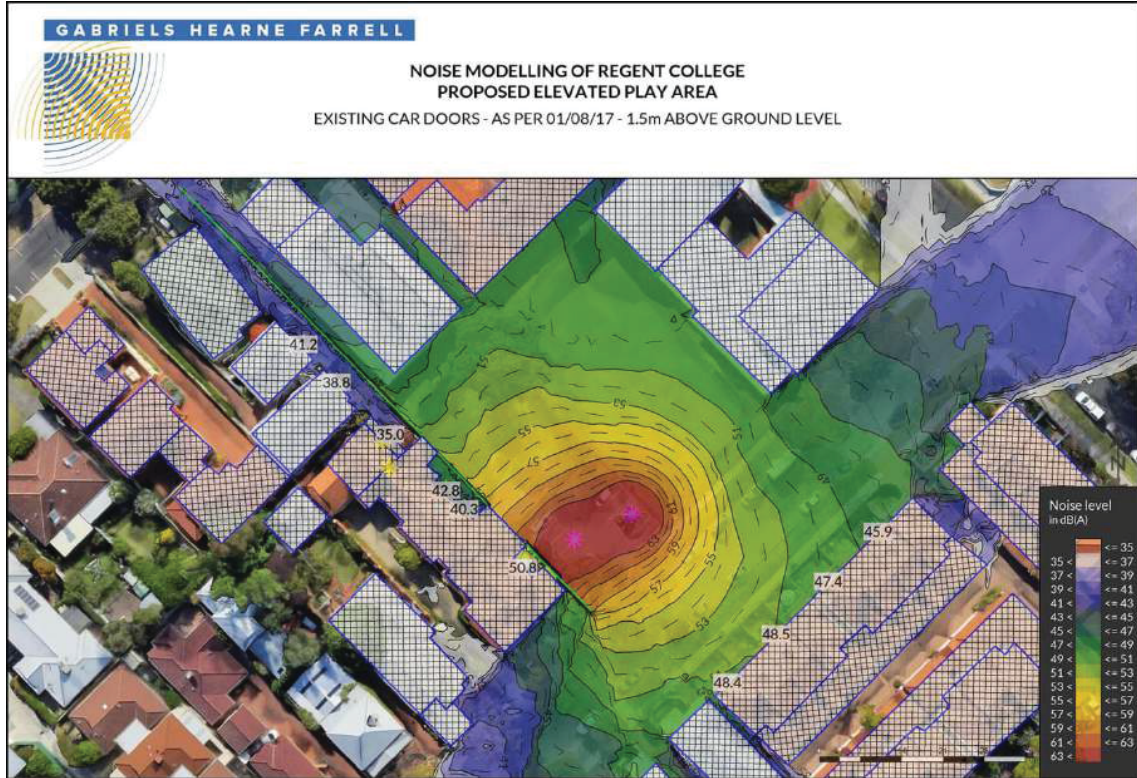
It can be seen in these images that the existing noise emissions from vehicle movements are approximately 39.7dB(A) at the worst case ground floor receiver position, and approximately 36.0 dB(A) at the upper floor receiver position on the boundary line.

With the proposed development the vehicle source positions were relocated further North West down the extended car parking area. With this new location and the proposed elevated play area, the approximate noise levels are now 39.6dB(A) for the ground floor and 41.5dB(A) for the upper floor.

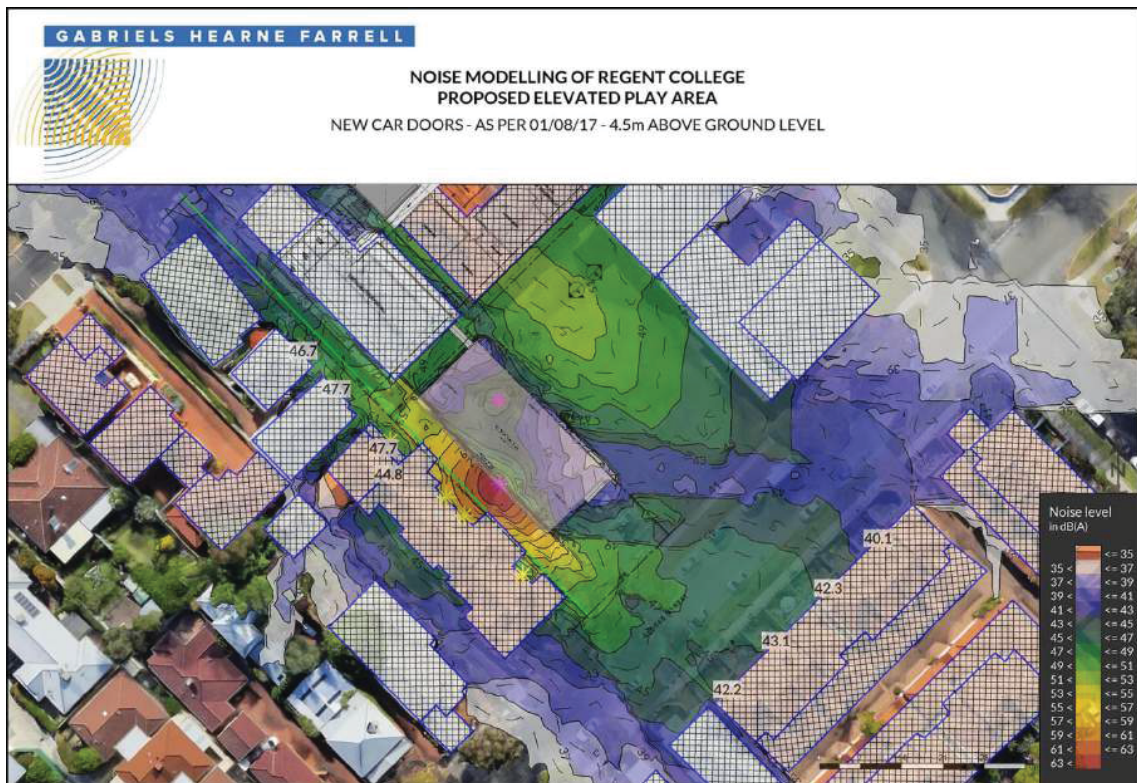
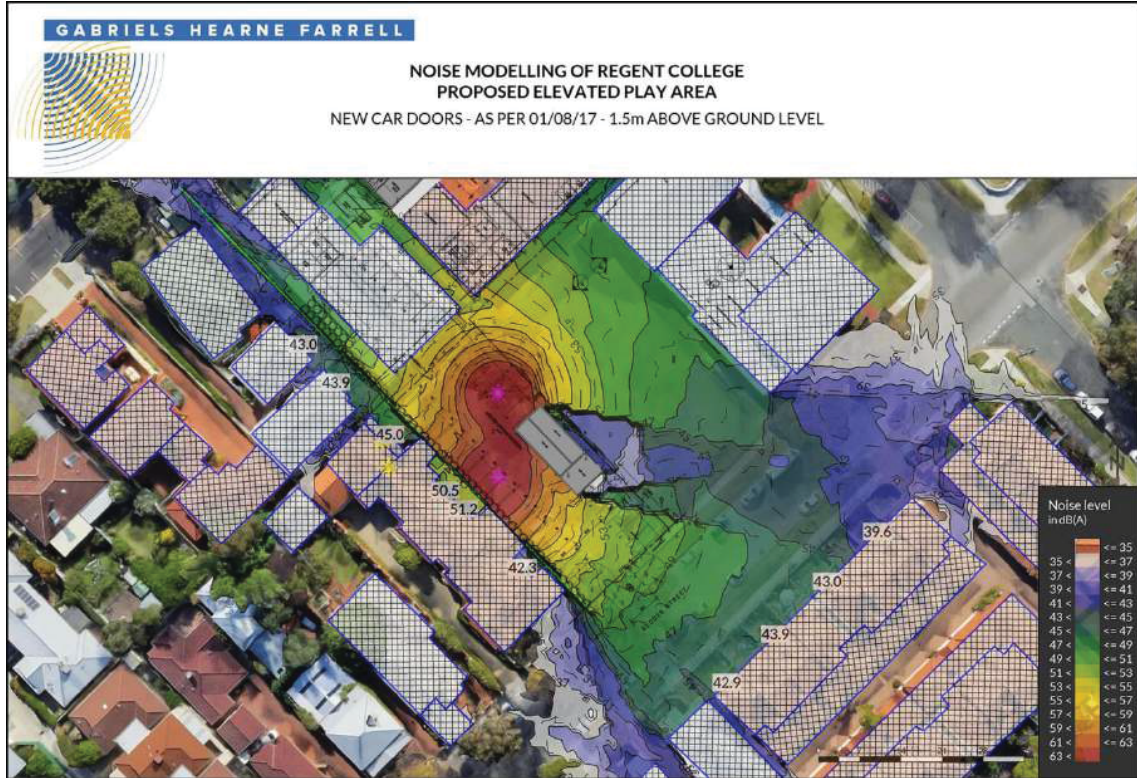
From these results it can be seen that the ground floor receiver positions do not increase in noise level, largely due to the continuation of the solid boundary fence along this line. The upper floor receiver position does go up approximately 6.5dB(A), however it must be noted that this is due to the location of the double story receivers along this boundary. If the units closer to Geddes Street were also double storey developments, then the 'existing' noise modelling would have been a higher noise level than the currently estimated 36.0dB(A). This increase of 6.5dB(A) is purely due to the car park extending closer to these particular units, and not an actual increase in noise levels due to the elevated playing court.

Nevertheless, with a predicted noise level of 41.5dB(A) at the worst case receiver position, this noise level easily achieves compliance with the relevant Assigned Noise Level of 58dB(A).

4.3 Noise Emissions from Existing Vehicles Doors



4.4 Noise Emissions from New Vehicles Doors



Observations and Conclusions

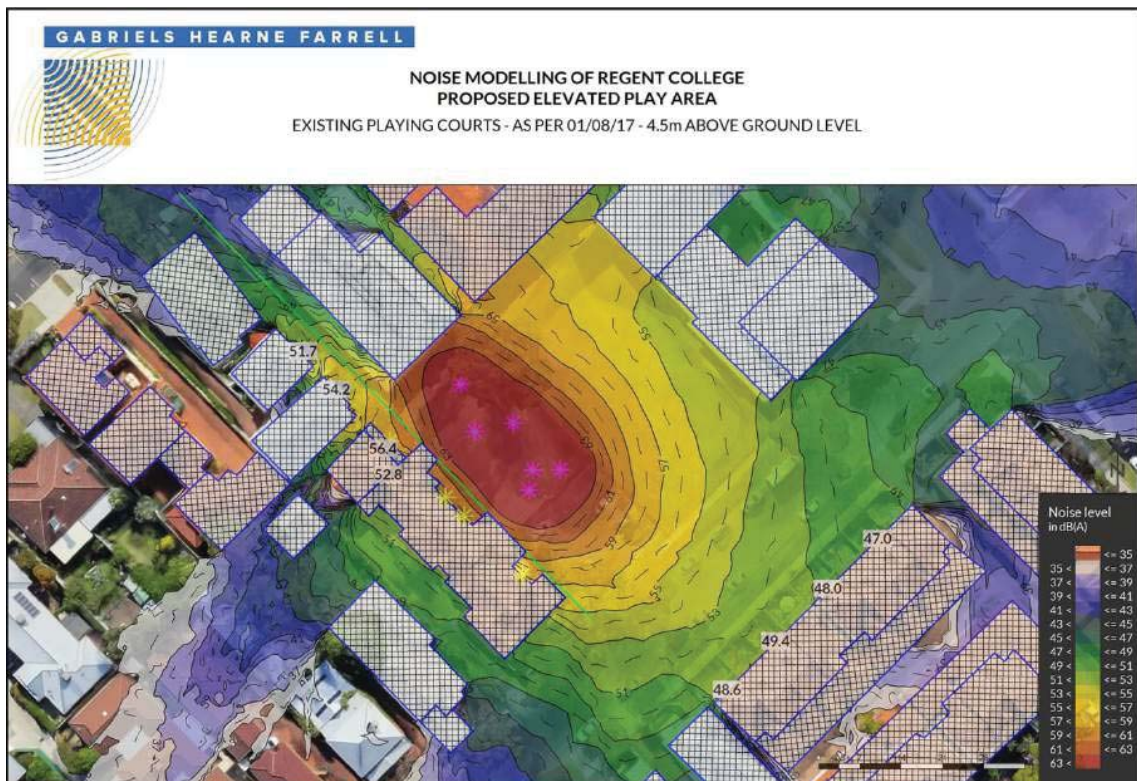
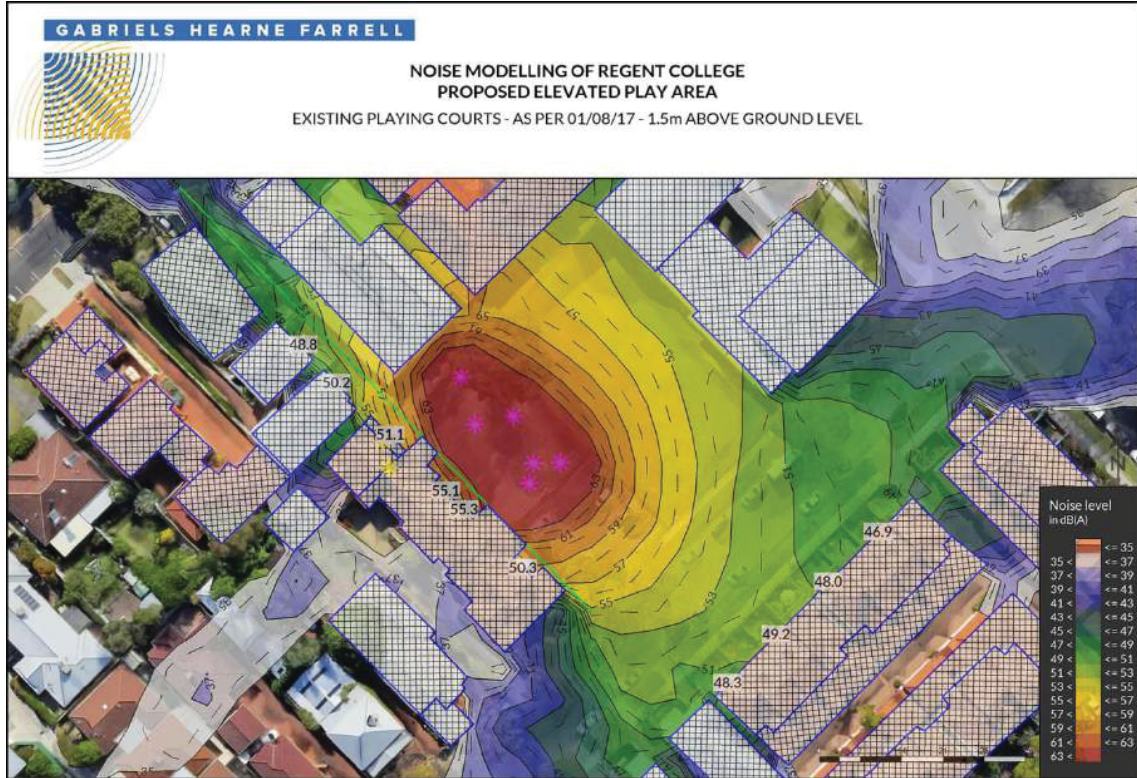
The results of the acoustic modelling for the vehicle door closes are relatively similar to the results for the vehicle movements modelled.

The noise levels from the existing car park at the worst case receiver positions are approximately 50.8dB(A) at the ground floor and 45.9dB(A) at the upper floor receiver. With the proposed development the predicted noise levels will be approximately 51.2dB(A) at the ground floor and 47.7dB(A) at the upper floor.

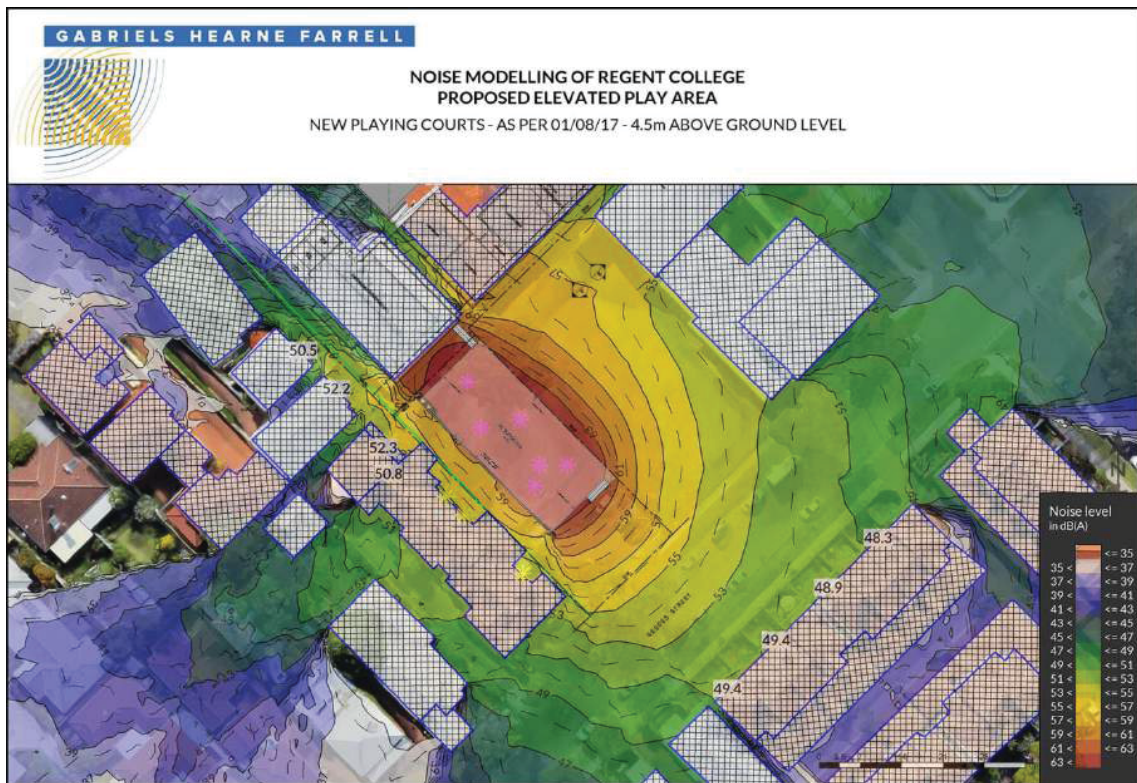
This indicates a marginal increase in noise level from the existing. The second storey receiver position does not have as large an increase in the noise level as the vehicle movements, however this is due to the vehicle bays chosen to reflect a representative spread of bays in concurrent usage. It should be noted that these particular bays were chosen to reflect to closest comparison to the ground floor receiver positions between the existing and the proposed. Should a closer bay to the second storey units be modelled then we would expect a similar increase in noise level to the vehicle movement study.

Again however, the worst case receiver position with a noise level of approximately 51.2dB(A), and allowing for the additional penalty for impulsiveness of +10dB(A), results in a predicted noise level of 61.2dB(A). This is still indicating compliance with the relevant Assigned Noise Level of 68dB(A).

4.5 Noise Emissions from Existing Playing Court Activities



4.6 Noise Emissions from New Elevated Playing Court Activities



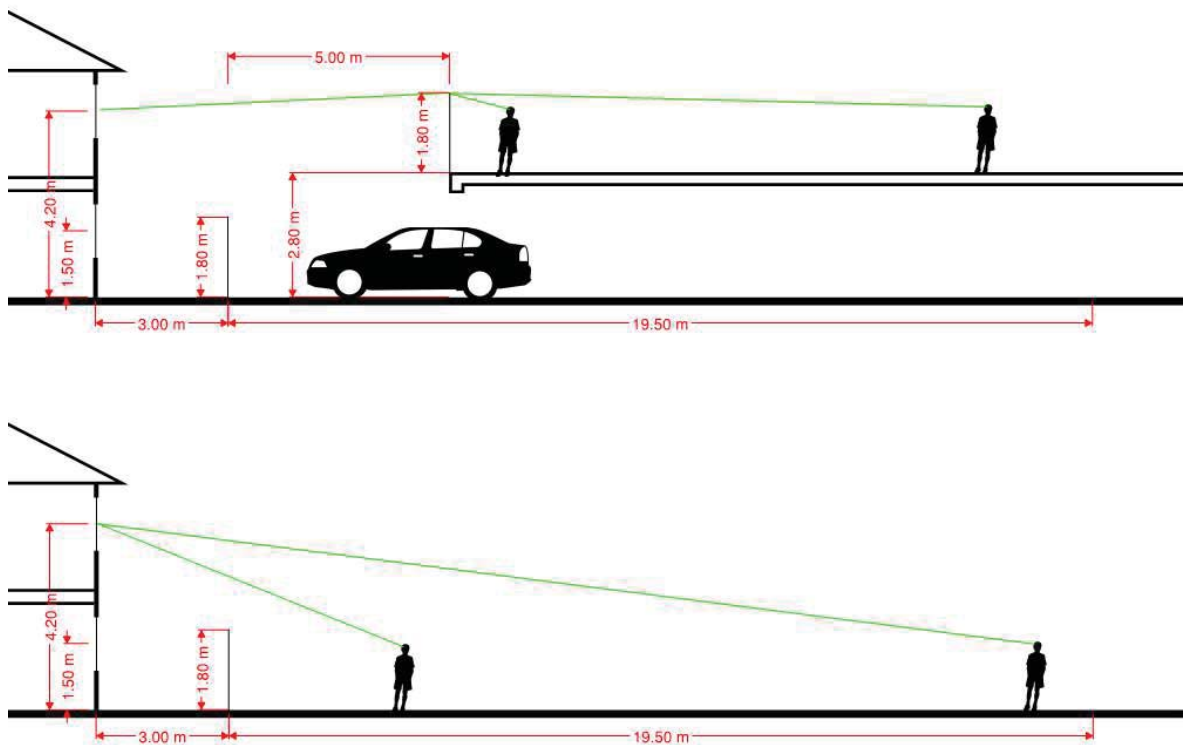
Observations and Conclusions

As discussed above the noise emissions from the activities on the playing court are technically exempt from meeting the EPNR. The purpose of this modelling is purely to compare a scenario on the existing playing courts, and then replicating that scenario on the proposed elevated playing court.

The documentation currently shows that the playing court has been raised approximately 2.8m above ground level, has a 1.8m solid barrier to the South West, and is shifted slightly to the North East.

The results of the modelling is indicating that the most effected ground floor receiver position has a predicted noise level of approximately 55.1dB(A), and 56.4dB(A) at the most effected upper floor receiver position. In modelling the proposed scenario as described above, the predicted noise levels are approximately 48.1dB(A) at the ground floor position and 52.3dB(A) at the upper floor position. This is indicating a reduction of approximately 4 to 7 dB(A).

These results reflect the previously estimated noise levels for the client, as whilst the noise source is raised higher up into the air, the barrier effect provided by the additional screening vs the existing boundary fence is noticeably increased. This is seen in the diagram below:



4.7 Noise Emissions from Fire Pump

An indicative assessment of the fire pump room has been conducted. This was undertaken to review the likelihood of compliance being achieved with the fire pump room in the proposed location.

The modelling allowed for approximately 2m² of ventilation louvres to the North East side of the fire pump room. These louvres were simple weatherproof louvres with no acoustic attenuation, however the unit used inside for the calculations was a Class 1 packaged unit from Allied Pumps. The results of the modelling can be seen in the image below:

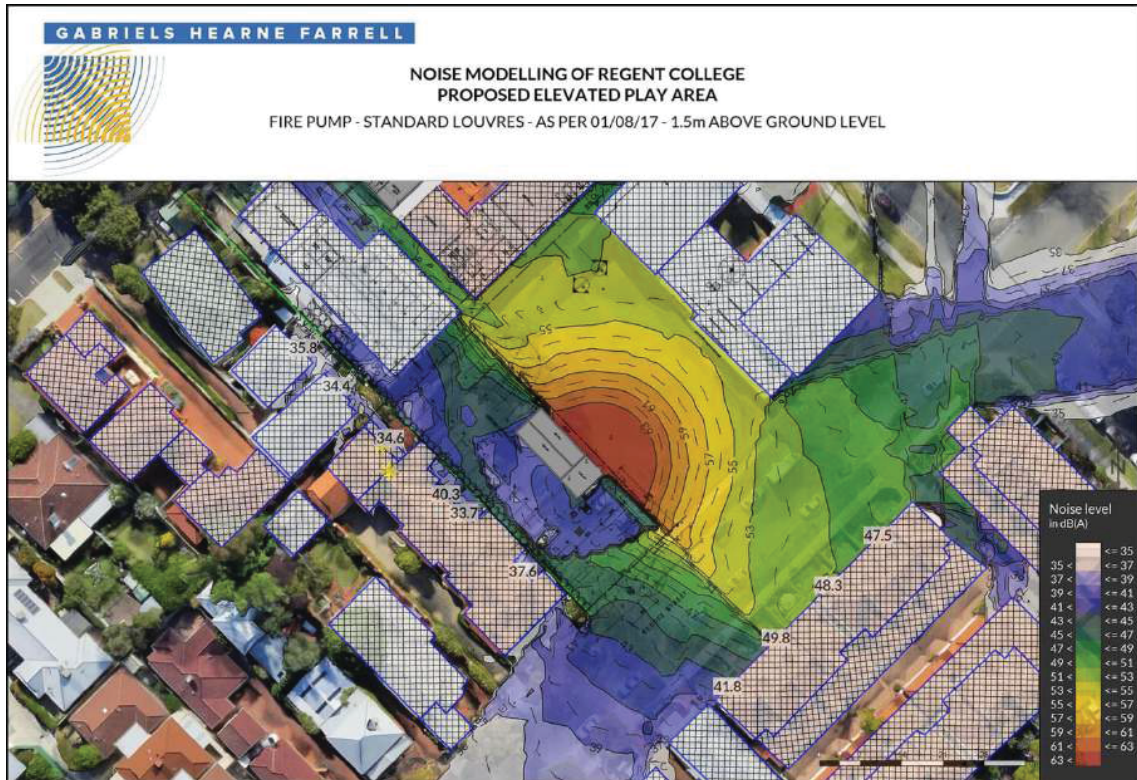


Image 14 - Noise Emissions from Fire Pump Room - Receivers at 1.5m above ground level

It can be seen from the above image that the most effected noise sensitive receiver position has a predicted noise level of approximately 49.8dB(A). Allowing for the penalty for tonality of +5dB(A), the predicted noise level is 54.8dB(A). This achieves compliance with the relevant Assigned Noise Level of 58dB(A).

In future stages the sizing and location of these louvres can be further analysed, however it is likely that these will only be allowed to the North East of this room. If an attenuated path is provided than an unpacked unit may achieve compliance, however calculations through the future stages of this project will be required to confirm this.

5. CONCLUSION

This report summarises the project requirements in terms of compliance with the Environmental Protection (Noise) Regulations, 1997. This includes determination of the relevant site specific Assigned Noise Level criteria.

A description of each noise source and applicable noise level criteria has been provided, including acknowledgment of relevant adjustments required for noise sources with particular characteristics.

A preliminary acoustic assessment and construction has been provided based upon a review of the current architectural documented supplied. In short, these calculations indicate that:

Noise Emissions from Vehicles

- For typical vehicle movements and car door closes, compliance is achieved during the daytime period, Monday to Saturday.
- The predicted noise level for the vehicle emissions indicates a similar expected noise level for the ground floor receiver positions, and a slight increase in noise level from the existing to the nearby two storey receiver positions. This increase is due to the parking area spreading closer to these double storey units.

Noise Emissions from Playing Court Activities

- A comparison scenario was run for the current playing court in comparison to the proposed elevated play area. With the additional screening provided by the solid 1.8m barrier along the South West of the new playing court, the predicted noise level has decreased across all receiver positions.

Noise Emissions from Potential Fire Pump

- A typical scenario for the fire pump room was run to indicate the likelihood of compliance being achieved with the fire pump room in this location. The results of this modelling are indicating that compliance is achieved provided that any testing is undertaken during the daytime period Monday to Saturday, and does not occur for longer than 24 minutes within a 4 hour period.
- The location of muffling of the fire pump exhaust point will also have to be considered in these future stage calculations.

If you have any queries regarding this information please call the undersigned on 9474 5966.

Regards,

Michael Ferguson

Associate Director B.IntArch(Hons) M.A.A.S.



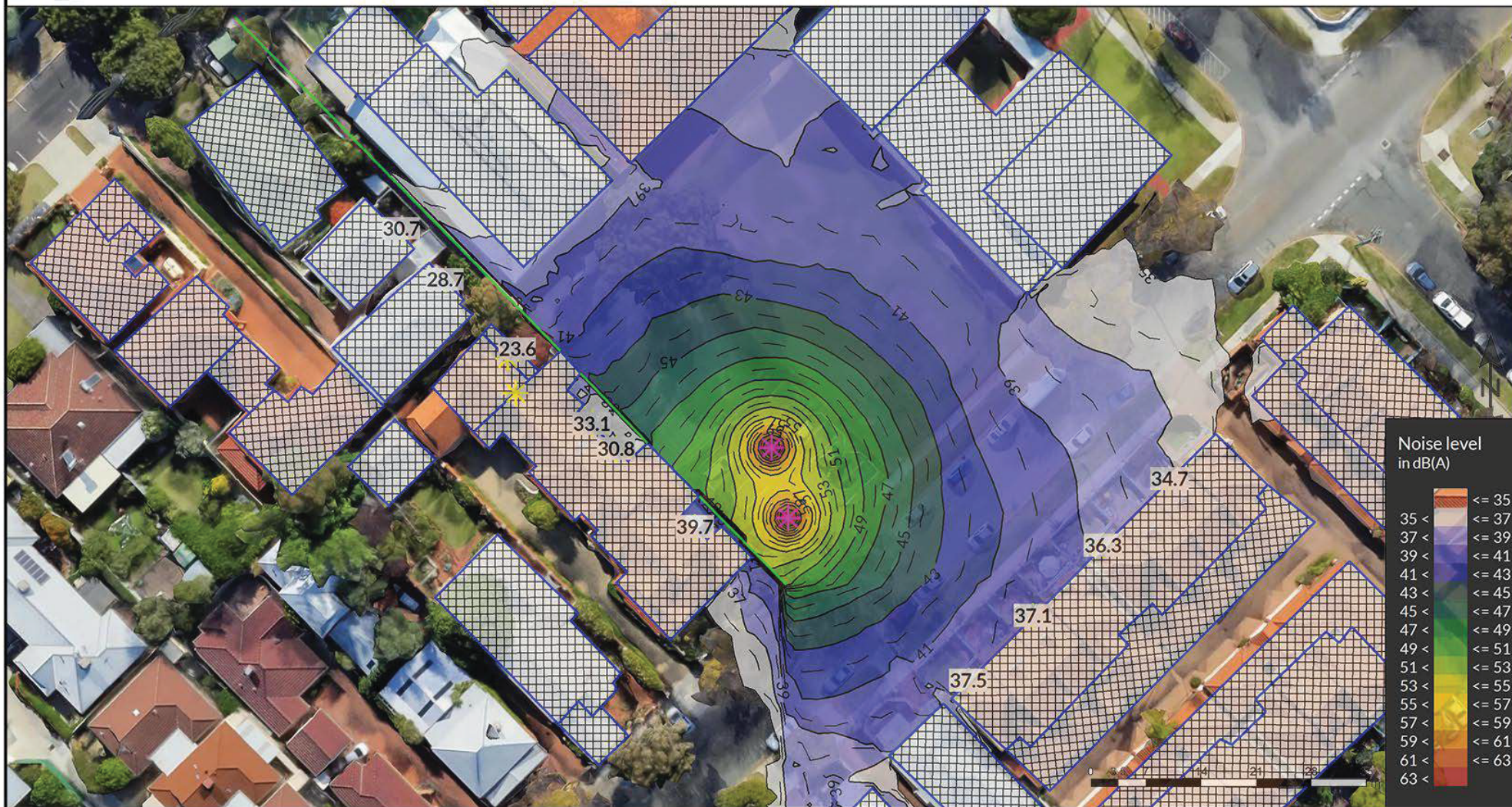
GABRIELS HEARNE FARRELL PTY LTD

Member Firm – Association of Australasian Acoustical Consultants

A Unit 3 / 2 Hardy St South Perth WA 6151 P (08) 9474 5966
E michael@gabriels.net.au W gabriels.net.au M 0423 880 388

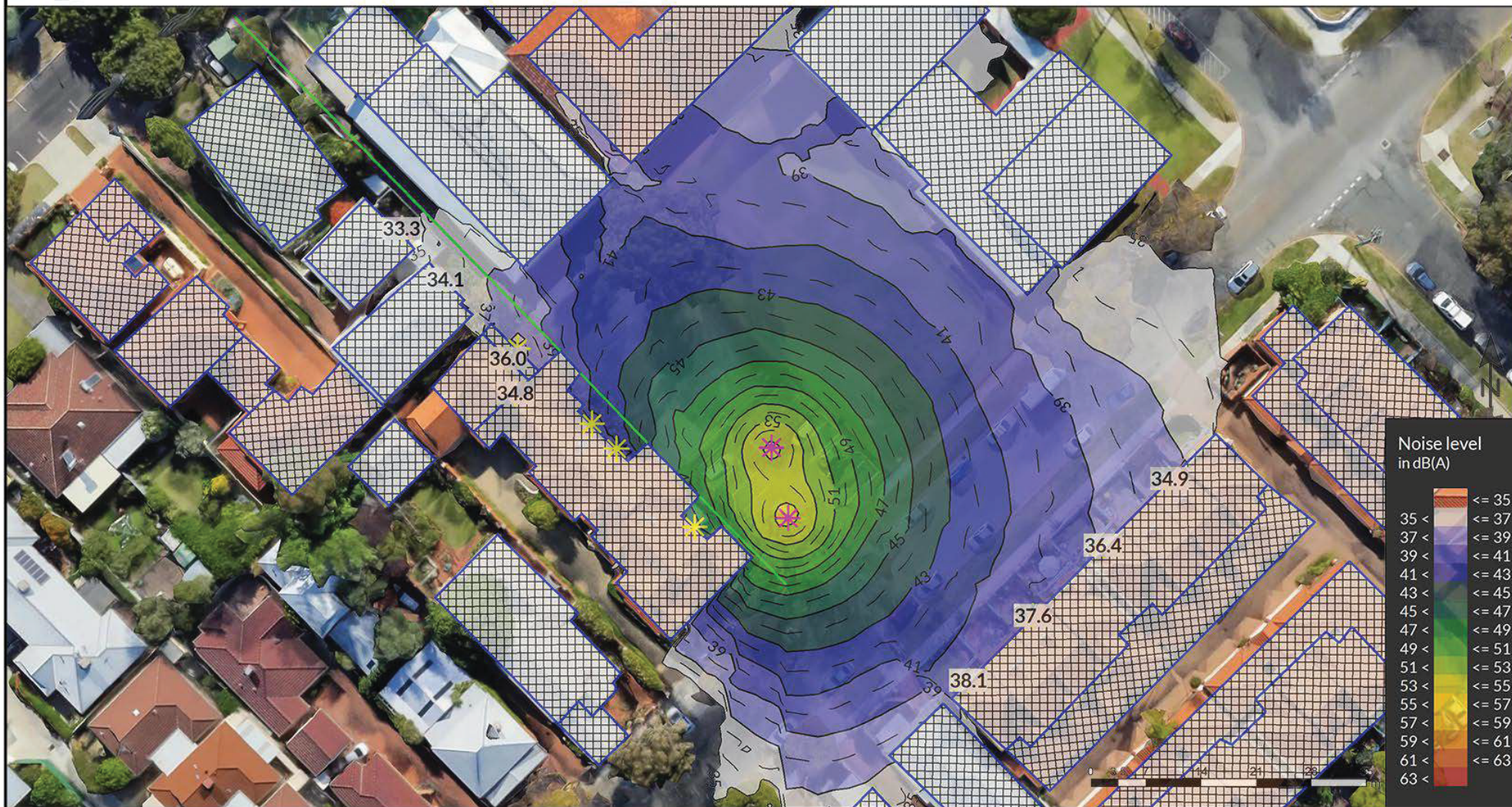
NOISE MODELLING OF REGENT COLLEGE PROPOSED ELEVATED PLAY AREA

EXISTING CAR MOVEMENTS - AS PER 01/08/17 - 1.5m ABOVE GROUND LEVEL



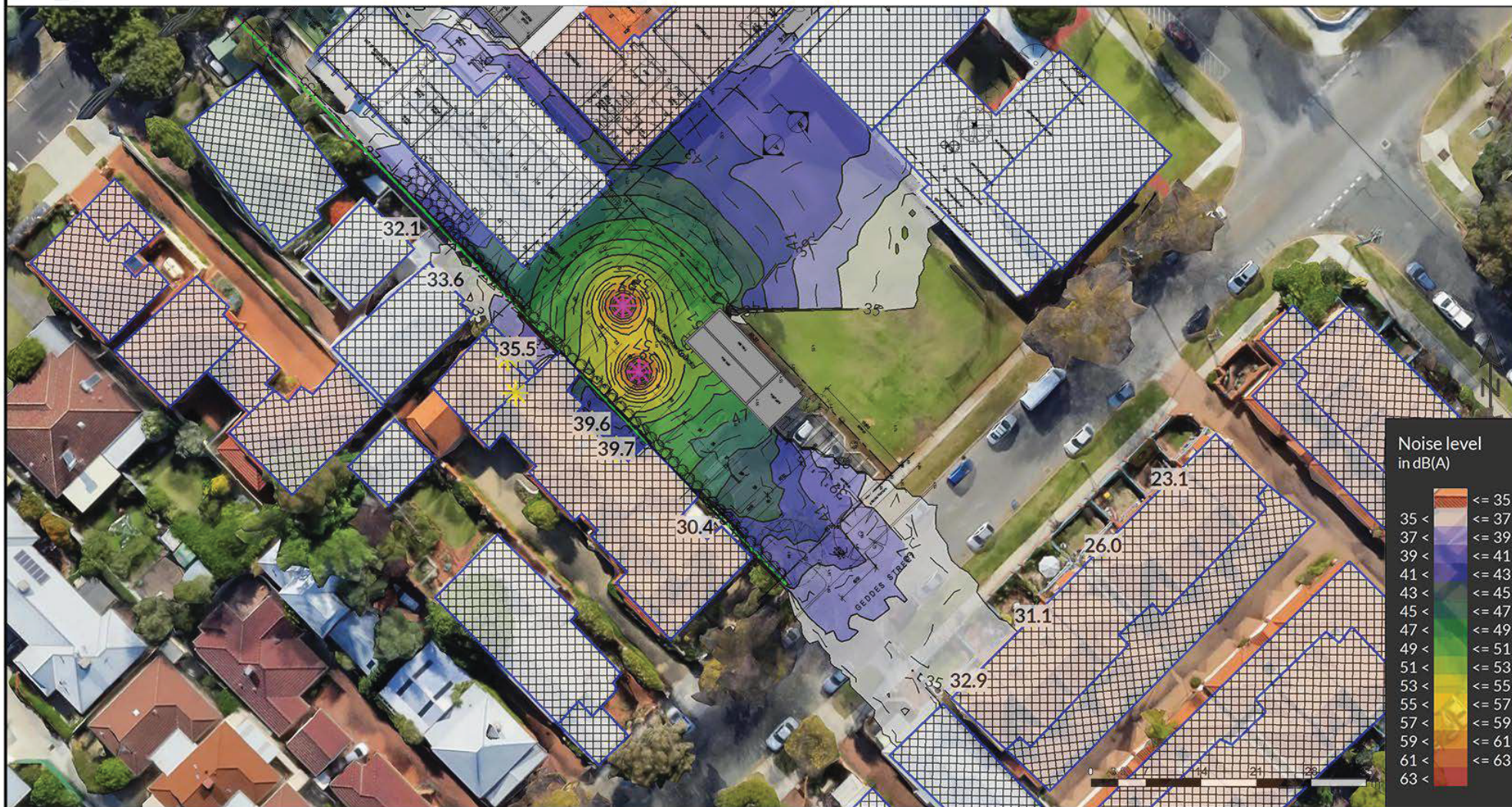
NOISE MODELLING OF REGENT COLLEGE PROPOSED ELEVATED PLAY AREA

EXISTING CAR MOVEMENTS - AS PER 01/08/17 - 4.5m ABOVE GROUND LEVEL



NOISE MODELLING OF REGENT COLLEGE PROPOSED ELEVATED PLAY AREA

NEW CAR MOVEMENTS - AS PER 01/08/17 - 1.5m ABOVE GROUND LEVEL



NOISE MODELLING OF REGENT COLLEGE PROPOSED ELEVATED PLAY AREA

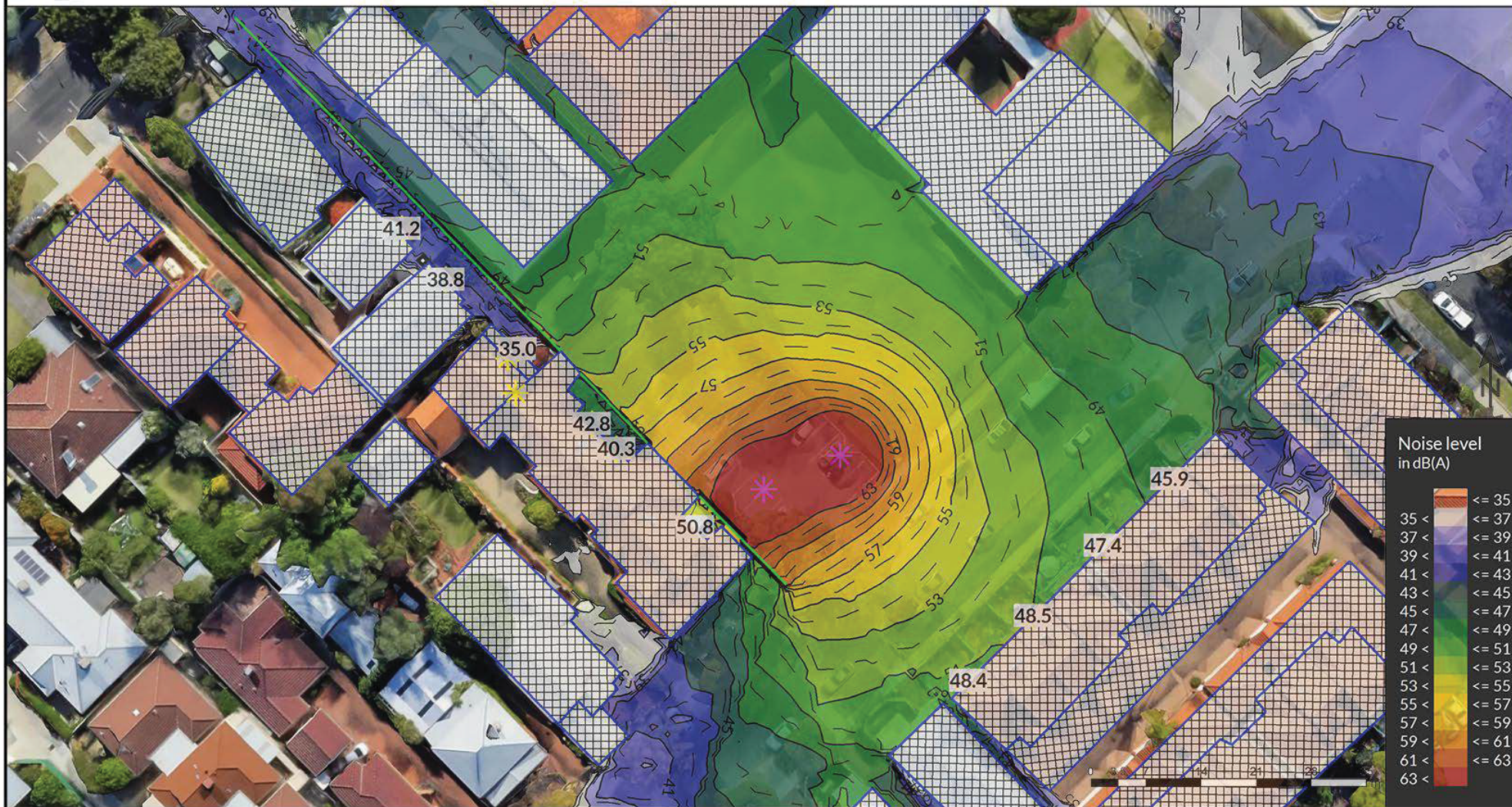
NEW CAR MOVEMENTS - AS PER 01/08/17 - 4.5m ABOVE GROUND LEVEL





NOISE MODELLING OF REGENT COLLEGE PROPOSED ELEVATED PLAY AREA

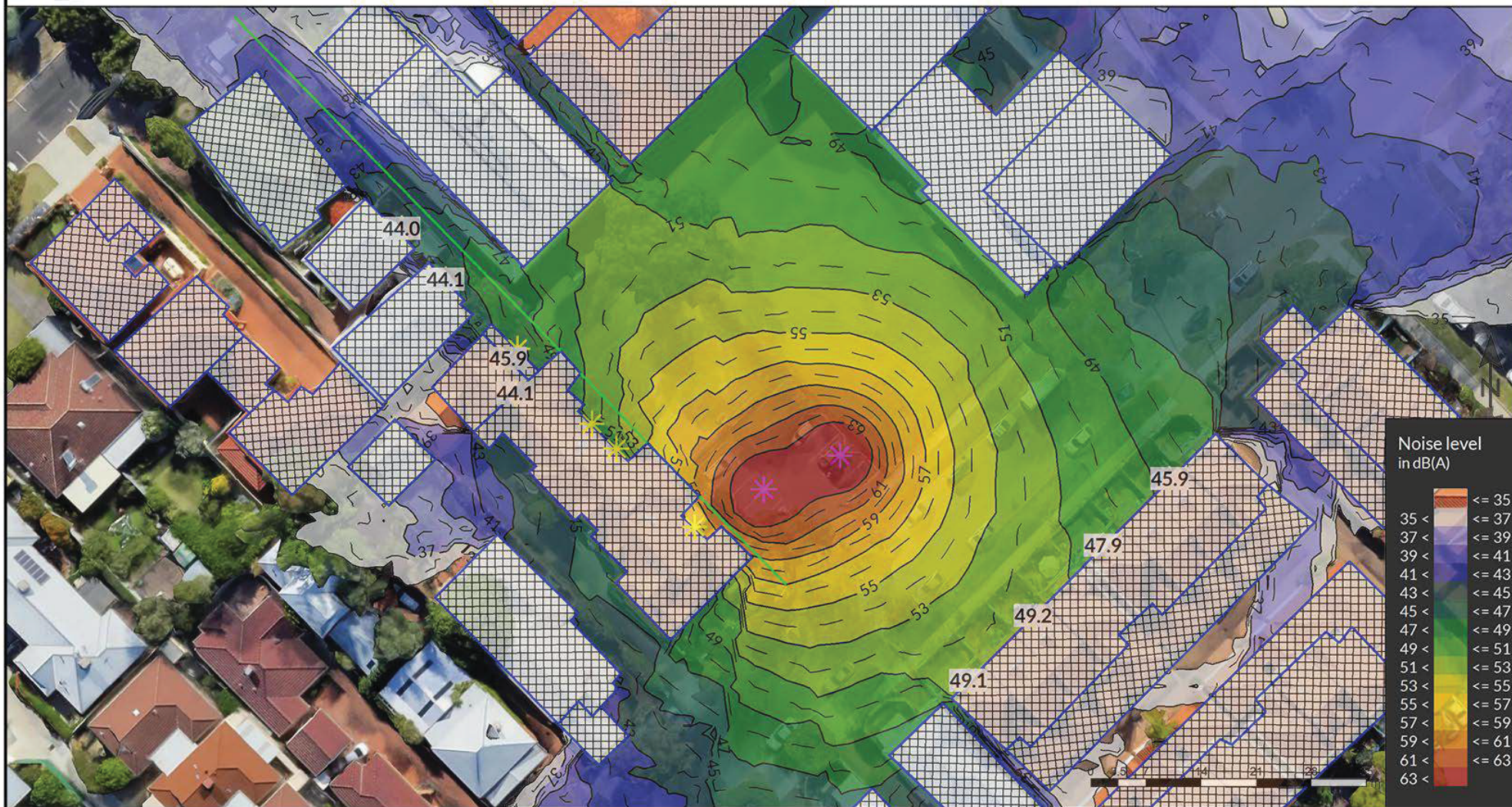
EXISTING CAR DOORS - AS PER 01/08/17 - 1.5m ABOVE GROUND LEVEL





NOISE MODELLING OF REGENT COLLEGE PROPOSED ELEVATED PLAY AREA

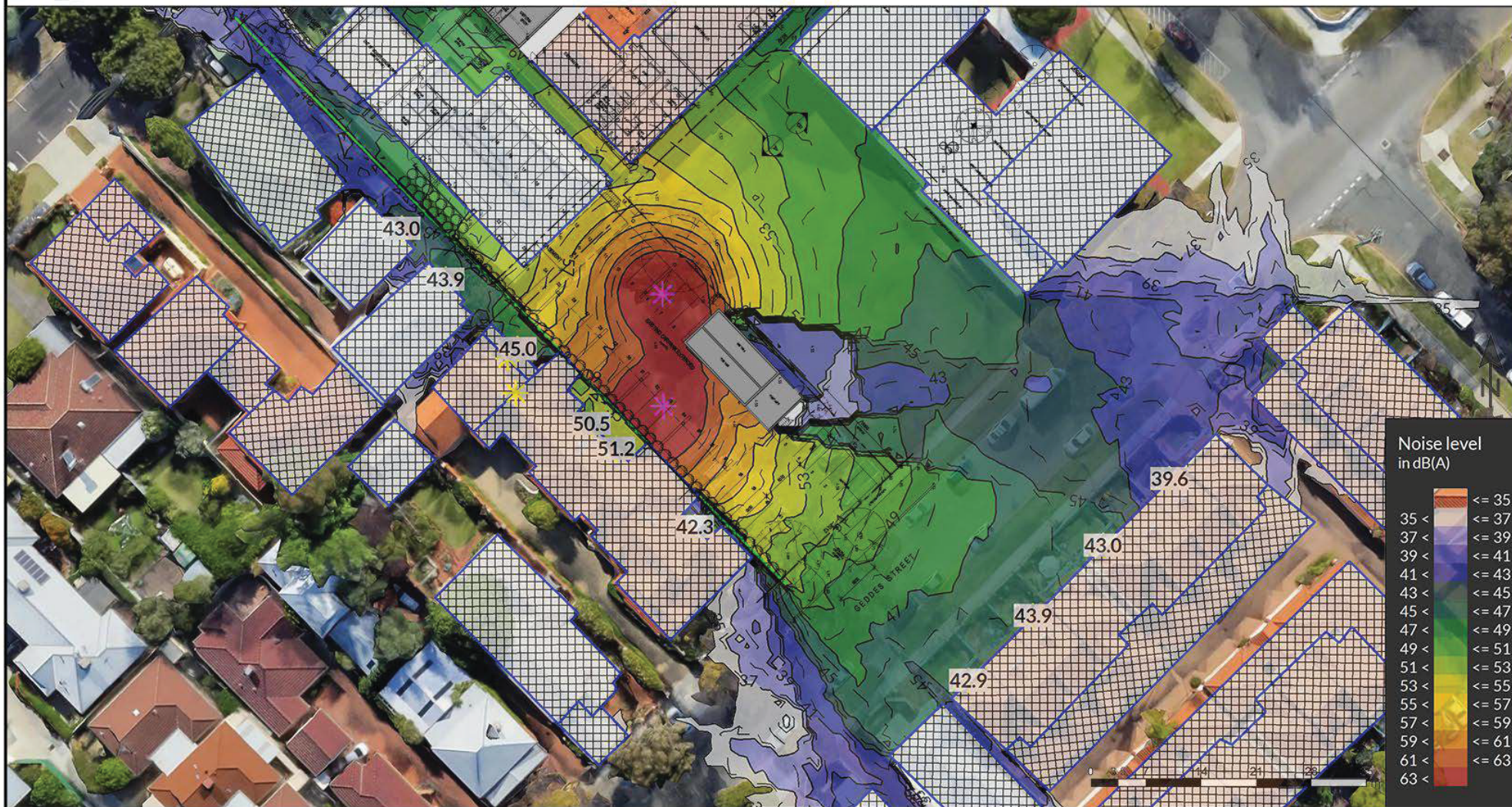
EXISTING CAR DOORS - AS PER 01/08/17 - 4.5m ABOVE GROUND LEVEL





NOISE MODELLING OF REGENT COLLEGE PROPOSED ELEVATED PLAY AREA

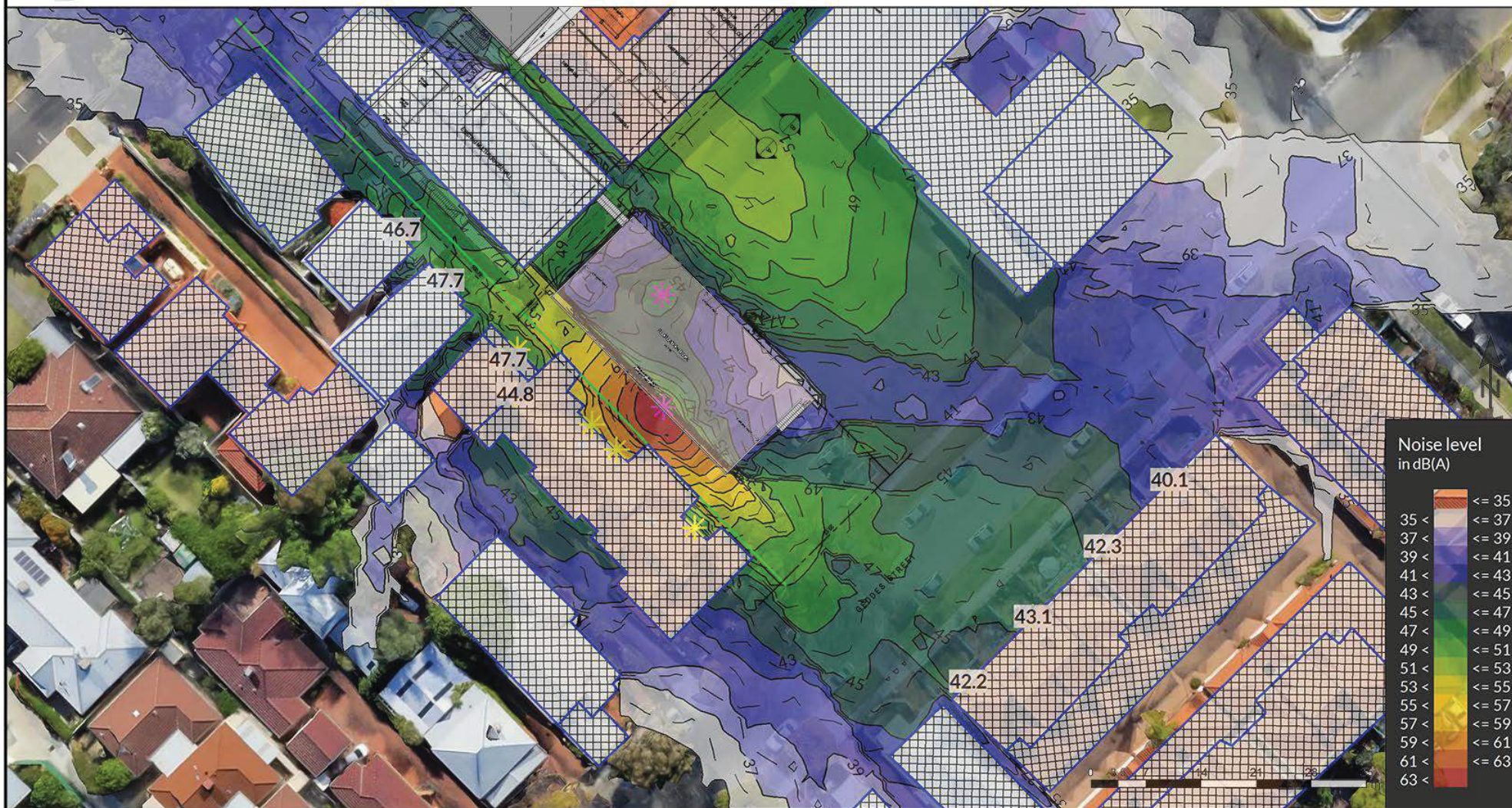
NEW CAR DOORS - AS PER 01/08/17 - 1.5m ABOVE GROUND LEVEL





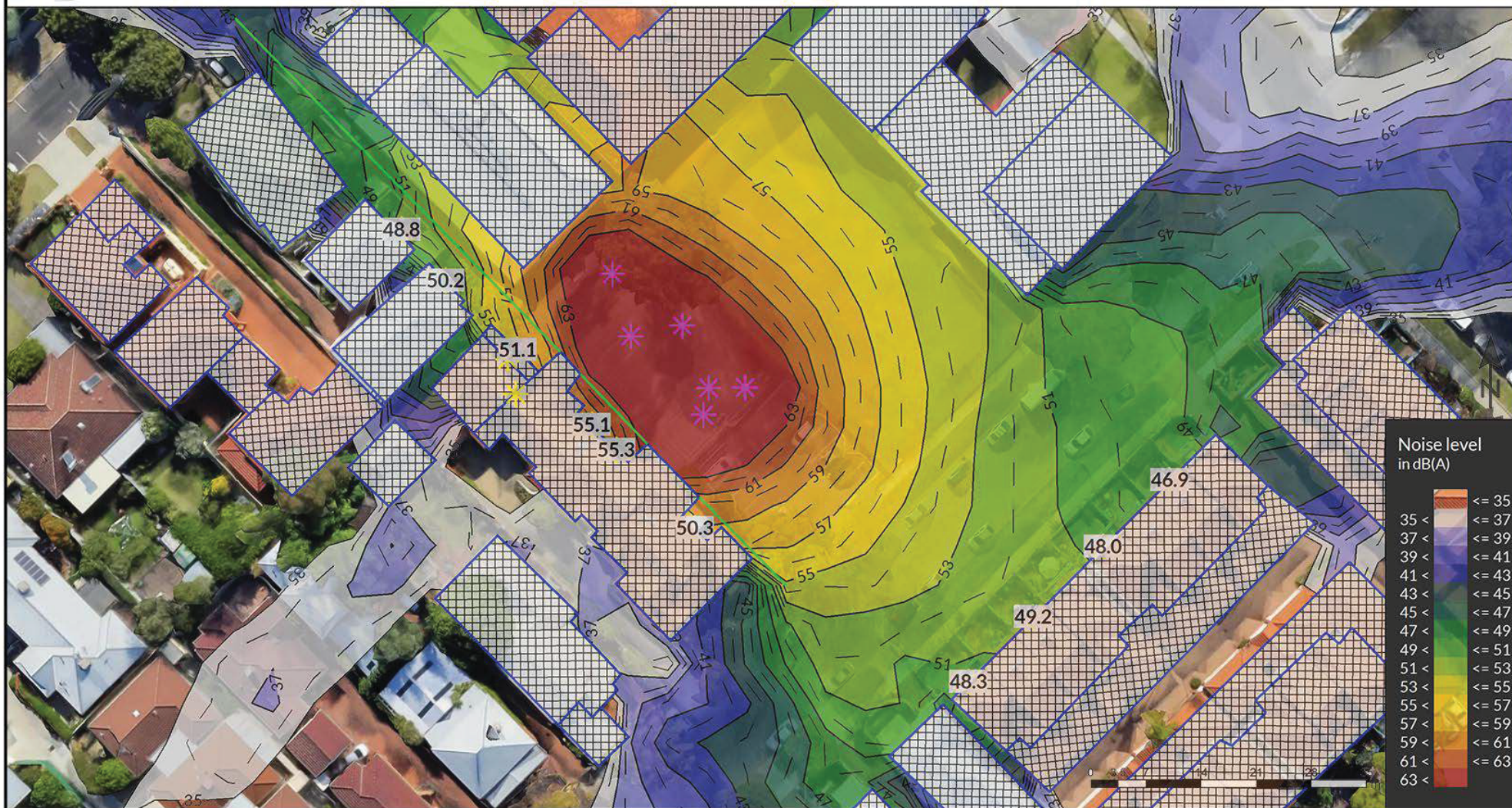
NOISE MODELLING OF REGENT COLLEGE PROPOSED ELEVATED PLAY AREA

NEW CAR DOORS - AS PER 01/08/17 - 4.5m ABOVE GROUND LEVEL



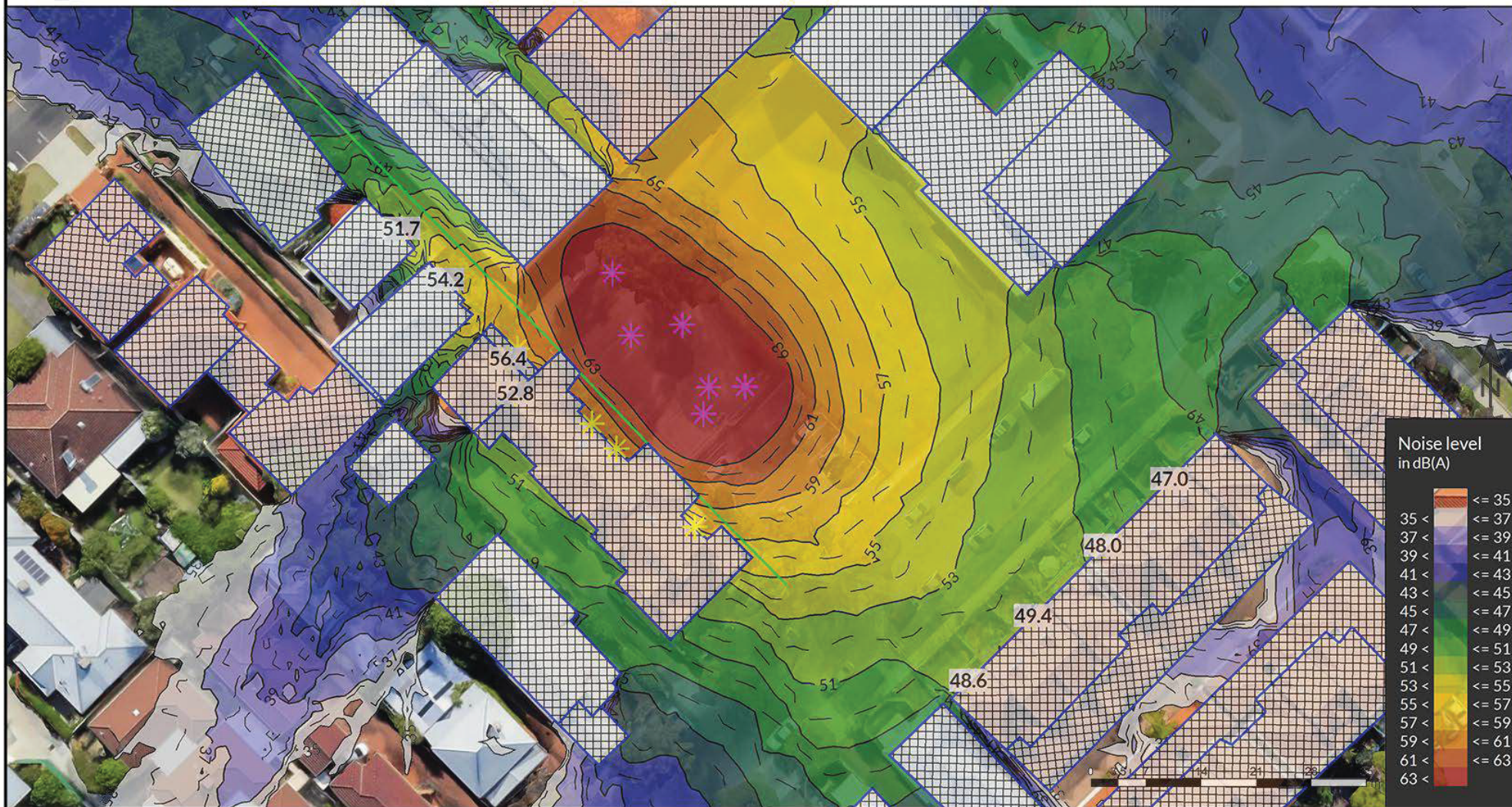
NOISE MODELLING OF REGENT COLLEGE PROPOSED ELEVATED PLAY AREA

EXISTING PLAYING COURTS - AS PER 01/08/17 - 1.5m ABOVE GROUND LEVEL



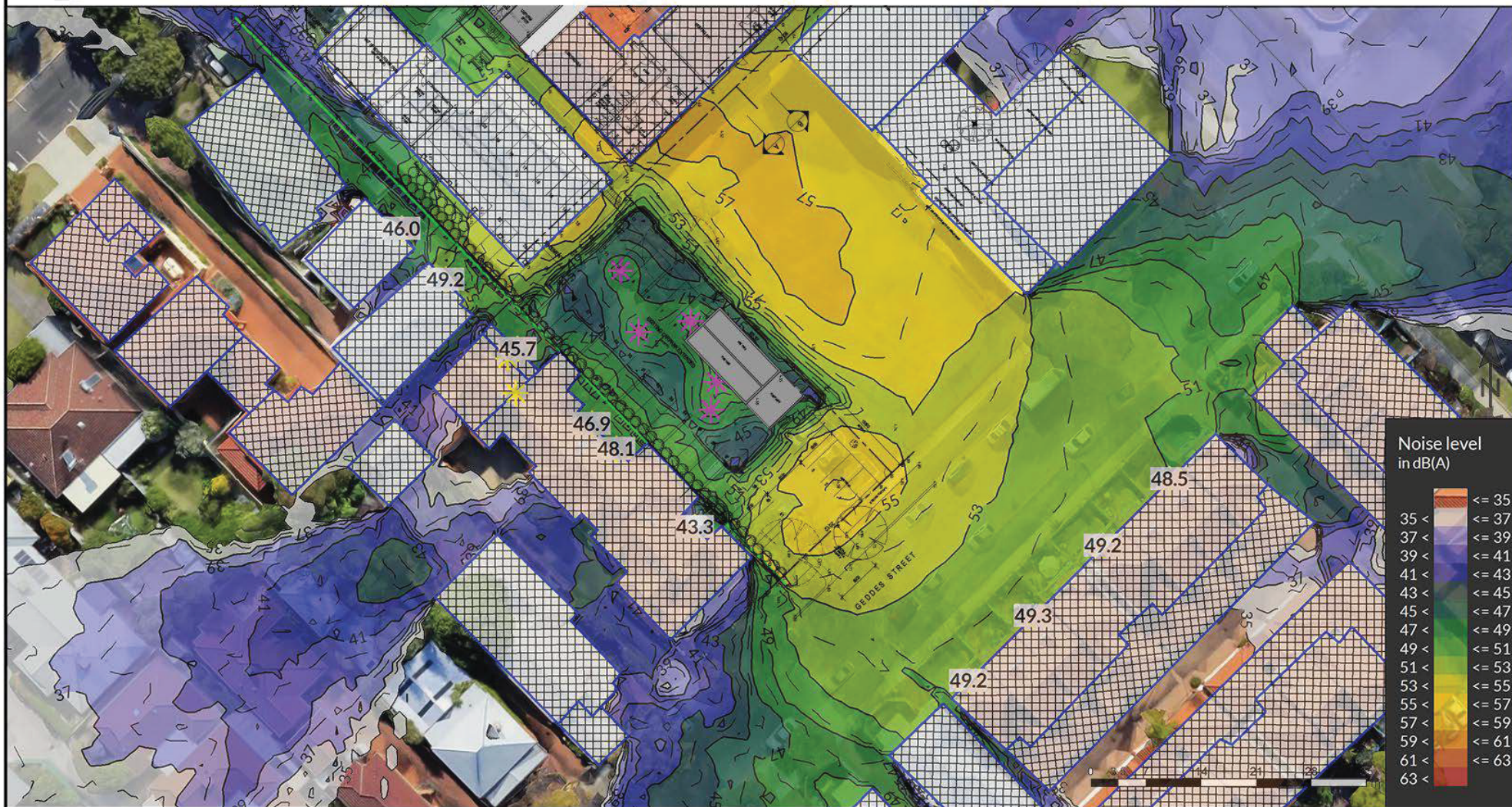
NOISE MODELLING OF REGENT COLLEGE PROPOSED ELEVATED PLAY AREA

EXISTING PLAYING COURTS - AS PER 01/08/17 - 4.5m ABOVE GROUND LEVEL



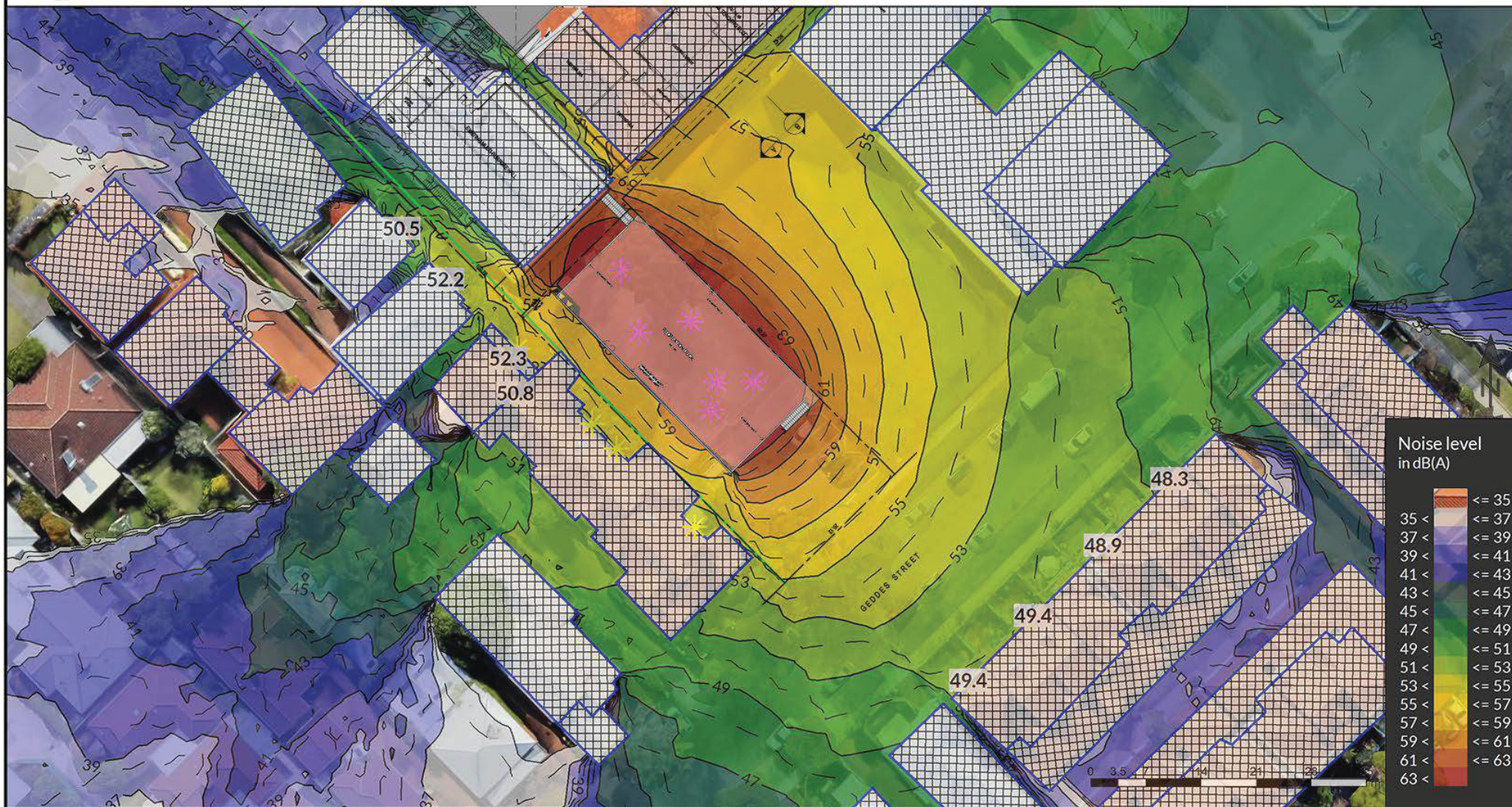
NOISE MODELLING OF REGENT COLLEGE PROPOSED ELEVATED PLAY AREA

NEW PLAYING COURTS - AS PER 01/08/17 - 1.5m ABOVE GROUND LEVEL



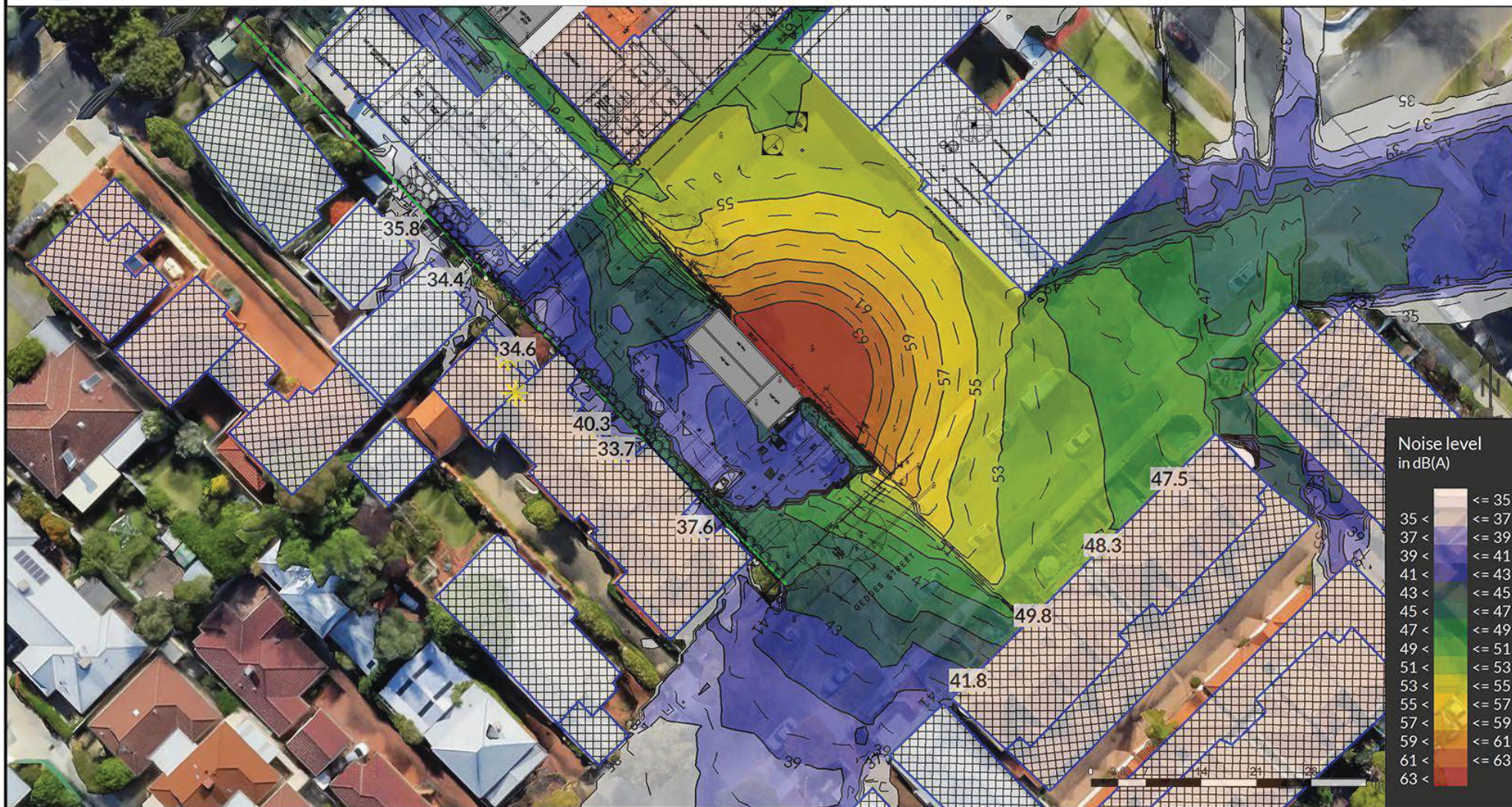
NOISE MODELLING OF REGENT COLLEGE PROPOSED ELEVATED PLAY AREA

NEW PLAYING COURTS - AS PER 01/08/17 - 4.5m ABOVE GROUND LEVEL



NOISE MODELLING OF REGENT COLLEGE PROPOSED ELEVATED PLAY AREA

FIRE PUMP - STANDARD LOUVRES - AS PER 01/08/17 - 1.5m ABOVE GROUND LEVEL



Attachment 5

Schedule of submissions

Vanessa Frankson

Subject:

FW: Planning Application reference no. 5.2017.385.1

[REDACTED]
Sent: Wednesday, 12 July 2017 7:54 PM

To: Records <records@vicpark.wa.gov.au>

Subject: Re: Planning Application reference no. 5.2017.385.1

We wish to strongly express our objection to the proposed development at 28 Columbo Street. We are concerned about the density of the additions and the perceived traffic issues that will be created in our suburban street. At the present time the traffic flow in Geddes Street is greatly impacted at school home time.

Our firsthand experience of parents waiting to collect their children is that almost every day the cars are double parked in Geddes Street as they queue. It appears that not many children walk to school. Buses and other vehicles coming along from Washington Street are forced to join the queue.

Parking is at a premium in Geddes Street most days and because of this we have witnessed parents sitting in cars parked on yellow lines and on some occasions parked across our access laneway and we have had to ask them to move on. We can only see this problem exacerbated if the proposal is accepted.

Geddes Street is extremely busy at present so we can foresee a gridlock situation arising if the pupil numbers rise from 256 to 423 and the associated traffic that would go with it.

If the proposal is accepted the huge increase in vehicular traffic would not be beneficial to pedestrians or cyclists and virtually impossible for residents to enter or exit their driveways.

The development might benefit the school but certainly not beneficial to the residents of the immediate area.



Vanessa Frankson

Subject: FW: Re: Planning Application reference no. 5.2017.385.1

[REDACTED]
Sent: Wednesday, 19 July 2017 5:10 PM
To: Records <records@vicpark.wa.gov.au>
Subject: FW: Re: Planning Application reference no. 5.2017.385.1

We refer to our email below and are resending as we do not appear to have an acknowledgement. As this is a very important issue for us we wanted to ensure our objections are recorded.

Regards

[REDACTED]

[REDACTED]
Sent: Wednesday, 12 July 2017 7:54 PM
To: 'admin@vicpark.wa.gov.au' <admin@vicpark.wa.gov.au>
Subject: Re: Planning Application reference no. 5.2017.385.1

We wish to strongly express our objection to the proposed development at 28 Columbo Street. We are concerned about the density of the additions and the perceived traffic issues that will be created in our suburban street. At the present time the traffic flow in Geddes Street is greatly impacted at school home time.

Our firsthand experience of parents waiting to collect their children is that almost every day the cars are double parked in Geddes Street as they queue. It appears that not many children walk to school. Buses and other vehicles coming along from Washington Street are forced to join the queue.

Parking is at a premium in Geddes Street most days and because of this we have witnessed parents sitting in cars parked on yellow lines and on some occasions parked across our access laneway and we have had to ask them to move on. We can only see this problem exacerbated if the proposal is accepted.

Geddes Street is extremely busy at present so we can foresee a gridlock situation arising if the pupil numbers rise from 256 to 423 and the associated traffic that would go with it.

If the proposal is accepted the huge increase in vehicular traffic would not be beneficial to pedestrians or cyclists and virtually impossible for residents to enter or exit their driveways.

The development might benefit the school but certainly not beneficial to the residents of the immediate area.

[REDACTED]



Vanessa Frankson

Subject: FW: Development application 5.2017.385.1

[REDACTED]
Sent: Monday, 24 July 2017 6:20 PM

To: Records <records@vicpark.wa.gov.au>

Subject: Development application 5.2017.385.1

Hi,

I'm writing to voice my objection to the proposed plans at Regent College which include increased parking & traffic flow along Geddes Street.

I'm the resident and owner of 28 Geddes St. I'm sure the council is already aware of the existing traffic & parking issues along Geddes St and hope common sense will prevail in making any development decisions.

--
Regards,

[REDACTED]

Vanessa Frankson

Subject: FW: New Online Submission regarding: 005.2017.00000385.001

[REDACTED]
Sent: Wednesday, 12 July 2017 2:01 PM

To: Records <records@vicpark.wa.gov.au>

Subject: New Online Submission regarding: 005.2017.00000385.001

Date Reported

12/07/2017

[REDACTED]
22 GEDDES ST
VICTORIA PARK WA 6100

Email Address: [REDACTED]

Phone Number: [REDACTED]

Relevant Interest

Owner of 24/22 Geddes Street VICTORIA PARK (LOT 23 STRATA 30592) Registered

Regarding

005.2017.00000385.001 - 28 Colombo VICTORIA PARK WA 6100

Comments

Hi

I'd like to comment on two things:

- The drawings show a max rL of approx 5.8m agl (above ground level) ie. 10,500 - 4,700 for the rooftop recreation area. Is this correct? What is proposed to be in the recreation area? Eg. further plants, sport nets/rings etc. any further height on top of the ~6m agl? I'm concerned about city views from my property and consequent property value reduction
- Is the current big tree on the verge at the entrance of the proposed Geddes St car park entrance proposed to be removed or retained?

[REDACTED]
Responsible Officer

Sturt McDonald

Vanessa Frankson

Subject:

FW: New Online Submission regarding: 005.2017.00000385.001

Sent: Tuesday, 11 July 2017 10:23 PM**To:** Records <records@vicpark.wa.gov.au>**Subject:** New Online Submission regarding: 005.2017.00000385.001**Date Reported**

11/07/2017

Submitted By

11 Geddes ST

Victoria Park WA 6100

Email Address:**Phone Number:****Relevant Interest**

Owner of 11A Geddes Street VICTORIA PARK (Lot: 1 SP: 63808) Registered

Regarding

005.2017.00000385.001 - 28 Colombo VICTORIA PARK WA 6100

Comments

I oppose the expansion of the Regent St School, located on the corner of Horden and Colombo St Victoria Park.

Doubling the size of the school will have a severe impact of traffic flow on Geddes St during the school drop off and pick up period. The traffic report submitted as part of the application is farcical. Those assumptions of doubling the number of students and having no impact on traffic is plain wrong.

Currently Geddes St is blocked most of the morning drop off and all of the afternoon pick up period. Transperth buses and other large vehicle cannot pass Geddes St (between Horden and Washington St) due to the queue of cars waiting to access the Regent St School Kiss and drive. It seems incorrect that parents are asked to circle around, as the queue extends from Kiss and Drive back up into Geddes St towards Washington St. This is further exacerbated by other parents waiting to turn right into Horden St for Kiss and Drive and who are blocked by parents turning left from Geddes St into Horden St. With Victoria Park Primary school only a few houses away, this is terrible to get around and causes drivers to perform risky actions. I recommend council officers come down during school drop off and pick up periods to see the traffic jam and consult with Transperth on the impact on their services. If the expansion is to go ahead, then the Kiss and Drive should be moved from Horden St into Colombo St with significant room for parents to pull off the road to pick up the children. They should have to drive into the school from Colombo and exit via Geddes St. That will push the traffic jam into Horden and Colombo St which will have less impact on public transport and parents accessing Victoria Park Primary School.

Responsible Officer

Sturt McDonald

Vanessa Frankson

Subject: FW: Planning Application reference number: 5.2017.385.1
Attachments: Objections 2.docx

[REDACTED]
Sent: Monday, 17 July 2017 6:17 PM
To: Records <records@vicpark.wa.gov.au>
[REDACTED]

Subject: RE: Planning Application reference number: 5.2017.385.1

Sorry attachment attached to the this one.

[REDACTED]

[REDACTED]

[REDACTED]
Sent: 17 July 2017 10:12
To: 'admin@vicpark.wa.gov.au' <admin@vicpark.wa.gov.au>
[REDACTED]

Subject: RE: Planning Application reference number: 5.2017.385.1

To whom it may concern,

Please find the attached letter, please confirm receipt.

Best,

[REDACTED]

[REDACTED]

18th July 2017

Town of Victoria Park, To whom it may concern,

**Re: Lot: 1961, No. 28 Columbo Street, Victoria Park – Development Application
5.2017.385.1 for Additions & Alterations to Educational Establishment (Regent
College)**

We are writing this letter as the owners and occupants of 25C Geddes Street as our property is right next to the proposed new massive oversized monstrosity of a recreation deck and car park. We believe that this structure will greatly and gravely endanger the safety of our children playing in our garden and drastically affect our quality of life due to privacy, noise and light concerns.

1. Danger to our children of the high velocity of large hard net and basket balls being lobbed from a high height onto the heads of our young children; and of the toxic fumes from a huge increase in car traffic directly abutting our living space.

Children often play in our back yard, and they will be put at grave risk of head injury from large hard basket balls coming over the fence from 10 meters or more above their heads. This risk is made much more of an immediate concern due to the closeness of the court and its height being one floor above them. To approve this in contravention of the 2.8 meter mandatory layback is reckless to say the least. Also allowing a court to be at a much higher height above children, thereby increasing the velocity is completely unacceptable on safety grounds. God forbid some child is hurt, we will hold everyone responsible for this decision responsible.

Also what analysis of air quality has been done on the inevitable large number of cars coming in and out of an enclosed space? Would you want your kids playing right next to a roofed car park spewing fumes directly and completely unobstructed into your garden?

2. Loss of natural light/noise/ pollution

Quite apart from the physical dangers, having a massive monstrosity right up against our wall will also greatly affect our quality of life. We have a significant concern regarding the loss of natural light and/or privacy, and the huge amount of additional noise that will be undoubtedly created by an oversized car park and sports arena one floor up cheek to jowl up not only against our wall, but overlooking us.

3. Loss of Privacy or light due to the screen

There are only two options of the Danpalon screen around the recreation deck, either it is high in privacy, which will block out the light, or it will be higher on light and low on privacy. What great options, obstruct hugely the natural light into garden and living areas, or allow hundreds of people daily to look directly into our living room from a floor above. We will have the choice of living in the dark or in a fish bowl; at least we will have the noise and fumes for company.

Easy Solutions

We are not anti-development in any way, and accepting to see schools expanding, we all have children who need schooling, but allowing a massive new eyesore that will cause very real physical danger to our children that could lead to serious head injuries and toxic fumes, that does not comply with even the basic layback of 2.8 meters, is completely intolerable.

Why could the setback not be further back and be put in the middle of the block not right up against us, and the car park sunk underground and walled up on our side? This space is currently not built on.

This would help alleviate the physical risk to our children and limit the intolerable noise and pollution of having it the way it is planned. This would also solve the light verses privacy issue as our property would not be overlooked by this huge new structure. If the project is back to one floor with sunken parking, there could be a netting system put in place to mitigate the balls coming over. If netting were in place with the current plans it would make the whole eyesore far worse by adding many more meters above the towering heights planned directly dominating our living areas.

To alleviate the potentially large amounts of pollution, could the carpark section facing us be closed in to our wall? Hopefully then the large volume of fumes coming from dozens of cars would have at least some chance to dissipate before they get into our kids lungs. I assume there will be a full analysis carried out as to the hugely detrimental changes in air quality directly on living areas?

Any other solution apart from putting the whole monstrosity back into the middle of the open space, and sinking the car park with a solid wall facing us, will cause us serious harm in several very real ways. Even this is not ideal for us, but we all need to compromise as we live in a community, hopefully the Christian school can do the same.

This an over \$4 million project, you not allowing the cutting of corners and riding roughshod over genuine concerns, with very achievable and reasonable solutions to save this relatively minor costs, is surely why we have a planning system and a local council.

I will leave it in your capable hands to protect our rights and reach a reasonable compromise we all can live with. I am sure you understand why we are horrified with the thought of our lounge room and outdoor living area being right up against this massively noisy, hugely polluting, privacy destroying, dangerous, concrete and brick sun blocker?

Yours sincerely,

TOWN OF VICTORIA PARK

File No. 5.2017.385.1

Xref No. _____

BLP ☐ 26 JUL 2017 RLP ☐

CLP ☐ CEO ☐

FLBLP ☐ HR ☐

FIN ☐ RAN ☐ PLN ☐ NE ☐

RAT ☐ EH ☐ BLD ☐

☐ DOC No. _____

23rd July 2017

Town of Victoria Park
 Locked Bag No. 437
 Victoria Park WA 6100

Dear Sir/Madam

**Re: Lot: 1961, No. 28 Columbo Street, Victoria Park – Development Application
 5.2017.385.1 for Additions & Alterations to Educational Establishment (Regent
 College)**

We are writing this letter as the owners and occupants of 25B Geddes Street (since January 2004) as we have a number of concerns regarding the impact of the proposed development on our property. Our property is right next to the proposed new recreation deck and car park and believe that this structure will have a negative impact to our property.

Our concerns are as follows:

1. Loss of Natural Light

We have a significant concern regarding the loss of natural light, particularly to the ground floor of 25B Geddes Street. A shadow diagram has been provided with the application however this does not match our experiences, which are not evident from a desk top study.

Due to the layout of the property, the ground floor living areas of 25B Geddes Street predominantly get their natural lighting from north east facing windows and glass doors.

Natural light is already somewhat limited by the property construction. The living areas are located at the back of a small yard area, with the boundary set by 25C Geddes Street on the left and the master bedroom on the right and a fence on the north east side. The north east side of the property, where the living areas are located, also has eaves. The master bedroom only receives natural light from a north facing window.

Another constraint on light is that we have trees along the fence line that are vital for privacy and noise reduction. The trees also provide some protection from the many balls that currently come over the fence, which is discussed further below.

Therefore, most of the light entering the ground floor, particularly in winter, comes through the trees in the area above the fence as it is framed by the eaves.

The top of the car park concrete is 2.8 metres from the ground, which is above our current fence height. Above this will be a 1.8 metre Danpalon (this appears to be spelt

incorrectly on the plans) translucent cladding fence with a 1.2 metre chain link fence on top of the cladding.

As the concrete structure is taller than the fence (1.8 metres), this will directly block some light, especially in the months where the sun is low and not just on the single date in the letter from the Council.

Danpalon comes in a variety of thicknesses and colours. This is insufficient information on the plans to determine this, however according to brochures provided on Danpalon's web site, the light reduction at 400 to 700mm ranges between 11% and 80%. Therefore, even the best case (thin, clear) will result in a further reduction of natural light to the property. Further information from Council representative, Sturt McDonald indicates that the selected cladding will allow only 63% of filtered light to pass through, therefore there will be no natural light for our home and a shadow year round over our property.

My wife does not work and spends part of her time on her painting and drawing hobbies as well as gardening. Natural light is important for all these activities and this proposed reduction and loss will affect these activities.

Loss of natural light may have the following negative effects on us:

- Additional heating costs
- Additional indoor lighting costs
- Health related consequences due to a reduction in the natural light as proper daylight is important for physical and mental health and well-being. There is sufficient research to support this. My wife has had a history of anxiety and depression and sunlight into our home assists her mental and emotional well-being.
- An increase in the amount of mildew and mould growth to the property
- Reduction in sunlight to the plants in the garden leading to plant loss
- Reduction in sunlight to clothes drying on the clothes line

A Council representative, Sturt McDonald, visited our home to understand the effect of lighting on our home and take photos. The Mayor - Trevor Vaughn, Deputy Mayor - Brian Oliver, and Hon. Kate Doust MLC also visited to see the impact for themselves.

We request a site visit from the JDAP panel representatives to our home to understand the effect of lighting on our home as it is the only way to appreciate the impact.

2. Loss of view/outlook

As highlighted above, the proposed structure will completely block any view of the sky from inside the living areas of our property.

3. Loss of Privacy

As stated above, the best case for light with the Danpalon cladding is a thin, clear material. However, if this is selected then people using the court will be able to see into our backyard and also into the upstairs bedrooms. Looking outside to the north east our view will be the very unattractive top of a concrete wall, and plastic and chain fences.

Using a more opaque cladding will block the natural light and decrease the radiant light to the property and both of these options (loss of privacy or loss of natural light) is unacceptable to us.

4. Non-conformance to Codes and Council Policies

We, the 25B and 25C Geddes Street owners, engaged, at our cost, TPG + PLACEMATCH to assess the proposed submission in relation to conformance with

Residential Design Codes and Council policies. Refer to the objection letter signed by Director, Matt Raymond. Some of the findings include that there is no proper regard for the impacts that the development would have on the amenity of the properties located to the southwest and that development that does not meet key objectives or requirements of the Town's LPS1, Precinct Plan, Policies related to Non-Residential Development in or Adjacent to Residential Areas, Car Parking, Boundary Walls, Climate Control or the specific associated design principles of the Residential Design Codes.

This is an exercise that we would have expected the school and its architects to perform before the submission and the costs of checking should not have had to be borne by us.

TPG + PLACEMATCH will also represent us at the JDAP, so we request that you contact both us and Alison Healey with the time and date so we can make our representation in person.

5. Location of Building to Fence Line/Property Boundary

The initial letter received from Council incorrectly stated that the boundary set back is proposed to be 2.3 metres, where 2.8 metres is normally required. The actual setback, as corrected after we pointed this out to Council, is 1.5 metres, which is considerably closer to our property than the required 2.8 metres.

It is unclear whether setback is from the property boundary or the fence line. Due to a construction error, the fence is actually about 0.2 metres from the boundary, slightly encroaching on all the 25 Geddes Street properties.

The Residential Design Codes call for boundary setbacks for the following reasons:

- To ensure adequate daylight, direct sun and ventilation for buildings and the open space associated with them
- To moderate the visual impact of building bulk on a neighbouring property
- To ensure access to daylight and direct sun for adjoining properties, and
- To assist with the protection of privacy between adjoining properties

As per the above, the closer the structure to our property, the more significant the impact on lighting in particular as well as the visual impact of a large structure right next to our property.

Therefore for any structure the 2.8 metre setback needs to be maintained as a minimum, and this measurement is taken from the actual property boundary and not the fence line.

A 2.8 metre setback will still block the natural light and have a negative impact to our home.

6. Out of character

The Council has a preferred federation style character for this area for domestic properties. A concrete/translucent wall chain link fence structure does not fit the character that the Council prefers.

Likewise the size and shape of the structure does not appear to be in line with the building bulk in the area, which is primarily residential.

7. Light Spillage

No details on lighting have been provided, however:

- As the car park roof is above our fence height and southern wall appears to be open, there is a high likelihood of light spillage from any car park lighting coming into our property.

As the car park is only to service school hours, we request that either no lighting is installed or, if lighting has to be installed then only downward facing lighting is used. Alternatively, some flashing to prevent light spillage could be installed.

- Any lighting of the court area will definitely spill into our property, especially as the translucent cladding is designed to let light through. It will also make night time use of the court much more likely to occur.

It is requested that court lighting is not approved.

8. Chain Fence

The chain fence on top of the translucent wall is unlikely to be aesthetically appealing or will keep all balls inside the court area (see below).

9. Balls Over Fence/Significant Injury

Our fence has an approximately 3 metre high chain fence behind it along the side of the current basketball court. Despite this fence, and our screening trees that are generally taller than the fence, a significant number of footballs, tennis balls, netballs and basketballs come over the fence. On one particular day, we found around 10 tennis balls that had come over the fence that day.

Another concern is that with a higher court, especially it is 1.5 metres from our fence, is that balls that clear the fence/trees will land in our yard at a greater velocity due to the additional height. We have two elderly cats (13 and 17 years old) that sleep and play in our back garden as well as plants in the garden and glass topped outdoor tables. We are very concerned that balls coming from a greater height could cause death, serious injury or harm to our cats, and damage to plants or outdoor furniture.

Whilst there are no children living in our home, we do have visiting young children and our neighbours at 25A & C have small children or visiting grandchildren. A heavy ball falling from a height poses a threat to them also.

10. Loss of property value

Whilst it is not easy to assess, we have a concern that the construction will lower the property value, particularly due to the light reduction and the visual bulk of the new structure. We have consulted a local real estate agent – refer to the attached letter from Andrew Patterson of PFR - who has stated that if the construction proceeds, there will be a significant reduction of potential buyers. That will only devalue all the 25 Geddes Street properties.

11. Amenity Blockage

- The proposed overall height of the car park/recreation area plus fencing is higher and directly in the line of site of one of our roof antennas. There may be additional costs to us if we need to relocate or mount higher.
- Whilst we currently do not have solar panels, the proposed overall height of the car park/recreation area plus fencing will limit the winter sun to any future solar panels.

We also have some other concerns regarding the impacts other than the recreation deck. These include:

1. Current Activities by the School

The school appears to be progressing as if the plans will be approved. Some examples include:

- As of Term 3, the school has started allowing parking on the basketball area next to our house. 44 cars were noted to enter and exit the single gated entrance during a 45 minute on one morning. There was no consultation with us regarding this change of use and we are concerned about the noise and fumes generated by many cars effectively in our back yard.

We were informed that the area is not zoned for car parking and my wife contacted the Council and reported this change of use. We were contacted by the Compliance Officer, Gray Godfrey, who confirmed a breach and advised that a "Compliance – Planning – Breach of Conditions/Plans" letter will be sent to the school.

- Furthermore, on the afternoon of Sunday 23rd July 2017, the basketball hoops were removed and the fence along Geddes Street was modified to be taller. This again generated significant noise, which is a breach of the Council's noise regulations, and once again there was no consultation with us.
- Two large trees in the proposed recreation have been removed since the plans were lodged with Council.

2. Other Non-compliance with Council Requirements by the School

Another concern is that future Council requirements will also be ignored, in particular those related to any requirements made to mitigate our concerns.

- When the multi-purpose hall was built next door (~2010), two of the Council requirements were:
 - "The first floor of the building hereby approved (comprising 'Performing Arts/Gymnasium') shall only be used by students, community groups and any other gathering of people between 7:30am to 7:00pm Monday to Friday, 8:00am to 4:00pm Saturdays and not at all on Sundays or Public Holidays", and
 - "The uncovered ground floor 'Multi-Purpose/Assembly' area shall not be used by community groups or any other groups of people outside of normal school hours".

We note that the above requirements have not been met a number of times since the hall was built.

- An Advice Note from the Council for the multi-purpose hall stated:
 - "The applicant is advised to consult with the affected residents of No. 25 Geddes Street prior to the submission of masonry fence details in accordance with Condition No. 10 above".

Condition No. 10 stated that a masonry fence was built along the No. 25 Geddes Street boundary. As far as we are aware, we were not consulted and this fence was only built along the boundary of 25A, not the No. 25 boundary.

- The sudden use of the basketball court as a car drop off area commenced without any warning or discussion with us from the school. Without the above wall, it has

increased noise to our property. We are also concerned about the effect of fumes on the garden and us.

As far as we understand it, the basketball court is neither zoned nor displays the correct lines to denote it as a parking area.

Due to the above two sections, we do not believe that the school is, or will, follow Council directions if the Council proposes any modifications to their plans.

3. Traffic congestion

Allowing parking on the basketball area next to our house is causing traffic congestion problems. My wife has witnessed people driving down the wrong side of the road – in the school zone – to go around people turning into the school driveway as well as buses being held up. The situation is already dangerous and any increase in school numbers will only increase traffic and make the congestion and unsafe actions worse. One period of observations by my wife is also attached.

We do not believe the desktop traffic congestion report accurately reflects the current situation. Notwithstanding the conclusions of the submitted traffic congestion report, an increase in traffic at school pick up hours is only likely to increase the blockages to our driveway that we are experiencing due to cars standing in the street for up to 20 minutes waiting to turn into the school carpark or using our driveway to change direction as is currently occurring.

My wife tries to avoid driving anywhere during morning and afternoon pick up times in case she is stuck in the driveway. This is not an acceptable situation. Other neighbours have expressed the same concerns.

It is noted that in the traffic report that Geddes Street is to be widened to 6.0 metres. This has not happened and is unlikely to address any of the above issues.

We request a new traffic congestion report be prepared and submitted and that it includes current observations of the school drop off and pick up traffic conditions.

4. Street Parking

The traffic report states that there is plenty of street parking along both Colombo Street and Geddes Street for drop off and pick up. However currently there is very little available street parking for people visiting us. This is even the case during school holidays. A school visitor reported she drove around for up to 15 minutes to find a parking spot to deliver an after school speech. The Hon. Kate Doust MLC also could not find a parking spot when visiting during school holidays at 1:45pm. Sturt McDonald found no parking at 9:00am during school holidays. Andrew Patterson also could not find parking at 2:00pm during school holidays.

The conclusions of the traffic report do not match the current circumstances. Increasing the school numbers will only make the situation worse.

Also, during construction, the current car parking will be compromised and the builder and parents will be forced to do more street parking. This will temporarily increase the undesirable parking and congestion outcomes.

5. Construction Noise

According to the Victoria Park Council web site, "Construction noise does not have to comply with the assigned noise levels in the regulations between the hours of 7am-7pm Monday to Saturday. Noisy construction work is not permitted on Sundays or public holidays".

The builders involved in previous building works (~2010) at this site regularly contravened this requirement, often starting much earlier than 7am. On the occasions they didn't "technically" start until 7am, there was often loud set up noise including vehicle reversing alarms and unloading that commenced much earlier than 7am.

It is requested that if more building works are to occur that the construction noise requirements are enforced and that the Council provides necessary policing and a contact so that out of hours construction noise can be addressed.

6. Other Construction Activities

Construction activities will also create an increase level of dust and rubbish storage leading to:

- Possible worsening of my wife's asthma
- Increased smell due to rubbish storage
- Dust settling in our garden, paved area and roof leading to additional cleaning and not being able to use the outdoor area
- Increase in mice and rats due to rubbish storage

We have previously seen all the above when other construction activities occurred next door.

Note, for any future construction activities we request that no bins are allowed to be placed next to our fence.

7. Night Time Noise

Currently the basketball court next door is used outside of school hours by others. This is not organised or approved by the school, but just people using the facilities. The court is right next to the master bedroom and the playing occasionally occurs during the middle of the night and it is not possible to sleep over the bouncing of a ball, nor the rattle of the backboards or shouting between participants. The lack of court lighting does not appear to be a deterrent. The higher court is likely to let the sound travel further, especially as only one side is walled, and any night time noise will affect more local residents. It is requested that suitable lock up facilities be provided.

8. Vegetation

We request that any vegetation planted for any current and future works be non-toxic to pets, in particular our cats, and be asthma friendly/have a low allergenic scent.

We were approached by the school principal, Derek Nicholls, who attended our Strata meeting to discuss the proposal. We explained that a loss of natural light is a significant concern to us and that the 1.5 metre gap from the fence only added to the problem. We also discussed some of the other issues above, although the school seemed to think that noise would be the only issue. We asked for more information regarding the car park height, which was provided, and more details on the translucent cladding, which was not provided. We voiced our concerns about loss of natural light, however it appears that the plans have been submitted without any acknowledgement of our issues or any further consultation.

Furthermore, with the sudden use of the basketball court as a car park, removal of trees, and new fence it appears that the school is progressing with their plans without council approval nor proper consultation or negotiation with affected neighbours.

At our Strata meeting, Derek Nicholls stated the school number were to be increased from 256 to ~320. We were surprised to discover that the submission proposes 423 students. There was plenty of opportunity to relate to us the correct figure and this was not done.

Given the above examples, the current preparations that have already started and the previous non-compliances with Council Requirements and after hour noise, we do not believe that the school will follow Council direction, is being consultative with the neighbourhood, nor do we think that we and our neighbours will be treated with honesty and integrity regarding our concerns by the school both now and in the future.

As stated above, the school is removing the basketball rings, presumably to assist with using the area for car parking. According to information provided by Derek Nicholls, the new deck is not proposed to be built for at least another year. If this is the case, this begs the question as to whether they actually need a recreation area at all.

We would be grateful if Council take all the above into consideration when deciding this application for development and we are appealing that the recreation deck/car park portion in particular is rejected. The increase in school numbers will also affect traffic, parking and will impact on us and our neighbours.

We love our home and want to see that our home, street and neighbourhood is not significantly impacted by a large development in such a small, low density residential zone. The current block is not designed for a larger school, and as there are two other schools within one block, neither is the area. If the impacts of the changes are too detrimental, particularly to our physical and mental health and well-being, then we may be forced to move and that is the most undesirable outcome.

We will be away overseas on annual leave from July 31st and returning August 27th, so will not be able to be contacted by phone. We request that any formal deliberations/JDAP proceedings be postponed until we return so we are able to speak on our behalf.

We will have access to email and can be contacted via [REDACTED] correspondence is required.

Yours sincerely,

[REDACTED] + [REDACTED]
[REDACTED]
[REDACTED]

Attachments:

Letter from PFR

Traffic Observations

Letter from Hon. Kate Doust MLC

Letter from Hon. Ben Wyatt MLA

Email re Compliance Breach



Market Appraisal – 25B Geddes St, Victoria Park

Thank you for the opportunity to conduct an appraisal on your home. This report should not be considered as a valuation but rather as a general assessment. It is understandable that the sale of your property is an important decision and it adds to our job satisfaction when we see smiles on our clients' faces after we have achieved the highest possible price.

Houses in Victoria Park have had mixed performance over the last 3 years please see below the growth rates.

2015 – Down -7.5%

2016 – Up 1%

2017 – So far up 3.1% this will change as the more sales come in

Past sold

Please see CMA attachment

Currently on Market

Please see CMA attachment

Having taken into account the current market trends and conditions, I make the following recommendations with the property in its current condition. This price is a suggestion and I am happy to advertise the property for any price you like.

Anticipated Selling Range
Market your property at

\$675,000 to \$695,000
from \$689,000

Proposed Recreation Deck

After viewing the information and drawings on the proposed deck I feel 25B Geddes St Victoria Park will decrease in value due to the following points.

- The setback of 1.5m from the fence and height of 2.8m is too close and will be very intrusive for privacy, excessive noise, light blockage and aesthetic appeal.
- The carpark will cause extra noise and extra traffic which will decrease the property's appeal.
- Damage from Balls coming over the fence will occur
- This property would appeal to mostly owner occupier but this deck will put that type of buyer off which means the ones that do like the property will pay less and if the buyer is an investor they traditionally pay less.
- Hard to tell how much the property will reduce in price but it will reduce the demand on how many buyers will want the property.

Please take the time to read the attached material. I look forward to working together with you to achieve an outstanding result.

Kind regards

Andrew Patterson
Director/Licensee

PO Box 513 Victoria Park WA 6979 · 845 Albany Highway East Victoria Park WA 6101 · 08 9470 7444 · admin@pfr.com.au

Trusted Real Estate Agents Licence: TRP No 116 ABR 41 170 525 052

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youtube.com/pfrrealestate

Observations from 25 Geddes St, Victoria Park- traffic and parking

Observations from 18 July, 2017 by Katrina Davy

Weather: Sunny, no rain

Location: end of driveway 25 Geddes Street, Victoria Park

Parking: all available parking on both sides of the road filled

3:01pm Cars turning left onto Hordern St into Kiss and Ride backed up from Kiss and Ride to 31 Geddes Street

Cars starting to dangerously overtake on the wrong side of the street.

Note: cannot exit driveway from 25 Geddes St. Driveway blocked.

3:06pm More cars overtake dangerously on the wrong side of the street. Cars backed up to 31 Geddes Street again

3:08pm Bus No 72 traveling towards Hordern St having trouble navigating the narrow passage between cars and traffic traveling south west on Geddes

3:10pm Cars backed up to 31 Geddes Street again

Watch as bus overtakes cars turning left onto Hordern St while the car immediately in front of the bus decides to also overtake and nearly causes an accident.

3:15pm Cars clear my driveway. 25 Geddes residents can exit driveway.

3:17pm Cars still turning from Geddes onto Hordern into the Kiss and Ride

3:18pm Intersection at Hordern and Geddes now unblocked.

Only now possible to exit my driveway safely. Nearly 20 minutes have passed.

[REDACTED]

[REDACTED]

Hon Kate Doust MLC

Member for the South Metropolitan Region



M/s Rochelle Lavery
Town of Victoria Park
Locked Bag 437
Victoria Park WA 6979

Dear M/s Lavery

I am writing on behalf of a local constituents, [REDACTED] and [REDACTED] 25B Geddes Street Victoria Park, who will be severely impacted, along with many other residents, by the councils proposed development at Regent College.

The proposed development borders [REDACTED] property and [REDACTED] will have to endure the following if the proposal goes ahead:

- Overshadowing/Loss of natural light;
- Loss of view/outlook;
- Loss of privacy;
- Location of building is nonconforming to "set-back" provisions in the residential design codes;
- Out of character compared to surrounding properties;
- Light Spillage;
- Antenna Blockage;
- Construction noise;
- Night time noise;
- Increased traffic congestion;
- Loss of property value; as well as
- Other direct and indirect losses of amenity.

Whilst I fully understand Regent College's need to increase student capacity and amenity, it should not be to the detriment of local resident/ratepayers and the broader community.

I would strongly urge the council to oppose the Lot: 1961, No. 28 Columbo Street, Victoria Park – Development Application 5.2017.385.1 for Additions & Alterations to Educational Establishment (Regent College) with the development in its current form.

Yours sincerely

A handwritten signature in dark ink, appearing to read "Kate Doust".

Kate Doust

Member for South Metropolitan Region



Ben Wyatt MLA
MEMBER FOR VICTORIA PARK

PO Box 4373
Victoria Park WA 6979
☎ 9361 1777
✉ victoriapark@mp.wa.gov.au
f Ben Wyatt
t @benwyatt

Mr Anthony Vuleta
Chief Executive Officer
Town of Victoria Park
Locked Bag No 437
VICTORIA PARK WA 6979

[REDACTED]
11 July 2017

Dear Mr Vuleta [REDACTED]

The Hon Ben Wyatt MLA has been contacted by a constituent who is deeply concerned about a proposed development at Regent College in Victoria Park. We have been provided with a Development Application number of 5.2017.385.1 for your reference.

Our constituent is concerned that the parties behind the development are not considering her objections. She further states that, as a neighbour of the school, she is a valid voice, whose concerns deserve to be heard and taken into consideration.

Mr Wyatt would appreciate any information that you can provide this office to allow him to respond to his constituent's concerns.

Thank you for your advice, I look forward to your response.

Yours sincerely

Jesvin Karimi
Electorate Officer to
BEN WYATT, MLA
Member for Victoria Park



A Government for You.



From: [REDACTED]
Sent: Sunday, July 23, 2017 5:39 PM
To: [REDACTED]
Subject: Fwd: Town of Victoria Park Request #17-016490 - Compliance - Planning - Breach of Conditions/Plans created.

----- Forwarded message -----

From: <CRMS@vicpark.wa.gov.au>
Date: 20 July 2017 at 09:49
Subject: Town of Victoria Park Request #17-016490 - Compliance - Planning - Breach of Conditions/Plans created.
To: [REDACTED]



TOWN OF
VICTORIA PARK

Dear [REDACTED]

This email is to confirm that a request for action has been created relating to "Compliance - Planning - Breach of Conditions/Plans".

The request number is "17-016490". Please keep this for any future contact in relation to this request.

We'd like to hear any feedback you have about your initial contact with us. Click [here](#) to complete a short survey!

Kind regards,

(08) 9311 8111

Town of Victoria Park

This email address is not monitored. For further enquiries, please email admin@vicpark.wa.gov.au.

Vanessa Frankson

Subject:

FW: Comment on planning application 5.2017.385.1


Sent: Thursday, 6 July 2017 10:28 AM**To:** Records <records@vicpark.wa.gov.au>**Subject:** Comment on planning application 5.2017.385.1

Thankyou for informing us of the above application-5.2017.385.1. My concern for this application is traffic management. As you are aware, Geddes St is a bus route. There is also an allowance for cars to park on both sides of Geddes. This alone can cause congestion for through traffic. Add into the mix Regents college "Kiss and Go zone". - parents and carers picking up their children turn left into Horden from Geddes Rd. Quite often there are 10 or so cars in the queue. If you are trying to drive down Geddes to Albany Highway around school pick up time, it is a major problem. I have seen near misses where oncoming buses nearly collide with cars trying to overtake the queue of cars. The "Kiss and Go " zone needs to be redirected so there is not a bank up of cars on Geddes. Parents need to enter this zone off a street without a bus route.

We currently have parking signs on Raphael Park that indicate no parking during school hours. This is ignored most mornings by parents taking their children to school. I have no problem with this but the extra car park bays in the application are critical for the current student numbers and therefore more bays are necessary for future students. I hope this is clear- please feel free to call.

Vanessa Frankson

Subject: FW: New Online Submission regarding: 005.2017.00000385.001

[REDACTED]
Sent: Tuesday, 4 July 2017 7:25 PM

To: Records <records@vicpark.wa.gov.au>

Subject: New Online Submission regarding: 005.2017.00000385.001

Date Reported

04/07/2017

Submitted By

[REDACTED]
22 Geddes ST

Victoria Park WA 6100

Email Address: [REDACTED]

Phone Number: [REDACTED]

Relevant Interest

Owner of 21/22 Geddes Street VICTORIA PARK (LOT 20 STRATA 30592) Registered

Regarding

005.2017.00000385.001 - 28 Colombo VICTORIA PARK WA 6100

Comments

I object to this proposal because an additional 31 car bays will not be sufficient to service the needs of an additional 167 enrolments and will therefore result in additional traffic congestion on Geddes Street, particularly during student drop off and collection periods. The situation on Geddes Street during this periods is already dire and dangerous as cars stop and park illegally and both people and cars dodge each other and buses.

Responsible Officer

Sturt McDonald

Vanessa Frankson

Subject: FW: New Online Submission regarding: 005.2017.00000385.001

[REDACTED]
Sent: Monday, 17 July 2017 10:39 AM
To: Records <records@vicpark.wa.gov.au>
Subject: New Online Submission regarding: 005.2017.00000385.001

Date Reported
17/07/2017

Submitted By

[REDACTED]
32 Armagh ST
Victoria Park WA 6151
Email Address: [REDACTED]
Phone Number: [REDACTED]

Relevant Interest

Other Owner/Occupier of 32 Armagh Street VICTORIA PARK (LOT 8 PLAN 1809) Registered

Regarding

005.2017.00000385.001 - 28 Colombo VICTORIA PARK WA 6100

Comments

At present Regent College creates significant traffic congestion. The college utilises a kiss and ride method and as a result the parents lining up in their vehicles block Hordern Street from Geddes Street and Geddes Street almost to Washington Street. This is particularly problematic as the Victoria Park Primary School parents also use Geddes street. Additionally there is a Transperth bus route that uses Geddes Street. The combination of these factors makes driving down Geddes Street from Washington Street towards Albany Highway extremely difficult and dangerous.

An increase in the number of vehicles by over 350 vehicles per day is significant. I also dispute the fact of an assumed stagnate rate of traffic increase since 2014, this is not my experience. Although there have been no major building changes I have noticed a change in driving behaviour, more traffic drives through this area from Berwick Street to Albany Highway to avoid the lights at the intersection of Berwick Street and Canning Highway. Although there have not been any reported traffic accidents in the area I have personally had to take precautions to avoid accidents on multiple occasions as the parents leaving the pickup area on Hordern Street seem to assume that they are the only traffic on the road and pull out without giving way to vehicles already travelling on Hordern Street.

Responsible Officer

Sturt McDonald

Vanessa Frankson

Subject: FW: Comments on Planning Application 5.2017.385.1
Attachments: Objection_Regent_Development.pdf

Sent: Monday, 24 July 2017 7:47 PM
To: Records <records@vicpark.wa.gov.au>

Subject: Comments on Planning Application 5.2017.385.1

To the Town of Victoria Park,

Please find attached our comments on the proposed development at Regent College - Planning Application reference number 5.2017.385.1.

We live close to the school and our son currently attends, so we would prefer to remain anonymous.

Kind regards,

Victoria Park, 24/07/2017

*Re: Comments on proposed development LOT: 1996, No. 28 Colombo Street,
Victoria Park – Planning application reference number 5.2017.385.1*

To Whom It May Concern:

We hereby object to the proposed development of Regent College at 28 Colombo Street, Victoria Park. We live close to the school at 32 Colombo Street and also have our son enrolled. We are moving him to another school next year, partly because we believe Regent College has too little play space.

Regent College would increase its students and staff by 65%. This is unacceptable to us as residents as well as school parents.

Proposed Use

Regent College currently has only limited play space and very little green. The proposed development will further decrease play space and increase noise from the school.

- Regent College has a larger amount of students per block than other primary schools in the vicinity. (See table)
- The 65% increase of students would be an unacceptable amount of students on a small area.
- The proposed playing court above the proposed car park would be an increase of noise due to the elevation and reverberation.
- Possible staggering of play times would mean the excess noise would go on for longer.

	Student Number			School Area (Blocks)	Students per Block	
	Current	Proposed	Increase		Current	Proposed
Regent College	256	423	165%	5	51.2	84.6
Victoria Park Primary	456			10	45.6	
Victoria Park Christian School	100			4	25	

Car Parking

Regent College currently does not have enough parking space nor does it appropriately handle parking.

- Both Regent College and Victoria Park Christian School are on the same block on Colombo Street. These are both private Christians schools that are not mainstream (Evangelicals and Seventh Day Adventists) and therefore draw students from large areas with only very few walking to school.
- Cars routinely block driveways for school drop off and pickup.
- Cars illegally park on residents' verges.
- Cars parked on the Colombo Street verge block the footpath, making it inaccessible to wheelchairs and prams during school hours.
- Parking on the Colombo Street verge has made it unsightly.

 3/32 Colombo Street in Victoria Park.

Vanessa Frankson

Subject: FW: New Online Submission regarding: 005.2017.00000385.001

[REDACTED]
Sent: Friday, 7 July 2017 10:17 AM
To: Records <records@vicpark.wa.gov.au>
Subject: New Online Submission regarding: 005.2017.00000385.001

Date Reported
07/07/2017

Submitted By

[REDACTED]
34 Washington ST
Victoria Park WA 6100
Email Address: [REDACTED]
Phone Number [REDACTED]

Relevant Interest
Owner of 34 Washington Street, Victoria Park

Regarding
005.2017.00000385.001 - 28 Colombo VICTORIA PARK WA 6100

Comments

As a resident I strongly object. I have read the traffic management and suspect that most of it is from modelling. It states no parking on verge side of Raphael Park, but every day, morning and afternoon school pick-up and drop-off, cars are parked along both sides of the road.

My access to Geddes Street is via the lane at the back of my home, during peak pick-up from Regent School there are 2 lanes of cars lined up on the west side of Geddes Street making it impossible to see any vehicle coming from Albany Highway, also a vehicle will be parked in the yellow no parking between the lane and Washington St.

This is a bus route, I have had to go down Geddes St towards Albany Highway with the 2 lanes of parked cars, having to go on wrong side of road to get past them all, and seen buses coming both ways trying to negotiate the traffic. I have no idea what happens in Hordern Street as have never any need to do this block, but Colombo Street is also extremely busy with Riverside School as well. To further complicate the parking there is the Government School further down Geddes Street that has drop-off and pick-up.

If I read the submission correctly it appears they may have staggered drop-off and pick-up, this will create further traffic havoc at other times of the day.

Responsible Officer
Sturt McDonald

Hon Kate Doust MLC

Member for the South Metropolitan Region



M/s Rochelle Lavery
Town of Victoria Park
Locked Bag 437
Victoria Park WA 6979

TOWN OF VICTORIA PARK
5.2017.385.1

File No. _____
Xref No. _____

26 JUL 2017

BLP <input type="checkbox"/>	RAN <input type="checkbox"/>	PLN <input type="checkbox"/>	RLP <input type="checkbox"/>
CLP <input type="checkbox"/>	EH <input type="checkbox"/>	BLD <input type="checkbox"/>	CEO <input type="checkbox"/>
FLBLP <input type="checkbox"/>			HR <input type="checkbox"/>
FIN <input type="checkbox"/>			NE <input type="checkbox"/>
RAT <input type="checkbox"/>			
<input type="checkbox"/>			DOC No. _____

Dear M/s Lavery

I am writing on behalf of a local constituents, [REDACTED] and [REDACTED],
25B Geddes Street Victoria Park, who will be severely impacted, along with many other
residents, by the councils proposed development at Regent College.

The proposed development borders [REDACTED] property and she will have to endure the
following if the proposal goes ahead:

- Overshadowing/Loss of natural light;
- Loss of view/outlook;
- Loss of privacy;
- Location of building is nonconforming to "set-back" provisions in the residential
design codes;
- Out of character compared to surrounding properties;
- Light Spillage;
- Antenna Blockage;
- Construction noise;
- Night time noise;
- Increased traffic congestion;
- Loss of property value; as well as
- Other direct and indirect losses of amenity.

Whilst I fully understand Regent College's need to increase student capacity and amenity, it
should not be to the detriment of local resident/ratepayers and the broader community.

I would strongly urge the council to oppose the Lot: 1961, No. 28 Columbo Street, Victoria
Park – Development Application 5.2017.385.1 for Additions & Alterations to Educational
Establishment (Regent College) with the development in its current form.

Yours sincerely

Kate Doust

Member for South Metropolitan Region

Vanessa Frankson

Subject:

FW: Planning Application 5.2017.385.1 Objection Letter

Attachments:

Kate Doust Letter.pdf; 25 Geddes St Traffic School Day.pdf; Email re Compliance Breach.pdf; Ben Wyatt Letter.pdf; Cover Letter 25B Geddes St Victoria Park.pdf; Application 5.2017.385.1 Letter to Council.pdf

[REDACTED]
Sent: Sunday, 23 July 2017 5:53 PM

To: Records <records@vicpark.wa.gov.au>
[REDACTED]

Subject: Planning Application 5.2017.385.1 Objection Letter

Hi,

Please find attached our letter of objection and supporting documentation for Planning Application 5.2017.385.1.

A hard copy will be posted. A letter from TPG + PLACEMATCH on behalf of us and the residents of 25C Geddes Street will be sent separately by TPG + PLACEMATCH.

Please acknowledge receipt of this email.

Regards,

[REDACTED]

Hon Kate Doust MLC

Member for the South Metropolitan Region



M/s Rochelle Lavery
Town of Victoria Park
Locked Bag 437
Victoria Park WA 6979

Dear M/s Lavery

I am writing on behalf of a local constituents, [REDACTED] and [REDACTED] 25B Geddes Street Victoria Park, who will be severely impacted, along with many other residents, by the councils proposed development at Regent College.

The proposed development borders [REDACTED] and [REDACTED] will have to endure the following if the proposal goes ahead:

- Overshadowing/Loss of natural light;
- Loss of view/outlook;
- Loss of privacy;
- Location of building is nonconforming to "set-back" provisions in the residential design codes;
- Out of character compared to surrounding properties;
- Light Spillage;
- Antenna Blockage;
- Construction noise;
- Night time noise;
- Increased traffic congestion;
- Loss of property value; as well as
- Other direct and indirect losses of amenity.

Whilst I fully understand Regent College's need to increase student capacity and amenity, it should not be to the detriment of local resident/ratepayers and the broader community.

I would strongly urge the council to oppose the Lot: 1961, No. 28 Columbo Street, Victoria Park – Development Application 5.2017.385.1 for Additions & Alterations to Educational Establishment (Regent College) with the development in its current form.

Yours sincerely

A handwritten signature in black ink, appearing to read "Kate Doust".

Kate Doust

Member for South Metropolitan Region

Observations from 25 Geddes St, Victoria Park- traffic and parking

Observations from 18 July, 2017 by [REDACTED]

Weather: Sunny, no rain

Location: end of driveway 25 Geddes Street, Victoria Park

Parking: all available parking on both sides of the road filled

3:01pm Cars turning left onto Hordern St into Kiss and Ride backed up from Kiss and Ride to 31 Geddes Street

Cars starting to dangerously overtake on the wrong side of the street.

Note: cannot exit driveway from 25 Geddes St. Driveway blocked.

3:06pm More cars overtake dangerously on the wrong side of the street. Cars backed up to 31 Geddes Street again

3:08pm Bus No 72 traveling towards Hordern St having trouble navigating the narrow passage between cars and traffic traveling south west on Geddes

3:10pm Cars backed up to 31 Geddes Street again

Watch as bus overtakes cars turning left onto Hordern St while the car immediately in front of the bus decides to also overtake and nearly causes an accident.

3:15pm Cars clear my driveway. 25 Geddes residents can exit driveway.

3:17pm Cars still turning from Geddes onto Hordern into the Kiss and Ride

3:18pm Intersection at Hordern and Geddes now unblocked.

Only now possible to exit my driveway safely. Nearly 20 minutes have passed.

[REDACTED]
[REDACTED]

From: [REDACTED]
Sent: Sunday, July 23, 2017 5:39 PM
To: [REDACTED]
Subject: Fwd: Town of Victoria Park Request #17-016490 - Compliance - Planning - Breach of Conditions/Plans created.

----- Forwarded message -----

From: <CRMS@vicpark.wa.gov.au>
Date: 20 July 2017 at 09:49
Subject: Town of Victoria Park Request #17-016490 - Compliance - Planning - Breach of Conditions/Plans created.
To: [REDACTED]



Dear [REDACTED]

This email is to confirm that a request for action has been created relating to "Compliance - Planning - Breach of Conditions/Plans".

The request number is "17-016490". Please keep this for any future contact in relation to this request.

We'd like to hear any feedback you have about your initial contact with us. Click [here](#) to complete a short survey!

Kind regards,

(08) 9311 8111

Town of Victoria Park

This email address is not monitored. For further enquiries, please email admin@vicpark.wa.gov.au.



Ben Wyatt MLA
MEMBER FOR VICTORIA PARK

PO Box 4373
Victoria Park WA 6979
9361 1777
victoriapark@mp.wa.gov.au
Ben Wyatt
@benwyatt

Mr Anthony Vuleta
Chief Executive Officer
Town of Victoria Park
Locked Bag No 437
VICTORIA PARK WA 6979

11 July 2017

Dear Mr Vuleta

The Hon Ben Wyatt MLA has been contacted by a constituent who is deeply concerned about a proposed development at Regent College in Victoria Park. We have been provided with a Development Application number of 5.2017.385.1 for your reference.

Our constituent is concerned that the parties behind the development are not considering her objections. [REDACTED] further states that, as a neighbour of the school, [REDACTED] is a valid voice, whose concerns deserve to be heard and taken into consideration.

Mr Wyatt would appreciate any information that you can provide this office to allow him to respond to his constituent's concerns.

Thank you for your advice, I look forward to your response.

Yours sincerely

Jesvin Karimi
Electorate Officer to
BEN WYATT, MLA
Member for Victoria Park



A Government for You.





20 July 2017

[REDACTED]
VICTORIA PARK WA 6100
[REDACTED]

Market Appraisal – 25B Geddes St, Victoria Park

Thank you for the opportunity to conduct an appraisal on your home. This report should not be considered as a valuation but rather as a general assessment. It is understandable that the sale of your property is an important decision and it adds to our job satisfaction when we see smiles on our clients' faces after we have achieved the highest possible price.

Houses in Victoria Park have had mixed performance over the last 3 years please see below the growth rates.

2015 – Down -7.5%

2016 – Up 1%

2017 – So far up 3.1% this will change as the more sales come in

Past sold

Please see CMA attachment

Currently on Market

Please see CMA attachment

Having taken into account the current market trends and conditions, I make the following recommendations with the property in its current condition. This price is a suggestion and I am happy to advertise the property for any price you like.

Anticipated Selling Range

\$675,000 to \$695,000

Market your property at

from \$689,000

Proposed Recreation Deck

After viewing the information and drawings on the proposed deck I feel 25B Geddes St Victoria Park will decrease in value due to the following points.

- The setback of 1.5m from the fence and height of 2.8m is too close and will be very intrusive for privacy, excessive noise, light blockage and aesthetic appeal.
- The carpark will cause extra noise and extra traffic which will decrease the property's appeal.
- Damage from Balls coming over the fence will occur
- This property would appeal to mostly owner occupier but this deck will put that type of buyer off which means the ones that do like the property will pay less and if the buyer is an investor they traditionally pay less.
- Hard to tell how much the property will reduce in price but it will reduce the demand on how many buyers will want the property.

Please take the time to read the attached material. I look forward to working together with you to achieve an outstanding result.

Kind regards

Andrew Patterson
Director/Licensee

PO Box 513 Victoria Park WA 6979 · 845 Albany Highway East Victoria Park WA 6101 · 08 9470 7444 · admin@pfr.com.au

Licensed Real Estate Agents Licensee: JR Pty Ltd ABN 41 120 525 055

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youtube.com/pfrrealestate

25B Geddes Street
Victoria Park WA 6100

23rd July 2017

Town of Victoria Park
Locked Bag No. 437
Victoria Park WA 6100

Dear Sir/Madam

**Re: Lot: 1961, No. 28 Columbo Street, Victoria Park – Development Application
5.2017.385.1 for Additions & Alterations to Educational Establishment (Regent
College)**

We are writing this letter as the owners and occupants of 25B Geddes Street (since January 2004) as we have a number of concerns regarding the impact of the proposed development on our property. Our property is right next to the proposed new recreation deck and car park and believe that this structure will have a negative impact to our property.

Our concerns are as follows:

1. Loss of Natural Light

We have a significant concern regarding the loss of natural light, particularly to the ground floor of 25B Geddes Street. A shadow diagram has been provided with the application however this does not match our experiences, which are not evident from a desk top study.

Due to the layout of the property, the ground floor living areas of 25B Geddes Street predominantly get their natural lighting from north east facing windows and glass doors.

Natural light is already somewhat limited by the property construction. The living areas are located at the back of a small yard area, with the boundary set by 25C Geddes Street on the left and the master bedroom on the right and a fence on the north east side. The north east side of the property, where the living areas are located, also has eaves. The master bedroom only receives natural light from a north facing window.

Another constraint on light is that we have trees along the fence line that are vital for privacy and noise reduction. The trees also provide some protection from the many balls that currently come over the fence, which is discussed further below.

Therefore, most of the light entering the ground floor, particularly in winter, comes through the trees in the area above the fence as it is framed by the eaves.

The top of the car park concrete is 2.8 metres from the ground, which is above our current fence height. Above this will be a 1.8 metre Danpalon (this appears to be spelt

incorrectly on the plans) translucent cladding proposed with a 1.2 metre chain link fence on top of the cladding.

As the concrete structure is taller than the fence (1.8 metres), this will directly block some light, especially in the months where the sun is low and not just on the single date in the letter from the Council.

Danpalon comes in a variety of thicknesses and colours. This is insufficient information on the plans to determine this, however according to brochures provided on Danpalon's web site, the light reduction at 400 to 700mm ranges between 11% and 80%. Therefore, even the best case (thin, clear) will result in a further reduction of natural light to the property. Further information from Council representative, Sturt McDonald indicates that the selected cladding will allow only 63% of filtered light to pass through, therefore there will be no natural light for our home and a shadow year round over our property.

My wife does not work and spends part of her time on her painting and drawing hobbies as well as gardening. Natural light is important for all these activities and this proposed reduction and loss will affect these activities.

Loss of natural light may have the following negative effects on us:

- Additional heating costs
- Additional indoor lighting costs
- Health related consequences due to a reduction in the natural light as proper daylight is important for physical and mental health and well-being. There is sufficient research to support this. My wife has had a history of anxiety and depression and sunlight into our home assists her mental and emotional well-being.
- An increase in the amount of mildew and mould growth to the property
- Reduction in sunlight to the plants in the garden leading to plant loss
- Reduction in sunlight to clothes drying on the clothes line

A Council representative, Sturt McDonald, visited our home to understand the effect of lighting on our home and take photos. The Mayor - Trevor Vaughn, Deputy Mayor - Brian Oliver, and Hon. Kate Doust MLC also visited to see the impact for themselves.

We request a site visit from the JDAP panel representatives to our home to understand the effect of lighting on our home as it is the only way to appreciate the impact.

2. Loss of view/outlook

As highlighted above, the proposed structure will completely block any view of the sky from inside the living areas of our property.

3. Loss of Privacy

As stated above, the best case for light with the Danpalon cladding is a thin, clear material. However, if this is selected then people using the court will be able to see into our backyard and also into the upstairs bedrooms. Looking outside to the north east our view will be the very unattractive top of a concrete wall, and plastic and chain fences.

Using a more opaque cladding will block the natural light and decrease the radiant light to the property and both of these options (loss of privacy or loss of natural light) is unacceptable to us.

4. Non-conformance to Codes and Council Policies

We, the 25B and 25C Geddes Street owners, engaged, at our cost, TPG + PLACEMATCH to assess the proposed submission in relation to conformance with

Residential Design Codes and Council policies. Refer to the objection letter signed by Director, Matt Raymond. Some of the findings include that there is no proper regard for the impacts that the development would have on the amenity of the properties located to the southwest and that development that does not meet key objectives or requirements of the Town's LPS1, Precinct Plan, Policies related to Non-Residential Development in or Adjacent to Residential Areas, Car Parking, Boundary Walls, Climate Control or the specific associated design principles of the Residential Design Codes.

This is an exercise that we would have expected the school and its architects to perform before the submission and the costs of checking should not have had to be borne by us.

TPG + PLACEMATCH will also represent us at the JDAP, so we request that you contact both us and Alison Healey with the time and date so we can make our representation in person.

5. Location of Building to Fence Line/Property Boundary

The initial letter received from Council incorrectly stated that the boundary set back is proposed to be 2.3 metres, where 2.8 metres is normally required. The actual setback, as corrected after we pointed this out to Council, is 1.5 metres, which is considerably closer to our property than the required 2.8 metres.

It is unclear whether setback is from the property boundary or the fence line. Due to a construction error, the fence is actually about 0.2 metres from the boundary, slightly encroaching on all the 25 Geddes Street properties.

The Residential Design Codes call for boundary setbacks for the following reasons:

- To ensure adequate daylight, direct sun and ventilation for buildings and the open space associated with them
- To moderate the visual impact of building bulk on a neighbouring property
- To ensure access to daylight and direct sun for adjoining properties, and
- To assist with the protection of privacy between adjoining properties

As per the above, the closer the structure to our property, the more significant the impact on lighting in particular as well as the visual impact of a large structure right next to our property.

Therefore for any structure the 2.8 metre setback needs to be maintained as a minimum, and this measurement is taken from the actual property boundary and not the fence line.

A 2.8 metre setback will still block the natural light and have a negative impact to our home.

6. Out of character

The Council has a preferred federation style character for this area for domestic properties. A concrete/translucent wall chain link fence structure does not fit the character that the Council prefers.

Likewise the size and shape of the structure does not appear to be in line with the building bulk in the area, which is primarily residential.

7. Light Spillage

No details on lighting have been provided, however:

- As the car park roof is above our fence height and southern wall appears to be open, there is a high likelihood of light spillage from any car park lighting coming into our property.

As the car park is only to service school hours, we request that either no lighting is installed or, if lighting has to be installed then only downward facing lighting is used. Alternatively, some flashing to prevent light spillage could be installed.

- Any lighting of the court area will definitely spill into our property, especially as the translucent cladding is designed to let light through. It will also make night time use of the court much more likely to occur.

It is requested that court lighting is not approved.

8. Chain Fence

The chain fence on top of the translucent wall is unlikely to be aesthetically appealing or will keep all balls inside the court area (see below).

9. Balls Over Fence/Significant Injury

Our fence has an approximately 3 metre high chain fence behind it along the side of the current basketball court. Despite this fence, and our screening trees that are generally taller than the fence, a significant number of footballs, tennis balls, netballs and basketballs come over the fence. On one particular day, we found around 10 tennis balls that had come over the fence that day.

Another concern is that with a higher court, especially it is 1.5 metres from our fence, is that balls that clear the fence/trees will land in our yard at a greater velocity due to the additional height. We have two elderly cats (13 and 17 years old) that sleep and play in our back garden as well as plants in the garden and glass topped outdoor tables. We are very concerned that balls coming from a greater height could cause death, serious injury or harm to our cats, and damage to plants or outdoor furniture.

Whilst there are no children living in our home, we do have visiting young children and our neighbours at 25A & C have small children or visiting grandchildren. A heavy ball falling from a height poses a threat to them also.

10. Loss of property value

Whilst it is not easy to assess, we have a concern that the construction will lower the property value, particularly due to the light reduction and the visual bulk of the new structure. We have consulted a local real estate agent – refer to the attached letter from Andrew Patterson of PFR – who has stated that if the construction proceeds, there will be a significant reduction of potential buyers. That will only devalue all the 25 Geddes Street properties.

11. Amenity Blockage

- The proposed overall height of the car park/recreation area plus fencing is higher and directly in the line of site of one of our roof antennas. There may be additional costs to us if we need to relocate or mount higher.
- Whilst we currently do not have solar panels, the proposed overall height of the car park/recreation area plus fencing will limit the winter sun to any future solar panels.

We also have some other concerns regarding the impacts other than the recreation deck. These include:

1. Current Activities by the School

The school appears to be progressing as if the plans will be approved. Some examples include:

- As of Term 3, the school has started allowing parking on the basketball area next to our house. 44 cars were noted to enter and exit the single gated entrance during a 45 minute on one morning. There was no consultation with us regarding this change of use and we are concerned about the noise and fumes generated by many cars effectively in our back yard.

We were informed that the area is not zoned for car parking and my wife contacted the Council and reported this change of use. We were contacted by the Compliance Officer, Gray Godfrey, who confirmed a breach and advised that a "Compliance – Planning – Breach of Conditions/Plans" letter will be sent to the school.

- Furthermore, on the afternoon of Sunday 23rd July 2017, the basketball hoops were removed and the fence along Geddes Street was modified to be taller. This again generated significant noise, which is a breach of the Council's noise regulations, and once again there was no consultation with us.
- Two large trees in the proposed recreation have been removed since the plans were lodged with Council.

2. Other Non-compliance with Council Requirements by the School

Another concern is that future Council requirements will also be ignored, in particular those related to any requirements made to mitigate our concerns.

- When the multi-purpose hall was built next door (~2010), two of the Council requirements were:
 - "The first floor of the building hereby approved (comprising 'Performing Arts/Gymnasium') shall only be used by students, community groups and any other gathering of people between 7:30am to 7:00pm Monday to Friday, 8:00am to 4:00pm Saturdays and not at all on Sundays or Public Holidays", and
 - "The uncovered ground floor 'Multi-Purpose/Assembly' area shall not be used by community groups or any other groups of people outside of normal school hours".

We note that the above requirements have not been met a number of times since the hall was built.

- An Advice Note from the Council for the multi-purpose hall stated:
 - "The applicant is advised to consult with the affected residents of No. 25 Geddes Street prior to the submission of masonry fence details in accordance with Condition No. 10 above".

Condition No. 10 stated that a masonry fence was built along the No. 25 Geddes Street boundary. As far as we are aware, we were not consulted and this fence was only built along the boundary of 25A, not the No. 25 boundary.

- The sudden use of the basketball court as a car drop off area commenced without any warning or discussion with us from the school. Without the above wall, it has

increased noise to our property. We are also concerned about the effect of fumes on the garden and us.

As far as we understand it, the basketball court is neither zoned nor displays the correct lines to denote it as a parking area.

Due to the above two sections, we do not believe that the school is, or will, follow Council directions if the Council proposes any modifications to their plans.

3. Traffic congestion

Allowing parking on the basketball area next to our house is causing traffic congestion problems. My wife has witnessed people driving down the wrong side of the road – in the school zone – to go around people turning into the school driveway as well as buses being held up. The situation is already dangerous and any increase in school numbers will only increase traffic and make the congestion and unsafe actions worse. One period of observations by my wife is also attached.

We do not believe the desktop traffic congestion report accurately reflects the current situation. Notwithstanding the conclusions of the submitted traffic congestion report, an increase in traffic at school pick up hours is only likely to increase the blockages to our driveway that we are experiencing due to cars standing in the street for up to 20 minutes waiting to turn into the school carpark or using our driveway to change direction as is currently occurring.

My wife tries to avoid driving anywhere during morning and afternoon pick up times in case she is stuck in the driveway. This is not an acceptable situation. Other neighbours have expressed the same concerns.

It is noted that in the traffic report that Geddes Street is to be widened to 6.0 metres. This has not happened and is unlikely to address any of the above issues.

We request a new traffic congestion report be prepared and submitted and that it includes current observations of the school drop off and pick up traffic conditions.

4. Street Parking

The traffic report states that there is plenty of street parking along both Colombo Street and Geddes Street for drop off and pick up. However currently there is very little available street parking for people visiting us. This is even the case during school holidays. A school visitor reported she drove around for up to 15 minutes to find a parking spot to deliver an after school speech. The Hon. Kate Doust MLC also could not find a parking spot when visiting during school holidays at 1:45pm. Sturt McDonald found no parking at 9:00am during school holidays. Andrew Patterson also could not find parking at 2:00pm during school holidays.

The conclusions of the traffic report do not match the current circumstances. Increasing the school numbers will only make the situation worse.

Also, during construction, the current car parking will be compromised and the builder and parents will be forced to do more street parking. This will temporarily increase the undesirable parking and congestion outcomes.

5. Construction Noise

According to the Victoria Park Council web site, "Construction noise does not have to comply with the assigned noise levels in the regulations between the hours of 7am-7pm Monday to Saturday. Noisy construction work is not permitted on Sundays or public holidays".

The builders involved in previous building works (~2010) at this site regularly contravened this requirement, often starting much earlier than 7am. On the occasions they didn't "technically" start until 7am, there was often loud set up noise including vehicle reversing alarms and unloading that commenced much earlier than 7am.

It is requested that if more building works are to occur that the construction noise requirements are enforced and that the Council provides necessary policing and a contact so that out of hours construction noise can be addressed.

6. Other Construction Activities

Construction activities will also create an increase level of dust and rubbish storage leading to:

- Possible worsening of my wife's asthma
- Increased smell due to rubbish storage
- Dust settling in our garden, paved area and roof leading to additional cleaning and not being able to use the outdoor area
- Increase in mice and rats due to rubbish storage

We have previously seen all the above when other construction activities occurred next door.

Note, for any future construction activities we request that no bins are allowed to be placed next to our fence.

7. Night Time Noise

Currently the basketball court next door is used outside of school hours by others. This is not organised or approved by the school, but just people using the facilities. The court is right next to the master bedroom and the playing occasionally occurs during the middle of the night and it is not possible to sleep over the bouncing of a ball, nor the rattle of the backboards or shouting between participants. The lack of court lighting does not appear to be a deterrent. The higher court is likely to let the sound travel further, especially as only one side is walled, and any night time noise will affect more local residents. It is requested that suitable lock up facilities be provided.

8. Vegetation

We request that any vegetation planted for any current and future works be non-toxic to pets, in particular our cats, and be asthma friendly/have a low allergenic scent.

We were approached by the school principal, Derek Nicholls, who attended our Strata meeting to discuss the proposal. We explained that a loss of natural light is a significant concern to us and that the 1.5 metre gap from the fence only added to the problem. We also discussed some of the other issues above, although the school seemed to think that noise would be the only issue. We asked for more information regarding the car park height, which was provided, and more details on the translucent cladding, which was not provided. We voiced our concerns about loss of natural light, however it appears that the plans have been submitted without any acknowledgement of our issues or any further consultation.

Furthermore, with the sudden use of the basketball court as a car park, removal of trees, and new fence it appears that the school is progressing with their plans without council approval nor proper consultation or negotiation with affected neighbours.

At our Strata meeting, Derek Nicholls stated the school number were to be increased from 256 to ~320. We were surprised to discover that the submission proposes 423 students. There was plenty of opportunity to relate to us the correct figure and this was not done.

Given the above examples, the current preparations that have already started and the previous non-compliances with Council Requirements and after hour noise, we do not believe that the school will follow Council direction, is being consultative with the neighbourhood, nor do we think that we and our neighbours will be treated with honesty and integrity regarding our concerns by the school both now and in the future.

As stated above, the school is removing the basketball rings, presumably to assist with using the area for car parking. According to information provided by Derek Nicholls, the new deck is not proposed to be built for at least another year. If this is the case, this begs the question as to whether they actually need a recreation area at all.

We would be grateful if Council take all the above into consideration when deciding this application for development and we are appealing that the recreation deck/car park portion in particular is rejected. The increase in school numbers will also affect traffic, parking and will impact on us and our neighbours.

We love our home and want to see that our home, street and neighbourhood is not significantly impacted by a large development in such a small, low density residential zone. The current block is not designed for a larger school, and as there are two other schools within one block, neither is the area. If the impacts of the changes are too detrimental, particularly to our physical and mental health and well-being, then we may be forced to move and that is the most undesirable outcome.

We will be away overseas on annual leave from July 31st and returning August 27th, so will not be able to be contacted by phone. We request that any formal deliberations/JDAP proceedings be postponed until we return so we are able to speak on our behalf.

We will have access to email and can be contacted via [REDACTED] if further correspondence is required.

Yours sincerely,

[REDACTED]

Owners and Concerned Residents

Attachments:

Letter from PFR

Traffic Observations

Letter from Hon. Kate Doust MLC

Letter from Hon. Ben Wyatt MLA

Email re Compliance Breach

Vanessa Frankson

Subject: FW: Addendum for 25 B Geddes Street- Development Application 5.2017.385.1
Attachments: IMG_1744.jpeg; IMG_1745.jpeg

[REDACTED]
Sent: Monday, 24 July 2017 7:01 PM
To: Records <records@vicpark.wa.gov.au>
[REDACTED]

Subject: Addendum for 25 B Geddes Street- Development Application 5.2017.385.1

Dear Sir/ Madam,

This is an addendum to the letter emailed on 23 July, 2017 by [REDACTED]

I visited the Council to see the Danpalon product for the privacy screening proposed by Regent College and took it outside. The attached photos show that the following will be completely blocked at our home: natural light, view of the sky, clouds and sun. Our view will be completely obstructed and the shadow will be year round.

We request that the Council and Panel reject the proposed recreation deck as it will devalue our property and make the inside and outside of our home significantly darker and colder, particularly since we have now seen the effect of the Danpalon.

Regards,
--
[REDACTED]





RE: Lot 1961, No 28 Columbo St, Victoria Park-
Development Application 5.2017.385.1

I OBJECT... SAVE MY SUNSHINE

Although I'd love to invite you, the Panel, to my home to sit and enjoy my natural sunshine out the back and have a cuppa in my sunlit home, it seems it may be a fleeting moment- perhaps one very limited during the winter season.

I wish you could be in my skin.

Know what it feels like to wake excited that the sun will once again stream through my windows during my morning breakfast with my husband.

To relax as the sun warms my body in the winter months as I meditate, knowing just the spot on my couch where the sun shines most brightly. To delight in the sun's rays dancing through the heart shaped leaves of my cottonwoods.

It brings me great comfort and joy, feeling the sun in the winter and sitting with my cats warming our souls.

Now imagine what life will be like without these moments- or greatly diminishes due to manufactured translucent material and solid concrete. My sun will no longer be true. It will be filtered, less of itself. And I will mourn the loss of it.

If you were in my skin, you too would want to save the natural light that is God's gift to us all. You would feel in your hearts that this construction is not a wise and heart connected plan- that the needs of the masses do not outweigh the yearning of ones' heart, to dance with the sun on a winter's day.

This one heart that speaks to you may not translate into building code issues, but some decisions cannot be made solely by man-made codes and needs to be evaluated by the part of man that is often denied. The heart- and its need for warmth, compassion and the loving caress of the sun. In the words of a great poet and songwriter, Paul Rice, please don't take my sunshine away.

25 B Geddes Street, Victoria Park, 6100 WA

TOWN OF VICTORIA PARK			
File No.	5.2017.385.1		
Appl No.			
BLP	<input type="checkbox"/>	RLP	<input type="checkbox"/>
CLP	<input type="checkbox"/>	CEO	<input type="checkbox"/>
FLBLP	<input type="checkbox"/>	HR	<input type="checkbox"/>
FIN	<input type="checkbox"/>	PLN	<input type="checkbox"/>
RAT	<input type="checkbox"/>	RD	<input type="checkbox"/>
	<input type="checkbox"/>	DOC No.	

25 JUL 2017

Vanessa Frankson

Subject: FW: Building application

[REDACTED]
Sent: Monday, 24 July 2017 7:16 PM

To: Records <records@vicpark.wa.gov.au>

Subject: Building application

To Whom it may concern

I wish to express my concern and disapproval of the proposed application 5.2017.385.1.
As an owner and resident in Geddes Street I am voting NO to the go ahead of this building.

Regards
[REDACTED]

Sent from my iPhone

Vanessa Frankson

Subject: FW: New Online Submission regarding: 005.2017.00000385.001

[REDACTED]
Sent: Friday, 21 July 2017 2:10 PM
To: Records <records@vicpark.wa.gov.au>
Subject: New Online Submission regarding: 005.2017.00000385.001

Date Reported
21/07/2017

Submitted By

[REDACTED]
11a Geddes ST
Victoria Park WA
Email Address: [REDACTED]
Phone Number [REDACTED]

Relevant Interest

Owner of 11A Geddes Street VICTORIA PARK (Lot: 1 SP: 63808) Registered

Regarding

005.2017.00000385.001 - 28 Colombo VICTORIA PARK WA 6100

Comments

Dear Sir/Madame,

I live on Geddes St and my 3 children attend 3 different schools in the area. Each day at 3pm I have to drive west, down Geddes st to pick them up. The back up of traffic waiting for the children at Regent College's kiss and drive is very long and banks up the entire street. It becomes very dangerous to drive down the street. Cars use the wrong side of the road to get past and I have seen cars taking terrible risks to get past. There are many children pedestrians at this time and this makes the potential risk greater. Sometimes, it is impossible for cars to travel either way due to buses, and other large vehicles blocking the way. If the number of children is increased at Regent College, this potential risk will be much greater and last for a much longer time.

It is very stressful and dangerous to drive through.

Please reconsider the traffic flow associated with this application as I think some of the assumptions made about the number of cars and the traffic congestion must be incorrect.

Yours sincerely,

[REDACTED]

Responsible Officer
Sturt McDonald

Vanessa Frankson

Subject: FW: New Online Submission regarding: 005.2017.00000385.001

[REDACTED]
Sent: Thursday, 6 July 2017 1:12 PM
To: Records <records@vicpark.wa.gov.au>
Subject: New Online Submission regarding: 005.2017.00000385.001

Date Reported
06/07/2017

Submitted By
[REDACTED]
33 Welwyn AVE
Manning WA 6152
Email Address: [REDACTED]
Phone Number: [REDACTED]

Relevant Interest
Owner of 17A Colombo Street VICTORIA PARK (LOT 4 STRATA 21370) Registered

Regarding
005.2017.00000385.001 - 28 Colombo VICTORIA PARK WA 6100

Comments
I am the [REDACTED] and own 17a and 17b Colombo Street; and 82a, 82b, and 82c Hordern Street which are diagonal to the build on Lot 1961 and are probably the most affected by the development.

I have read through the information provided and am happy with what they intend to do.

Regards

[REDACTED]

Responsible Officer
Sturt McDonald

Vanessa Frankson

Subject: FW: Application reference 5.2017.385.1 - Regent College - objection
Attachments: Council letter 24.7.2017 - edited.pdf

[REDACTED]
Sent: Tuesday, 25 July 2017 4:04 PM

To: Records <records@vicpark.wa.gov.au>

Subject: Application reference 5.2017.385.1 - Regent College - objection

Dear Sir/Madam,

Please see attached letter raising concerns regarding the additions and development to Regent College.

Should you not be able to open the attached letter – please don't hesitate to call me on [REDACTED]

Kind regards

[REDACTED]

[REDACTED]
25A Geddes Street
Victoria Park WA 6100
[REDACTED]

24th July 2017

Mr Sturt McDonald
Planning Officer
Town of Victoria Park
99 Shepperton Road
VICTORIA PARK WA 6100

Dear Mr McDonald,

RE: Lot 1961, 28 Colombo Street, Victoria Park – Development Application 5.2017.381.1 for Additions & Alterations to Educational Establishment (Regent College)

Thank you for your letters dated 4th July 2017 and subsequent letter dated 6th July, 2017 in which you ask for our feedback regarding the proposed additions and alterations to the college.

Judging from the drawings it appears that the new buildings facing Hordern Street and Columbo Street are going to be a marked improvement to the school and more pleasing to the eye. My concern is that of the recreational deck and undercroft parking that will be built addressing Geddes Street.

Firstly let it be noted that it appears that Regent College have not demonstrated themselves to be operating in the interests of community for the following reasons and are in breach:

- Approved numbers of students as at 2009 – 256 – currently enrolled 279 as advised by D. Nichols (Principal)
- No lighting to undercroft area of Performing Arts space built in 2010 was approved at time of submission – lighting has been installed retrospectively and is being used for longer periods of time for after school care
- Unauthorised use of basketball court for additional parking and for pick up and drop off
- New boundary fence in brick at 1.8m high should have been built in 2010 **along the entire length of 25 Geddes Street**
- At a meeting of residents of 25 Geddes and the Principal Derek Nichols on 7th June I asked what the expected numbers of students could be, at which time Mr Nichols informed student numbers would be in the vicinity of 330. Council letter of 4th July clearly states a proposed increase to 423.
- The school is in breach of its current use of Multi-Purpose Assembly area with its use outside of school times – afterschool care finishes at 6.00 pm and the undercover ground floor is currently being used.

I strongly oppose the increase in numbers to 423 for the following reasons:

- We have 3 schools in a radius of 500 metres, Victoria Park Primary 500 students currently enrolled, Regent College currently 279 with a proposed increase to 423, Riverview Community School 100.
- New primary schools with an approval of student numbers at 500 need to have a minimum of 3.5 ha. Regent college has nowhere near that sort of footprint.
- It appears from an aerial view of all three schools that Vic Park primary and Riverview have a greater expanse of open play space for students at lunchtime and playtime. Regent college currently rents the playing field alongside the current carpark. What provisions have been made in the future should the Seventh Day Adventist church decide not to allow this lawned area to be used by the School.
- We already have traffic congestion that causes undue pressure on residents and visitors alike, not to mention Geddes Street is also a bus route.
 - cars bumper to bumper at pick up and drop off times and often double parked in front of 25 Geddes while waiting for cars in drop off area to move out
 - I have had several near misses as I attempt to drive out of the driveway
 - visitors to 25 Geddes have at times had to park near Raphael Park and walk down
- I believe the additions to be an overdevelopment of the current site.

I strongly oppose the building of the undercroft carpark and open air recreation deck above for the following reasons:

- Boundary setback is proposed at 1.5 metres. 2.8 metres is the minimum requirement. I believe the 2.8m should be the absolute minimum, in consideration of the proposed use perhaps it needs to be more.
- Loss of privacy to entertaining areas for all 25 Geddes Street residents
- Sound Issues
- Loss of Natural light
- Overshadowing
- Line of sight eyesore
- The school has demonstrated it does not comply to council approvals

I would suggest the following solutions:

- The school increase its current land holding (buying back land from neighbouring residents)
- The school sink the undercroft carpark so that the play area is at ground level so it doesn't impact on neighbours
- The 1.8 brick boundary wall be built along the entire boundary of 25 Geddes as per 2009 approval
- The school adhere to Council requirements for current use and that some restrictions be applied for any future buildings and their use, in particular after 3pm
- Should an elevated recreational deck be approved, **increased privacy, noise control, height restrictions and use restrictions be imposed to ensure minimum disruption to neighbouring properties. That the elevated deck be kept as low as possible so that the vast majority of it is not visible above the 1.8 metre fence line. That the Geddes street elevation also have the acoustic and privacy cladding to ensure privacy to entertaining areas for 25A, and that any netting be black in colour so as to fade into the background.**
- The area in front of 25 Geddes should be resident parking only.

I would appreciate being informed of when the Development Assessment Panel will meet in relation to this matter as I would like to attend the meeting.

Kind regards

[REDACTED]

Parking restrictions are ignored and if policed by the council some improvement occurs for a short time, however the parking violations soon return.

Increasing the college's student, staff and parent population will only exacerbate an already impossible parking and traffic congestion situation.

Traffic calming - closing streets, one way streets, one directional turning at entry and exit points and other options should be considered. E.g. staggered school start and finish times would help.

On-site Car Parking

The proposal should not be approved with the proposed shortfall of 4 parking bays. This would further impact the available street parking. There already appears to be a shortfall in the required bays as the parking along Colombo St between Hordern and Washington Streets on the college verge is always occupied. This also causes a very dangerous traffic situation when a car drives on or off the verge because the driver's view of oncoming traffic is obscured and limited. As already exists in over areas such in Colombo St from Hordern St to Albany Hwy - the verge area at the College should become "No Standing".

School Noise Impacts

Play ground noise needs to be addressed and minimized. Children's normal play noise is welcomed. However, the constant screaming needs to be confined by the playing areas being located in the centre of the college. This will provide a sound barrier to long suffering residents (You have local residents that are home during school hours for various reason, retirees, shift workers, the disabled and aged, etc.) This would also make outside play safer and the children less vulnerable to undesirable outsiders.

The volume of the school public announcement system impacts the local community and should not be used for superficial and non urgent announcements e.g. winners of the Fathers day raffle, regular staff meetings about to start, individual staff members required to take a phone call, etc, etc, etc. School "bells/alarms" for school times should be turned off during public and school holidays.

Thank you for the opportunity to comment, which is submitted herewith in writing as requested. A brief overview of the submissions highlighting those, if any, which were adopted by council should be circulated to those that submitted comments. This will allow them some opportunity to assess whether this process and submitting comments is worthwhile.

Yours Faithfully

[Redacted signature]

[Redacted signature]

Vanessa Frankson

Subject: FW: Planning Application reference Number: 5.2017.385.1
Attachments: 28 Colombo St School Development Proposal Lot 1961.pdf

[REDACTED]
Sent: Monday, 24 July 2017 2:01 PM
To: Records <records@vicpark.wa.gov.au>
Subject: Planning Application reference Number: 5.2017.385.1

RE: Planning Application reference Number: 5.2017.385.1

Please find attached my submission in respect to this planning application.

Thank you

[REDACTED]

Town of Victoria Park
98 Shepperton Road
Victoria Park WA 6100

Re: Lot 1961, No. 28 Colombo Street, Victoria Park – Development application 5.2017.385.1 for additions and alterations to educational establishment (Regent College)

I write as the owner/occupier of No. 34A Colombo Street, Victoria Park.

I strongly oppose any expansion to the above educational facility, particularly the proposed increase in student numbers. This is a Residential zone and as such priority must be given to the wishes of owners and residents of local residential properties.

Already residents of Colombo Street, including myself have observed ongoing transgressions of parking laws as well as the use of our verge lawns by parents of the students from Regent College. Even after repeated complaints to the school on the part of my neighbours as well as myself, along with the added policing by the Town's ranger staff, this misuse of our residential area continues. At present I find that attempting to reverse out of my driveway in order to travel to work between 0820 and 0830 presents a major hazard as a result of having my vision impeded by parked parental vehicles and school traffic travelling in both directions along Colombo Street. **An increase in student numbers at the school will only multiply this problem.** An associated problem here is that Regent College, as a private education facility tends to draw the majority of their students from beyond the Victoria Park area; a factor that appears to contribute to the lack of consideration for the rights of local residents on the part of the parents of Regent College students. I often wonder what these parents may think if we came out to their suburbs and parked on their verges and clogged their streets. I believe the philosophy of Regent College would support the Christian adage that we consider the welfare of others as we would like our own welfare considered. This latter point should also be central in the minds of Regent College administration in respect to conducting an educational facility that is suitably sized for a residential area.

Additionally, while I have not kept the Town's historical correspondence, I seem to recall a previous statement by the Town in respect to the building of the new hall on the grounds of Regent College. That is, that there would be no increase in student numbers. This aside, I respectfully object to the current development proposal and implore the Town of Victoria Park to reject this application.

Perhaps Regent College would do well to consider locating any expansion of their education facility in the Burswood industrial area. This would be an ideal location as it would not impinge on the ambiance of residential areas in the town and safeguard the peace and quiet of those living there. Otherwise I believe Regent College should be restricted to their current enrolment numbers should they wish to continue to operate in Colombo Street.

Yours faithfully



24 July 2017

Owner of 34A Colombo Street, Victoria Park

Vanessa Frankson

Subject:

FW: Development Application 5.2017.385.1

[REDACTED]
Sent: Friday, 21 July 2017 10:27 AM

To: Records <records@vicpark.wa.gov.au>

Subject: Development Application 5.2017.385.1

I am responding to **Development Application 5.2017.385.1 on Lot 1961 No 28 Colombo Street Victoria Park**. Being a resident at 32 Colombo Street we find the application to increase student numbers at the school as rather ridiculous because of the parking situation. We have enough trouble trying to get out of our drive at the best of times as the parents don't seem to consider our plight. Parking on our verge, broken sprinklers and parking across the drive are just a few of the problems we encounter. Not to mention the rubbish and recycle trucks that only just have enough room to get to the end of the street. We should only have parking on one side of the street as it is too narrow for larger vehicles.

So will Council please consider this submission as a definite **NO** to the development **5.2017.385.1**

Regards

[REDACTED]

Vanessa Frankson

Subject: FW: Response to Development Application 5.2017.385.1.pdf
Attachments: Response to Development Application 5.2017.385.1.pdf; notice.jpg

[REDACTED]
Sent: Wednesday, 26 July 2017 1:22 PM

To: Records <records@vicpark.wa.gov.au>
[REDACTED]

Subject: Response to Development Application 5.2017.385.1.pdf

Please find attached a response to the Development Application 5.2017.385.1

[REDACTED]

>

27 Geddes Street
Victoria Park WA 6100

Page 1 of 5

- A reduction of the required setback to 1.5m as outlined in the planning proposal by T&Z Architects (page 3) effectively delivers a 4.5m wall directly adjacent to the outside living areas of all three units. The provision of a translucent and chain link fence on top of the concrete deck will not reduce the sheer impact of the potentially unsightly structure.
- The proposal includes the provision of a total of 44 car bays which includes the existing parking area (12 bays) under the proposed deck and parking under the multi-purpose hall which was subject to a separate planning approval in 2010/11. The area under the multipurpose hall was approved as a multipurpose assembly area, not a car park.
- Geddes Street is already a very busy street with peak times between 7:30am – 9:00am and 2:30pm – 4:00pm. During that time the heavy flow of traffic between Berwick street to Albany Highway, cars parked on both sides of the street, buses running frequently in both directions, drop offs of children to both Regent College and Victoria Park Primary is already creating a dangerous situation. Access to and from the existing carpark is already problematic and the impact of the increase to 44 bays is already being felt due to the opening of the basketball court area to vehicles in term three. The 44+ cars is already happening. See photo below
- The transport impact assessment by SHAWMAC for T&Z Architects draws heavily on a statistical analysis of traffic patterns, volumes and standards, but has failed to consult with local residents or take into account the large volume of people who utilise the free parking on Geddes and surrounding streets, or ignore existing school restriction times. The report in fact says (p10) "As there is plenty of street parking along Columbo Street and Geddes Street, it is **assumed** that half of the remaining trips will be generated to each of these streets (30% each). This is just not the case. Many of the people that park in these locations do so all day as they work in the Monadelphous complex or commute by bus into the city. This exacerbates the traffic congestion as parents who park and either pickup or drop off children quite often cause traffic congestion by trying to park in remaining or non-standing areas.

The reference in this report to the directive that parents or careers are encouraged to do laps of the block before queuing for the 'kiss and drive' pickup on Hordern Street from Geddes Street highlights the congestion issue. Quite often cars stop on Geddes Street waiting to turn left into Hordern Street.

Further on in the report (p14) it recommends the Geddes Street access driveway be widened to 6.0m and discusses sight distances being restricted by the parked cars on the street, highlighting existing access driveway for the group dwelling at number 22 Geddes Street as an example having 'significantly more traffic than the proposed car park' (p15). This grouped dwelling already has exit issues from the access drive onto Geddes Street, however this is an **all day** issue due to the cars parked by people working at other businesses or commuting into the city. The exit issue for 22 Geddes Street is also reduced as the complex has another exit onto Hordern Street at the rear. The statement that 22 Geddes Street would have 'significantly more traffic than the proposed carpark' has nothing to support it.

The report goes on to say (p16) that the "sight distance could be improved by **removing parking bays** from either side of the car park access driveway, or extending the driveway

out past the parked vehicles with pavement or hard landscaping". This is totally inconsistent with the statement (p10) that says (as above) "there is plenty of street parking along Columbo Street and Geddes Street, it is **assumed** that half of the remaining trips will be generated to each of these streets (30% each)".

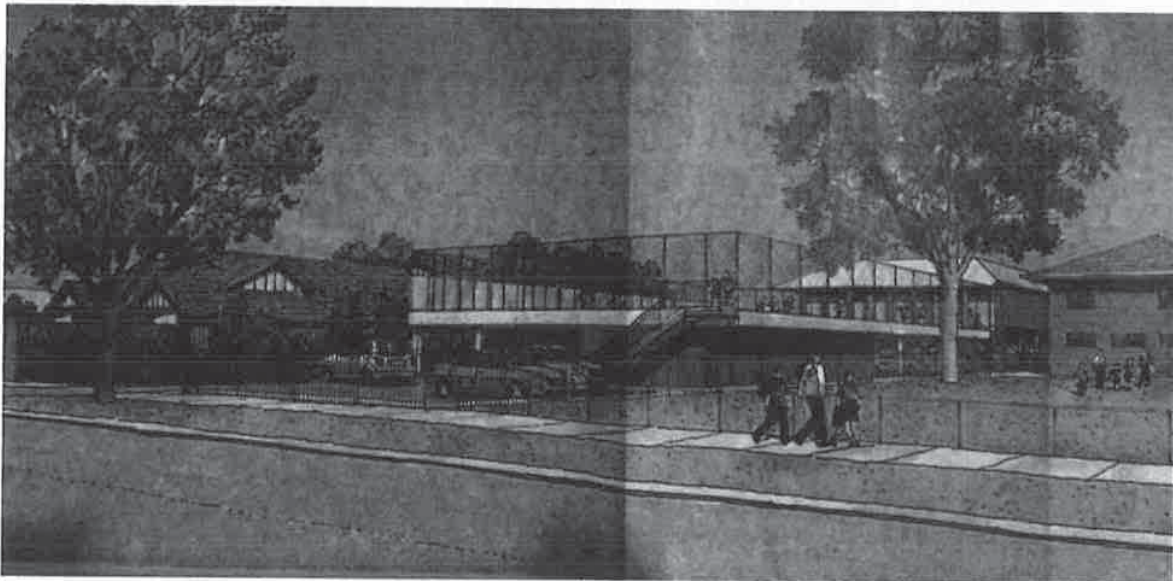
The provision of a 6m wide entry and removal of existing parking would make the situation even worse for residents who are already impacted by the all-day parking, with quite often no spaces available for visitors. We are impacted by that situation frequently.

The report references public transport and the access and available to bus services but says nothing about the impacts of the buses to congestion on Geddes Street during peak time. Perhaps there should have been some discussion with Transperth.

The report again mentions the abundance of street parking (p20), which is inconsistent with the reality in the peak times and during the day.

The conclusions (p10) need to be independently tested as they paint a picture which from someone who has to deal with the congestion every day seems difficult to believe.

The visual impact of this structure is significant and totally at odds with the planning and design objectives of the Raphael Park precinct plan P5. The nature of the structure has a significant visual impact, and favours cars over the needs of the children who attend the school.



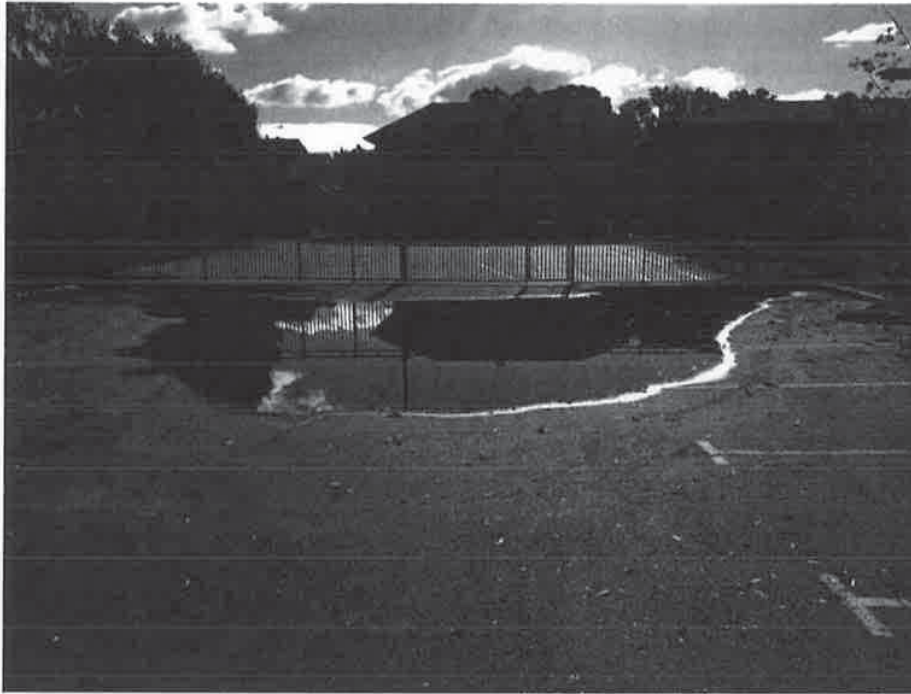
Other Issues

- The proposal supports taking Regent College from 256 to 423 students (60% increase and teachers from 20 to 30 (50 increase). The existing traffic management is inadequate to deal with the increase during peak periods and will only add to the existing problems that residents have with parking due to pickups, drop-offs, extended stays and people parking to compute to work.
- Since the start of term 3 the existing bitumen area (was a basketball court) subject to the planning application is being used for car parking. This is already placing additional

pressure on access to and from Geddes Street, as well additional noise impacting the adjacent property. This photo was taken at 8:51 am on the 26th July 2017, and gives a good indication of what would happen if approval is given. Place a screened deck on top of this carpark and the scale and visual impact is obvious.



- Other work in advance of planning permission has already begun, including the removal of trees and new high fencing on the Geddes Street side.
- Drainage on the existing carpark is an ongoing issue in winter, quite often making the parking unusable. These issues would need to be addressed. This photo was taken on the 8th July 2017, after most of the water had drained away.



Recommendations

- Council rejects the application component of the proposal that deals with the additional parking, widening of the crossover, removal of existing street parking and the building of a recreation deck above the parking.
- Consideration of the impacts on adjacent property owners is taken into account earlier in the planning process.
- A wider review of traffic management including better consultation with residents is undertaken.
- Schools are community based and need to work with local residents to ensure the best interests of the students, school, and surrounding community. This can be achieved through earlier consultation.
- The streetscape and visual impact of the carpark and recreation deck be considered in relation to the objectives of the Raphael Park planning guidelines.

25th July 2017

TOWN OF VICTORIA PARK TOWN PLANNING SCHEME NO 1

NOTICE OF APPLICATION TO USE OR DEVELOP LAND

Notice is hereby given that T & Z Architects on behalf of
Regent College Inc has applied to the Town of Victoria Park for approval of
ADDITIONS & ALTERATIONS TO EDUCATIONAL ESTABLISHMENT
on land situated at **LOT 1961 No. 28 Colombo Street VICTORIA PARK.**

Plans/details of the proposed development can be viewed online via the

Town's Website www.victoriapark.wa.gov.au

Any person wishing to comment upon this proposal should do so by no later than
5:00pm 26th July 2017 by either lodging a submission online through the
Town's Website, by email to admin@vicpark.wa.gov.au or by letter to the
Town of Victoria Park, Locked Bag No. 437, Victoria Park WA 6979.

Vanessa Frankson

Subject:

FW: New Online Submission regarding: 005.2017.00000385.001

[REDACTED]
Sent: Wednesday, 26 July 2017 12:36 PM

To: Records <records@vicpark.wa.gov.au>

Subject: New Online Submission regarding: 005.2017.00000385.001

Date Reported

26/07/2017

Submitted By

[REDACTED]
27 Geddes ST

Victoria Park WA 6100

Email Address: [REDACTED]

Phone Number: [REDACTED]

Relevant Interest

Owner of 90C Hordern Street VICTORIA PARK (LOT 5 STRATA 22331) Registered

Regarding

005.2017.00000385.001 - 28 Colombo VICTORIA PARK WA 6100

Comments

I would like to lodge my objection to the planning proposal

Lot: 1961, No. 28 Columbo Street, Victoria Park – Development Application 5.2017.385.1 for Additions & Alterations to Educational Establishment (Regent College)

The proposal is for the development of new facilities and parking to cater for a 60% increase in student numbers from 256 to 423 and 50% increase in teacher numbers from 20 to 30. The increase in numbers brings with it an increase in the traffic management issues already present, including available parking. At this point in time the no parking during school hours combined with the 'kiss and drive' in the section of Hordern Street between Geddes and Columbo creates a major restriction to resident parking and traffic chaos during the morning 7:30 - 9:00am and afternoon 2:30 - 4:00pm.

The proposal is also seeking to significantly expand the car park off Geddes Street and build a recreation deck on top. The existing car park already creates congestion on Geddes Street in the morning and at night. The increase in car numbers will only make this situation worse.

The proposed recreation deck above the carpark is a large structure which will look very unattractive from the street and create a significant impact on adjoining residents. Does it conform to what the Town of Victoria Park wants for the Raphael Park Precinct?

Responsible Officer

Sturt McDonald



Steve IRONS MP

Federal Member for Swan

25th July 2017

Mr Anthony Vuleta,
CEO of Victoria Park
99 Shepperton Road,
VICTORIA PARK, WA 6100

TOWN OF VICTORIA PARK

File No. 5.2017.385.1

Xref No. 26 JUL 2017

BLP	<input type="checkbox"/>	RAN	<input type="checkbox"/>	PLN	<input type="checkbox"/>	RLP	<input type="checkbox"/>
CLP	<input type="checkbox"/>	EH	<input type="checkbox"/>	BLD	<input type="checkbox"/>	CEO	<input type="checkbox"/>
FLBLP	<input type="checkbox"/>					HR	<input type="checkbox"/>
FIN	<input type="checkbox"/>					NE	<input type="checkbox"/>
RAT	<input type="checkbox"/>						

DOC No. _____

Dear Mr Vuleta,

I am writing to you today on behalf of one of my constituents, a [REDACTED] of 25B Geddes Street and her objections to the development application by Regent College.

The Development application in question is 5.2017.385.1, and more specifically relates to the outdoor recreation deck. [REDACTED] concerned that due to the height of the development will negatively impact not only her privacy but her access to sunlight.

[REDACTED] also has concerns in regards to her safety and the safety of her pets in their backyard due to this raised recreation deck. Please consider her objections to this development through the normal processes of development approval.

If you have any questions or queries about this letter, please do not hesitate to get in contact on 9355 0099.

Yours sincerely,

STEVE IRONS MP
Federal Member for Swan

Vanessa Frankson

Subject: FW: comments - Planning Application ref no: 5.2017.385.1
Attachments: 22 July 2017.docx

Sent: Sunday, 23 July 2017 7:27 PM
To: Records <records@vicpark.wa.gov.au>
Subject: comments - Planning Application ref no: 5.2017.385.1

We are writing to comment on the proposed development for the property 28 Colombo St Victoria Park, which increases the maximum number of students from 256 to 423 total enrolments.

Please refer to our attached letter (12 pages) and photographs (11). Should there be any queries with respect to our correspondence or attached photographs, please contact us.

Please confirm receipt of this email.

We have provided our details below on the understanding that Town of Victoria Park not disclose our names and address to any other parties.

[Redacted content]



photo 1



photo 2



photo 3



photo 4



photo 5



photo 6



photo 7



photo 8



photo 9



photo A



photo B

23 July 2017

Mr Sturt McDonald
Planning Officer
Town of Victoria Park

Planning Application Ref No: 5.2017.385.1

We are writing to comment on the proposed development for the property 28 Colombo St Victoria Park, which increases the maximum number of students from 256 to 423 total enrolments.

Our comments incorporate

- the inter-related matters of parking in the local area, traffic congestion on Geddes St and safety
- visual impact of the proposed development addressing Geddes St
- limitations in the Transport Impact Assessment authored by Shawmac (dated 30/6/2017)
- other factors that are relevant to the local area

It is understood that that the proposed development has been revised. The architects' *Perspective View from Colombo Street* and *Perspective View Corner Colombo and Hordern Streets* shows formal verge parking at school frontage that does not appear elsewhere on the plans or written proposal that are available for public consultation.

Traffic congestion

We note from the Raphael Precinct Plan Statement of Intent

"Safe, accessible movement for pedestrians, cyclists, public transport and private vehicles is an important aim for the precinct".

We have concerns about the safe movement of road users with the existing number of students, which will be outlined below.

The Transport Impact Assessment puts forth expectation that the Hordern St and Geddes St intersection will perform satisfactorily in the AM and PM peak periods. We do not think the intersection performs satisfactorily at present.

The school operates a "Kiss and Drive" system. The Transport Impact Assessment describes this as follows

"The current Kiss and Drive has several staff members managing the children and accompanying them to the parents' vehicles as they arrive. When students are not at the pick-up location, parents and carers are directed to do a lap of the block, in an anti-clockwise direction along Colombo Street, Washington Street and Geddes Street before joining the queue again on Hordern Street." page 21

There is no comment in the report as to what occurs when the Kiss and Drive bays on Hordern St (approximately 12) are full.

In practice, a queue forms which extends around the corner into Geddes St. We regularly observe cars queuing along the yellow line and around the corner into Geddes St. As car numbers build up, cars will then be banked along Geddes St. This obstructs traffic flow travelling past Regent College toward Albany Highway. With the existing student numbers, we regularly observe the adverse impact of queuing of cars for Kiss and Drive on traffic movement on Geddes St. Where drivers caught in queue are actually seeking to traverse Geddes St, they may make judgement that they will not be able clear queue in a reasonable time, and are seen to overtake queued vehicles using opposing traffic lane or turn around. It is observable that queuing obstructs visibility for drivers, cyclists and pedestrians using the intersection.

Due to current congestion, we adapt our travel route or planned departure/arrival time in order to avoid using Geddes St near Regent College at specific, school related hours. We see this as necessary to avoid delay and for safety.

To provide documentation of traffic congestion on Geddes St, photographs have been taken at the intersection of Geddes St and Hordern St and these have provided as email attachments

Afternoon Wednesday 19-7-2017.

These photos are presented in chronological order, demonstrating the build up of the queue for "Kiss and Drive" around the corner into Geddes St.

- * photo 1 and photo 2 - cars on Hordern St are stopped across a driveway and along the yellow "no stopping" line on the corner. The queue is stationary.
- * photo 3 - a blue vehicle stops at the intersection to turn right into Hordern St. It is seeking to join the Kiss and Drive queue and because the queue is stationary, the blue vehicle remains stationary in the intersection.
- * photo 4 - a vehicle travelling along Hordern St is attempting to cross the intersection. Given delay, the vehicle enters the intersection and swerves around the stationary right turning blue vehicle in order to continue along Hordern St.
- * photo 5 - with vehicles remaining at a standstill on Geddes St, a vehicle travelling toward Albany Hwy overtakes the queue of cars by using the opposing lane
- * not photographed but observed after taking photo 5 was a white vehicle travelling north attempting to turn right from Hordern St into Geddes St. This white vehicle also swerves around the stationary right turning blue vehicle that is seen in photo 4. Two pedestrians (adult and child that can be seen on the corner in photo 3) are observed to have difficulty crossing Geddes St and have an obstructed view. They are walking toward Victoria Park Primary. Having waited, they begin walking across the street. The right turning white vehicle elects to stop waiting and swerves around the blue vehicle obstructing the intersection. Once entering the intersection, the driver sees the pedestrians and stops his vehicle on the intersection to allow the pedestrians to complete their crossing.

Afternoon Friday 21 July 2017

- * photo 6 - Cars are backed up along most of the block due to queuing for the Kiss and Drive at 3:06pm
- * photos 7, 8 and 9 - when I return at 3:13pm there is a right turning vehicle joining the Kiss and Drive queue. To merge with the left turning cars, it stops across the lane of oncoming traffic.

In summary, with existing student numbers, the Kiss and Drive operated by Regent College impacts upon traffic flow on Geddes St on school days.

With increased student numbers, demand on the Hordern St Kiss and Drive will increase and therefore, so will traffic congestion.

In addition, given the impact on flow of vehicles along a public transport route, we would think it appropriate that Transperth should be asked to comment on the proposed development. I have used public transport on Geddes St during PM school peak time and observed buses to be caught in the banked up traffic and thereby delayed.

Parking bays on school premises

Parking shortfall

From telephone contact with Mr McDonald Planning Officer, Town of Victoria Park, currently Regent College has a parking shortfall of roughly 40 bays (as at the previous development application). The current proposal will add to this existing parking shortfall.

The Transport Impact Assessment presents a calculation of parking required to accommodate an additional 167 students, putting this forth on the premise that the existing parking shortfall is acceptable, ie *"considering that the provision of only 13 off-street bays has served the existing school population"* (page 20). We do not accept the premise that 13 off-street bay sufficiently services the existing student numbers. The statement in the report *"The proposed 44 bays is then only 4 bays short of policy requirement."* (page 20) is phrased in such a way that a reader could be mislead. Parking supply of 89 bays (30 for staff, 59 for students) is the actual figure to comply with current Town of Victoria Park policy.

The report presents calculation that 35 bays are required according to comply with policy for 167 students and associated staff. According to the Transport Management Assessment there are only 44 bays proposed on school premises: an additional 33 bays and 11 existing bays (given the loss of 2 of the existing 13 bays to accommodate widened crossover). The parking shortfall below the 89 bays is a significant number and the report appears to attempt to minimize this matter.

Carpark access – Geddes St

The Transport Impact Assessment states

"Sight distance is restricted when cars are parked on the northbound lane of Geddes Street, either side of the driveway. This is consistent with other access driveways

along Geddes Street, in particular the grouped dwellings located at 22 Geddes Street, which would have significantly more traffic than the proposed car park.” (page 15).

Comparison with residential dwellings is made, in particular the grouped dwelling on 22 Geddes St. The claim that 22 Geddes St would be expected to have “significantly more traffic” is not substantiated in the report. It actually seems very unlikely given this group of dwellings (25) has a second driveway access on Hordern St. Indeed, the Hordern St driveway allows residents to avoid congestion on Geddes St where necessary. The comparison made with residential traffic is of limited value given resident usage is staggered across the day. The usage of a school carpark is different and especially so if used by families of students. In addition, the nearby primary school is a relevant planning matter not considered in the report.

If the Regent College Geddes St carpark is to be used for student parking, then there will be increased vehicle movement at the same time as increased pedestrian movement. Victoria Park Primary School, being a government school, services a local catchment. Child pedestrians are seen to walk, cycle and use scooters on Geddes St footpaths and crossing streets. In this circumstance, going beyond minimum standard for the safety of child pedestrians seems necessary, particularly in view of the Statement of Intent for the precinct. There are 2 methods the report identifies for improving sight distance: the removal of cars bays on either side of carpark driveway (ie loss of street parking) and extending the driveway using pavement or hard landscaping. Improving sight distance should be assessed further and specifically addressed.

Geddes St carpark/recreation deck - Appearance

The perspective view of the carpark accessed from Geddes St with open recreation deck above was not included in the documents available online on Town of Victoria Park website. That this was not made available is concerning as a local resident. We have now seen the T&Z perspective view of this element of the proposal.

It is noted that the T & Z Architects' Report - *Urban Design and Streetscape* makes no specific representation as to what design features of the carpark, enclosure to accommodate fire fighting equipment and deck are in keeping with the Raphael Park

Precinct Plan Statement of intent. We note from the Statement of intent "*the precinct should remain visually attractive*". As local residents, our comment is that this element of the proposal is visually unappealing and not in keeping with the character of the area. To be blunt, it is ugly.

We note that inexplicably, there is a mature tree depicted next to the carpark/open deck. That tree was identified on the plan as to be removed and in fact, it has already been cut down. There is no mention of landscaping on the Geddes Street side of the site in the proposal. There is no attempt in the proposal to mitigate the visual impact of the carpark, deck and the 3m fencing on the deck. Also depicted in the drawing are children in what appears to be school uniform on the grassed area adjacent to the carpark. That area is actually not on the site plan given it is not owned by the school. Consequently, depicting it as the school's play area is misleading.

In summary, the appearance of the Geddes St carpark/open deck is of concern and given the school does not own the land adjacent, the scope to mitigate the visual impact seems extremely limited.

Parking bay usage

How the bays on-school premises are to be used is not included in the report. This is unsatisfactory. Traffic impact cannot be adequately assessed without this information.

If bays are allocated for use by families in the larger of the two carparks, this will draw vehicles to Geddes St. The increased number of cars would be entering and exiting the Geddes St carpark at the same time as there is congestion on Geddes St due to the Kiss and Drive queue. This would inevitably further increase traffic congestion in the street. If the on-premises parking bays are only allocated to staff parking, then the local area bears the brunt of school related parking demand for all enrolled students.

In summary, the parking shortfall is considered by us to be a significant matter and the absence of any information about the planned use of off-street parking a notable limitation of the Transport Impact Assessment. The potential for conflicting traffic

demands on Geddes St (access to carpark and Kiss and Drive queue) is of concern, as is the lack of planning around pedestrians from nearby primary school which has pedestrian access point on Geddes St.

Proposed compensation for parking shortfall

The Transport Impact Assessment states

"...the shortfall in off-street parking is considered to be adequately compensated as follows:

- ☐ *there is an existing Kiss and Drive area on Hordern Street accommodating up to 12 cars at any one. [sic]*
- ☐ *The abundance of formal street parking surrounding the school including 12 bays along the school (north) side of Geddes Street which are restricted to 15 minutes during the morning and afternoon school peak periods on school days. The available street parking surrounding the school is detailed in **Table 7**.*
- ☐ *the informal verge parking areas along both sides of Colombo Street.*
- ☐ *it is typical for many parents and guardians to park on nearby streets, walk to the school and escort their children back to the car. It was observed during a site visit to the school that some parents and guardians park at Raphael Park and walk their children to and from the school.*
- ☐ *the excellent available public transport services within the vicinity of the site and the comprehensive network of footpaths in the surrounding area."* (page 20)

In response to these points in the report

- re Kiss and Drive.

The current overflow and queuing from these 12 bays around the corner into Geddes St has been described above with accompanying photographs.

- re purported "abundance of formal street parking surrounding the school".

Regent College is situated in an area identified by Town of Victoria Park as a parking "hotspot". The 2012 Parking Management Plan, which is available on the Council website, identifies a number of hotspots and management plans within the Town. Regent College is situated within an area labeled in the document as Hotspot Area 5.

It is notable that there is no reference in the Transport Impact Assessment to nearby schools also creating demand for street parking at AM and PM peak times. Apart

from residents, other sources of street parking demand in the area are commuters who seek parking in order to use public transport into the Perth CBD, employees of local businesses and business customers.

- re informal verge parking,

It is noted from the Town of Victoria Park website that where there are no verge restrictions in place

"Town of Victoria Park allows a resident or property owner the ability to control who parks on the verge adjacent to their property."

The verge on the northside of Colombo St is not controlled by Regent College. It is adjacent to a different school - Victoria Park Christian School. There is no evidence presented in the report that currently the neighbouring school has given permission for families of students attending Regent College or associated staff to park on that verge. If there is current permission, that permission could be withdrawn in the future. Victoria Park Christian School is under no obligation to assist another school compensate for its parking shortfall.

Any capacity for informal verge parking therefore to compensate for parking shortfall would be limited to the southside of Colombo St, as that is the verge currently controlled by Regent College. However, it is not the property of the school. As such there is the potential for council to implement changes to the verge parking in future. Should this occur, it would impact on the street parking demand in the surrounding area.

- re parking in nearby streets and walking.

This is reported to be "typical" without providing evidence to substantiate this. Nor does it consider what factors may influence decision to walk to the school from a vehicle parked elsewhere. On days where weather is inclement or during heatwave conditions, parking and walking becomes less practical for families, particularly if they are managing very young children or infants during drop-off / pick-up.

In the report there is an estimate that 40% of car trips use Kiss and Drive. The basis of this estimate appears to be a single observation during pick-up and staff comments. The nature of the observation is not specified, nor the basis of staff comments articulated. There is an assumption that 40% is consistent day to day. In very hot or

inclement weather conditions, those that walk to school or park and walk may change their travel arrangements. In that circumstance, it would be anticipated that the demand on the Hordern St Kiss and Drive would increase, further impacting upon congestion.

The Transport Impact Assessment states

"As there is plenty of street parking along both Colombo Street and Geddes Street..."

page 10. This does not take into account other demands on parking that are generated in the local area. Specifically with respect to Geddes St, at school pick-up and drop-off times, there is traffic on Geddes St associated with both Victoria Park Primary and Regent College. There are vehicles seeking street parking associated with both schools.

- Usage of public transport

While access to public transport is good (bus route on Geddes St, bus routes on Albany Highway and bus transfer station within walking distance), there is no information as to the current number of students that use this as a transport mode, nor projection of what proportion of increased student population would use public transport. Anecdotally, we see only very few students at the bus stops on either side of the street nearby to both the school and our residence. Unless there is evidence to the contrary, there may be limited actual usage of the public transport available.

In summary, the Traffic Impact Assessment is not considered to present evidence that there is adequate compensation for the off-street parking shortfall. Indeed, for the reasons outlined above, we are very concerned that there is actually limited scope for the surrounding area to absorb increased parking demand.

Traffic Management Plan - Transport Impact Assessment

The Traffic Management Plan (appendix D) is not comprehensive. It depicts certain areas of street parking but not others. There is no rationale provided.

For example, it depicts the 2-hour parking on the northside of Geddes St between Hordern St and Albany Highway. It does not include the opposite side of Geddes St. The southern side includes Kiss and Drive for Victoria Park Primary School. Not

depicted but also relevant to parking demand, is the pedestrian access point to Victoria Park Primary School located on the southern side of Geddes St. As such, the demand for parking at drop-off and pick-up times is not limited to Regent College in that area.

Parking on Hordern St opposite to the school is not represented. Had this been included it would be clear to the reader that there is no parking available during pick up and drop off times. Not depicted is Hordern St on either side of the school, despite proximity to pedestrian access points of the school. We note the parking restrictions along both sides of Hordern St between Geddes and Cargill relating to school hours (1/2 hour parking Mon – Fri , 7:30 AM - 9 AM and 2:30 PM – 4 PM). Given proximity to both Victoria Park Primary and Regent College, both schools are generating parking demand in that section of the street.

We have found inaccuracies in the figure Appendix D. The Traffic Management Plan represents 2 hour parking for the length of Colombo St on both sides between Hordern St and Washington St. It was stated elsewhere in the report that there is informal verge parking outside the school. If 2 hour parking were in place outside the school as depicted, then verge parking would not be possible for either entry or reverse exit (see photo A below). Having viewed the signage on Colombo St, there are in fact parking restrictions in place. On the street outside the school itself is a no standing zone. Across the street from the school is no standing 7:30 AM – 5:30 PM school days and a no standing area (photo B). No standing restriction extends the full length of north side of Colombo St to the intersection with Washington St.

In summary, there is insufficient detail and errors that should be corrected.

Other factors relevant to the local area

We are concerned that the Transport Impact Assessment considers the Regent College in isolation. The school is situated in a suburb close to Perth CBD with good access to public transport and there is associated commuter parking demand. There are businesses along Albany Highway, with associated ticketed parking restrictions along the highway and into adjacent areas of adjoining streets. Regent College has very close proximity to the 2 other primary schools: Victoria Park Primary School and Victoria Park Christian School.

Victoria Park Primary School has limited off-street parking, which is allocated to staff only use. We note that this school has experienced an increased number of enrolments. As at Semester 1 2017 there were 473 students enrolled at the school (source https://www.det.wa.edu.au/schoolsonline/student_current.do?schoolID=5444&pageID=SP01). At beginning of 2015 there were reported to be 398 students enrolled, and the school's annual report for 2015 includes the following comment *"The opening of the Kindergarten in 2005 has obviously increased numbers in the Early Childhood area; however student numbers throughout the school has also continued to show growth"* (source <http://www.vicparkps.wa.edu.au/annual-report/>). The increase in Victoria Park Primary School enrolment numbers over time (excluding kindy) is shown at the following web site https://www.det.wa.edu.au/schoolsonline/student_trends.do?schoolID=5444&pageID=SP03. In 2016 the school completed building work to create an additional classroom. Traffic congestion is an issue for the school and saw the school participate in a "Your Move" campaign in 2017, which was co-sponsored by Town of Victoria Park. In an article in the school newsletter (Newsletter number 8 2017) about the "Walk Ride Scoot to School Breakfast Event" held at the school 24/5/2017 it was stated *"As you're aware these promotions aim to reduce the traffic congestion before and after school."*

The Application for Planning Approval by T & Z Architects (dated June 2017) makes reference to Regent College providing a service to the residents of Town of Victoria Park. It presents no data as to current proportion of enrolled students are from Town of Victoria Park. There is no projection of whether the proposed expansion actually services the local area or will draw additional enrolments from suburbs beyond Town of Victoria Park. The school sits within a residential area and yet there is no information as to the service provided to that area. It is local residents who will experience loss of amenity due to the proposed development.

T&Z Architects also make reference to the WAPC's Draft Perth and Peel @3.5 million. The longterm viability of the site for a school population exceeding 400 students is therefore relevant. It is noted that the green space currently used by the

school is by agreement of adjoining landowner. The outdoor play areas actually shown in the proposal site plan are the existing E.L.C playground (Hordern Street side of the site) and a proposed open deck for recreation above the larger carpark. In future, if the school should lose access to the green space, the available play space for students would be inadequate. Noting that one play area is dedicated to the Early Learning Centre, the open deck area would presumably become the main area of play for students of the primary school. The anticipated increased noise levels and further loss of privacy in the context of non-conforming setback would obviously be an issue for neighbouring residents. (please note, the preliminary noise assessment by Gabriels Environment Design was not available online for reference on the council website)

Concluding remarks

For reasons outlined above, we are concerned that the proposed parking arrangements for the increased numbers of staff and students will be entirely inadequate, that the existing traffic congestion will increase and that there will be short but intense periods of traffic chaos on Geddes St near the school. We have made our comments concerned that on school days the proposed development will adversely impact on the amenity and character of an area that needs to cater for the needs of residents, non-residents, businesses, schools and public transport provider.

Vanessa Frankson

Subject:

FW: Comment re proposed development 5.2017.385.1

[REDACTED]
Sent: Wednesday, 26 July 2017 4:27 PM

To: Records <records@vicpark.wa.gov.au>

Subject: Comment re proposed development 5.2017.385.1

I wish to add to my previously submitted written comments regarding the proposed development at 28 Colombo St Victoria Park. This pertains to design elements that do not affect me as a local resident directly, but is a broader issue.

The report of the submitting architect makes reference to provision of education service and infrastructure needs for a growing population in Perth. It would be expected that this would include current and prospective students with a disability. One of the elements that is lacking is the considerations around an inclusive, accessible play environment for students with disabilities. The open deck play area above the carpark is accessible north end and south end via steps only. Students with physical disability and/or sensory disability may be unable to safely ambulate stairs to access the play area. There is no wheelchair access.

Planning for an inclusive play environment, accessible for all students irrespective of disability would seem desirable at an early stage. A play area accessible only by steps will be a barrier to participation for some children in an aspect of school life. In addition, any parent with a disability visiting the school would be unable to access that area if ever required.

Lack of disability access seems a highly regrettable oversight within the design. I would hope that this would be seen as important to address.

[REDACTED]

Sent from Samsung Mobile

Our Ref: 17-752
Your Ref: DA 5.2017.385.1; File: 22983
DAP Ref: DAP/17/01219



25 July 2017

Chief Executive Officer
Town of Victoria Park
Locked Bag 437
VICTORIA PARK WA 6979

Attention: Sturt McDonald, Planning Officer

RE: LOT 1961, NO. 28 COLOMBO STREET, VICTORIA PARK – DEVELOPMENT APPLICATION 5.2017.385.1 FOR ADDITIONS & ALTERATIONS TO EDUCATIONAL ESTABLISHMENT (REGENT COLLEGE) - SUBMISSION

Thank you for your letter dated 4 July 2017 in relation to a development application the Town of Victoria Park (Town) has received for the abovementioned property. TPG+Place Match have been engaged by the landowners of 25B and 25C Geddes Street, Victoria Park immediately to the southwest of the proposed development to prepare this submission in objection. Our clients are concerned about the significant negative impact that the development will have on the amenity of their properties and the enjoyment of their lifestyles, as detailed below.

Background and Appreciation

It is understood that the landowner of Lot 1961 (No. 28) Colombo Street, Victoria Park (Regent College) has submitted a development application for additions and alterations to the existing Educational Establishment. The proposal is to be determined by the Metro Central Joint Development Assessment Panel (JDAP) on the recommendation of the Town. The site is zoned 'Residential' under the Town's Local Planning Scheme No. 1 (LPS1) with a corresponding density, as described by the Residential Design Codes, of R30. The application proposes a variation to the lot boundary setback and location of car parking requirements, as they relate to the shared boundary with our clients' properties.

We understand the proposal includes, among other things, the construction of an elevated 'Recreation Deck' and 41 car bays adjacent to the north-eastern lot boundary of our clients' properties. It seems apparent that the landowner and project architects proposed the raised deck simply as a consequence of not having any other option to locate additional on-site or on-street car parking needed to accommodate the proposed increase in private school enrolments; and then adding a privacy screen and further sports ball mesh fencing atop of the deck in an attempt to mitigate against further non-compliances such as privacy.

As a result, the proposed development as it currently stands results from the landowner's deliberate intent to maximise space for additional car parking for the development without any proper regard for the impacts that the development would have on the amenity of the neighbouring residential properties to the southwest.

On this basis, we have undertaken an independent assessment of the proposed recreation deck against the applicable elements of the Town's local planning framework as detailed below:

- State Planning Policy 3.1 – Residential Design Codes (as the site is within a Residential Zone, is subject to an R-Code and adjoins residential development);
- LPS1 and Precinct Plan 5 – Raphael Precinct;
- Local Planning Policy 3 (LPP3) – Non-Residential Uses in or Adjacent to Residential Areas;
- Local Planning Policy 23 (LPP23) – Parking Policy;
- Local Planning Policy 26 (LPP26) – Boundary Walls; and
- Local Planning Policy 36 (LPP36) – Climate Control (Energy Efficiency).

Our assessment also takes into account the Deemed Provisions for Local Planning Schemes under Schedule 2 of the *Planning and Development (Local Planning Schemes) Regulations 2015* (Deemed Provisions) and identified that

the extent of non-compliance with the requirements of the Town's local planning framework extend beyond that identified within the Town's letter dated 4 July 2017.

General Comments

The impacts that the proposed development will have on the amenity of the affected neighbours are a result of the cumulative impact of varying the deemed-to-comply standards of the R-Codes relating to lot boundary setbacks, provisions of LPS1 or associated established planning policy in respect of use, character, streetscape, and overshadowing associated with the recreation deck. It is reiterated that this area is a relatively low-density, R30 coded residential zone.

Clause 6 of LPS1 provides general objectives of the Scheme, including the objective to *"protect and enhance the health, safety and general welfare of the Town's inhabitants"*. Clause 67 of the Deemed Provisions identifies that in determining an application the Council is to have regard to, among other things, *"the compatibility of the development with its setting including the relationship of the development to development on adjoining land or on other land in the locality including, but not limited to, the likely effect of the height, bulk, scale, orientation and appearance of the development"*.

The design of the proposed development has no proper regard to its setting or the design of the houses on the neighbouring residential properties and represents the landowners of the development site seeking to maximise parking without consideration for and to the detriment of others. The design of the proposed development introduces unacceptable bulk and vehicular movements, in close proximity to the affected residential properties. This will cause undue overshadowing of our clients' only outdoor living areas and adjoining indoor living areas as illustrated in the attached Site Analysis Plan and discussed further below.

Refer to Figure 1 – Site Analysis Plan

While Clause 29 of LPS1 provides for circumstances where the Town may support a non-complying application, we do not consider the proposed variations to be consistent with the orderly and proper planning or the conservation of the amenity of the locality and will clearly have an adverse impact on the inhabitants of the locality.

Precinct, Streetscape and Land Use Comments

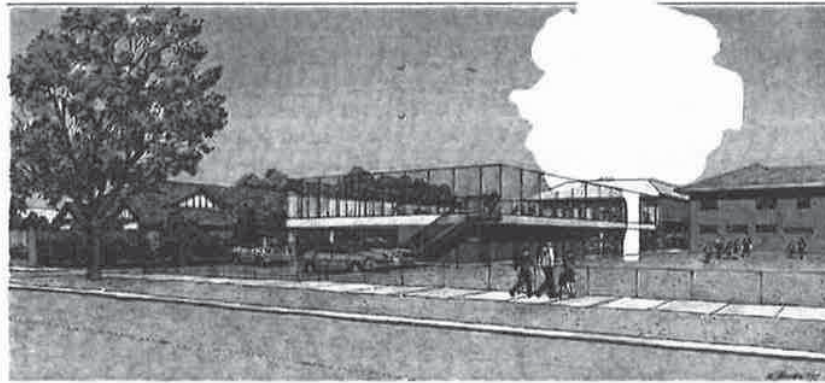
Precinct Plan 5 provides statements of intent for the Raphael Precinct and Residential Zone in which the proposal is located, including:

- *"The Raphael Precinct shall remain as a residential precinct ..."*
- *"The precinct is and should remain a low to medium density housing area ..."*
- *"The precinct should remain a visually attractive area and have a pleasant atmosphere characterised by low to medium scale architecture, buildings facing the street in the traditional manner and set in landscaped surrounds."*
- *"Priority will be given to ensuring that new development, particularly infill and development at higher densities, does not result in undue loss of privacy or amenity for existing residents."*

With the above statements of intent in mind, an Educational Establishment is an 'AA' land use within the Residential zone. Notwithstanding the existing approved land use, the proposed development represents a significant intensification of a use that would otherwise not be approved unless Council exercised its discretion following advertising and having regard to submissions from affected neighbours.

The proposed recreation deck and at-grade car parking adjacent to our clients' properties will have a negative impact on both the character of the locality and streetscape, and the amenity of the residential properties. It is proposing to locate an imposing structure and increase vehicular movements in close proximity to adjoining property boundaries. The Geddes Street perspective shown below demonstrates the proposed recreation deck is clearly inconsistent with, and does not complement, the character of the streetscape. It carries the appearance of a multi-deck car park as seen from the streetscape and adjoining residences.

Further, the aim of LPP3 – Non-Residential Use in or Adjacent to Residential Areas is *"to ensure non-residential uses in or adjacent to residential areas are compatible with existing nearby dwellings"*. LPP3 states that *"Non-residential development on land which abuts land which is or may be used for residential purposes shall only be permitted where the nature of the non- residential use will not cause undue conflict through the generation of traffic and parking or the emission of noise or any other form of pollution which may be undesirable in residential areas."*



It is noted from the Traffic Impact Statement accompanying the application that there will be an additional 354 vehicle trips per day (or an increase of 64.1%) associated with the development (additional 167 students and 10 staff); almost all parking of which will be adjacent to 25 Geddes Street. Our client is concerned that the significant increase in traffic movement, engine start-ups, car door slamming, car horn noise, car fume emissions and all other amenity impacts associated with car parks will cause undue impact on their residential amenity.

Principles of LPP23 – Car Parking then include:

- *"The amenity of areas surrounding parking facilities should be safeguarded. Parking facilities should complement their surroundings and provide a convenient service, without causing undue disruption to surrounding uses."*
- *"Parking facilities should be located so they do not dominate the surroundings or intrude into residential areas."*

Further reference to adjoining development considerations is made in clause 6.12.4 of LPP23. The location of the proposed and significantly intensified car park is clearly in conflict with the Town's adopted policies.

LPP23 also states that *"The perimeter of all parking areas should be landscaped by a planting strip of at least 1.5 metres in width. In some circumstances a greater area of landscaping may be required, particularly where a parking area adjoins a residential property"*. The proposed 1.5m setback to our clients' lot boundary is considered inadequate and discussed further below.

The proposed development, being an imposing structure to accommodate significant vehicle movements at-grade in close proximity to properties within a Residential Zone, as well as safety concerns, causes detrimental loss of amenity for our clients' properties and residential lifestyles and should not be supported.

Lot Boundary Setback Comments

Assessment against the Residential Design Codes

The recreation deck proposes construction to a total height of 5.8m above natural ground level at a minimal setback of 1.5m from the boundary, for a length of 32.5m.

LPP3 states that non-residential development in residential areas is *"required to comply with setback ... standards for grouped dwellings of the relevant R-Code."* Our assessment of the recreation deck requires it to be setback a minimum of 2.8m from our clients' shared lot boundary (being 5.8m in height, more than 25m in length with no major openings). We have considered the 'wall' of the recreation deck to include the chain link mesh fencing as this contributes to the imposing bulk of the structure. In any case, the applicant's view that the wall is only 4.5m tall is inconsistent with the interpretation of Table 2a of the Residential Design Codes as the nearest higher value shall be taken for all intermediate wall measurements.

The proposed setback of 1.5m in lieu of 2.8m is considered a significant variation and cannot be supported against the relevant design principles, which state: *"buildings set back from lot boundaries so as to:*

1. *Reduce impacts of building bulk on adjoining properties;*
2. *Provide adequate direct sun and ventilation to the building and open spaces on the site and adjoining properties."*

These design principles are considered individually as follows:

1. Reduce impacts of building bulk on adjoining properties;

The bulky appearance of the recreation deck as viewed from both our clients' properties and the streetscape (as referenced in clause 67(m) of the Deemed Provisions) is not consistent with that expected within a Residential Zone. The recreation deck is completely out of character for the Raphael Precinct. Plastic cladding and chain link mesh fencing to height of 5.8m, for a length of more than 30m in close proximity to our clients' properties, pushes highly visible and unappealing building bulk unnecessarily close to the adjoining property boundary where it will also block direct sun to our clients' open spaces and habitable rooms as discussed below.

LPP26 – Boundary Walls further defines the recreation deck as a 'Boundary Wall', and therefore all connotations of this term. LPP26 then notes that *"Two storey (or more) boundary walls will generally not be supported unless it abuts an existing or simultaneously constructed boundary wall of similar or greater dimension"*. There are no two storey boundary walls located on our clients' properties and therefore the Town should uphold its policy and not support the proposal.

LPP26 also acts to strengthen the design principles of the Residential Design Codes for R30+ coded areas, stating *"Buildings set back from boundaries or adjacent buildings so as to ... moderate the visual impact of building bulk on the neighbouring property"*.

For the reasons mentioned above, the proposed recreation deck does not meet this design principle.

2. Provide adequate direct sun and ventilation to the building and open spaces on the site and adjoining properties;

We understand the project architect is proposing the use of Danpalon cladding to 4.6m above natural ground level. The applicant claims the material acts as a *"translucent privacy screen to 1.8m above the deck surface to prevent overlooking of the property but to still allow light transmission"*. Our clients refute this claim in the strongest possible terms.

We understand that the Danpalon multicell 16mm cladding chosen by the applicant restricts visible light transmission to 63% of direct sunlight and 57% of solar heat transmission (as described by the manufacture). This results in a cold shadow for all intents and purposes being cast over our clients' only outdoor living areas, which are located on the northern side of the property to make best use of the natural sunlight afforded by the lot's north-eastern aspect. In fact the outdoor living area of 25B Geddes Street is completely overshadowed at midday 21 June. The development also denies direct morning winter sunlight to our clients' north-eastern facing windows to habitable rooms. Refer to Figure 2 - Solar Access Diagram.

The Residential Design Codes design principles in relation solar access for adjoining sites require *"development designed to protect access for neighbouring properties taking into account the potential to overshadow existing"*:

- Outdoor living areas;
- North facing major openings to habitable rooms, within 15 degrees of north in each direction; or
- Roof mounted solar collectors."

LPP26 states for R30+ sites that *"Buildings set back from boundaries or adjacent buildings so as to ... ensure adequate daylight, direct sun and ventilation for buildings and the open space associated with them"*. Clause 2(d) of LPP 36 – Climate Control (Energy Efficiency) also states that *"New development should not deny solar access to neighbours' primary outdoor living areas"*. This cannot be any clearer as to the importance placed on protecting solar access, which is lost in this instance due to the non-compliance of the proposal against the requirements of lot boundary setbacks.

In the case of the proposed recreation deck the extent of overshadowing of our clients' outdoor living areas is significant as shown in Figures 1 and 2. The proposed recreation deck completely denies access to direct sunlight in the winter months when it is extremely important for the health and well-being of our clients. This is echoed and given statutory weight by the aims of LPS1.

The claim by the applicant that the proposed Danpalon cladding *"allows for natural light transmission to the adjoining property"* is questionable. Danpalon multicell cladding, at the thickness proposed, is far from a clear and uninterrupted transmission of sunlight and thermal benefits that access to direct winter sun unequivocally provides. It is also noted that the transmission of 'visible light' (as described by the manufacture of Danpalon) is in no way comparable to the benefits of direct winter sunlight. It is also not possible to replace the Danpalon cladding with clear glazing or fencing, as this would be non-compliant with privacy requirements.

For the reasons mentioned above, the proposed recreation deck does not meet this design principle.

Other Comments

The proposed raising of the recreation deck will also compromise opportunities for casual surveillance over the playing court and grassed area beyond due to the introduction of solid components that will obscure views from our client's upper floors. We understand these areas are informally used after hours and the ability to survey this space in the interest of safety is now comprised by the proposed deck. Our clients have also raised the concern that the recreation deck poses safety risks to people, children and domestic pets from sports balls acting as projectiles into their properties.

It is also not a compelling planning argument for the landowner of the development site to indicate that other forms of development that might meet deemed-to-comply or other requirements of the Town's planning framework would have the same or an even worse impact on the affected properties or streetscape. The design and appearance of the proposed recreation deck has no resemblance to a compliant residential development that would have indentations and other architectural expressions expected within a Residential Zone. Each application is required to be considered and assessed on its individual merits having regard to the requirements of the Town's planning framework, which have a strong focus on the protection of the amenity of adjoining properties, especially in lower-density R30 coded areas. In this instance, the proposed deck and car park have no planning merits as they are clearly inconsistent with adopted policy.

Concluding Comments

Based on the assessment and comments provided above, the cumulative impacts of the proposed development, particularly in relation to the significant intensification of use, side setback encroachments and interrelated and unacceptable overshadowing and amenity impacts, result in a development that does not meet key objectives or requirements of the Town's LPS1, Precinct Plan, Policies related to Non-Residential Development in or Adjacent to Residential Areas, Car Parking, Boundary Walls, Climate Control or the specific associated design principles of the Residential Design Codes.

The proposed development as it currently stands results from the landowner's deliberate intent to maximise private school enrolments (and the unacceptable location of car parking and therefore elevated recreation deck) without any proper regard for the impacts that the development would have on the amenity of the properties located to the southwest. Taking into account all inconsistencies with the State and local planning framework, the proposed development as currently designed will have a demonstrable adverse impact on the adjoining properties. We therefore respectfully request the Town to uphold its Scheme and policies and recommend refusal of this application in its current form.

We thank you for your time and consideration on this submission and look forward to being kept informed on any deliberations on the proposal. It is anticipated that our Clients will be afforded the opportunity to provide further comment should revised plans be received by the Town.

Should you have any queries or require any additional information then please do not hesitate to contact Alison Healey or the undersigned on 9289 8300.

Yours sincerely

TPG + PLACEMATCH



Matt Raymond
Director

Enc.



Figure 1



Affected
Neighbour



Outdoor Living Area



Overshadowing at midday 21 June

25 GEDDES STREET, VICTORIA PARK

Site Analysis Plan

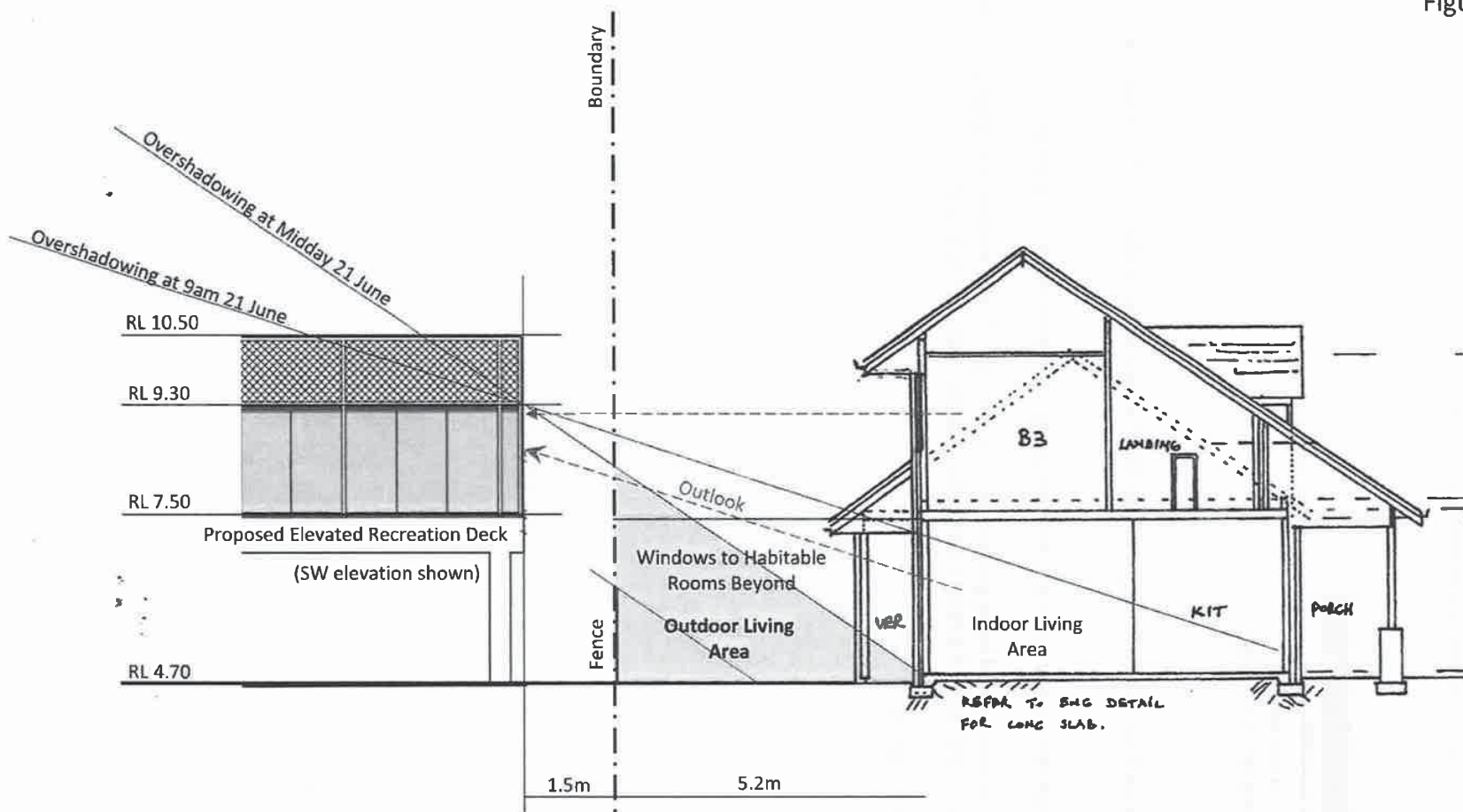
July 2017 | 17-752

tpg + PLACE MATCH

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tpg + PLACE MATCH
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Figure 2



28 Colombo Street

25B and 25C Geddes Street - Typical Section

25 GEDDES STREET, VICTORIA PARK

Solar Access Diagram

July 2017 | 17-752

tpg + PLACE MATCH

Vanessa Frankson

Subject: FW: Development application 5.2017.385.1

[REDACTED]
Sent: Wednesday, 26 July 2017 2:54 PM

To: Records <records@vicpark.wa.gov.au>

Subject: Re: Development application 5.2017.385.1

Dear Sir/Madam,

I live on Geddes Street, Victoria Park and emailing to advise that I object to the addition of 31 onsite car bays on the street.

The street traffic is bad enough being a bus route and with car parking on both sides of the street.

It would actually be great if the street could have parking only on one side. I have had the bus come past and taken off my side mirror when I was parked within a designated car bay outside my house.

Please let me know if have any queries.

Regards,
[REDACTED]

Attachment 6

Consultation Plans (Superceded)



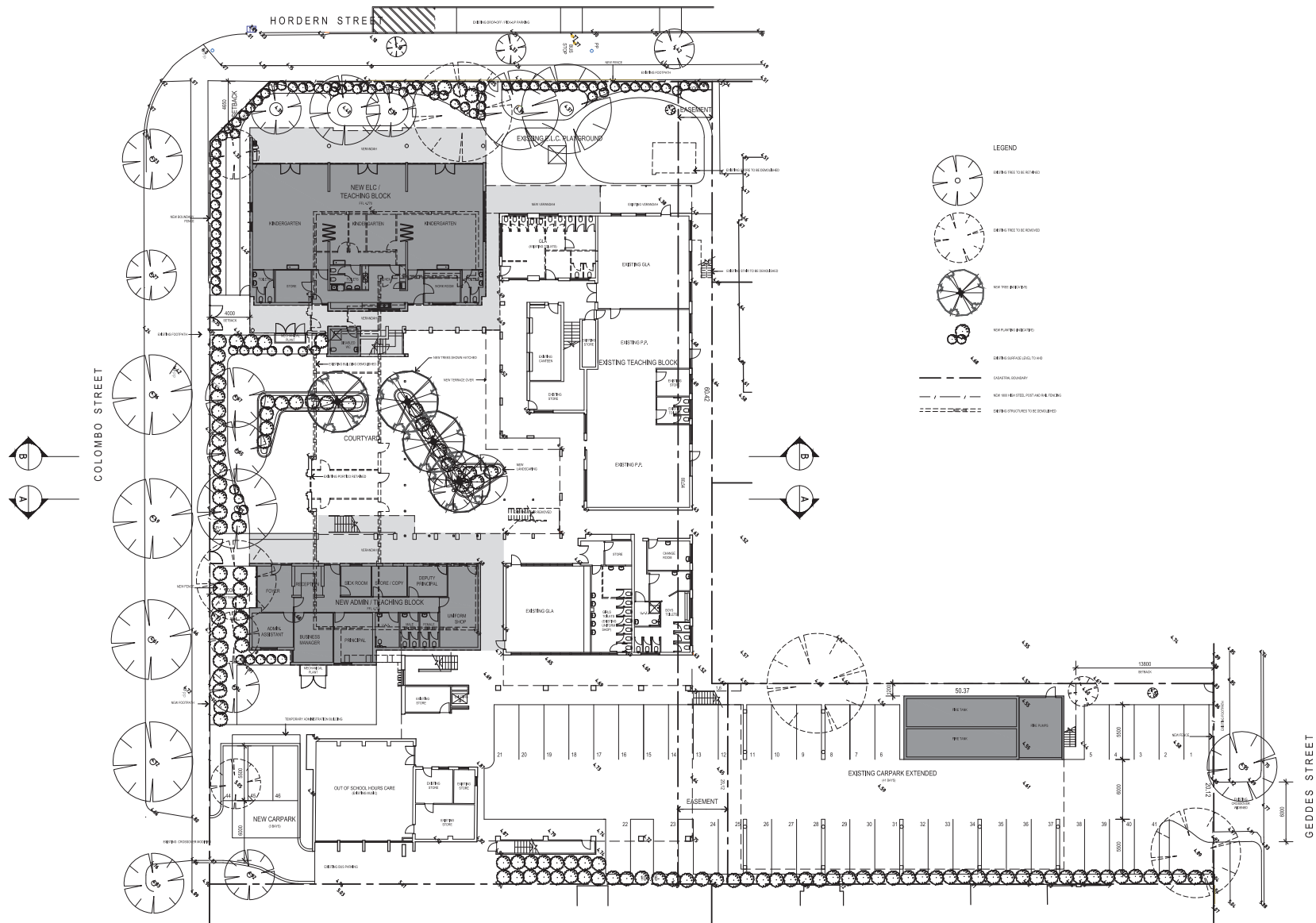
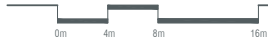
REGENT COLLEGE

PERSPECTIVE VIEW CORNER COLOMBO & HORDERN STREETS

SCALE: N.T.S.
DATE: 15.05.2017
DRAWN: BQ
JOB NO: 414055
DRAWING NO: A14 revA

T&Z ARCHITECTS

479 MURRAY STREET WEST PERTH
T 9423 0000 P 9423 0001
E info@tza.com.au



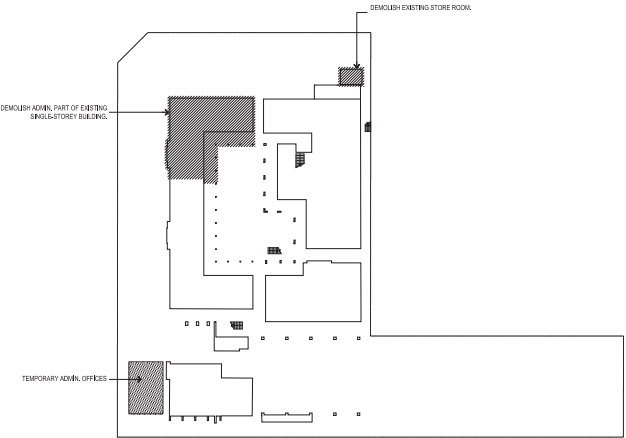
REGENT COLLEGE

SITE PLAN

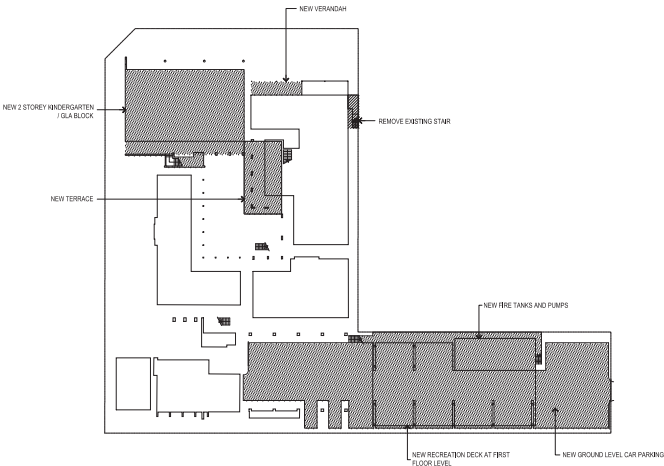


SCALE: 1 : 200 @ A1
DATE: 15.05.2017
DRAWN: BQ
JOB NO: 414055
DRAWING NO: A01 revB

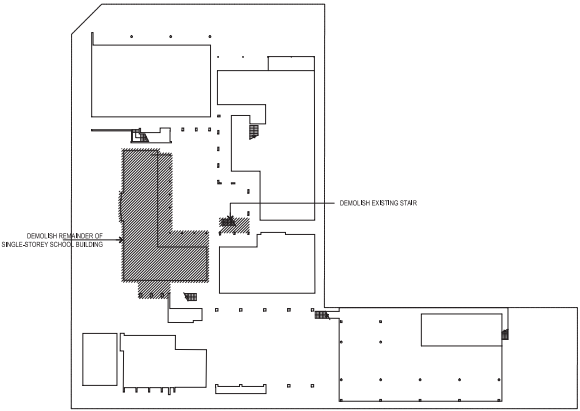




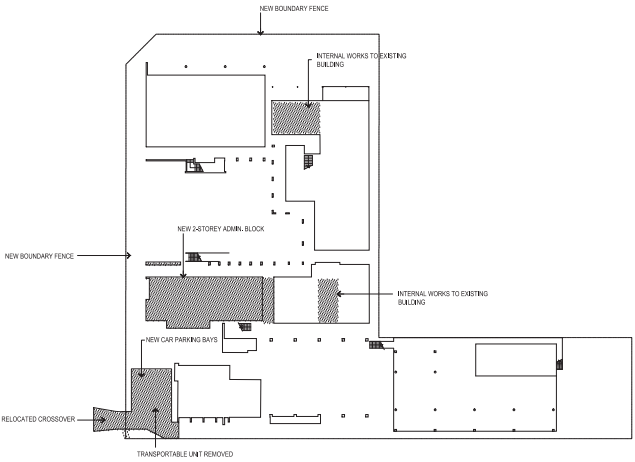
PHASE 1



PHASE 2



PHASE 3



PHASE 4

REGENT COLLEGE

STAGING DIAGRAM



SCALE: 1 : 500 @ A1
DATE: 15.05.2017
DRAWN: BQ
JOB NO: 414055
DRAWING NO: A12 revB



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HORDERN STREET

COLOMBO STREET

GEDDES STREET

REGENT COLLEGE

SITE PLAN - FIRST FLOOR

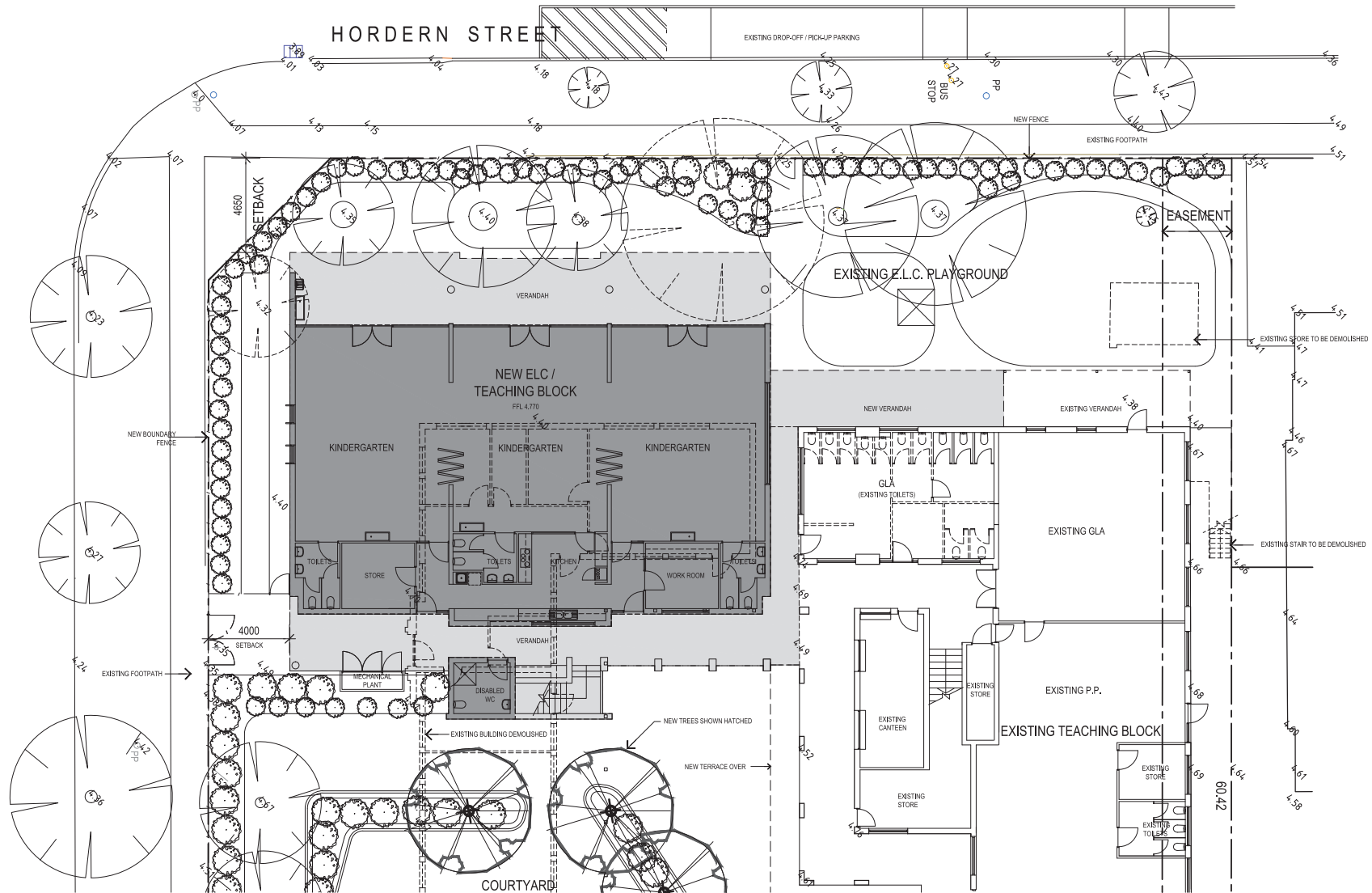


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DRAWING NO: A02 revB



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REGENT COLLEGE

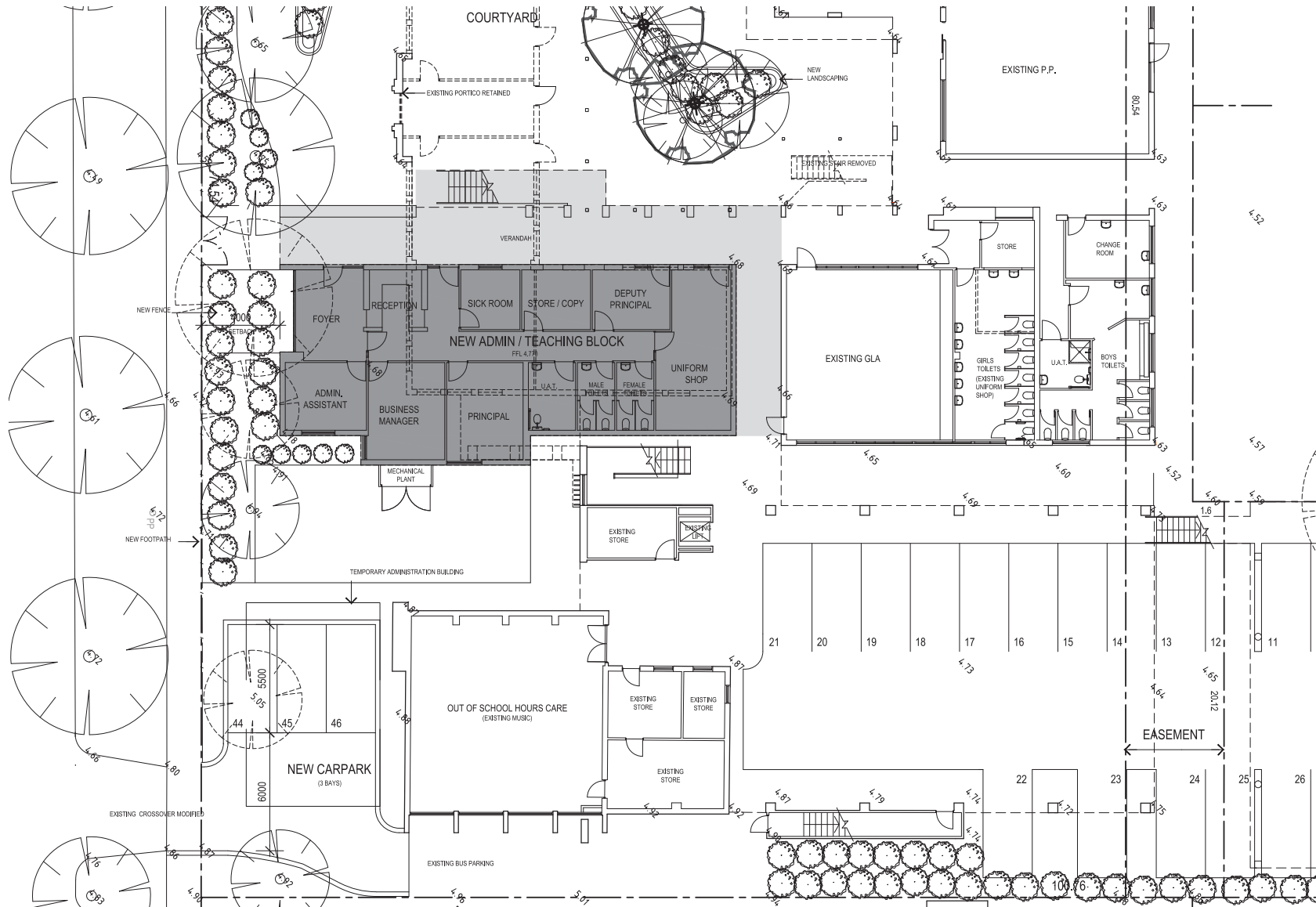
GROUND FLOOR PLAN ELC / GLA TEACHING BLOCK



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DATE: 15.05.2017
DRAWN: BQ
JOB NO: 414055
DRAWING NO: A03 revC



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REGENT COLLEGE

GROUND FLOOR PLAN ADMINISTRATION / GLA TEACHING BLOCK

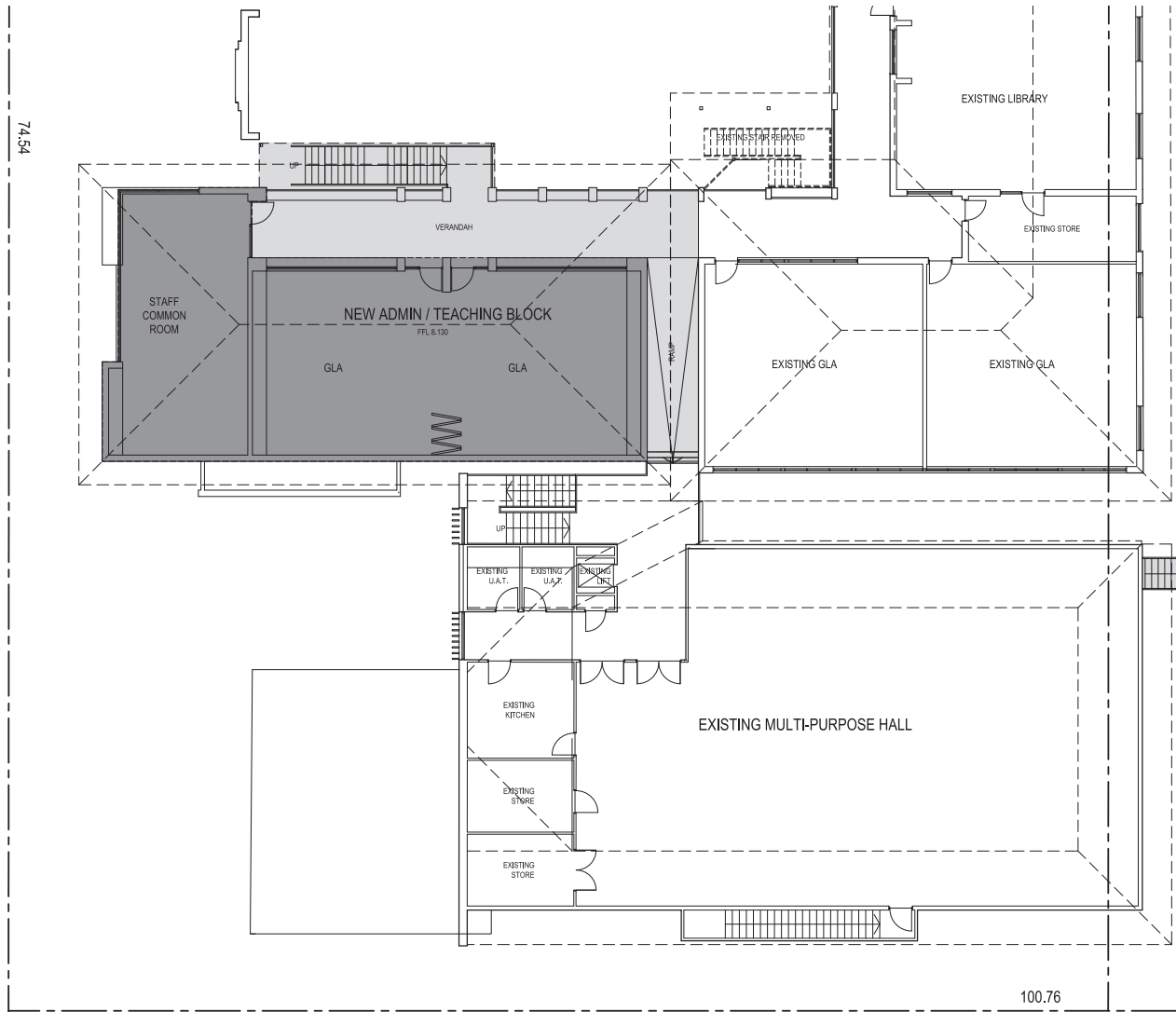


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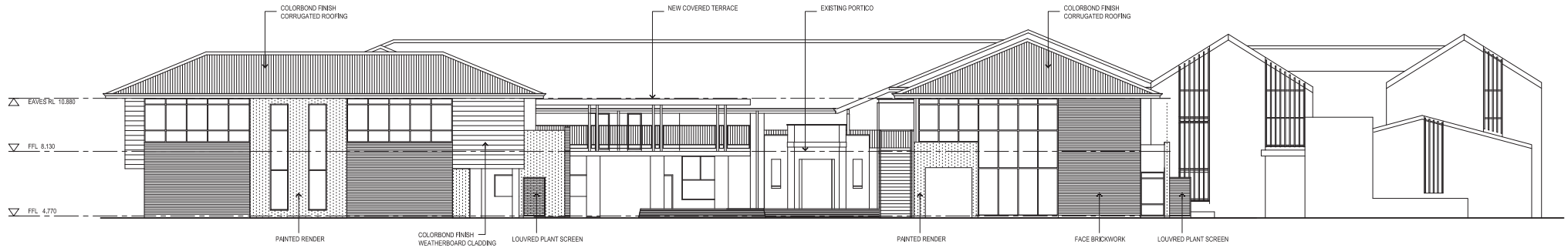
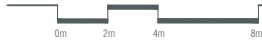
FIRST FLOOR PLAN
ADMINISTRATION / GLA TEACHING BLOCK



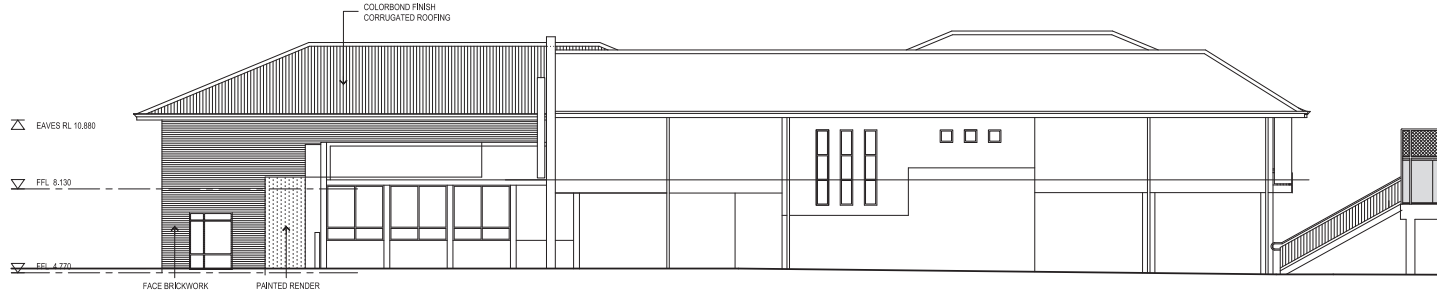
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JOB NO: 414055
DRAWING NO: A06 revB



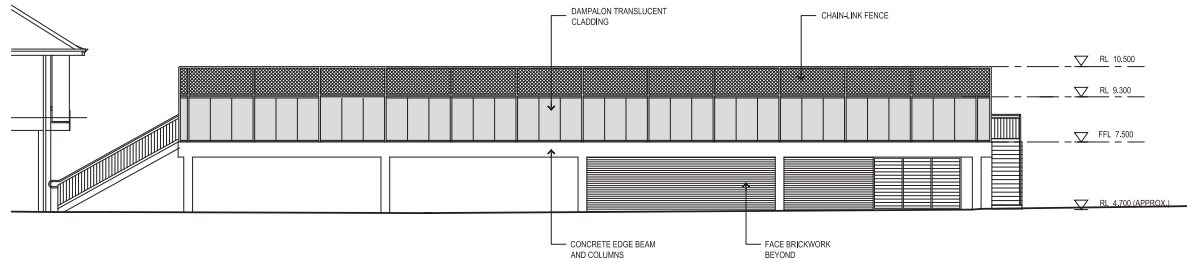
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COLOMBO STREET ELEVATION



SOUTH WEST ELEVATION



SOUTH WEST ELEVATION CONTINUED

REGENT COLLEGE

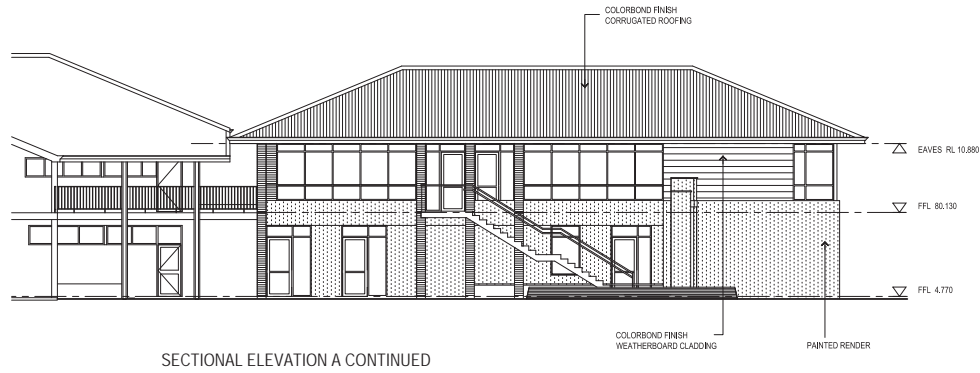
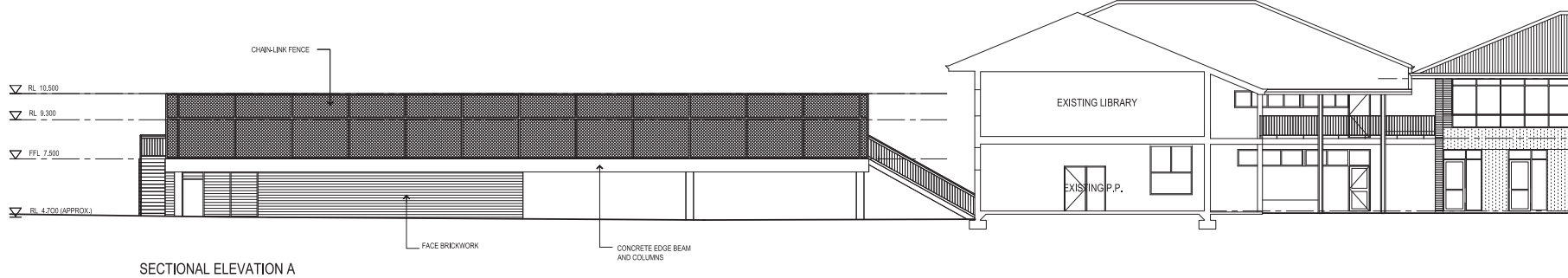
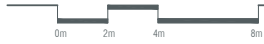
ELEVATIONS



SCALE: 1 : 100 @ A1
DATE: 15.05.2017
DRAWN: BQ
JOB NO: 414055
DRAWING NO: A08 revB



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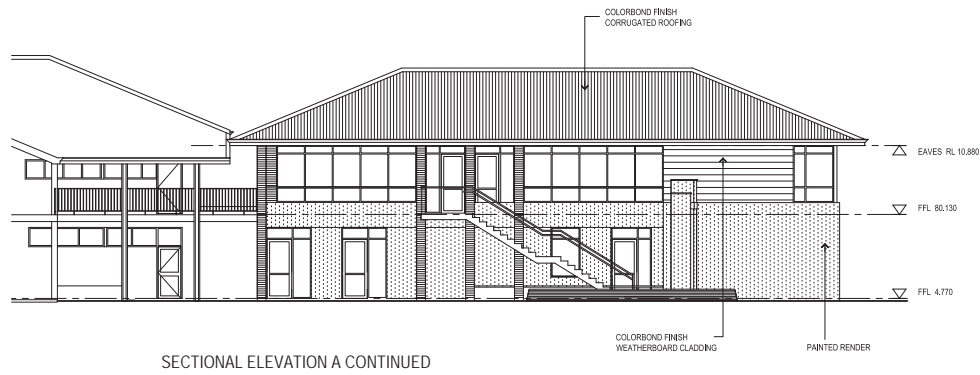
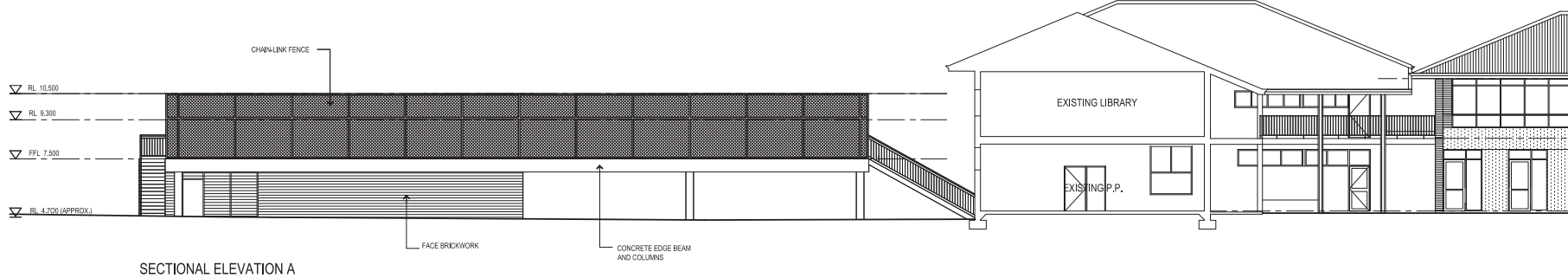
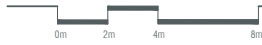
SECTIONAL ELEVATIONS



SCALE: 1 : 100 @ A1
DATE: 15.05.2017
DRAWN: BQ
JOB NO: 414055
DRAWING NO: A10 revB



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REGENT COLLEGE

SECTIONAL ELEVATIONS



SCALE: 1 : 100 @ A1
DATE: 15.05.2017
DRAWN: BQ
JOB NO: 414055
DRAWING NO: A10 revC



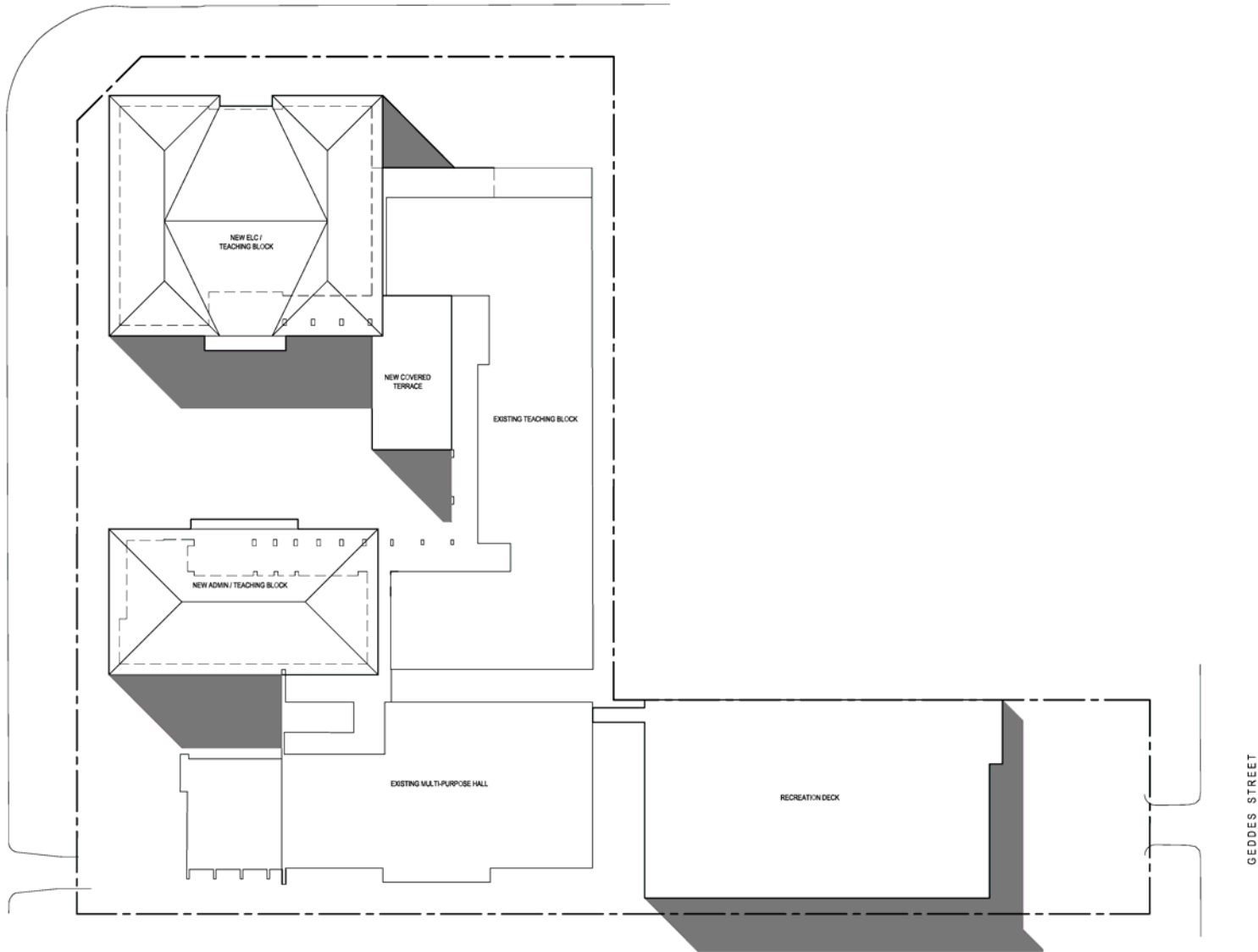
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TOWN OF VICTORIA PARK
Received 18/05/2017

HORDERN STREET

COLOMBO STREET



GEDDES STREET

REGENT COLLEGE

OVERSHADOWING SITE PLAN



SCALE: 1 : 200 @ A1
DATE: 15.05.2017
DRAWN: BQ
JOB NO: 414055
DRAWING NO: A11 revA



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REGENT COLLEGE

PERSPECTIVE VIEW FROM COLOMBO STREET

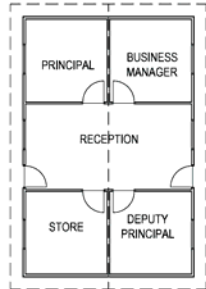
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DATE: 15.05.2017
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JOB NO: 414055
DRAWING NO: A13 revA



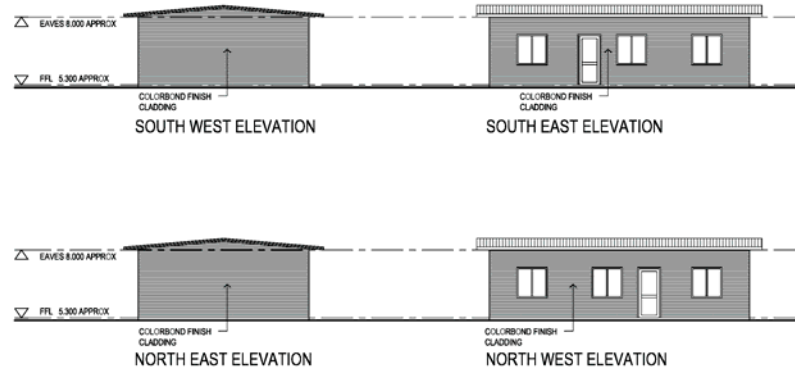
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TOWN OF VICTORIA PARK
Received: 18/05/2017



FLOOR PLAN



REGENT COLLEGE

TEMPORARY ADMINISTRATION BUILDING PLANS & ELEVATIONS



SCALE: 1 : 100 @ A1
DATE: 15.05.2017
DRAWN: BQ
JOB NO: 414055
DRAWING NO: A07 revA



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Colours & Materials Schedule

PROPERTY	Date: 12.05.2017	Street No.: 28	
	Street Name: COLOMBO STREET		
	Suburb: VICTORIA PARK		Post Code: 6100

Item	Colour	Material / Profile	Make
Roofing			
Roof cover	SUREMIST	COLOURBOND CUSTOM ORB	FIELDERS
Fascias / rafters	SUREMIST	COLOURBOND	
Gutters	SUREMIST	COLOURBOND QUAD.	FIELDERS
Exterior Walls & Columns / Piers			
Face brick	RED SMOOTH	CLAY	MIDLAND BRICK
Render	WHITE.	-	-
Columns / piers	FACE BRICK - RED	CLAY	MIDLAND BRICK
Weatherboards (if applicable)	SUREMIST	COLOURBOND WEATHERBOARD PANEL	FIELDERS
Paving / Driveway			
Main area	AUTUMN BLEND	CONCRETE PAVER	MIDLAND BRICK
Border	CHARCOAL	CONCRETE PAVER	MIDLAND BRICK
Front Fence			
Piers	-	-	-
Fence infill	BLACK	1800 TUBULAR STEEL	TBS.
Other			
Garage door			
Window frames*	SILVER	POWDERCOATED ALUMINIUM	

*Further information may be required depending on the location of the property. If an item is not applicable, specify 'N/A' or leave blank (see next page for example).

Attachment 7

Consultation Document – Applicants Report



REPORT

PROJECT:

REGENT COLLEGE

28 COLOMBO STREET
VICTORIA PARK

**APPLICATION FOR
PLANNING APPROVAL**

JUNE 2017

414055

1. Background

Regent College is a private Christian school that has operated at its site bounded by Colombo, Hordern and Geddes Streets since 1982. The College provides education for students from kindergarten through to year 6. Increasing demand for places at the college, particularly in the early childhood education years of kindergarten and pre-primary have lead the college to plan for partial redevelopment of the campus to cater for the increased demand, along with predicted further increases in demand as the catchment population grows.

The most recent planning approval at the College granted by the Town of Victoria Park on the 15th December 2009 has placed a limit of 256 on student enrolments on account of carparking provisions on and around the College. This application seeks to increase the student enrolment to a maximum of 423 through an increase in carparking on and around the college, along with an overall increase in classroom accommodation.

The existing buildings on the campus have been developed across four distinct eras.

- A single storey teaching and administration building constructed circa 1950
- Two storey teaching block constructed circa 1970
- Two storey teaching block constructed circa 1990
- Two storey assembly hall constructed in 2010.

The original single storey building addressing Colombo and Horden Streets has been identified with a number of structural issues that will require extensive remediation in the near term. The layout of this building does not support contemporary pedagogical practices. In view of these issues the area of the site occupied by this building has been identified for redevelopment.

2. Description of Proposal

This Application for Planning Approval seeks approval for the partial redevelopment of the lot.

The proposed scope of redevelopment is broadly summarised as follows.

- Demolition of the existing single storey Administration and classroom block addressing Colombo and Hordern Streets.
- A new two storey teaching block on the corner of Colombo and Hordern Streets comprising Kindergarten/ Pre Primary classrooms on the ground floor, with General Learning Areas on the first floor.
- A new two storey block addressing Colombo Street comprising Administration spaces on the ground floor, with General Learning Areas and Staff Common Room on the first floor.
- Conversion of an existing playing court addressing Geddes Street to carparking, with a new recreation space on an open deck above the carpark.
- A new enclosure to accommodate firefighting equipment (water storage tanks and pumps).
- Refurbishment and internal alterations to the existing two story classroom blocks.

3. Planning Details

Site Details

Address;	28 Colombo Street, Victoria Park. Lot 1961 on diagram 67423
Certificate of Title;	Volume 2761 Folio 76

Zoning

Metropolitan Region Scheme;	Urban
Town of Victoria Park TPS 1;	Residential R30
Town of Victoria Park Precinct;	Raphael Plan P5

Town of Victoria Park TPS1, Precinct Plan & Policies

Current and Continuing use;	Education Establishment; AA (Discretionary use).
Weatherboard Precinct;	Not applicable.
Weatherboard Streetscape;	Not applicable.
Residential Character Study Area;	Applicable.
Existing Original Residential Fabric;	Not applicable.
Municipal Heritage Site;	Not applicable.
Municipal Heritage Document;	Not applicable.
Bushfire Prone Areas;	Not applicable.

Plot Ratio

Maximum permitted Plot Ratio:	0.5:1 (Residential Design Codes)
Site Area:	5,054 m ²
Maximum Allowable Plot Ratio Area;	0.5 x 5,054 m ² = 2,527 m ²
Existing Retained Buildings Plot Ratio Area;	1,456 m ²
Proposed New Buildings Plot Ratio Area	1,034 m ²
Total Proposed Plot Ratio Area	2,490 m ²
Actual Proposed Plot Ratio;	2,490m ² /5,054m ² = 0.49

Open Space

Minimum Open Space;	45% of site area	
Minimum Required Open Space;	45% x 5,054 m2 = 2,274m2	
Open Space Provided;	Ground Level;	2,922 m2
	Coved Verandas etc	50 m2 (maximum allowable)
	<u>Open deck</u>	<u>588 m2</u>
	Total	3,560 m2 (i.e. 70%)

Landscape

Minimum Landscape	25% of site area
Minimum Required Landscape Area	25% x 5,5054 m2 = 1,264 m2
Landscape Provided	
(i.e. hard & soft landscaped area, excluding covered areas, carpark and crossovers.	
	1,273 m2 (i.e. 25%).

Street Setbacks

Colombo Street	Minimum required (Primary Street);	4.0m
	Minimum Setback Proposed;	4.0m
Hordern Street	Minimum required (Secondary Street);	1.5m
	Minimum Setback Proposed;	4.6m
Geddes Street	Minimum required (Primary Street);	4.0m
	Minimum Setback Proposed;	13.8m

Side Boundary Setbacks

19 Geddes Street;	Required (Open recreation deck);	1.5m
	Setback proposed;	0.0m
19 Geddes Street;	Fire Tanks/pumps enclosure; required:	1.5m
	Setback proposed;	1.2m

The setbacks are assessed in accordance with the Residential Design Codes on the basis of a 3.5m high wall greater than 25m long with no major openings. The elevation is proposed as a 3.0m high chain mesh fence to the perimeter of the deck. The adjoining property is an open grassed area that is utilised by the College during school hours as a play space under agreement with the landowner. In view of this arrangement prevention of overlooking is not considered a factor. On account of this arrangement with the owners of 19 Geddes Street, a reduction of the setback is sought.

25 Geddes Street;	Required Open Recreation deck;	2.0m
	Setback proposed;	1.5m

The setback is assessed in accordance with the Residential Design Codes on the basis of a 4.5m high wall greater than 25m long with no major openings. The elevation is proposed as a translucent privacy screen to 1.8m above the deck surface to prevent overlooking of the property but to still allow light transmission. Above the privacy screen a chain mesh fence is proposed to 3.0m above the deck to contain ball activities. A reduction of the setback to 1.5m is sought on consideration that overlooking from the elevated recreation deck is prevented, and the design of the screen allows for natural light transmission to the adjoining property.

4. Staging

The new works are proposed to be carried out in the following stages to enable continuing operation of the College at its current enrolment.

Stage 1; Construction of a temporary administration building (transportable/demountable building)
Partial Demolition of the existing single storey administration building

Stage 2; Construction of the new two storey Early Learning Centre/Pre-Primary and General Learning Area block
Construction of new onsite carparking, recreation deck and fire tanks and pumps.

Stage 3; Demolition of the remainder of the existing single storey teaching block
Construction of the new two storey Administration and general learning area block
Completion of landscaping

Stage 4; Removal of the temporary administration building.
Construction of new onsite carpark (Colombo Street)
Internal refurbishment and alterations to the existing two storey buildings.

Please refer to the attached staging diagram.

5. Temporary Administration Building

To facilitate the staged redevelopment of the college, it is proposed to construct a temporary administration building in the western corner of the site on Colombo Street. The building will be a transportable/demountable building constructed with modular metal wall and roof cladding. The plans and elevations shown on the drawings are indicative of the proposed structure which will be confirmed upon appointment of the building manufacturer. The building will be removed from the site upon completion of the new building works.

Approval is sought for this temporary building as a part of this planning approval application. It is proposed that final details of this structure be subject to the approval of the Manager of Planning prior to the issue of a Building Permit.

6. Existing Trees

The Raphael Precinct Plan notes in the statement of intent; “*The retention of structurally sound original houses and healthy mature trees will be a priority in order to maintain the existing residential character and streetscapes.*”

A number of mature trees exist within the site and along the adjacent street verges. It is proposed that existing verge trees be retained.

Within the site three tree species exist;

- Lemon Scented Gum *Corymbia citriodora*
Located adjacent to the boundary to No 19 Geddes Street, this species is renowned as dropping limbs and is not recommended for school environments. The tree is also impacted by the proposed recreation deck and therefore is proposed to be removed.
- Weeping Peppermints *Agonis flexuosa*
These trees are located within the Hordern street setback area. With selective pruning it is proposed to retain these trees with the exception of one specimen which is displaying signs of stress and is at risk of a stem collapsing onto the playground or street verge. It is proposed to remove this tree.
- Camphour Laurel trees *Cinnamomum camphora*
Located at the corner of Colombo and Hordern Streets and within the Colombo Street setback, it is proposed that 3 of these trees be removed due to their impact on the tree canopy and root zones by the new buildings. The remaining 5 specimens of this tree will be retained.

7. Landscaping

The redeveloped portion of the site is proposed to be re-landscaped in response to the new built form and associated functions. The Hordern Street setback zone is presently a playground for the early learning years (kindergarten and pre-Primary). It is proposed to expand and partially redevelop this area utilising “nature play” concepts with a strong connection to the new Kindergarten/Pre-Primary Activity Areas.

A new central courtyard is defined by the new and existing buildings and will be landscaped to support social and passive recreation activities. Thematically “nature play” and community garden concepts will be incorporated appropriate to the age range of the students.

An indicative layout of proposed hard and soft landscaping is shown on the submitted drawings. Detailed planning and design of the new landscape will be undertaken. It is proposed that approval of this application be conditional upon a detailed landscape design being submitted and approved by the Director of Planning prior to the issue of a Building Permit.

8. Carparking & Traffic

A Traffic Impact Assessment of the proposed development has been carried out by Shawmac Consulting Traffic Engineers.

Their report concludes the following.

- The additional traffic generated by the proposed development can be accommodated into all adjacent roads practical capacity and will be limited to morning and afternoon drop off and pick up times.
- A review of the crash statistics for the intersection of Colombo Street and Hordern Street indicated a high number of right angled crashes during the afternoon peak hour, indicating forced flow may occur during the school pick up period.
- All other adjacent intersections are expected to perform satisfactorily in both the AM peak and PM peak periods.
- The proposed on-site and on-street car parking supply is considered to be sufficient to meet to the parking demand of the increase in school population..

Please refer to the Traffic Impact Assessment Report by Shawmac dated 30 June 2017 in Appendix A.

9. Environmental Noise

The College currently have a playing court located at ground level located between Nos 19 and 25 Geddes Street. In this application it is proposed to be replaced with on grade carparking, and a recreation area on a suspended deck at first floor level.

In the course of consultation, it has been noted that potential noise generated from the proposed recreation deck may cause disturbance to the adjoining residents. In consideration of this potential impact on amenity, a 1.8m high screen is proposed along the side of the recreation deck abutting 25 Geddes Street. A preliminary noise assessment has been undertaken by Gabriels Environmental Design, who have concluded that in their professional opinion, the expected noise levels at the neighbouring 'worst case' receiver positions will be approximately 5 to 8 dB(A) lower than those current experienced from the playing court in the existing situation. Please refer to the attached correspondence from Gabriels Environmental Design in Appendix B.

Notwithstanding the above, It is noted that the Environmental Protection (Noise) Regulations 1997, provide exemption from the provisions of the regulations for educational activity under Schedule 2; Community activities — exempt noise.

4. Noise emitted as a consequence of a recreational or educational activity from premises occupied for educational purposes if the activity —
 - (a) is conducted under the control of the occupier of the premises; and
 - (b) does not include the use of mechanical equipment other than musical instruments.

It is confirmed that activities on the recreation deck will only be conducted for educational purposes under the control of Regent College.

10. Urban Design & Streetscape

The Raphael Precinct Plan Statement of Intent states that “... *non-residential uses will only be permitted where they are small in scale, maintain the residential character and provide for day to day local needs. The precinct should remain a visually attractive area and have a pleasant atmosphere characterised by low to medium scale architecture, buildings facing the street in the traditional manner and set in landscaped surrounds.*”

Consideration of these intents has informed the proposed redevelopment of Regent College, with key design elements noted as follows;

- Buildings have been limited to two storeys of an equivalent scale to the existing two storey buildings remaining on the campus.
- Traditional hipped roof forms have been employed, consistent with those of the existing buildings on campus, and with the surrounding single residential typology.
- Colombo and Hordern Street frontages are both addressed by way of extensive fenestration, and formal entry points on Colombo Street.
- Building facades have been articulated by the utilising a mixture of materials and textures that are consistent with existing structures on the campus, and that are commonly utilised in surrounding residential buildings, namely;
 - Traditional red face brickwork
 - White rendered walls
 - Weatherboard profile cladding
 - Corrugated profile metal roofing
- Buildings are set in landscaped surrounds with retention of significant existing trees to retain the existing character of the streetscape.

11. General Planning Considerations

Regent College provides an important service to the residents of the Town of Victoria Park and suburbs beyond. As an inner city school it is in a unique position to provide educational services in a region that is predicted to grow significantly in the next two decades.

Population in the Town of Victoria Park is expected to show growth rates of 47.7% for people under working age for the period 2010 to 2036 based on forecasts by Forecast.id with the peak growth period expected to be in the years 2022 to 2036. The overall population is projected to grow from 35,903 in 2015 to 55,476 by 2036.

Whilst Regent College draws students predominantly from suburbs within in the Town of Victoria Park, it also attracts students from further afield in the south east metropolitan corridor, where population growth is also predicted.

The underlying context for the proposed development is one of increasing infill occurring within the central sub-region of the Perth metropolitan area, which is placing increased demand on social and community infrastructure, particularly schools. In this regard, it should be acknowledged that the redevelopment of the site represents the provision of necessary education facilities, and the efficient use of infrastructure within an existing developed area. This being a key feature of the WAPC's Draft Perth and Peel @ 3.5 Million suite of strategic land use and infrastructure plans.

12. Conclusion

In summary, the following key considerations in support of this application are noted.

- The proposed development complies with the provisions of TPS 1 in respect of Plot Ratio, open space, landscaping and street setbacks.
- A variation to the side boundary setbacks to Nos 19 and 25 Geddes Street are sought on account of there being no adverse impacts on the amenity of those properties.
- The majority of the existing mature trees on the site are to be retained, with trees only to be removed where they are impacted by proposed development or are in an unstable condition.
- The Traffic Impact Assessment concludes that the additional traffic generated by the proposed development can be accommodated into all adjacent roads practical capacity and will be limited to morning and afternoon drop off and pick up times.
- The proposed on-site and on-street car parking supply is considered to be sufficient to meet to the parking demand of the increase in school population.
- The scale, articulation and materiality of the proposed buildings are consistent with existing infrastructure on the campus, and with the surrounding residential streetscape and character.
- The redevelopment of the site represents the provision of necessary education facilities, and the efficient use of infrastructure within an existing developed area. This being a key feature of the WAPC's Draft Perth and Peel @ 3.5 Million suite of strategic land use and infrastructure plans.

Attachment 8

Consultation Letters

4 July 2017

Insert Name
Insert Address1
INSERT SUBURB

Sturt McDonald 9311 8111
Planning Officer
File Ref: 22983
DA 5.2017.385.1

Dear Sir/Madam

LOT: 1961, NO. 28 COLOMBO STREET, VICTORIA PARK - DEVELOPMENT APPLICATION 5.2017.385.1 FOR ADDITIONS & ALTERATIONS TO EDUCATIONAL ESTABLISHMENT (REGENT COLLEGE)

Council has received a development application for ADDITIONS & ALTERATIONS TO EDUCATIONAL ESTABLISHMENT at the above-mentioned property. The proposed development is summarised as follows:

- An increase to the maximum number of students, from 256 to 423 total enrolments.
- Demolition of the existing single storey Administration and classroom blocks addressing Colombo and Hordern Streets.
- A new two storey teaching building on the corner of Colombo and Hordern Streets comprising Kindergarten/Pre-primary classrooms on the ground floor, with General Learning Areas on the first floor.
- A new two storey building addressing Street comprising Administration spaces on the ground floor, with General Learning Areas and Staff Common Room on the first floor.
- 31 new on-site car bays.
- Conversion of an existing playing court addressing Geddes Street to car parking , with a new recreation space on an open deck above the carpark.
- A new enclosure to accommodate firefighting equipment (water storage tanks and pumps).
- Refurbishment and internal works to the existing two storey classroom blocks.
- A Temporary Administration Building.

In accordance with Local Planning Policy 37 – *“Community Consultation on Planning Proposals”*, before Council determines this application you are invited to comment on the following:

- **Proposed Use** - An Educational Establishment is classified as an “AA” (discretionary use) within the Residential zone under Town Planning Scheme No. 1.

- **Car Parking** – Based upon the Council’s approval of a maximum of 256 enrolled students, as part of an approval of additions to the school in 2009, there is an existing shortfall of on-site car parking bays. Having regard to the proposed increase in student numbers to 423 and the provision of an additional 31 on-site car bays, the proposal results in an additional parking shortfall of 4 car bays.

Plans / details of the proposed development can be viewed online via the Town’s website www.victoriapark.wa.gov.au by going to ‘Planning and Building’, ‘Lodge and Track an Application’, ‘Track an Application’ then ‘Search by Property Address’ and then ‘Current Consultation’ and entering the property address.

Computer facilities are also available at Council’s Administration Centre between the hours of 8:30am to 5:00pm, Monday to Friday, and at the Town of Victoria Park Library to view the plans online.

Any comments you wish to make on the proposed development are to be submitted in writing by 5:00pm 26 July 2017, by one of the following:

- Online via the abovementioned links on the Town’s website; or
- Email to admin@vicpark.wa.gov.au or letter addressed to the Town of Victoria Park, Locked Bag No. 437, Victoria Park WA 6979. In either instance, please quote Planning Application reference number: **5.2017.385.1** as part of any submission.

Should no reply be received within the above timeframe it will be assumed that you do not wish to comment. It should be noted that the Council in determining the application will take into account the comments of owners and occupiers of the adjoining properties, however, the Council is not obliged to support these views.

Should you have any queries or require further information please contact Sturt McDonald of Council’s Urban Planning Unit on 9311 8163 or via email smcdonald@vicpark.wa.gov.au.

Yours faithfully



Sturt McDonald
Planning Officer



4 July 2017

Insert Name
Insert Address
INSERT SUBURB

Sturt McDonald 9311 8111
Planning Officer
File Ref: 22983
DA 5.2017.385.1

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- Demolition of the existing single storey Administration and classroom blocks addressing Colombo and Hordern Streets.
- A new two storey teaching building on the corner of Colombo and Hordern Streets comprising Kindergarten/Pre-primary classrooms on the ground floor, with General Learning Areas on the first floor.
- A new two storey building addressing Street comprising Administration spaces on the ground floor, with General Learning Areas and Staff Common Room on the first floor.
- 31 new on-site car bays.
- Conversion of an existing playing court addressing Geddes Street to car parking, with a new recreation space on an open deck above the carpark.
- A new enclosure to accommodate firefighting equipment (water storage tanks and pumps).
- Refurbishment and internal works to the existing two storey classroom blocks.
- A Temporary Administration Building.

In accordance with Local Planning Policy 37 – *“Community Consultation on Planning Proposals”*, before Council determines this application you are invited to comment on the following:

- **Proposed Use** - An Educational Establishment is classified as an “AA” (discretionary use) within the Residential zone under Town Planning Scheme No. 1.
- **Car Parking** – Based upon the Council’s approval of a maximum of 256 enrolled students, as part of an approval of additions to the school in 2009, there is an existing shortfall of on-site car parking bays. Having regard to the proposed increase in student numbers to 423 and the provision of an additional 31 on-site car bays, the proposal results in an additional parking shortfall of 4 car bays.
- **Overshadowing** – the proposed development will cast a shadow onto the adjoining properties at 12noon on 21 June as follows:
 - No. 25A Geddes Street: The proposed development would overshadow part of the North East facing outdoor living area at midday, 21 June (ie, the winter solstice).
- **Boundary Setbacks** – Clause 6.1.4 of the Residential Design Codes prescribes the minimum setback distance of buildings from boundaries other than the street. The application proposes variations to the setback of the following walls:
 - Recreation deck, privacy screen and fencing - 2.8 metres required; 2.3 metres proposed to the common boundary with No. 25 Geddes Street.

Plans/details of the proposed development can be viewed online via the Town’s website www.victoriapark.wa.gov.au by going to ‘Build & Develop’, ‘Lodge and Track an Application’, ‘Track an Application’ then ‘Search by Property Address’ and then ‘Current Consultation’ and entering the property address.

Computer facilities are also available at Council’s Administration Centre between the hours of 8:30am to 5:00pm, Monday to Friday, and at the Town of Victoria Park Library to view the plans online.

Any comments you wish to make on the proposed development are to be submitted in writing by 5:00pm 26 July 2017, by one of the following:

- Online via the abovementioned links on the Town’s website; or
- Email to admin@vicpark.wa.gov.au or letter addressed to the Town of Victoria Park, Locked Bag No. 437, Victoria Park WA 6979. In either instance, please quote Planning Application reference number: **5.2017.385.1** as part of any submission.

Should no reply be received within the above timeframe it will be assumed that you do not wish to comment. It should be noted that the Council in determining the application will take into account the comments of owners and occupiers of the adjoining properties, however, the Council is not obliged to support these views.

Should you have any queries or require further information please contact Sturt McDonald of Council's Urban Planning Unit on 9311 8163 or via email smcdonald@vicpark.wa.gov.au .

Yours faithfully

A handwritten signature in black ink, appearing to be 'SM', on a light grey rectangular background.

Sturt McDonald
Planning Officer

6 July 2017

Insert Name
Insert Address1
INSERT SUBURB

Sturt McDonald 9311 8111
Planning Officer
File Ref: 22983
DA 5.2017.385.1

Dear Sir/Madam

LOT: 1961, NO. 28 COLOMBO STREET, VICTORIA PARK - DEVELOPMENT APPLICATION 5.2017.385.1 FOR ADDITIONS & ALTERATIONS TO EDUCATIONAL ESTABLISHMENT (REGENT COLLEGE)

Council has received a development application for ADDITIONS & ALTERATIONS TO EDUCATIONAL ESTABLISHMENT at the above-mentioned property. Community consultation letters dated the 04 July 2017 provided details of the application, including proposed variations to Council Policies. Please be advised that the consultation letters to owners/occupants of No. 25 Geddes Street incorrectly stated that the proposed recreation deck has a side boundary setback of 2.3m. The information relating to this boundary setbacks should read as follows:

- **Boundary Setbacks** – Clause 6.1.4 of the Residential Design Codes prescribes the minimum setback distance of buildings from boundaries other than the street. The application proposes variations to the setback of the following walls:
 - Recreation deck, privacy screen and fencing - 2.8 metres required; 1.5 metres proposed to the common boundary with No. 25 Geddes Street.

Plans/details of the proposed development can be viewed online via the Town's website www.victoriapark.wa.gov.au by going to 'Build & Develop', 'Lodge and Track an Application', 'Track an Application' then 'Search by Property Address' and then 'Current Consultation' and entering the property address.

Computer facilities are also available at Council's Administration Centre between the hours of 8:30am to 5:00pm, Monday to Friday, and at the Town of Victoria Park Library to view the plans online.

Any comments you wish to make on the proposed development are to be submitted in writing by 5:00pm 26 July 2017, by one of the following:

- Online via the abovementioned links on the Town's website; or
- Email to admin@vicpark.wa.gov.au or letter addressed to the Town of Victoria Park, Locked Bag No. 437, Victoria Park WA 6979. In either instance, please quote Planning Application reference number: **5.2017.385.1** as part of any submission.

Should no reply be received within the above timeframe it will be assumed that you do not wish to comment. It should be noted that the Council in determining the application will take into account the comments of owners and occupiers of the adjoining properties, however, the Council is not obliged to support these views.

Should you have any queries or require further information please contact Sturt McDonald of Council's Urban Planning Unit on 9311 8163 or via email smcdonald@vicpark.wa.gov.au .

Yours faithfully



Sturt McDonald
Planning Officer

Attachment 9

PTA comment

Sturt McDonald

From: Herbert, Glenn [REDACTED]
Sent: Monday, 24 July 2017 09:54
To: Sturt McDonald
Subject: RE: Consultation document 1 - Regent College JDAP Referral

Hi Sturt,

Please find Public Transport Authority (PTA) comments regarding the proposal for Regent College below.

The PTA has no objection to the partial redevelopment of Regent College and finds the proposal to be generally conducive to the operation and growth of the Transperth network.

As noted in the traffic impact assessment, the site is well serviced by the Route 72 and 75 bus services which operate on Geddes Street, providing access to Elizabeth Quay Bus Station, Curtin University and Cannington Station. The school is also in close proximity to Albany Highway and the Victoria Park Transfer Station which provides access to a range of bus services operating across the metropolitan region.

It should be noted that the opening of a new bus station at Curtin University in 2018 will prompt a review into the Route 72 and 75 bus services. This will result in the reallocation of resources according to demand and may lead to the withdrawal of poor performing trips.

If you require any additional information, please do not hesitate to contact me.

Regards,

Glenn Herbert
Senior Service Planner | Transperth System, Regional Town & School Bus Services
Level 1, Public Transport Centre, West Parade, Perth 6000
Tel: (08) [REDACTED] Email: [REDACTED] Web: www.transperth.wa.gov.au



The Public Transport Authority of Western Australia cannot accept any liability for any loss or damage sustained as a result of software viruses. You must carry out such virus checking as is necessary before opening any attachment to this message. The information in this email and any files transmitted with it may be of a privileged and/or confidential nature and is intended solely for the addressee(s). If you are not an intended addressee please notify the sender immediately, and note that any disclosure, copying or distribution by you is prohibited and may be unlawful. The views expressed in this email are not necessarily the views of the Public Transport Authority.

From: Sturt McDonald [REDACTED]
Sent: Friday, 21 July 2017 11:16 AM
To: Herbert, Glenn
Subject: FW: Consultation document 1 - Regent College JDAP Referral

Hi Glen,

The consultation plan set proved too large (even by itself) for email, so I've put together the key plans that may be of reference to you (site and staging plans).

Let me know if you have any questions in regards to the proposal (or the traffic impact assessment). My direct line is [REDACTED]

Attachment 10

Danpalon test and Brochure



SHADOW CAST BY 16MM CLEAR DANPALON SAMPLE MATERIAL

SHADOW CAST BY CONCRETE PILLAR



SHADOW CAST BY 16MM CLEAR DANPALON SAMPLE MATERIAL

SHADOW CAST BY CONCRETE PILLAR

THE DANPALON® MICROCELL STRUCTURE: 10 TIMES MORE CELLS FOR EXTRA INSULATION, IMPACT AND WEATHER RESISTANCE

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SUPERIOR LIGHT DIFFUSION

The Microcell structure transmits an even diffusion of natural light, producing a rich look. Specifically designed for architectural daylight applications, the tight spacing between the ribs produces a superior quality of light, offering unique iridescence - reflecting and dispersing light in a way unmatched by any other material. Danpalon® Microcell panels are available in a range of thicknesses and widths.



Gymnasium Posco, Korea | Danpal® Single Glazing, 16mm | Architect: Posco A&C

Attachment 11

Traffic photos





Form 2 - Responsible Authority Report

(Regulation 17)

Property Location:	Lot 25 (No. 300) Collier Road, Bassendean
Development Description:	Convenience Store
Proposed Amendments:	Modifications to Condition 6 of existing Approval
DAP Name:	Metropolitan Central JDAP
Applicant:	Planning Solutions
Owner:	HICON (WA) PTY LTD
Value of Amendment:	\$2.1 million
LG Reference:	DABC/BDVAPPS/2017-106
Responsible Authority:	Town of Bassendean
Authorising Officer:	Dylan Stokes, Planning Officer
DAP File No:	DAP/17/01187
Report Date:	30 August 2017
Application Received Date:	11 July 2017
Application Process Days:	50 days
Attachment(s):	<ol style="list-style-type: none"> 1. Applicant's (Planning Solutions) submission and Transcore Traffic Report dated 11 July 2017. 2. Correspondence on behalf of the Department of Planning dated 4 August 2017. 3. Correspondence on behalf of the Department of Planning associated with the original application on the site dated 10 April 2017.

Officer Recommendation:

That the Metropolitan Central JDAP resolves to:

1. **Accept** that the DAP Application reference DAP/17/01187 as detailed on the DAP Form 2 dated 11 July 2017 is appropriate for consideration in accordance with regulation 17 of the *Planning and Development (Development Assessment Panels) Regulations 2011*;
2. **Approve** the DAP Application reference DAP/17/01187 as detailed on the DAP Form 2 date 11 July 2017 ~~and accompanying plans:~~

Dwg No.	Drawing Name	Rev No.	Dwg Date
1616-TP1	Locality Plan and Survey Plan	C	13.02.17
1616-TP2	Layout Plans	D	13.02.17
1616-TP3	Elevations	B	19.12.16
1616-TP4	Landscape Plan and Signage	D	13.02.17

	Details		
1616-TP5	Truck Path	C	13.02.17
N/A	Overall Site Plan	N/A	21.02.17
1616-TP5 (with recommendations in red)	Figure 17 Recommended changes to kerbs for fuel tanker access	C	13.02.17

in accordance with the provisions of the Town of Bassendean Local Planning Scheme No. 10, for the proposed minor amendment to the approved Convenience Store at Lot 25 (No. 300) Collier Road, subject to the following conditions

Amended Conditions

1. Modification of Condition 6 so as to now read:

No vehicle used for the delivery of fuel is permitted on site between 7:30am to 9:00am and 2:30pm to 4:00pm on weekdays.

Advice Notes

All other conditions and requirements detailed on the previous approval dated 6 June 2017 shall remain unless altered by this application.

Details: outline of development application

Insert Zoning	MRS:	Industrial
	TPS:	General Industrial
Insert Use Class:		Convenience Store
Insert Strategy Policy:		Not applicable
Insert Development Scheme:		Town of Bassendean Local Planning Scheme No. 10 (District Zoning Scheme)
Insert Lot Size:		1828m ² (proposed as part of subdivision)
Insert Existing Land Use:		Factory and Office

The applicant seeks approval to modify the development approval for a Convenience Store which was originally issued by JDAP at its meeting held 29 May 2017 by removing a condition relating to the access of fuel vehicles to the site.

Background:

Development approval for a Convenience Store was granted by Metro Central JDAP at its meeting held 29 May 2017. The original application incorporated proposed access via a new crossover to Collier Road and the widening of a crossover to Alice Street.

Legislation & policy:

The legislation relevant specifically to the Form 2 application is listed below.

Legislation

- a) Planning & Development Act 2005
- b) Planning and Development (Local Planning Scheme) Regulations 2015
- c) Metropolitan Region Scheme

State Government Policies

- a) Development Control Policy 5.1 – Regional Roads (Vehicular Access)

Local Policies

N/A

Consultation:

Public Consultation

Under the Zoning Table (Table 1) of the Town's Local Planning Scheme, a convenience store is a 'D' or discretionary use in the General Industry Zone, which did not generate a need for public advertising of the application.

Consultation with other Agencies or Consultants

The application was referred to the following agency for comment:

- Department of Planning – Other Regional Road Reservation (Policy No. DC 5.1)

The original application incorporated a crossover to Collier Road. Under Clause 3.3.1 and 3.3.2 of the policy, the Commission seeks to minimise the creation of new access arrangements to regional roads and instead aims to seek access from side streets. The original application was therefore referred to the Commission for comment where the Commission recommended approving the application but requested limiting hours that fuel vehicles can enter the site. The Commission did not state the specific hours that fuel vehicles should not be permitted to access the site.

As limited hours were recommended as part of the original referral from the Commission, Council Officers referred the Form 2 application to the Commission with the updated Traffic Report. A response was provided by the Commission that detailed the following:

- The Department recommends removing Condition 6 but replacing it with a similar condition that changes the timeframes to a more 'pin-pointed timeframe'.
- The Department notes that whilst Collier Road is considered a 'RAV 7' (Restricted Access Vehicle) road, a high portion of the traffic is considered regular traffic, which can result in a higher probability of vehicle conflict.
- As noted by the Commission, fuel tankers do not exit the site in an efficient or lane correct manner, thereby resulting in an obstruction to vehicles travelling west along Collier Road.
- During peak PM period, it was noted that 815 vehicles were travelling west, which translates to 13 vehicles per minute. Any obstruction caused by the fuel tanker at this point in time will likely contribute in a build up and reduce the overall capacity of Collier Road.

Planning Assessment:

The original application for a Convenience Store incorporated the following:

- A proposed crossover to Collier Road.
- An extension of the existing crossover to Alice Street.
- A proposed median strip extension to Collier Road, preventing right hand turns into and out of the site from the Collier Road crossover.
- A tight turning circle for fuel vehicles that involves the vehicles entering the site from Alice Street via a right hand turn and exiting the site onto Collier Road via a left hand turn and crossing two lanes of traffic.

Council Officers recognised that the access and turning arrangements on site had potential safety implications during peak hours for the following reasons:

- The 19m fuel vehicles must wait for an adequate period of time to exit the site, which will involve crossing two lanes of traffic.
- During the peak PM period, cars are travelling westbound along Collier Road at a rate of 13 vehicle per minute or nearly at a rate of one vehicle every 4 seconds.
- There are vehicles that are estimated to enter the site from Collier Road at a rate of 13 vehicles per hour from Collier Road during peak AM hours and 19 vehicles per hour entering during peak PM hours. These vehicles won't be able to enter whilst the fuel vehicle is waiting to exit.
- The 7-Eleven Customer Patronage as shown in the previous Transcore report showed a peak between 6:00am and 9:00am and also between 3:00pm and 7:00pm.
- Movement inside the site will be extremely congested during peak periods and will be further limited if the fuel vehicle is occupying a large portion of the manoeuvring area.
- The previous traffic report prepared by Transcore clearly stated that fuel tankers are expected to access the site outside of peak site activity periods.

Furthermore, the Commission requested that the vehicle hours be limited as per the referral. As such, Council Officers recommended a condition restricting fuel hours between the period of 7:00am to 9:00am and 3:00pm to 7:00pm. The Council Officers considered that a timeframe beyond the nominated 'peak hours' (8:00am-9:00am and 3:00pm-4:00pm) as referenced throughout the previous Transcore report was necessary due to the identified issues listed above.

The transport report submitted as part of the Form 2 application argues that the times should be removed for the sake of providing flexibility to the landowner to ensure that planning conditions do not restrict the ability to conduct business on site. The applicant has provided the following primary reasons to support the removal of Condition 6:

- There are no impacts to the operation of the Collier Road crossover or the intersection of Collier Road and Alice Street.
- Fuel deliveries during peak periods will not undermine traffic operation or safety of the surrounding road network.
- Both Collier Road and Alice Street fall within a 'RAV (Restricted Access Vehicle) Network 7' classification which can cater for vehicles up to 36.5m in length.

- The original application shows a sufficient turn path analysis for a fuel tanker to enter the site from Alice street, manoeuvre through the site and exit from Collier Road.
- Heavy vehicle movements that are not 'lane' correct and are considered a common occurrence in the industrial area.
- An updated analysis of the Collier Road intersection using Sidra Intersection software.
- Further justification that analyses statements made in the previous Transcore report from the original application.

Officer Comments

The applicant is seeking complete removal of Condition 6, primarily on the grounds of flexibility, supply/demand and operational processes. Council Officers acted on the Commissions advice in placing a condition that restricts hours that fuel vehicles can enter the site primarily for reasons related to safety. It is the Council Officers perspective that a condition related to safety should take precedence over any economic or business related needs, especially given the confined nature of the site and the site specific safety circumstances related to fuel vehicles. Regarding the consultant report and Transcore report provided with the Form 2 application, many of the above listed issues recognised by the Council Officers as part of the original submission still remain despite the additional information.

The Form 2 Transcore report includes a Sidra analysis. Council Officers consider the Sidra analysis to be unwarranted, as it discusses the capability of the Collier Road Crossover generally during peak hours. It makes the assumption that substituting three cars in place of the fuel tanker will adequately cater for the potential 'operational impact' that would result from the fuel truck. However Council Officers concerns aren't with the general ability for cars to exit onto Collier Road during peak hours which would be covered through the Sidra Analysis, but instead the specific circumstance that a 19m vehicle will be waiting to exit and the additional knock-on safety impacts that could occur along Collier Road and inside the site during peak hours.

Under the turn path analysis section of the Form 2 Transcore report, there is discussion that the fuel vehicle requires the full width of both lanes to complete the turning manoeuvre and how this is a regular occurrence for semi-trailers at service stations that would otherwise result in overly large and undesirable crossovers to cater for the wide turning movement. This movement is stated to be legal in accordance with the Traffic Code under Austroads and Liveable Neighbourhoods guidelines. There is also reference to Collier Road and Alice Street being classified as a 'RAV network 7' which caters for heavy vehicles up to 36.5m and are commonly associated with heavy vehicle movements. Regarding these statements, the Council Officers do not oppose the notion that the site, the proposed crossover widths and the roads can accommodate the 19m vehicle. However it is the repercussions of the fuel tanker not exiting the site in a lane correct manner during periods where there will be a high traffic volume into and out of the site that resulted in the condition being placed on the original application.

Finally, the Form 2 Transcore report briefly details commentary provided in the previous Transcore report, specifically the statement that *"fuel tankers and service vehicles are expected to access the site no more than 3-4 times a week and generally outside peak road network and peak site activity periods."* It was stated in the report that this statement is considered general in nature and that consideration

should be given to *“particular site needs to be serviced by these types of vehicles during peak periods.”* As previously stated, Council Officers recommends that safety concerns take precedence over retail needs of the site.

In accordance with the recommendation made by the Commission, Council Officers recommend amending the previously specified hours. Condition 6 previously stated the following:

“6. No vehicle used for the delivery of fuel is permitted on site between 7:00am to 9:00am and 3:00pm to 7:00pm on weekdays.”

These hours were considered adequate at the time of the initial application taking into account the traffic volumes along Collier Road in addition to the amount of vehicles entering the subject site. However upon reconsideration by Council Officers in addition to the correspondence provided by the Commission it was deemed that the hours should be modified to more directly address the peaks shown on Figure 2 and 3 of the Form 2 Transport report and the traffic along Collier Road generally as opposed to the amounts of vehicles entering the site. Council Officers therefore considers the following condition to adequately address the peaks of Collier Road in addition to the comments made by the Commission:

“6. No vehicle used for the delivery of fuel is permitted on site between 7:30am to 9:00am and 2:30pm to 4:00pm on weekdays”

Options/Alternatives:

JDAP has the ability to remove the condition in lieu of modifying it to the specified hours, but this would go against the recommendations of both the Commission and the Council Officers. Alternately the timeframes can be modified different hours that the JDAP deems appropriate.

Council Recommendation:

That Council endorses the Planning Officer’s Form 2 Responsible Authority Report for the proposed Convenience Store on Lot 25 (No. 300) Collier Road, Bassendean, but recommends that Condition 6 be modified as follows:

“6. No vehicle used for the delivery of fuel is permitted on site between 7:30am to 9:00am and 2:30pm to 5:00pm on weekdays”

Conclusion:

For the reasons identified within this report it is recommended that Condition 6 be modified as shown in the officer recommendation.

PS ref: 4765
Town ref: 2017-033
DAP ref: DAP/17/01187

Document #: IPA-12345617
Date: 11.07.2017
Officer: MARY BIDSTRUP
File: A969



11 July 2017

Chief Executive Officer
Town of Bassendean
PO Box 87
BASSENDEAN WA 6934

Attention: Dylan Stokes, Development Services

Dear Sir,

**LOT 25 (300) COLLIER ROAD, BASSENDEAN
APPROVED CONVENIENCE STORE
DAP FORM 2 APPLICATION**

Planning Solutions acts on behalf of Collier Road WA Pty Ltd, the proponent of the approved convenience store development at Lot 25 (300) Collier Road, Bassendean (**subject site**). Development approval was granted by the Metropolitan Central Joint Development Assessment Panel (**JDAP**) on 29 May 2017.

In accordance with regulation 17(1)(b) of the *Planning and Development (Development Assessment Panels) Regulations 2011 (DAP Regulations)*, this application seeks to delete Condition 6 of the development approval.

With regard to the above, please find enclosed the following:

- DAP Form 2 'Application for amendment or cancellation of a Development Assessment Panel determination', signed by the landowner and the applicant.
- Town of Bassendean 'Application for Development Approval' form, signed by the landowner and applicant.
- Metropolitan Region Scheme Form 1, signed by the landowner and the applicant.
- A cheque for \$491, comprising payment of the maximum \$295 'minor amendment fee' stipulated by the *Planning and Development Regulations 2009* and \$196 for the DAP 'minor amendment fee'.

The proposed DAP Form 2 application requests the removal of Condition 6, which restricts fuel deliveries from occurring between 7:00am – 9:00am and 3:00pm – 7:00pm on weekdays. This application demonstrates (with appropriate supporting traffic/transport analysis) that fuel deliveries during the above periods will have no impacts on the safety or operation of Collier Road and that there is no demonstrable safety benefit arising from the condition, given the industrial context of the locality and the activities already taking place along Collier Road.

1. BACKGROUND

An application seeking to develop the subject site with a fuel retailing convenience store was lodged with the Town of Bassendean (**Town**) on 2 March 2017. The proposal represents the efficient development of underutilised industrial land with an activity providing key services to the surrounding area and patrons travelling along Collier Road.

The fuel retailing convenience store was approved by the Metro Central JDAP at its meeting on 29 May 2017, subject to conditions.

Refer **Appendix 1** for a copy of the Metro Central JDAP Form 1 approval dated 29 May 2017.

2. PROPOSED DELETION OF APPROVAL CONDITION 6

Condition 6 of the JDAP approval granted 29 May 2017 states:

6. *No vehicle used for the delivery of fuel is permitted on site between 7:00am to 9:00am and 3:00pm to 7:00pm on weekdays.*

The officer's report to the JDAP states the following with regard to the imposition of Condition 6:

The provided Transcore Transport Impact Assessment states that the average weekday traffic flow is approximately 17,210 vehicles per day with peak periods between 8:00am to 9:00 am and 3:00pm to 4:00pm. The report also states that as a result of the proposed convenience store, there is estimated to be 13 vehicles per hour entering the site from Collier during peak AM hours, and 19 vehicles per hour entering during peak PM hours.

Section 9.0 of the report states that "Fuel tanks and other service vehicles are expected to access the site no more than 3-4 times a week and generally outside the peak road network and peak site activity periods." To ensure that the fuel trucks are exiting the site during off peak periods, the Town recommends a condition on the approval limiting the periods that fuel trucks can enter and exit the subject site.

While fuel deliveries are generally made outside of peak periods, the times of deliveries can occasionally vary for a number of reasons (including supply/demand, operational processes, and specific needs for a particular site). The deletion of approval Condition 6 is proposed, as the operator wants to ensure compliance with their planning approval in the event a fuel delivery is made during a peak period.

A traffic/transport analysis and technical note has been prepared by Transcore in support of the proposed removal of Condition 6, which confirms the deletion of Condition 6 is warranted for the following reasons:

- There will be no impacts on the operation of the Collier Road crossover, or the Collier Road / Alice Street intersection as a result of fuel deliveries being made during peak periods.
- Fuel deliveries during peak periods will not undermine the traffic operations or safety of the surrounding road network.
- Both Collier Road and Alice Street fall within the RAV Network 7 classification, and are legally capable of accommodating vehicles up to 36.5m in length on a regular basis and during road network peak periods.

Refer to **Appendix 2** for Transcore's supporting technical note.

3. JUSTIFICATION FOR CONDITION REMOVAL

The subject site is zoned 'General Industry' pursuant to the Town of Bassendean (**Town**) Local Planning Scheme No. 10 (**LPS10**) and is located within a wider industrial precinct reflecting the same zoning. Clause 4.2.4 of LPS10 sets out the following relevant objectives for the 'General Industry' zone:

- (a) *To provide for a broad range of industrial uses, excluding noxious or hazardous activities.*
- (b) *To accommodate industry that would not otherwise comply with the performance standards of light industry.*
- (d) *To achieve safety and efficiency in traffic circulation, and also recognise the function of Collier Road as a regional road.*

Land zoned 'General Industry' is specifically planned to accommodate activities not falling within the scope of 'Light Industry'. There is an established connection between 'General Industrial' activities and the usage of heavy vehicles to support such activities. This is supported by Collier Road's RAV Network 7 classification, which permits access for heavy vehicles up to 36.5m.

Accordingly, there is an established 'General Industrial' amenity along Collier Road in the vicinity of the subject site, specifically comprising transport depot/warehousing type activities which are clearly supported by the frequent usage of heavy vehicles for transportation. Due to Collier Road's RAV 7 classification, vehicles up to 36.5m in length can legally travel on this road, access land via crossovers and use intersections without restriction during peak periods.

Having regard to the above, the infrequent deliveries (no more than 3-4 per week) of a 19.0m fuel tanker, regardless of the time at which these deliveries occur, is consistent with the existing activities along Collier Road and is in keeping with the amenity of the area. Transcore has confirmed that fuel deliveries have no impact whatsoever on both the approved Collier Road crossover and the Collier Road / Alice Street intersection, regardless of time these deliveries are made.

To further support there being no demonstrable safety benefits arising from Condition 6, Transcore have confirmed the following critical matters with respect to heavy vehicle movements:

- The turn path analysis conducted as part of the DAP Form 1 application demonstrates a 19.0m fuel tanker can navigate the subject site and egress on to Collier Road via the approved left-in/left-out crossover satisfactorily.
- Heavy vehicle movements that are not "lane correct" are a common and acceptable occurrence – not only for fuel retailing sites, but all other crossovers and most intersections (including signalised intersections) without safety concerns.

The removal of Condition 6 is therefore appropriate and warrants the JDAP's approval.

4. CONCLUSION

The proposed DAP Form 2 application seeks to delete Condition 6 from the development approval issued by the Metro Central JDAP on 29 May 2017, which restricts fuel delivery times to outside of peak periods.

The application is supported by an expert traffic/transport assessment prepared by Transcore. In summary, the deletion of Condition 6 is appropriate and warrants approval for the following reasons:

- The infrequent fuel deliveries (up to 3-4 per week) made by 19.0m fuel tankers is consistent with the operation of Collier Road, which is comprised of general industrial activities consistent with its General Industry zoning.
- Collier Road is within RAV Network 7 and legally able to accommodate the unrestricted and regular usage of heavy vehicles up to 36.5m. There is a minimal safety impact associated with the movements of 19.0m tankers along Collier Road, given its current usage and operation.
- Deliveries made by 19.0m fuel tankers during peak AM and PM periods has no impact whatsoever on the operation of the approved Collier Road crossover and the Collier Road / Alice Street intersection, and will not undermine the safety of the surrounding road network.
- Heavy vehicle movements that are not "lane correct" are not unusual and not unsafe, including in the context of the approved convenience store, as confirmed by expert transport consultants.

Having regard to the traffic/transport advice produced by Transcore and the additional justification provided in this submission, there is no demonstrable safety benefit to restricting fuel deliveries outside of peak periods.

We therefore respectfully request the Metro Central JDAP grant approval to the proposed DAP Form 2 application.

Should you have any queries or require further clarification with regard to the application, please do not hesitate to contact the undersigned.

Yours faithfully,



ALESSANDRO STAGNO
PLANNING CONSULTANT

170707 4765 DAP Form 2 - Bassendean.docx



Government of **Western Australia**
Development Assessment Panels

LG Ref: 2017-033
DoP Ref: DAP/17/01187
Enquiries: Development Assessment Panels
Telephone: (08) 6551 9919

Mr Alessandro Stagno
Planning Solutions
GPO Box 2709
Cloisters Square WA 6850

Dear Mr Stagno

Metro Central JDAP – Town of Bassendean – DAP Application 2017-033
Lot 25 (No. 300) Collier Road, Bassendean
Proposed Convenience Store

Thank you for your application and plans submitted to the Town of Bassendean on 2 March 2017 for the above development at the abovementioned site.

This application was considered by the Metro Central Joint Development Assessment Panel at its meeting held on 29 May 2017, where in accordance with the provisions of the Town of Bassendean Local Planning Scheme No.10, it was resolved to approve the application as per the attached notice of determination.

Should the applicant not be satisfied by this decision, a DAP Form 2 application may be made to amend or cancel this planning approval in accordance with regulation 17 of the *Planning and Development (Development Assessment Panels) Regulations 2011*.

Please also be advised that there is a right of review by the State Administrative Tribunal in accordance with Part 14 of the *Planning and Development Act 2005*. Such an application must be made within 28 days of the determination, in accordance with the *State Administrative Tribunal Act 2004*.

Should you have any queries with respect to the conditions of approval, please contact Mr Dylan Stokes at the Town of Bassendean on (08) 9377 8098.

Yours sincerely,

Zoe Hendry

DAP Secretariat

6/06/2017

Encl. DAP Determination Notice
Approved plans

Cc: Mr Dylan Stokes
Town of Bassendean



wa.gov.au

Postal address: Locked Bag 2506 Perth WA Street address: 140 William Street Perth WA 6000
Tel: (08) 6551 9919 Fax: (08) 6551 9961 TTY: 6551 9007 Infoline: 1800 626 477
daps@planning.wa.gov.au www.planning.wa.gov.au
ABN 35 482 341 493



Planning and Development Act 2005

Town of Bassendean Local Planning Scheme No.10

Metro Central Joint Development Assessment Panel

**Determination on Development Assessment Panel
Application for Planning Approval**

Location: Lot 25 (No. 300) Collier Road, Bassendean

Description of proposed Development: Proposed Convenience Store

In accordance with regulation 8 of the *Planning and Development (Development Assessment Panels) Regulations 2011*, the above application for planning approval was **granted** on 29 May 2017, subject to the following:

Approve DAP Application reference DAP/17/01187 and accompanying plans:

Dwg No.	Drawing Name	Rev No.	Dwg Date
1616-TP1	Locality Plan and Survey Plan	C	13.02.17
1616-TP2	Layout Plans	D	13.02.17
1616-TP3	Elevations	B	19.12.16
1616-TP4	Landscape Plan and Signage Details	D	13.02.17
1616-TP5	Truck Path	C	13.02.17
N/A	Overall Site Plan	N/A	21.02.17
1616-TP5 (with recommendations in red)	Figure 17 – Recommended changes to kerbs for fuel tanker access	C	13.02.17

Pursuant to Clause 68 Schedule 2 of the Planning and Development (Local Planning Scheme) Regulations 2015 subject to the following conditions:

1. This approval is for the use of the building as a convenience store only. Alternative use of the premises may require the submission of an application to Council for a change of use.
2. Lot A as shown on the overall site plan is to be a minimum of 1,828m² and shall not decrease as a result of a re-survey of the subject site associated with the proposed subdivision.
3. Revised drawings shall be submitted in conjunction with the application for a building permit and such drawings shall demonstrate:
 - a. An amended top of retaining wall height of 22.6; and
 - b. A reduced height to S1 – High Main Price Board to a maximum height of 6m.
 - c. Straightening of the kerb on the western side of the site to increase the width of the proposed crossover as shown in red on drawing titled Figure 17. The crossover wing radius must be a minimum of 5.0m in accordance with the Towns crossover specifications.



- d. Fencing within 11.5m from the Collier Road lot boundary to be shown as either open mesh or palisade fencing.
 - e. The bin area is to be masonry in construction and equipped with a hose cock. The floor must be graded to a floor waste and connected to sewer.
4. A detailed and professionally prepared landscaping plan being submitted prior to or with the application for a Building Permit for the Town's approval which provides full detail of the scope of works to be undertaken in both the private and public realms adjoining the development site, including:
- a. All the requirements listed under LPP18 including but not limited to: street frontages, contours, reticulation details, details of ground treatment and a plant legend showing:
 - i. quantity of plants,
 - ii. species name
 - iii. pot size of plants at the time of planting;
 - iv. height at full growth
 - b. Details of the location and type of proposed trees, shrubs, ground cover and lawn areas to be planted;
 - c. All plants to be of low water use;
 - d. Landscaping of the verge area adjacent to the development site, including the provision of 4 substantial street trees (2 x *Corymbia Ficifolia* to Collier Road and 2 x *Melaleuca Quinquenervia* to Alice Street) of a minimum 90L pot size in accordance with the Town's adopted Street Tree Master Plan;
 - e. The total number of plants to be planted at a minimum rate of 4 per 1m²; and
 - f. Details of the proposed watering system to ensure the establishment of species and their survival during the hot, dry summer months.
5. Landscaping shall be installed and maintained in accordance with a landscaping plan, submitted to and approved by the Town of Bassendean prior to the practical completion of the development.
6. No vehicle used for the delivery of fuel is permitted on site between 7:00am to 9:00am and 3:00pm to 7:00pm on weekdays.
7. No products, goods or materials are to be stored outside of the building, unless in a designated area approved by the Town for this purpose.
8. The applicant is responsible for all costs and works associated with extending the kerbed median island within the Collier Road road reserve. The works are to be completed to the satisfaction of the Western Australian Planning Commission and the Town of Bassendean prior to the occupation of the convenience store.

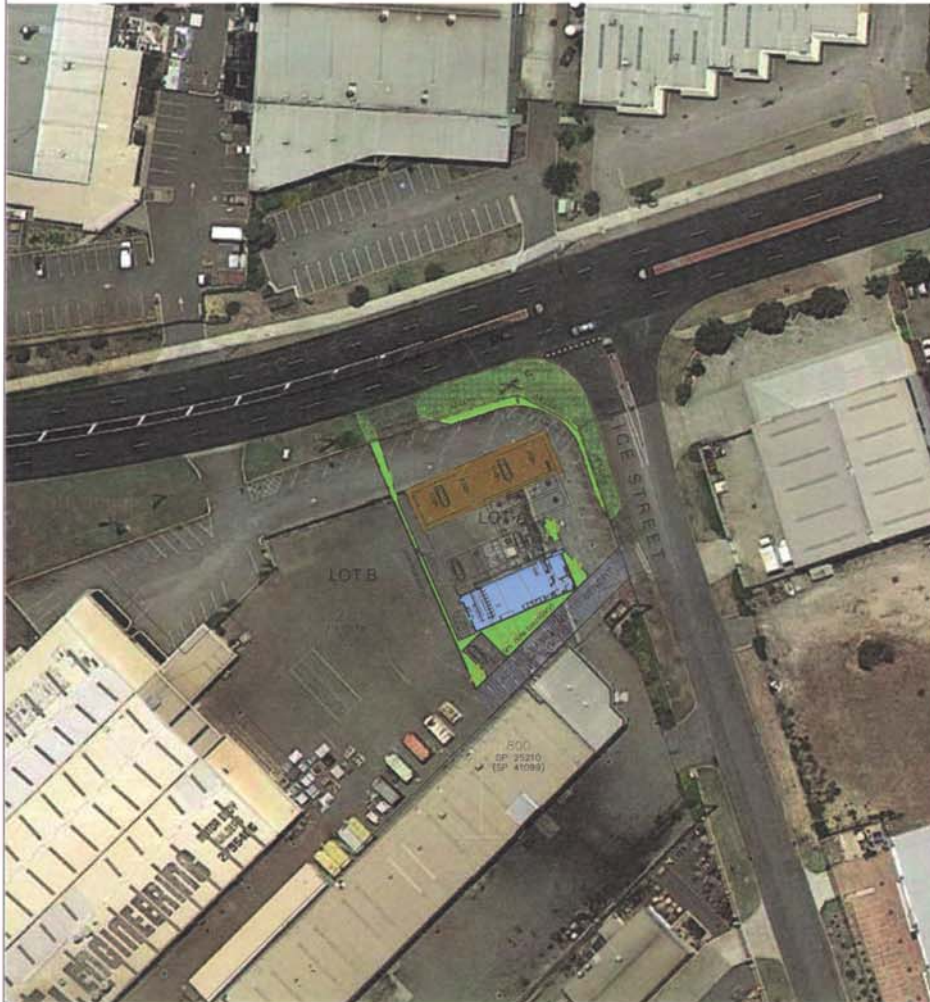


9. All storm water being contained on site. Details of the method of storm water being submitted for approval in conjunction with the application for a Building Permit.
10. The car parking spaces and access ways to be designed and constructed in accordance with Local Planning Policy No. 8 and AS 2890.1.
11. The car parking spaces and access ways being constructed and maintained thereafter to the Town's satisfaction.
12. All building works carried out under this planning approval are required to be contained within the boundaries of the subject lot.
13. Prior to the issue of a building permit, a development bond for the sum of \$42,000 being lodged with the Town to ensure the satisfactory completion of all works associated with landscaping, car parking, access ways, screen walls, and other associated works.
14. The incorporation of public art into the proposed development or a cash-in-lieu payment of one per cent of the construction cost of the proposed development in accordance with the Town's adopted Local Planning Policy No. 15 'Percent for Art Policy'. Detailed arrangements and agreement with respect to art to be provided on-site with a bond being provided to the Town for the full cost of the art or alternatively payment of the required fee shall be made prior to or in conjunction with the application for a Building Permit.
15. The building hereby approved shall not be occupied until all of the conditions of development approval have been complied with to the satisfaction of the Town, unless the applicant has entered into an agreement with the Town to comply with those conditions within a specified period.

Where an approval has so lapsed, no development shall be carried out without further approval having first been sought and obtained, unless the applicant has applied and obtained Development Assessment Panel approval to extend the approval term under regulation 17(1)(a) of the *Planning and Development (Development Assessment Panels) Regulations 2011*.

DEVELOPMENT
ASSESSMENT PANEL
APPROVED
29-May-2017

TOWN OF BASSENDEAN
17 JUL 2017
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LOCALITY PLAN
SCALE 1:500



SURVEY PLAN
SCALE 1:200

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Rev No	Description	Date	By
1	REVISED	01/01/17	MPH
2	REVISED	01/01/17	MPH
3	REVISED	01/01/17	MPH



PROPOSED TELEVEN CONVENIENCE STORE
300 COLLIER ROAD, BASSENDEAN WA

745767EN

LOCALITY PLAN SURVEY
PLAN

DATE: 01/01/17
BY: MPH
CHECKED: MPH
DATE: 01/01/17
FHM CONSULTING
1616-TP1

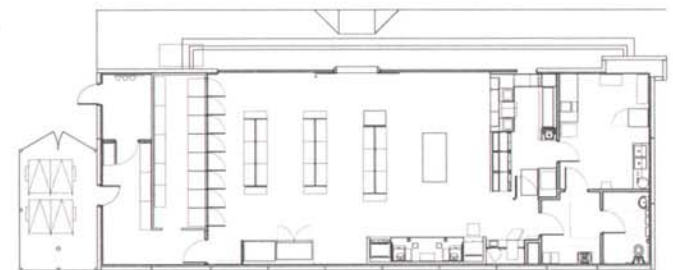
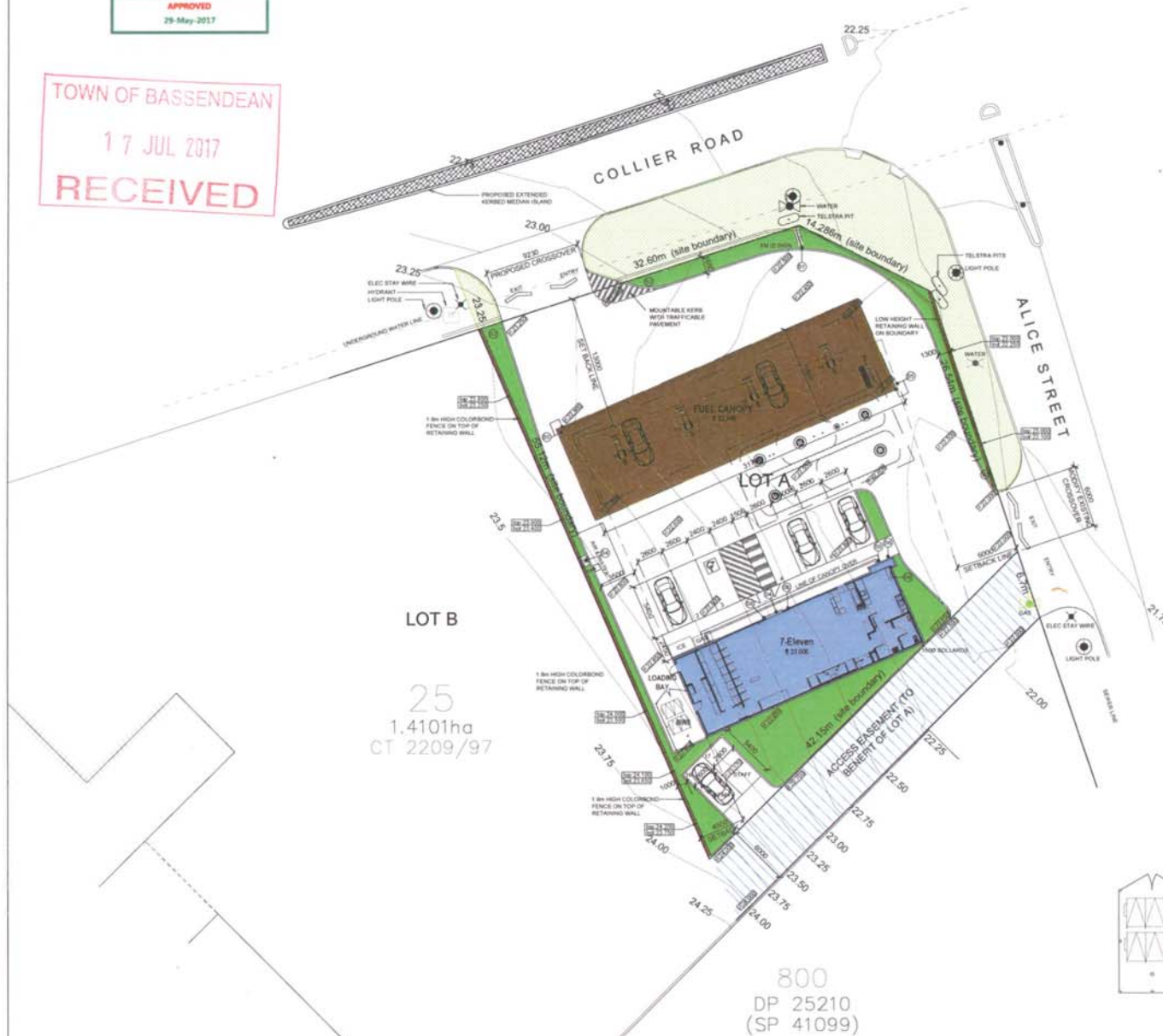
DEVELOPMENT
ASSESSMENT PANEL
APPROVED
29-May-2017

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17 JUL 2017
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SCHEDULE OF AREAS		
TOTAL SITE AREA:	1829m ²	100%
7-ELEVEN TENANCY:	929m ²	10.5%
BINS:	15m ²	0.9%
FUEL CANOPY AREA:	308m ²	16.7%
CAR PARKING SPACES:	17 - inc. driveway days	
LANDSCAPING AREA:	108 5m ²	10.8%

SIGNAGE LEGEND	
S1	EXTERNALLY ILLUMINATED RED SIGN
S2	EXTERNALLY ILLUMINATED DIRECTIONAL SIGN
S3	NON ILLUMINATED AIR AND WATER SIGN
S4	NON ILLUMINATED RETAIL BUILDING
S5	EXTERNALLY ILLUMINATED FUEL CANOPY FABRIC
S6	EXTERNALLY ILLUMINATED TOWER SIGN
S7	NON ILLUMINATED WINDOW DECALS
S8	NON ILLUMINATED POSTER HOLDER
S9	EXTERNALLY ILLUMINATED SCROLLING SIGN

REFER TO SHEET TP4 FOR SIGNAGE
REFERENCE ELEVATIONS AND DETAILS

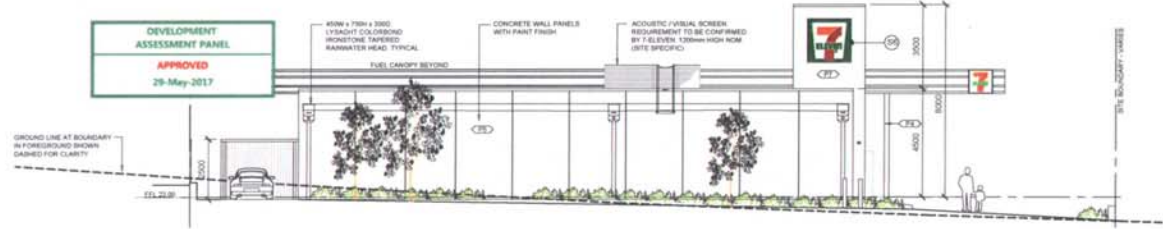


SITE PLAN
SCALE 1:200

7-ELEVEN FLOOR PLAN
SCALE 1:100

<p>PROPOSED 7-ELEVEN CONVENIENCE STORE 300 COLLIER ROAD, BASSENDEAN WA</p>				<p>LAYOUT PLANS</p>			
<p>7-ELEVEN</p>	<p>DATE: 15.02.17</p> <p>BY: [Signature]</p> <p>DATE: 15.02.17</p> <p>BY: [Signature]</p>	<p>DATE: 15.02.17</p> <p>BY: [Signature]</p> <p>DATE: 15.02.17</p> <p>BY: [Signature]</p>	<p>DATE: 15.02.17</p> <p>BY: [Signature]</p> <p>DATE: 15.02.17</p> <p>BY: [Signature]</p>	<p>DATE: 15.02.17</p> <p>BY: [Signature]</p> <p>DATE: 15.02.17</p> <p>BY: [Signature]</p>	<p>DATE: 15.02.17</p> <p>BY: [Signature]</p> <p>DATE: 15.02.17</p> <p>BY: [Signature]</p>	<p>DATE: 15.02.17</p> <p>BY: [Signature]</p> <p>DATE: 15.02.17</p> <p>BY: [Signature]</p>	<p>DATE: 15.02.17</p> <p>BY: [Signature]</p> <p>DATE: 15.02.17</p> <p>BY: [Signature]</p>

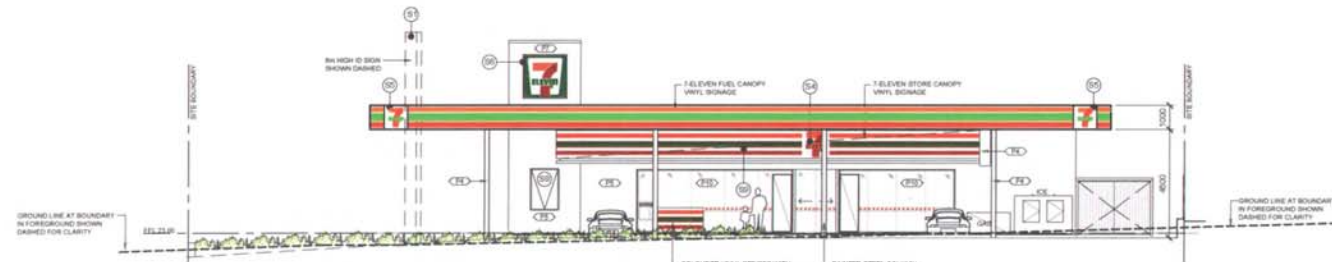
DEVELOPMENT
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APPROVED
29-May-2017



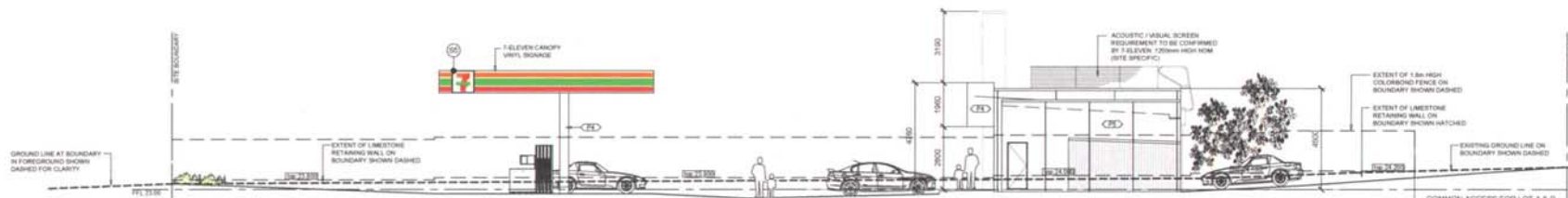
SOUTH EAST ELEVATION (convenience store)
Scale 1:100

CODE	FINISH SPECIFICATION	LOCATION
CE1	TEXTURE ROUGH SANDY POSTS COLOUR: CRUMP	VERANDAH POSTS PADA & GUTTER
CE2	CORRUGATED IRON COLOUR: COLORBOND BLAZE GREY	ROOF CLADDING
CE3	SALIX WEATHERSHIELD X10 GLOSS ACRYLIC	7-ELEVEN Pylon POLES LIGHTING POLES, VENT PIPES, PETROL CANOPY COLUMNS & DOWNPIPES
CE4	TEXTURED BRICKWORK FINISH GREY COLOUR	BUILDING - EXTERNAL CONCRETE WALL PANELS
CE5	SALIX WEATHERSHIELD X10 GLOSS ACRYLIC	STEEL CANOPY COLUMNS AND BOLLARDS 30mm ABOVE GROUND LEVEL
CE6	TIMBER LOOK CLADDING TO BURNAGE TONGUE	BUILDING TOWER CONCRETE WALL PANELS
CE7	CLEAR GLAZING IN A POWDERCOATED ALUMINUM FRAME WITH FRAMELESS MULLIONS	SHOPFRONT

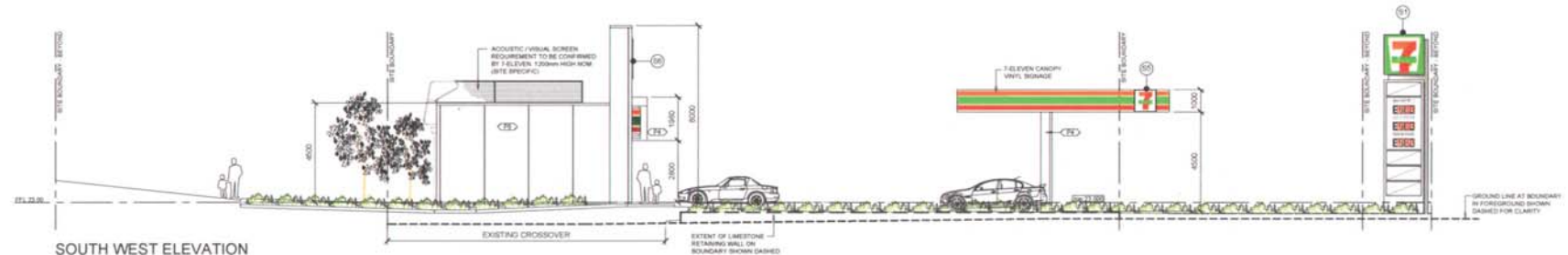
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NORTH WEST ELEVATION (fuel canopy)
Scale 1:100



NORTH EAST ELEVATION
Scale 1:100



SOUTH WEST ELEVATION
Scale 1:100

PROPOSED 7-ELEVEN CONVENIENCE STORE
300 COLLIER ROAD, BASSENDEAN WA
7-ELEVEN
ELEVATIONS

DEVELOPMENT
ASSESSMENT PANEL
APPROVED
29-May-2017

- ALL LANDSCAPED AREAS TO BE RETICULATED AND MAINTAINED TO THE SATISFACTION OF COUNCIL IN ACCORDANCE WITH LOCAL PLANNING POLICY 18
- NON-TURNED LANDSCAPING AREAS TO BE MULCHED TO A MINIMUM DEPTH OF 100MM, OR AS OTHERWISE REQUIRED BY COUNCIL

- SMALL SHRUBS (UP TO 1M) ENDOMIC TO BASSEDEAN POTENTIAL SPECIES:
COUCH WHEATGRASS
ELEGANT BEAUFORTIA
COMMON BROWN PEA
YELLOW STARFLOWER
ORANGE-FRUITED EREMBEA

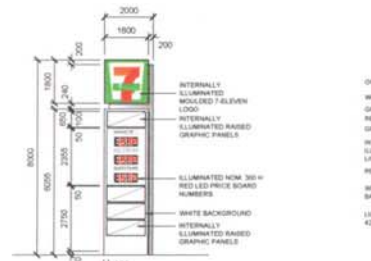
- LARGE SHRUBS (UP TO 3M) ENDOMIC TO BASSEDEAN POTENTIAL SPECIES:
PERTH HORSEBOX
CANOLE HAKEA

- TREES ENDOMIC TO BASSEDEAN (UP TO 4M) SPECIES TO BE CONFIRMED AT DETAILED DESIGN STAGE VIA A DETAILED LANDSCAPING PLAN ADDRESSING THE REQUIREMENTS OF LOCAL PLANNING POLICY NO. 18 IN ACCORDANCE WITH A CONDITION OF PLANNING APPROVAL

- A FULL LANDSCAPING PLAN IS TO BE PROVIDED FOLLOWING PLANNING APPROVAL, ADDRESSING THE FOLLOWING REQUIREMENTS OF LOCAL PLANNING POLICY 18:
- RETICULATION DETAILS (TYPE AND METHOD OF OPERATION)
 - PLANT LEGEND, INCLUDING THE NUMBER OF PLANTS AND SPECIES NAMES, INCLUDING POT SIZE OF PLANTS AT THE TIME OF PLANTING

800
DP 25210
(SP 41099)

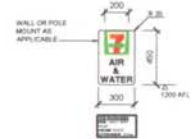
LANDSCAPE PLAN
SCALE 1:200



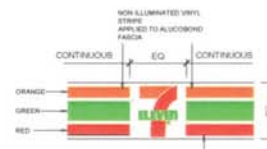
S1 - 8m HIGH MAIN PRICE BOARD
NOT DRAWN TO SCALE



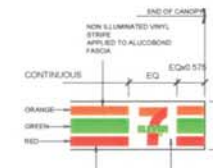
S2 - DIRECTIONAL SIGN
NOT DRAWN TO SCALE



S3 - AIR & WATER SIGN
NOT DRAWN TO SCALE

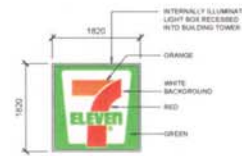


S4 - RETAIL BUILDING FASCIA (TYPICAL)
NOT DRAWN TO SCALE

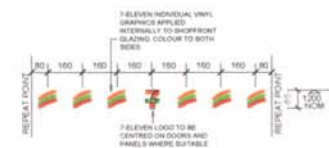


S5 - FUEL CANOPY FASCIA (TYPICAL)
NOT DRAWN TO SCALE

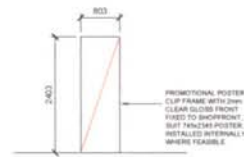
COLOUR	PAINTING	MIN. QTY.	ALUM.
ORANGE	PMS 105	7/25-14	3000-13
GREEN	PMS 341	7/25-14	3000-13
RED	PMS 485	7/25-14	3000-13



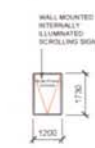
S6 - TOWER LOGO
NOT DRAWN TO SCALE



S7 - WINDOW DECALS
NOT DRAWN TO SCALE



S8 - POSTER HOLDER
NOT DRAWN TO SCALE



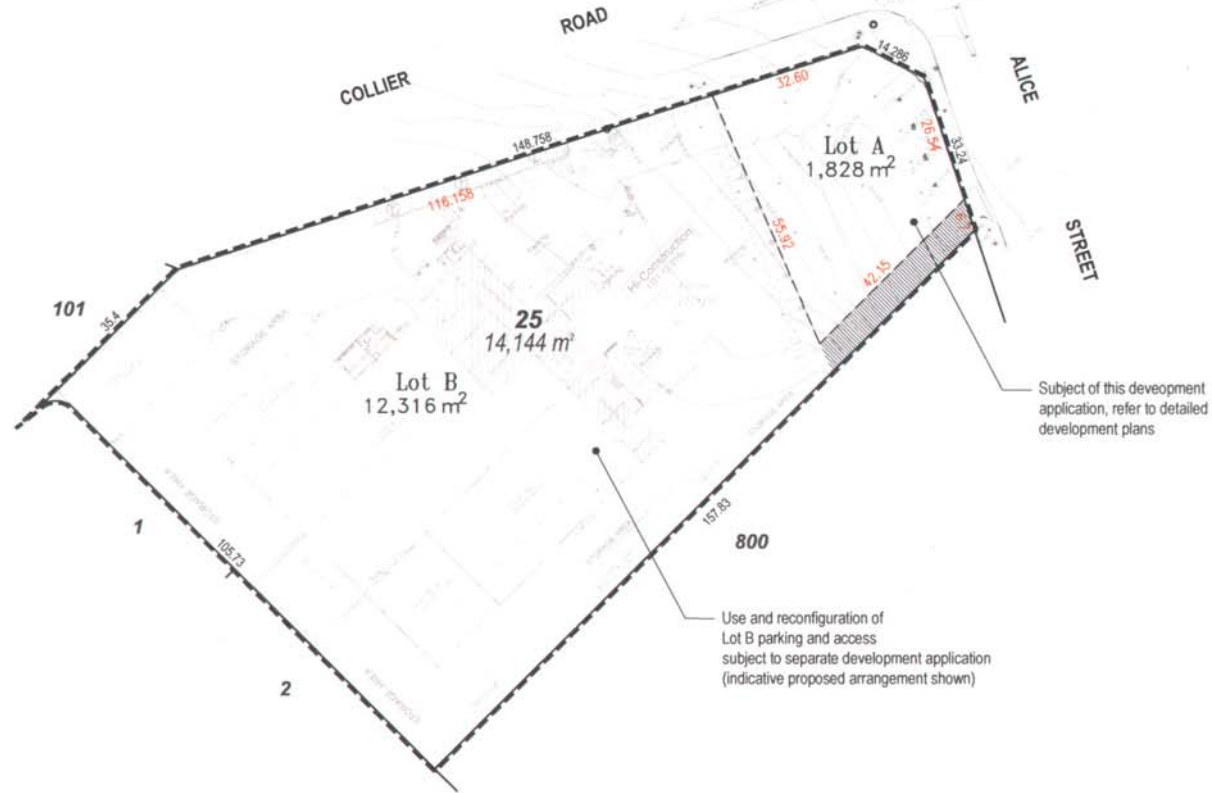
S9 - SCROLLING SIGN
NOT DRAWN TO SCALE

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DEVELOPMENT
ASSESSMENT PANEL

APPROVED
29-May-2017

LEGEND	
	Subject Site (Lot 25)
	Existing Lot Number
	Existing Lot Boundary
	Lot A Proposed Lot Number
	Proposed Lot Boundary
	Existing Lot Dimensions
	Proposed Lot Dimensions
	Common Access
	Existing Level Contour



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PLANNING SOLUTIONS **PS**
URBAN & REGIONAL PLANNING

SCALE 1:1000 @ A3
DATE 21 February 2017
FILE 170216-4750_Overall Site Plan.dwg
REVISION 20/04/2017 Drawn: JG
16/04/2017 Drawn: JG



OVERALL SITE PLAN
LOT 25 (300) COLLIER ROAD
BASSENDEAN, WESTERN AUSTRALIA

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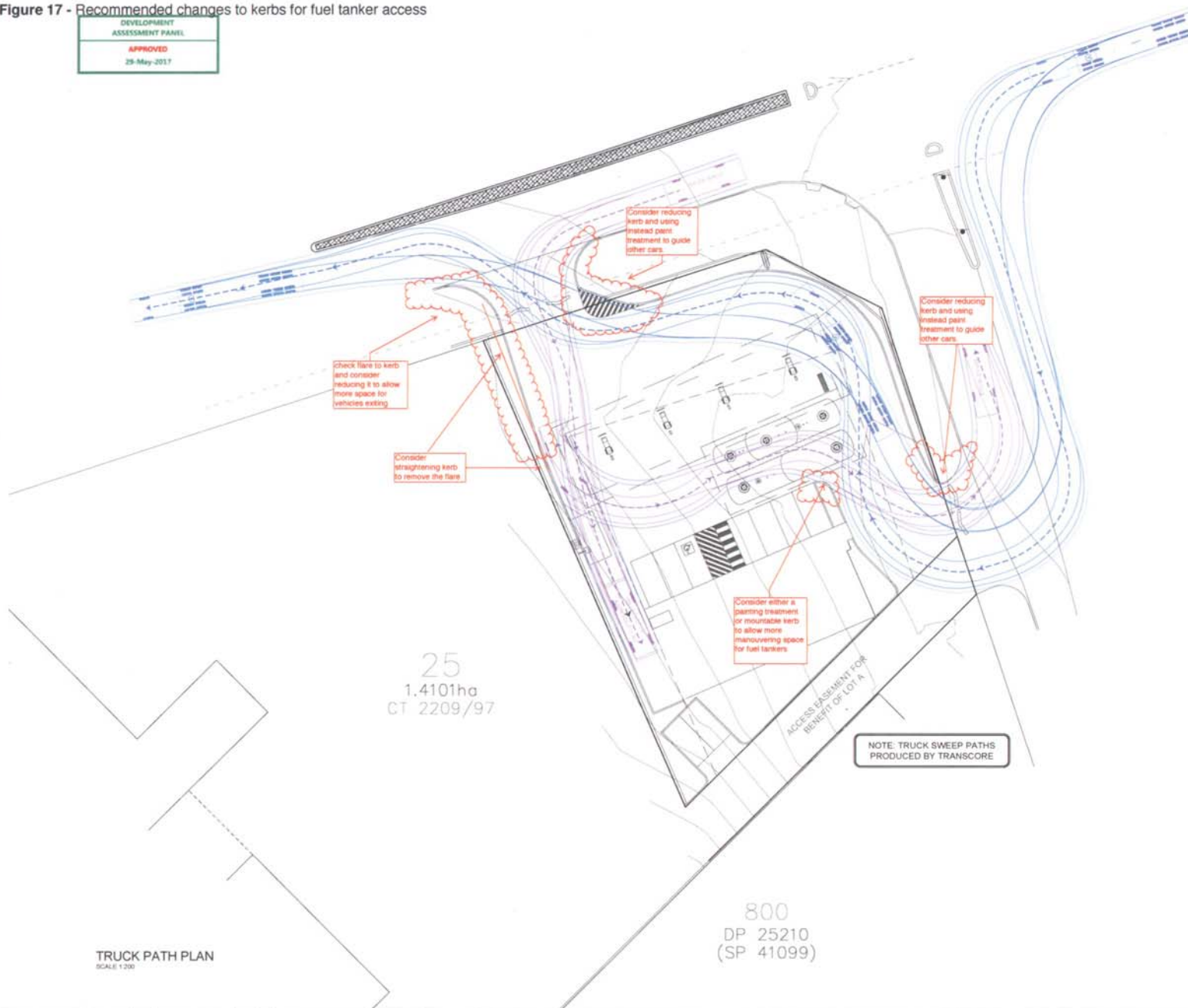
Figure 17 - Recommended changes to kerbs for fuel tanker access

DEVELOPMENT
ASSESSMENT PANEL
APPROVED
29-May-2017

TOWN OF BASSENDEAN

17 JUL 2017

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TRUCK PATH PLAN
SCALE 1:200

NOTE: TRUCK SWEEP PATHS
PRODUCED BY TRANSORE

<p>CONSULTANT'S CERTIFICATE OF THE COMPLETION OF THE DEVELOPMENT ASSESSMENT PANEL</p>	<p>LOT AREA: 1.4101ha CT 2209/97</p>	<p>DATE: 29-May-2017</p>	<p>BY: [Signature]</p>	<p>PROPOSED 7-ELEVEN CONVENIENCE STORE 300 COLLIER ROAD, BASSENDEAN WA</p>	<p>TRUCK PATH</p>	<p>FHM CONSULTING 1616-TPS</p>
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transport planning • traffic engineering • project management

TRANSCORE PTY LTD AS TRUSTEE FOR THE TRANSCORE TRUST
ACN 054 951 318 ABN 85 707 500 280

Technical Note: No. 1b

Date: 10/07/2017

Project No: t16.147

Project: Approved 7- Eleven – 300 Collier Road, Bassendean

Subject: Request for removal of condition 6 of the JDAP approval

INTRODUCTION

This Technical Note (TN) has been prepared by Transcore on behalf of Collier Road WA Pty Ltd ATFT Collier Road WA Unit Trust. The subject of this technical note is the approved 7- Eleven development to be located at a portion of 300 Collier Road, in the Town of Bassendean as shown in Figure 1.

As part of the Development Application (DA) for the proposal a Transport Impact Assessment (TIA) was prepared by Transcore in February 2017.

The application was conditionally approved by MCJDAP on 29 May 2017. Condition 6 of the JDAP approval restricts the fuel tanker delivery times and states that:

"No vehicle used for the delivery of fuel is permitted on site between 7:00am to 9:00am and 3:00pm to 7:00pm on weekdays."

It is understood that Condition 6 of the JDAP approval is a reflection of the commentary provided by the Responsible Authority (Town of Bassendean) in Page 21 of the Responsible Authority Report (RAR) which states that:

"To ensure that the fuel trucks are exiting the site during off peak periods, the Town recommends a condition on the approval limiting the periods that fuel trucks can enter and exit the subject site. Comments provided by the Department of Planning also recommends limiting fuel tanker access outside of peak times."

Therefore, it is concluded that the Town's concern is mainly with the exit movements of the tankers onto Collier Road during the peak hour periods.

Accordingly, this TN is prepared to investigate the impact on the traffic operation of the surrounding road network and in particular the operation of the proposed Collier Road crossover as a result of fuel tanker deliveries during the restricted hours (7:00am-9:00am and 3:00pm-7:00pm).



Figure 1: Location of the subject site

COLLIER ROAD TRAFFIC COUNT

According to Main Roads WA traffic counts data, Collier Road east of Tonkin Highway carried an Average Weekday Traffic flow of about 17,210vpd with 14% heavy vehicle in September 2015. As shown in Figure 2 the AM peak hour for Collier Road in this vicinity is recorded between 8.00am to 9:00am with 1,245vph and as shown in Figure 3 the PM peak hour is recorded between 3:00pm – 4:00pm with 1,500vph. The eastbound and westbound directional traffic flow of Collier Road during the AM and PM peak hours are also clarified in Figures 2&3.

It is noted that the available traffic counts data relates to the east of the Tonkin Highway (about 700m to the west of the site) which includes the Tonkin Highway, Jackson Street/ Grey Street traffic and other developments between the location of the traffic count and the site, as such it is expected that the traffic counts in the vicinity of the subject site are much lower than that reported by Main Roads WA traffic counts. Therefore, the analysis undertaken in this technical note is conservative and results in a robust assessment.

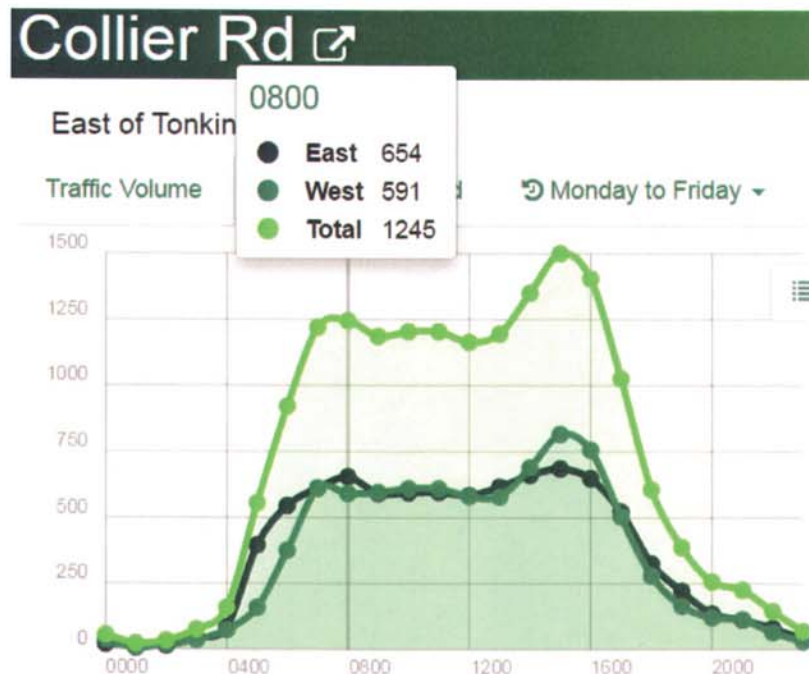


Figure 2: Collier Road Directional Split AM Peak Hour Traffic Count

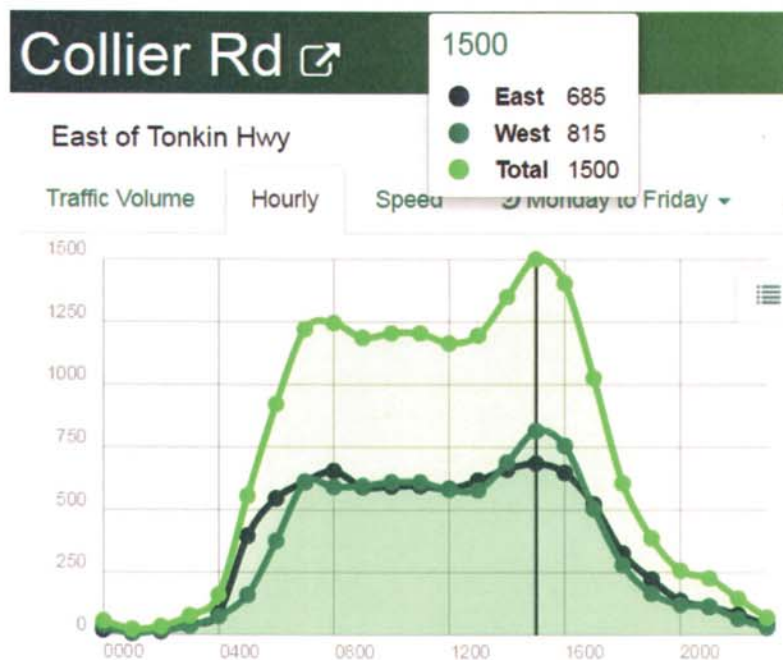


Figure 3: Collier Road Directional Split PM Peak Hour Traffic Count

FUEL TANKER DELIVERY

19.0m tankers would be used as the fuel delivery tankers for the proposed 7-Eleven. The fuel tankers will turn left from Collier Road, enter the site from Alice Street via a right turn, circulate within the site and access the fill point

and then egress the site onto Collier Road via a left turn. Service vehicle deliveries including the fuel tanker deliveries to the site are expected to be generally up to 3-4 times per week.

COLLIER ROAD/ ALICE STREET INTERSECTION OPERATION

SIDRA analysis was undertaken for the AM and PM peak hours of the existing and post development scenarios for the intersection of Collier Road and Alice Street. The SIDRA results were documented in the TIA.

According to the SIDRA results for the post development scenario, the intersection of Collier Road/ Alice Street will operate satisfactorily. Key intersection performance indicators are as follows:

- An overall degree of saturation¹ of 0.241 and 2.4 seconds average delay and 10.6m queue length during the post development AM peak hour; and,
- An overall degree of saturation of 0.71 and 4.9 seconds average delay and 21.6m queue length during the post development PM peak hour.

To establish the impact of the fuel tanker access during the peak hours the SIDRA analysis for the intersection was revised assuming that the fuel tanker would access the proposed 7- Eleven during the AM (8:00-9:00) or PM (3:00-4:00) peak hours. This situation represents the "worst case scenario" with respect to traffic volumes.

In order to simulate the operational impact of the fuel tanker at the intersection it is assumed that a 19.0m fuel tanker is equivalent to 3 normal passenger cars (3PCE²) and the extra 3 cars were added to the left turn movement from Collier Road onto Alice Street.

The results of the revised SIDRA analysis for the intersection of Collier Road and Alice Street show that the intersection will operate the same as the original post development SIDRA analysis undertaken for the TIA during the AM and PM peak hours and with no changes to degree of saturation, average delay and queue length. This indicates that the use of fuel tankers during the AM and PM peak hours has no impact whatsoever on critical operational parameters of this intersection. The results of the SIDRA analysis are attached in APPENDIX A.

COLLIER ROAD CROSSOVER OPERATION

The Collier Road crossover is approved as a left in/ left out crossover. SIDRA analysis was undertaken as part of this technical note for this crossover to

¹ Degree of Saturation (DoS) is the ratio of the arrival traffic flow to the capacity of the approach during the same period. The Degree of Saturation ranges from close to zero for varied traffic flow up to one for saturated flow or capacity.

²PCE: Percentage Car Equivalent (refer Table 4.3.1 of MRWA Supplement to Austroads Guide to Road Design - Part 3).

establish the post development operational conditions during the AM and PM peak hours. 3PCE was again added to the left out movements from the 7-Eleven onto Collier Road. The results of the SIDRA analysis are attached in APPENDIX A with a brief explanation provided in following dot points:

- The left in/ left out crossover will operate with LOS A and 0.17 degree of saturation and minimal average delay and queue distance during the post development AM peak hour; and,
- The left in/ left out crossover will operate with LOS A and 0.234 degree of saturation and minimal average delay and queue distance during the post development PM peak hour.

Based on the SIDRA results the left in/ left out crossover on Collier Road will operate satisfactorily even with fuel tankers movements during AM or PM peak hours and with significant spare capacity. Accordingly, this indicates that the use of fuel tankers during the AM and PM peak hours has no impact whatsoever on critical operational parameters of this crossover.

ADDITIONAL INFORMATION

Turn path analysis

Turn path analysis have been undertaken as part of the DA submission and documented in the TIA. The results of the turn path analysis show that the 19.0m fuel tanker can travers through the intersection of Collier Road/Alice Street and the site crossover on Collier Road satisfactorily.

The turn path analysis shows that when tanker exits onto Collier Road it requires the full width of the Collier Road westbound lanes. This is a normal and regular occurrence for semi-trailers not only at service station crossovers but at all other crossovers and most intersections including signalised intersections without any safety concerns. This is because lane correct left turn out movements requires significant widening of crossovers (or intersections) which is undesirable.

Further, such movements are legal in accordance with Traffic Code in dual carriageway settings and are allowed for by Austroads and Liveable Neighbourhood guidelines.

It should be noted that the tankers exiting the site onto Collier Road are required to give way to the traffic on Collier Road, exit the site and join traffic on Collier Road when it is safe to do so.

Furthermore, it is important to note that Collier Road and Alice Street in this vicinity are classified as RAV network 7 and as such heavy vehicles of up to 36.5m are allowed to travel on these roads and turn in and out of crossovers and intersections. Therefore, these two roads experience heavy vehicle movements every day and during all hours and having a fuel tanker to access the proposed 7- Eleven during peak hours will not have any impacts on the operations of these roads.

TIA Commentary regarding service vehicle access

The TIA report on pages 15 and 30 states that "*Fuel tankers and service vehicles are expected to access the site no more than 3-4 times a week and generally outside peak road network and peak site activity periods*".

This statement is a general statement and not a recommendation. Generally based on Transcore's experience, the fuel tankers (and other service vehicles) try to avoid road network peak periods due to the delays caused to travel times. However, there are circumstances that based on need a particular site needs to be serviced by these types of vehicles during peak periods.

CONCLUSION

According to the traffic assessments undertaken as part of this technical note removal of Condition 6 of the JDAP approval is supported on following grounds:

- The intersection of Collier Road/ Alice Street will continue to operate satisfactorily and with no impact if fuel tankers turn left from Collier Road onto Alice Street during AM or PM peak hours;
- The approved left in/ left out crossover on Collier Road will continue to operate satisfactorily and with no impact if fuel tankers turn left out of this crossover onto Collier Road during AM or PM peak hours;
- If fuel tankers access this site during peak hours traffic operations and safety will not be undermined on the surrounding road network; and,
- Collier Road and Alice Street are classified as RAV 7 and experience heavy vehicle traffic of up to 36.5m in length on regular basis and during road network peak periods.

APPENDIX A

SIDRA RESULTS

**TABLE 1: Intersection of Collier Road/ Alice Street - Post Development
AM Peak Hour**

MOVEMENT SUMMARY

 **Site: Post Development AM**

New Site
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Alice St											
1	L2	56	14.0	0.060	6.1	LOS A	0.2	1.7	0.36	0.58	48.2
3	R2	26	14.0	0.233	39.7	LOS E	0.7	5.8	0.91	0.98	33.5
Approach		82	14.0	0.233	16.8	LOS C	0.7	5.8	0.54	0.71	42.3
East: Collier Rd - East											
4	L2	26	14.0	0.162	6.6	LOS A	0.0	0.0	0.00	0.06	61.2
5	T1	557	14.0	0.162	0.0	LOS A	0.0	0.0	0.00	0.03	69.6
Approach		583	14.0	0.162	0.3	NA	0.0	0.0	0.00	0.03	69.2
West: Collier Rd - West											
11	T1	598	14.0	0.241	0.9	LOS A	1.4	10.6	0.14	0.08	67.8
12	R2	99	14.0	0.241	11.3	LOS B	1.4	10.6	0.50	0.31	52.6
Approach		697	14.0	0.241	2.4	NA	1.4	10.6	0.19	0.12	65.1
All Vehicles		1362	14.0	0.241	2.4	NA	1.4	10.6	0.13	0.11	64.6

**TABLE 2: Intersection of Collier Road/ Alice Street - Post Development
PM Peak Hour**

MOVEMENT SUMMARY

 **Site: Post Development PM**

New Site
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Alice St											
1	L2	145	14.0	0.170	6.7	LOS A	0.6	5.1	0.44	0.66	47.9
3	R2	55	14.0	0.713	95.3	LOS F	2.8	21.7	0.98	1.15	22.2
Approach		200	14.0	0.713	31.0	LOS D	2.8	21.7	0.59	0.79	36.4
East: Collier Rd - East											
4	L2	41	14.0	0.206	6.6	LOS A	0.0	0.0	0.00	0.07	61.0
5	T1	700	14.0	0.206	0.0	LOS A	0.0	0.0	0.00	0.03	69.5
Approach		741	14.0	0.206	0.4	NA	0.0	0.0	0.00	0.03	69.0
West: Collier Rd - West											
11	T1	664	14.0	0.250	1.3	LOS A	1.5	11.8	0.16	0.06	67.4
12	R2	68	14.0	0.250	13.7	LOS B	1.5	11.8	0.49	0.20	52.7
Approach		733	14.0	0.250	2.4	NA	1.5	11.8	0.19	0.08	65.7
All Vehicles		1674	14.0	0.713	4.9	NA	2.8	21.7	0.15	0.14	61.1

TABLE 3: Collier Road Crossover - Post Development AM Peak Hour

MOVEMENT SUMMARY

▽ Site: Collier Rd Crossover AM

New Site
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Collier Road Crossover											
1	L2	35	0.0	0.028	1.0	LOS A	0.1	0.8	0.36	0.22	45.6
Approach		35	0.0	0.028	1.0	LOS A	0.1	0.8	0.36	0.22	45.6
East: Collier Rd - East											
4	L2	14	14.0	0.170	6.6	LOS A	0.0	0.0	0.00	0.03	61.8
5	T1	599	14.0	0.170	0.0	LOS A	0.0	0.0	0.00	0.01	69.8
Approach		613	14.0	0.170	0.2	NA	0.0	0.0	0.00	0.01	69.6
All Vehicles		647	13.2	0.170	0.2	NA	0.1	0.8	0.02	0.02	68.5

TABLE 4: Collier Road Crossover - Post Development PM Peak Hour

MOVEMENT SUMMARY

▽ Site: Collier Rd Crossover PM

New Site
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Collier Road Crossover											
1	L2	47	0.0	0.044	1.5	LOS A	0.2	1.2	0.44	0.31	45.3
Approach		47	0.0	0.044	1.5	LOS A	0.2	1.2	0.44	0.31	45.3
East: Collier Rd - East											
4	L2	20	14.0	0.234	6.6	LOS A	0.0	0.0	0.00	0.03	61.7
5	T1	825	14.0	0.234	0.0	LOS A	0.0	0.0	0.00	0.01	69.7
Approach		845	14.0	0.234	0.2	NA	0.0	0.0	0.00	0.01	69.6
All Vehicles		893	13.3	0.234	0.3	NA	0.2	1.2	0.02	0.03	68.4



Department of **Planning,**
Lands and Heritage

Your ref: 2017-106
Our ref: 808/02/13/0004P
Enquiries: Jane Maynard (08) 6551 9259
Jane.maynard@planning.wa.gov.au
Date: 4 August 2017

Dylan Stokes
Town of Bassendean
PO Box 87
Bassendean
WA 6934

Dear Mr Stokes

LOT 25 (300) COLLIER ROAD, BASSENDEAN - DEVELOPMENT

I refer to your letter dated 19th July 2017 regarding the above application. In accordance with the Western Australian Planning Commission's (WAPC) Instrument of Delegation dated 30th May 2017, the following transport comments are provided by the Department of Planning, Lands and Heritage.

Proposal

Lot 25 is currently occupied by a warehouse, as shown in **Figure 1**, and the proposed development would see a service station and convenience store constructed in the north-east portion of the Lot following subdivision, as shown in **Figure 2**.

Previous comments

The Department provided comment on the 10th April 2017, and had no objection, subject to a number of modifications; including the recommendation that fuel tanker access be permitted only outside of peak times.

The Metropolitan Central Joint Development Assessment Panel in turn, included a condition (Condition no. 6) that fuel delivery take place outside the hours of 7:00 am – 9:00 am, and 3:00 pm – 7pm on weekdays.

The proponent has since requested this condition be removed, and has provided a letter¹ along with a technical note from Transcore² in support of this, which argues that fuel deliveries during these periods;

¹ Refer to Letter from Planning Solutions to the Town of Bassendean dated 11th July 2017.

² Refer to technical note from Transcore dated 10th July 2017.



Department of **Planning,**
Lands and Heritage

... will have no impacts on the safety or operation of Collier Road, and that there is no demonstrable safety benefit arising from the condition, given the industrial context of the locality and the activities already taking place along Collier Road.

The Department has considered this information, and offers the following response:

Discussion

The Department has no objection to the removal of Condition no. 6 on transport planning grounds, but suggests consideration be given to replacing it with a similar condition that would see time restrictions retained, but reduce them to a more pin-pointed timeframe.

The Department offers the following justification for this suggestion:

Risk of peak hour conflict is increased due to Collier Rd having high proportion of regular traffic

While the Department acknowledges that the Collier Rd is a RAV 7 road in an industrial area, and is intended for heavy vehicles; Collier Rd also has a high proportion of regular traffic. As higher regular traffic volumes contribute more to peak hour volumes than heavy vehicles, the high proportion of regular traffic is likely to increase the probability of conflict in instances where heavy vehicles use Collier Rd during peak times.

Fuel tankers cannot exit the site in a lane correct manner

As fuel tankers cannot exit the site in an efficient or lane correct manner, this can create an obstruction to vehicles travelling west along Collier Rd.

Obstructions to traffic flow during busy periods can significantly reduce capacity

Main Roads WA traffic counts for Collier Rd indicate 815 vehicles travelled west during the PM peak (approximately 3:00pm). This translates to approximately 13 vehicles per minute. As such, the obstruction caused by a fuel tanker manoeuvring across both lanes at this time would likely contribute to build up, and reduce the overall capacity of Collier Rd.

Taking reasonable measures such as restricting fuel tanker access at peak times is therefore worth considering.



Conclusion

The Department acknowledges the Industrial function of the RAV 7 road, but suggests consideration be given to the following factors which could increase the risk of conflict between regular vehicles and fuel tankers during peak times:

- Fuel tankers cannot exit the site in a lane correct manner;
- brief obstructions to traffic flow during busy periods can significantly impact capacity;
- a high proportion of the traffic on Collier Rd is from regular vehicles, and this intensifies the traffic volumes during the peak hour, which in turn increases the risk of conflict.

Given the above, the Department considers the mixing of heavy vehicles with peak hour traffic to be something which would increase the risk of conflict and reduce capacity. It is therefore suggested that consideration be given to mitigating this risk by restricting fuel tanker access to outside peak times.

The Department has no objection to the proposal to remove Condition no. 6, but suggests consideration be given to replacing it with a modified condition which retains some restrictions at peak times; albeit at a reduced, and more pin-pointed timeframe than those currently prescribed.

Sincerely

Mohsin Muttaqui
Planning Manager
Infrastructure & Land Use Coordination

Figure 1. MRS and aerial maps of subject lot



Figure 2 - Proposed development

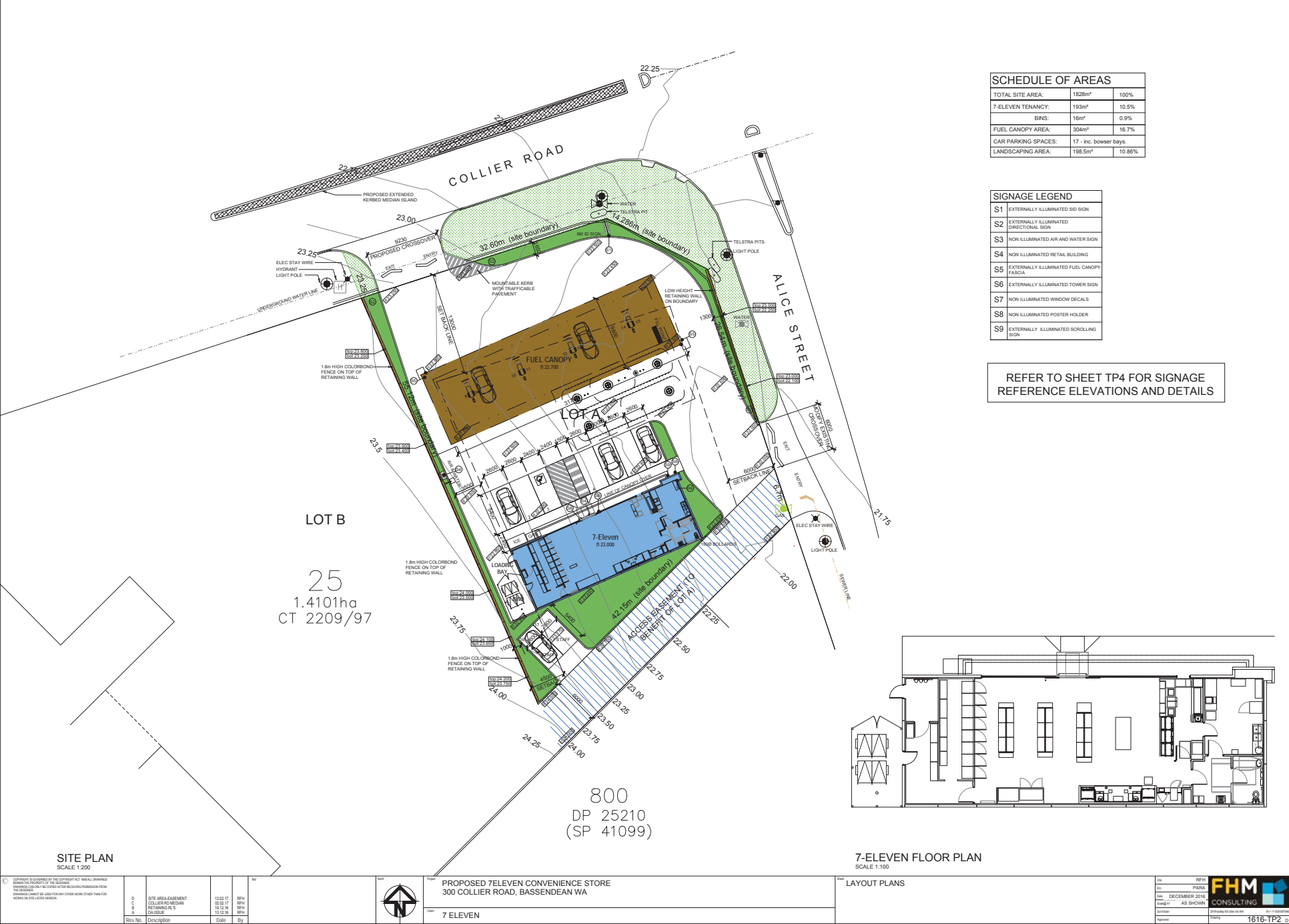
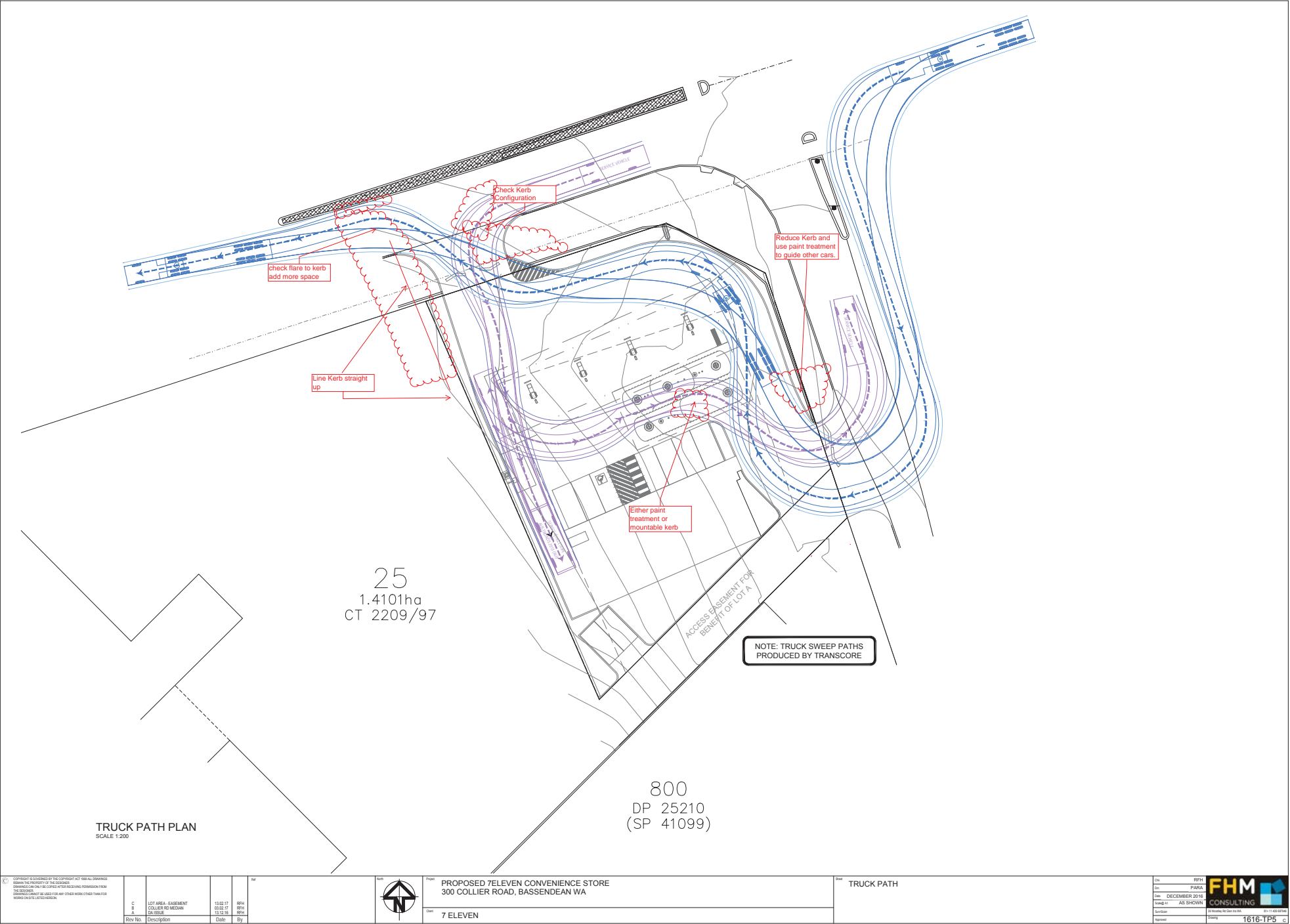


Figure 3 - Swept Paths for fuel tanker (with previous DoP recommendations in red)





Your ref: 2017-033:BR
Our ref: 802/02/13/0004P
Enquiries: Jane Maynard (08) 6551 9259
Jane.maynard@planning.wa.gov.au
Date: 10 April 2017

Dylan Stokes
Town of Bassendean
PO Box 87
Bassendean
WA 6934

Dear Mr Stokes

LOT 25 (NO. 300) COLLIER ROAD, BASSENDEAN - DEVELOPMENT

I refer to your letter dated 9th March 2017 regarding the above application. In accordance with the Western Australian Planning Commission's (WAPC) Notice of Delegation dated 18 December 2015, the following transport comments are provided by the Department of Planning (DoP).

Proposed Development

Lot 25 covers approximately 1.4 ha of *Industrial* zoned land, and is currently occupied by a grouping of warehouses, as shown in **Figures 1** and **2**. The proposed development would see a *7-Eleven* convenience store and service station constructed over the existing car parking area in the eastern corner of the lot, as shown in **Figures 3** and **4**.

Subdivision plans

It is understood that a separate subdivision plan (File no. 154842) has been submitted for Lot 25, for the creation of two lots, (Lots A and B), as shown in **Figure 5**. The proposed development is to be located within proposed Lot A.

A separate DA has also been submitted to the Department for extensions to the existing office area within proposed Lot B, as shown in **Figure 6**.

Land Requirements

The subject property abuts Collier Rd, which is reserved as an Other Regional Road (ORR) in the Metropolitan Region Scheme (MRS), and a Category 2 ORR¹ in WAPC

¹ **ORR Categories:** WAPC Plan No. SP 694/4 uses the following ORR categories; **Category 1:** frontage access is not allowed (control of access). **Category 2:** frontage access may be allowed subject to approval. **Category 3:** road reservation not accurately defined or under review. http://www.planning.wa.gov.au/dop_pub_pdf/devwapca_2_2A0.pdf



Plan No. SP 694/4. Lot 25 is not affected by the ORR reservation for Collier Rd, as shown in **Figure 1**.

Access

Vehicle access to Lot 25 is currently provided via two full movement crossovers onto Collier Rd and one onto Alice St, as shown on **Figure 1**, however, given that the lot is to be subdivided; neither the Collier Rd, nor the Alice St crossovers will be available to the proposed convenience store.

To rectify this, the applicant seeks to construct a new left-in, left-out crossover onto Collier Rd; and to widen the existing Alice St crossover so that it extends into proposed Lot A, as shown in in **Figure 4**.

The subdivision application also seeks to create an easement along the southern portion of proposed Lot B to give Lot A access to the existing Alice St crossover.

As the proposed development would see the existing Alice St crossover widened six meters into proposed Lot A, the easement would function to provide Lot A with access to a 12.7m crossover, as shown in **Figure 4**.

The DA report advises that the proposed crossover onto Collier Rd will be Left-in, Left-out (LILO), and that this will be formalised through an extension of the existing median strip. The Department supports this proposal, and advises that this should be completed before the new crossover is constructed.

Fuel tanker access

The DA report advises that the fuel tankers will enter via Alice St and exit via Collier Rd. The Department has no objection to the proposed access arrangements, but recommends access for fuel tankers be limited to outside peak times.

Transport Impact Assessment

A Transport Impact Assessment (TIA), dated 14th February 2017 has been prepared by Transcore in support of the proposal. The following comments relate to Transcore's TIA.

Traffic Generation from proposed development

The development site, which is 1,828 m², as shown in **Figure 5**, will consist of the following:

- The convenience store building;
- Air and water bay;
- Loading bay;



- Eight fuel filling bays;
- Seven car parking bays including one disabled;
- Two staff car parking bays.

A total of 19 vehicles therefore can be accommodated on the site at any one time.

Transcore have estimated trip generation rates by using transaction data on previous 7-eleven stores, as shown in **Figure 6**.

To obtain trip generation estimates, data on the number of transactions made at the surveyed 7-eleven stores was collected, and vehicle trips were assumed to make up 95% of all transactions, (with 5% of transactions being from walk-ins, rather than vehicle visits).

The estimated peak hour trips to and from the site are shown shown in **Table 1**.

Table 1. Peak hour trips for proposed development

Time period	Direction	Total Peak Hour Trips	
		Split	Total
AM Peak	Inbound	45	90
	Outbound	45	
PM Peak	Inbound	62	124
	Outbound	62	

The TIA then estimates that 70% of vehicles entering and exiting the site would likely be passing traffic, with only 30% generated by the business itself.

From here the TIA calculates that the development will generate an estimated 537 vehicles per day (vpd), 28 vehicles per hour (vph) in the AM, and 38 vph in the PM peak hour.

Comparisons with other trip generation rates from the Roads and Traffic Authority (RTA) *Guide to Traffic Generating Developments* and the Institute of Transport Engineers (ITE) *Trip Generation Manual*, arrive at PM peak hour estimates of 130 vph² and 152 vph³ respectively; compared with 124vph, as stated above.

The TIA does not specify how many 7-eleven stores were surveyed to obtain source data; the location of the stores surveyed, or whether they all included service station facilities. It is therefore recommended that future TIAs include this information.

The Department has no objection to the methods used to estimate trip generation rates, but recommends additional information on the data source be provided in future.

² RTA (2002) estimates taken from page 3.7, using the formula of 0.04 x site area + 0.3 x GFA.

³ ITE (2012). Page 1672. Uses formula of 19.07 trips per vehicle fuelling positions.



Distribution of traffic onto surrounding roads

The subject lot abuts Collier Rd to the north and Alice St to the east. Collier Rd is a dual divided carriageway with a posted speed of 70km per hour.

The proposed crossover is located approximately 600m from the intersection with Tonkin Hwy; where upgrades are planned as part of the Northlink road project, as shown in **Figure 8**; and 350m from intersection with Jackson St.

The TIA provides data from the Main Roads WA (MRWA), as shown in **Figure 9**, which shows the PM peak (between 3:00 and 4:00 pm) to have recorded the highest volumes, at 1,500vph, of which 14% were heavy vehicles.

Trip distribution estimates are provided in **Figures 10 – 14**, which break the figures into existing traffic; traffic that is diverted by the proposed development; traffic generated by the development and total estimated post development figures (shown as AM and PM peak figures).

Impact on surrounding intersections

SIDRA analysis has been carried out for the Collier Rd / Alice St intersection as follows:

	Degree of Saturation	Average Delay	Level of Service
Existing AM Peak	0.229	1.7	A - E
Existing PM Peak	0.432	2.8	A – F
Post Development AM Peak	0.241	2.4	A – E
Post Development PM Peak	0.710	4.9	A - F

While the overall Level of Service (LoS) is high in all scenarios, the right turn movement from Alice St onto Collier Rd, (eastbound) as shown in **Figure 1**, shows an LoS of *E* in the AM peak and *F* in the PM peak in both the existing in post development analysis, and delays of up to 94.6 seconds.

The Department of Planning therefore recommends the Town of Bassendean, together with the applicant, give consideration to upgrading the Alice St / Collier Rd intersection.

Vehicle & bicycle parking

The TIA discusses vehicle parking; noting that the site will consist of one air and water bay, one loading bay, seven car parking bays, two staff car parking bays, and eight fuel filling points. No bicycle parking facilities are proposed.

The Department of Planning recommends the Town of Bassendean, together with the applicant, give consideration to whether bicycle parking facilities should be provided, and amend the plans accordingly if applicable.



Bicycle access & movement

The TIA addresses bicycle access and movement; noting that a shared path exists on the other side of Collier Rd, which has links with the principal shared path adjacent to the Midland railway line. There are no other shared paths, footpaths, or bicycle paths along this stretch of Collier Rd.

Pedestrian access & movement

The TIA discusses pedestrian access, noting that there are no footpaths on Alice St or Collier Rd immediately adjacent to the subject lot, but advises that a 2m wide footpath is proposed along Collier Rd.

The TIA refers to the site plan shown at **Figure 4** as evidence of this, however the site plan does not show any footpaths. It is therefore recommended that any future iterations of the TIA be updated to correct for this omission.

Signage

The proposed development includes signage, as shown in **Figures 15** and **16**, and none⁴ of the proposed signage is located within the ORR reserve for Collier Rd.

The Department has no objection to the proposed signage, on condition that the advertisements do not interfere with sight lines, distract drivers, or have the potential to become confused with traffic signals or road signs. All signage must comply with all relevant by-laws and planning schemes made by Council.

Fuel tanker access and swept paths

It is understood that the swept paths shown in **Figure 17** are based on the movements of a 19m long fuel tanker. The Department recommends consideration be given to making minor modifications as follows:

- Reduce the verge kerb at the proposed Alice St and Collier Rd crossovers, and instead use paint treatment to guide smaller vehicles;
- Straighten the (currently flared) kerb adjacent to the boundary between the two proposed lots;
- Ensure that the kerb inside the Alice St entrance which defines the beginning of the parking bays is either painted or mountable.

These recommendations are shown in red on the marked up map shown at **Figure 17**.

⁴ It is noted that there is a drafting error in **Figure 15** which could potentially be interpreted as showing that parts of the signage are to be located within the road reserve, however discussions via email with the applicant on 7th April 2017 have confirmed that no part of the development or signage is to be located outside the lot boundary.



Conclusion

The proposal seeks development approval for the construction of a convenience store and service station. The plan would also see a new vehicle crossover onto Collier Rd.

The Department has no objection to the construction of the new crossover onto Collier Rd, on the condition that it is not constructed before the extension of the median strip (to formalise LILLO access) is completed.

The Department has no objection to the proposed signage, on condition that the advertisements do not interfere with sight lines, distract drivers, or have the potential to become confused with traffic signals or road signs. All signage must comply with all relevant by-laws and planning schemes made by Council.

The Department also offers the following recommendations:

- Fuel tanker access should be permitted only outside of peak times.
- It is recommended that the Town of Bassendean work with the developer to upgrade the intersection of Collier Rd and Alice St, to improve the poor LoS in the right turn movement from Alice St.
- It is also recommended that the Town of Bassendean work with the developer in investigating whether bicycle parking facilities should be included, and modify the plans accordingly if required.
- Given the restrictive movement currently available for fuel tankers, it is recommended minor modifications be made to the plans to reduce the likelihood of fuel tankers hitting the kerb, as shown in **Figure 17**.

The Department has no objection to the proposal, subject to the above.

Sincerely

A handwritten signature in blue ink that reads "moshinmuttaqui".

Moshin Muttaqui
Planning Manager
Infrastructure & Land Use Coordination

Figure 1. MRS and aerial maps of subject lot



Subject Lot



Other Regional Road



crossover



movement with the longest delays,
lowest LoS and highest saturation

Figure 2. Location map

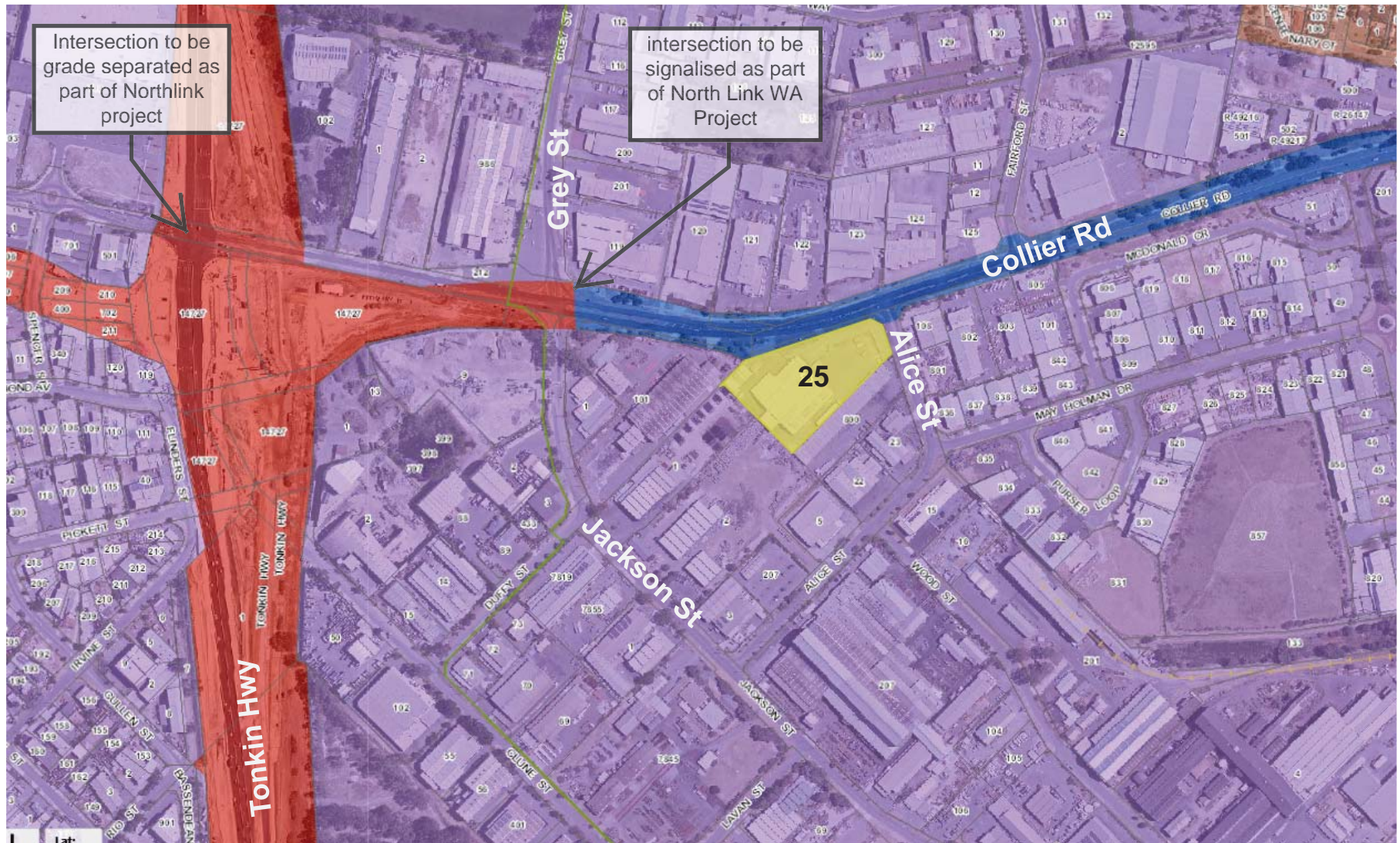


Figure 3 - Locality Plan

The figure consists of two panels. The left panel is an aerial photograph showing the site's location relative to Collier Road and Alice Street. The site is labeled 'LOT B' and '25 1.4101ha CT 2209/97'. It is situated between Collier Road to the north and Alice Street to the east. The right panel is a topographic map of the site, showing contour lines and elevation points. The site is labeled '25 1.4101ha CT 2209/97' and '800 DP 25210 (SP 41099)'. The map shows the site's boundaries and internal features, including a proposed road layout and various elevation points.

SURVEY PLAN
SCALE 1:200

Figure 4 - Site Plan

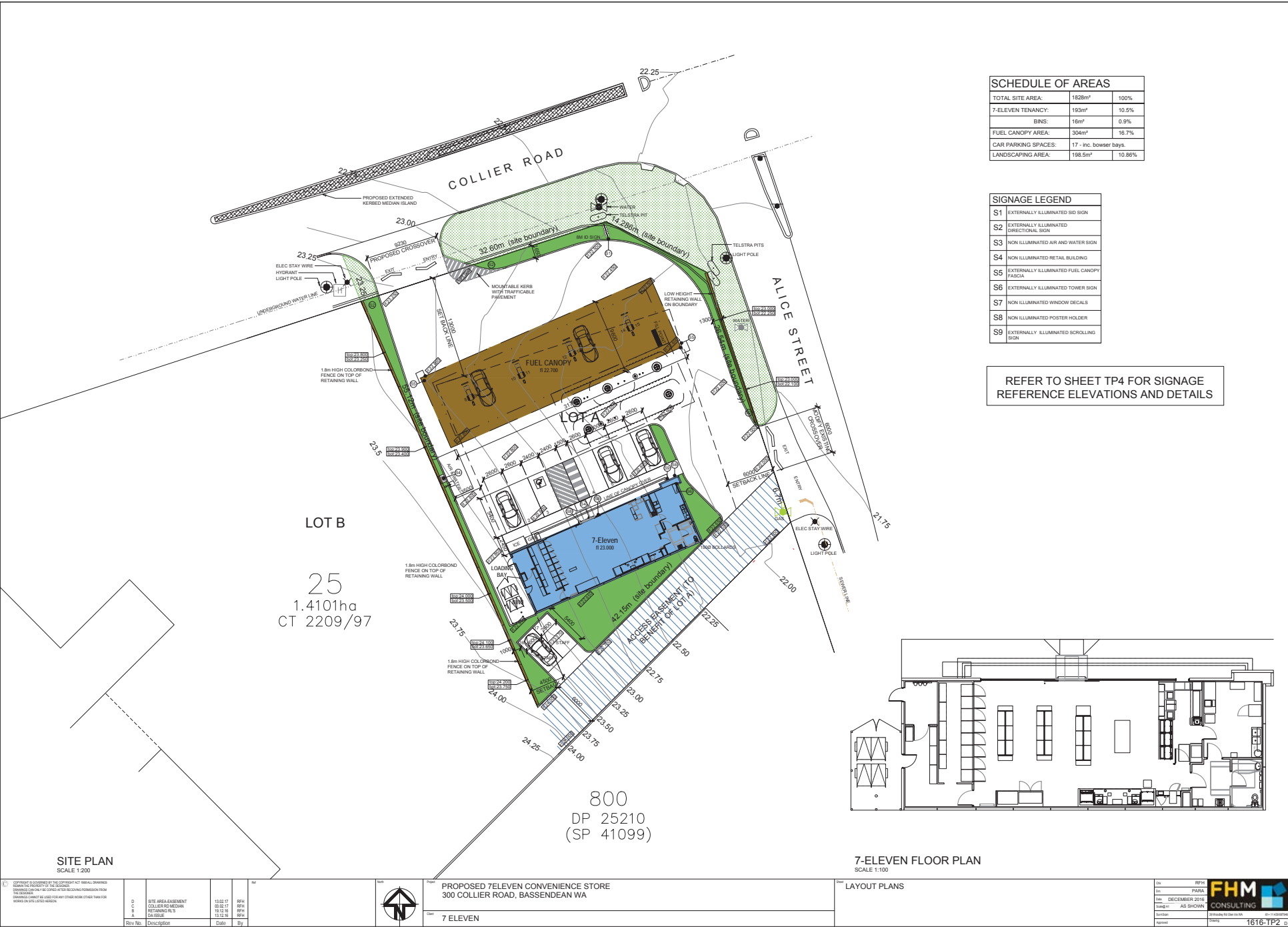
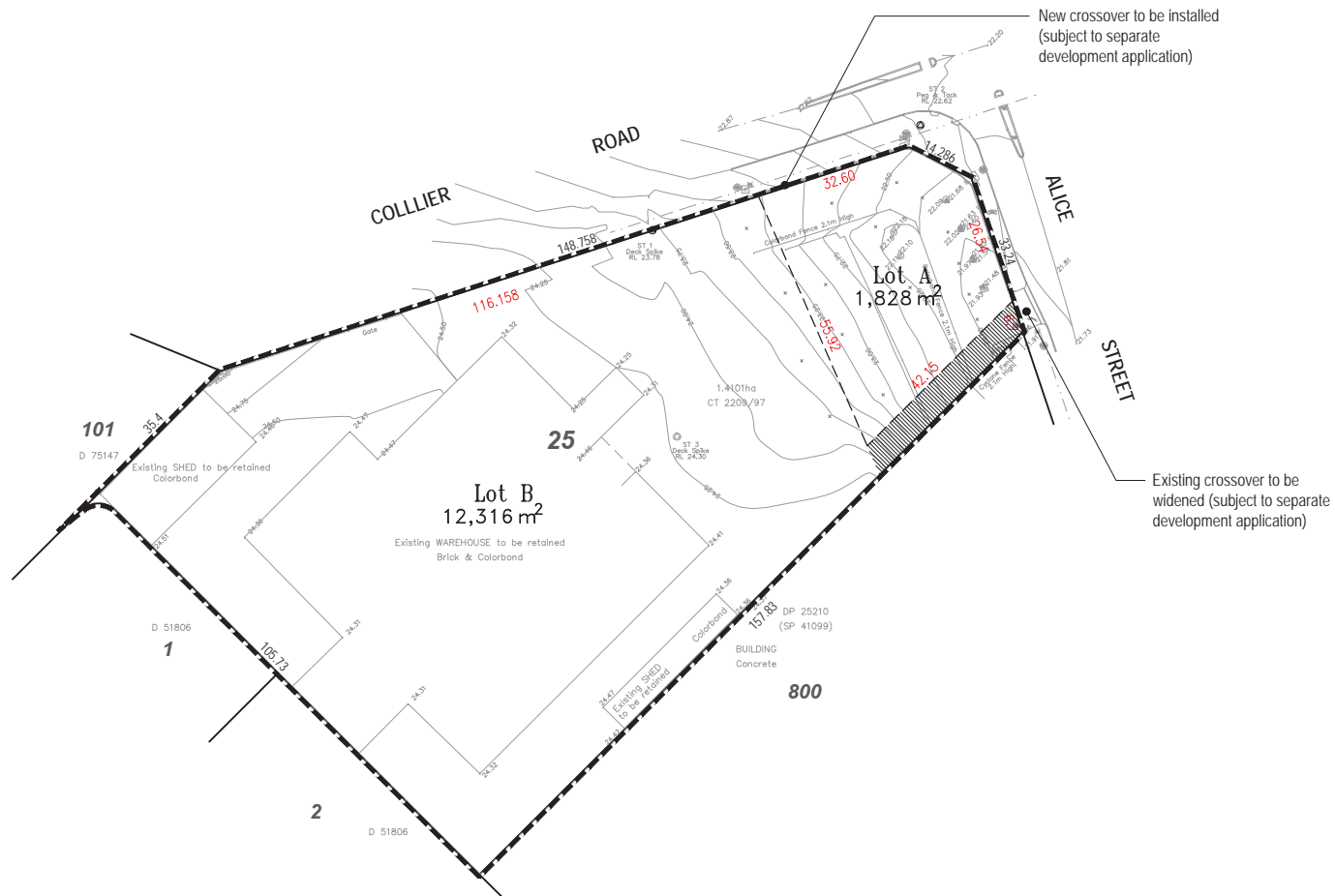






Figure 5 - Subdivision proposal no. 154842



LEGEND	
	Subject Site
6	Existing Lot Number
	Existing Lot Boundary
Lot A	Proposed Lot Number
	Proposed Lot Boundary
110	Existing Lot Dimensions
110	Proposed Lot Dimensions
	Access Easement (to benefit of Lot A)

SUBDIVISION SUMMARY	
Subject Site (ha)	1.4144
No. of Existing Lots	1
No. of Proposed Lots	2
Total Area of Proposed Lots (m ²)	14,144
Average Lot Size (m ²)*	7,072
Minimum Lot Size (m ²)	1,828
Maximum Lot Size (m ²)	12,316

DEPARTMENT OF PLANNING	
DATE	FILE
17/02/2017	154842

Figure 6 - Adjacent Development Application

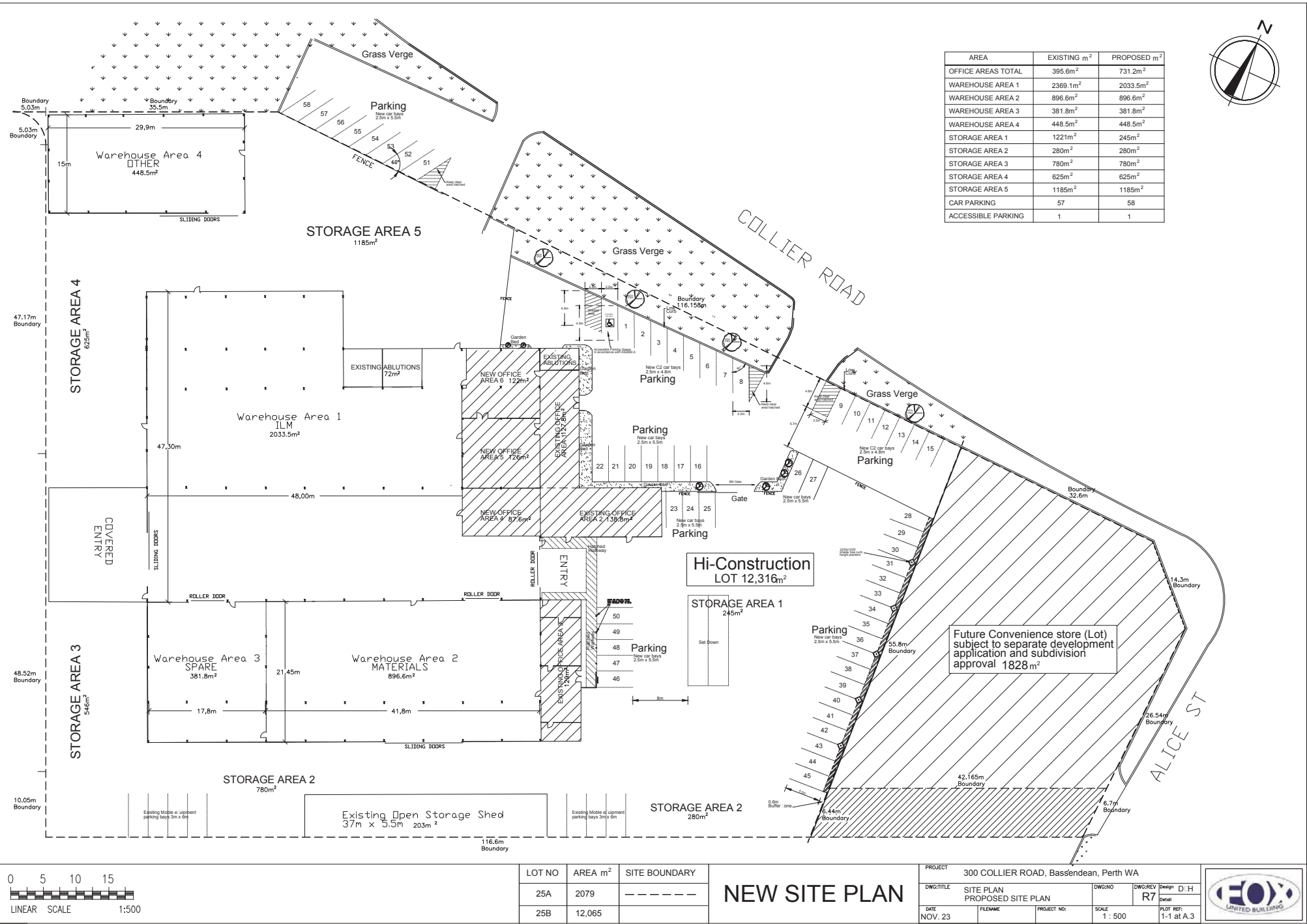


Figure 7 - TIA excerpt: 7-Eleven Customer Patronage
Hourly customer demand profile (average weekday)

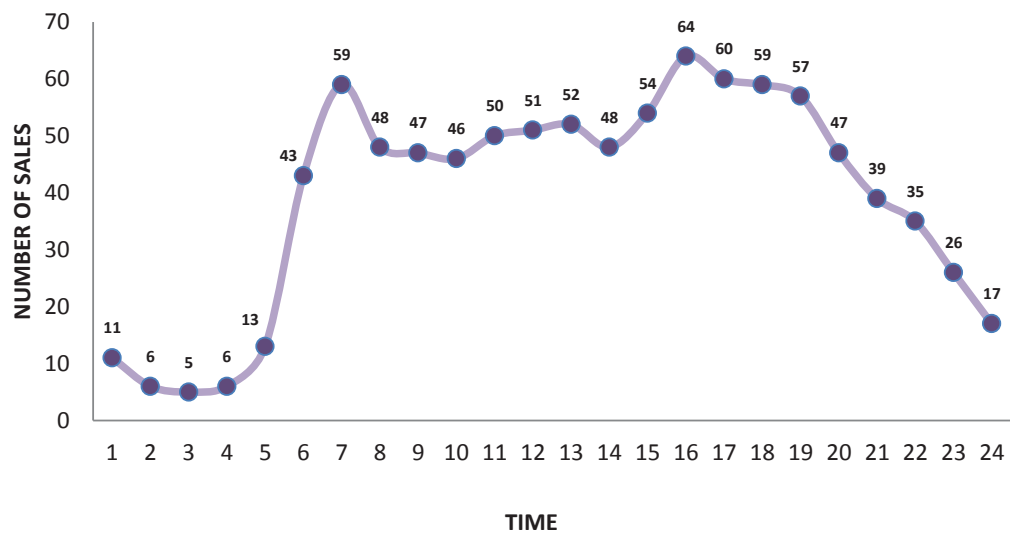
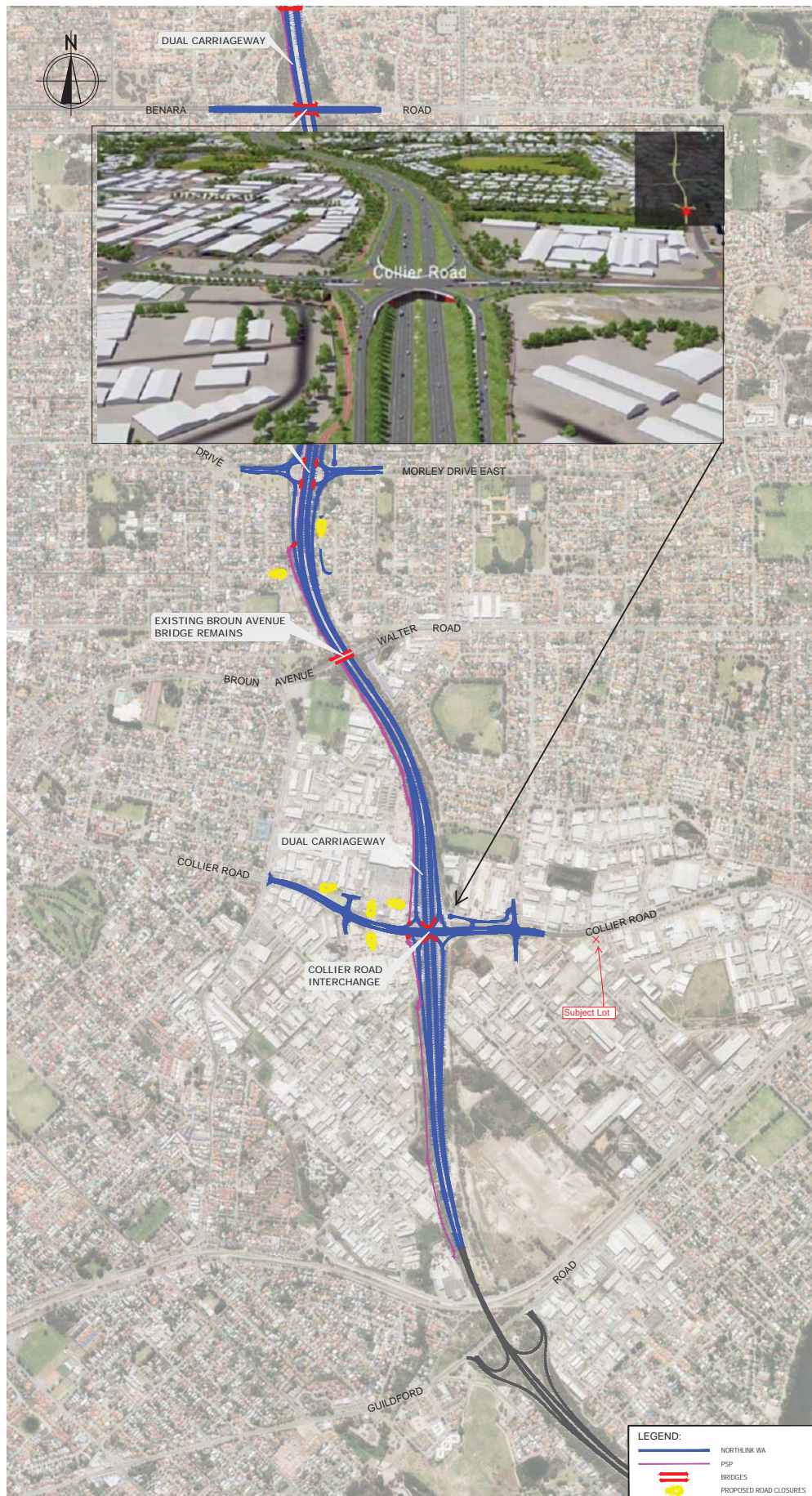
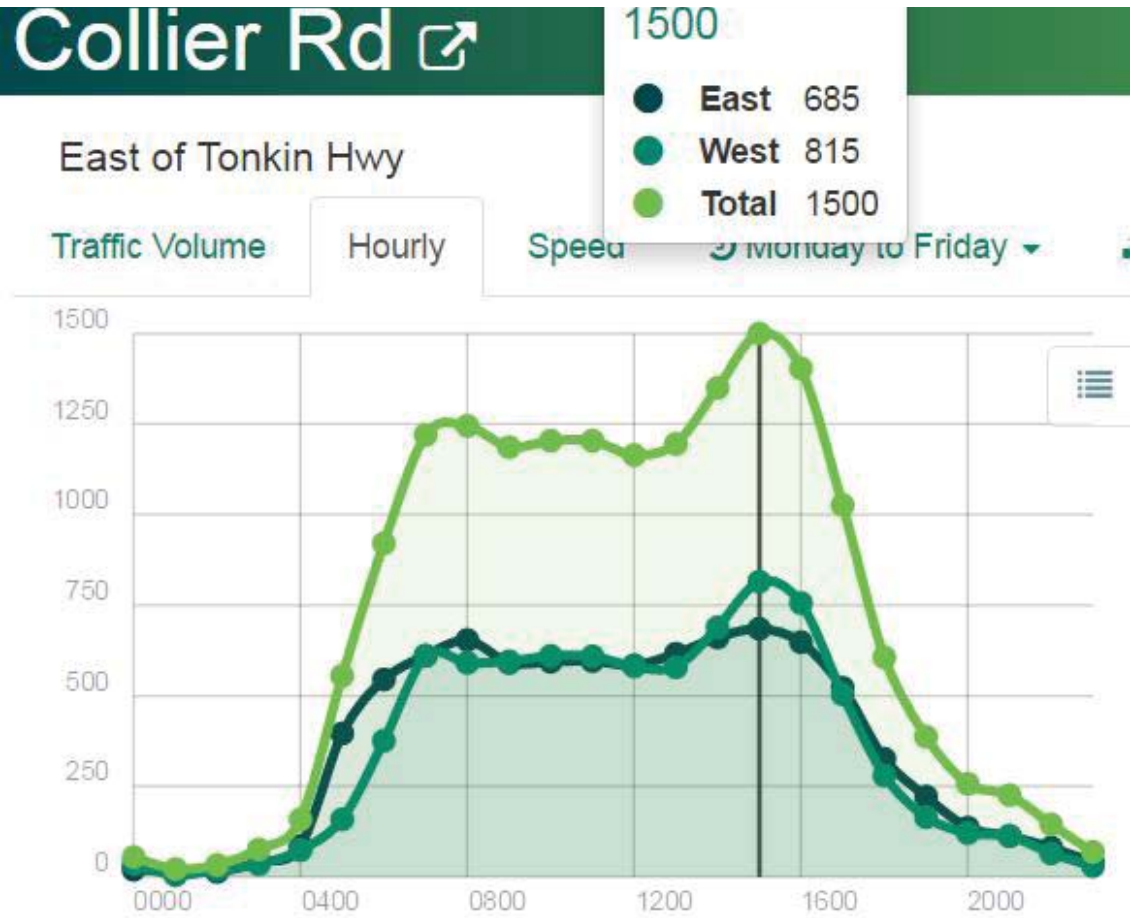


Figure 8 - NorthLink



SOUTHERN SECTION CONCEPT PLAN:
GUILD FORD ROAD TO REID HIGHWAY

Figure 9 - Main Roads WA Traffic map counts



**Figure 10. Passing trade peak hour traffic diverted by the proposed development -
AM and **PM** hour**

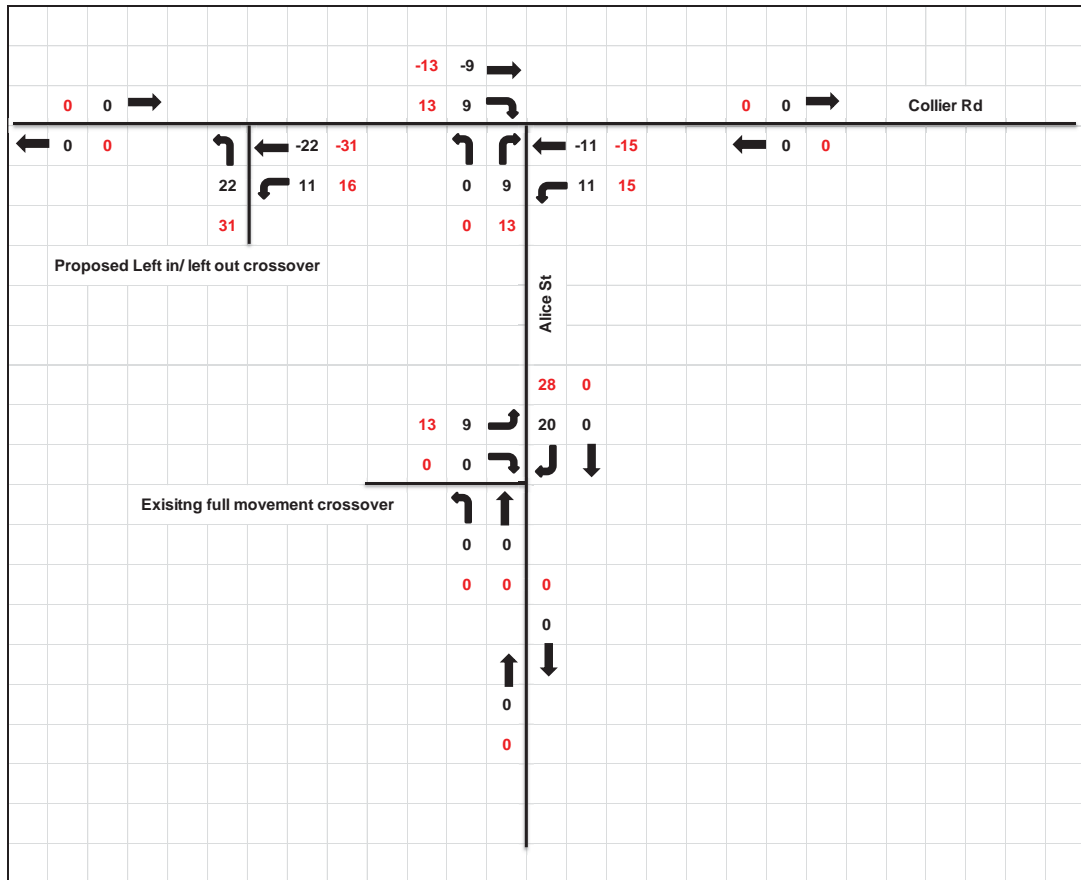


Figure 11: Additional (non-passing trade) AM and **PM** peak hour traffic generated by the proposed development

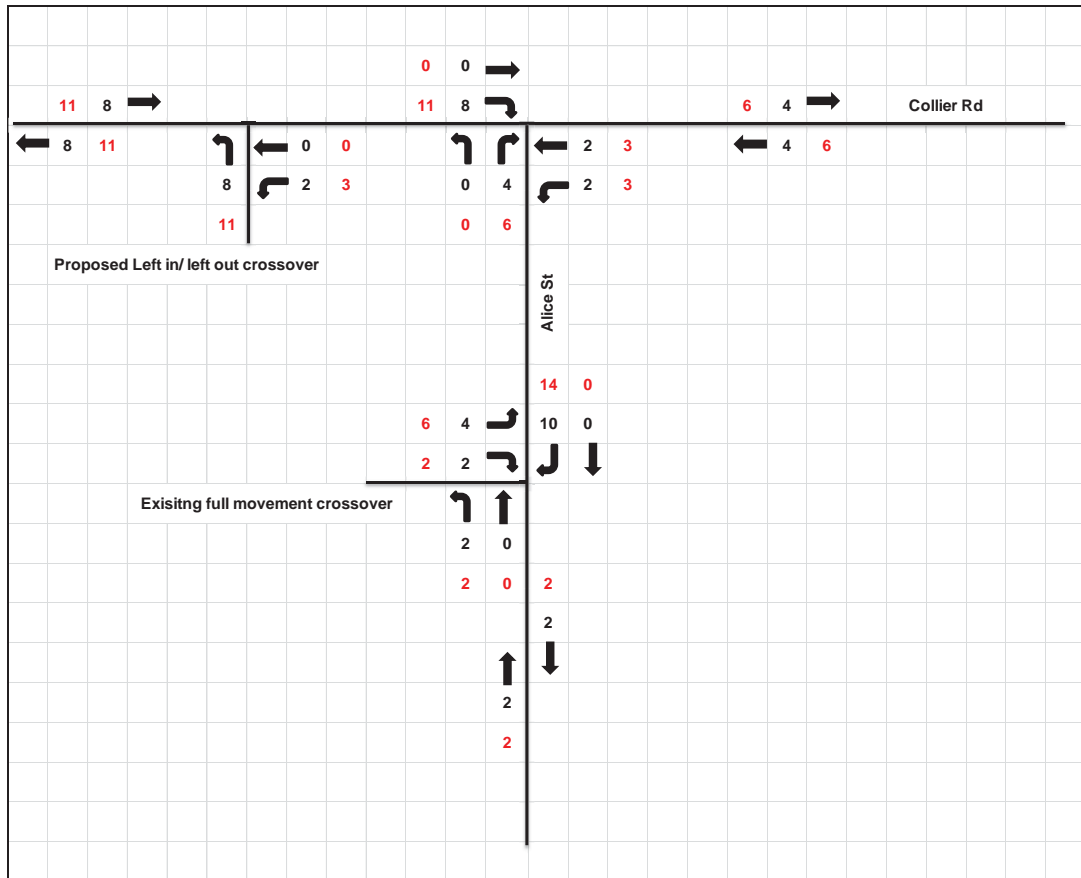


Figure 12: Net combined AM and **PM** peak hour traffic generated by the proposed development

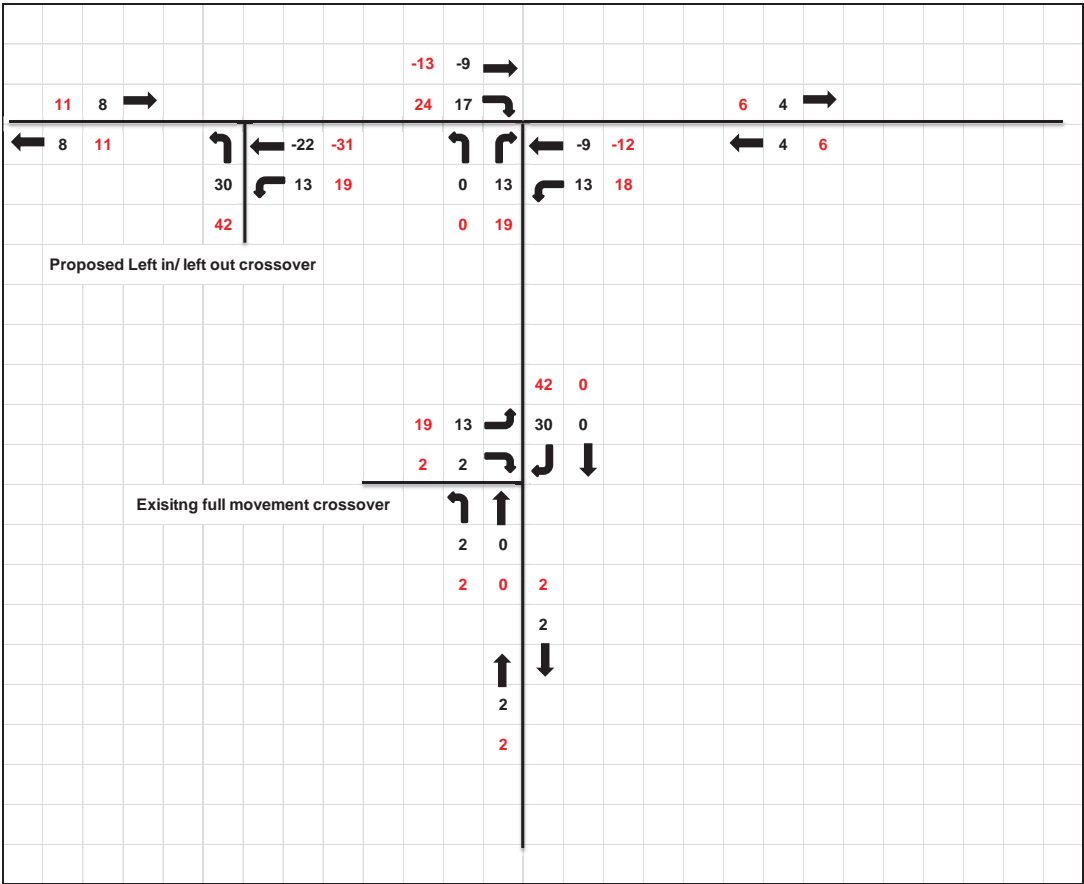


Figure 13: Existing AM and **PM** peak hour traffic flows

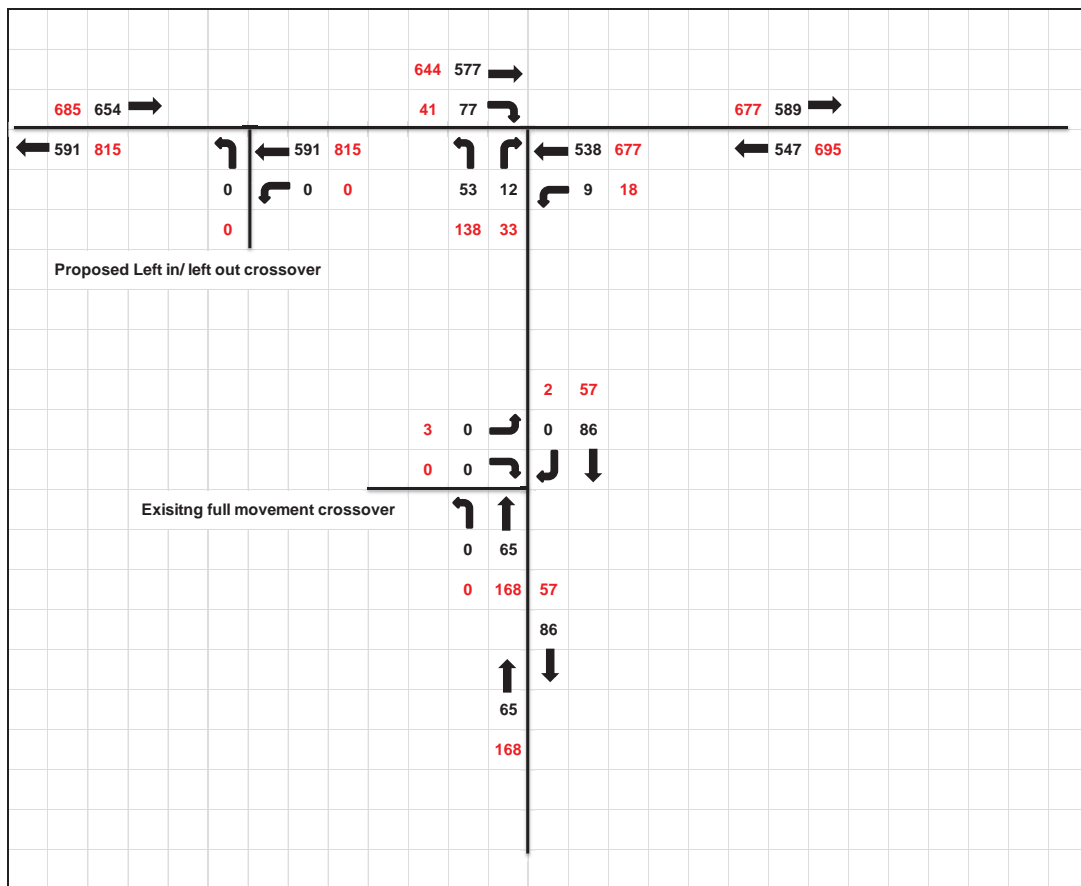


Figure 14: Total AM and **PM** peak hour traffic flows – Immediately post development scenario

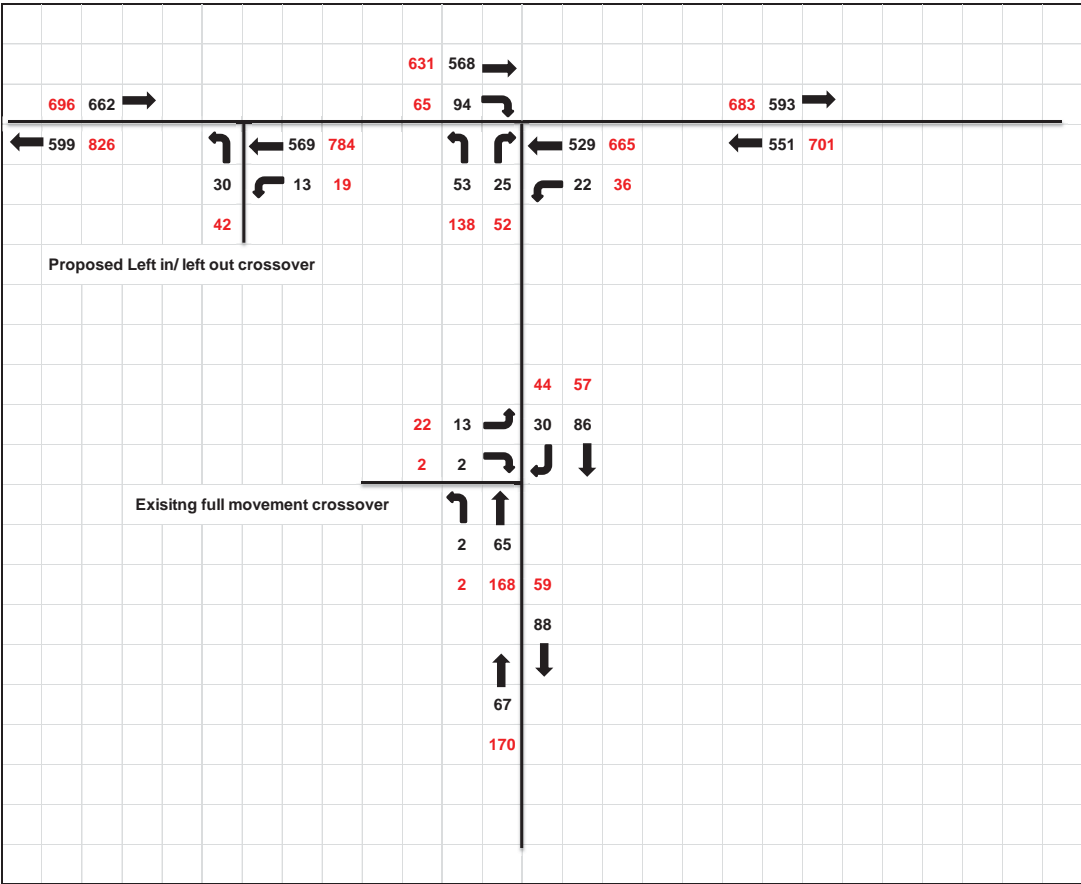
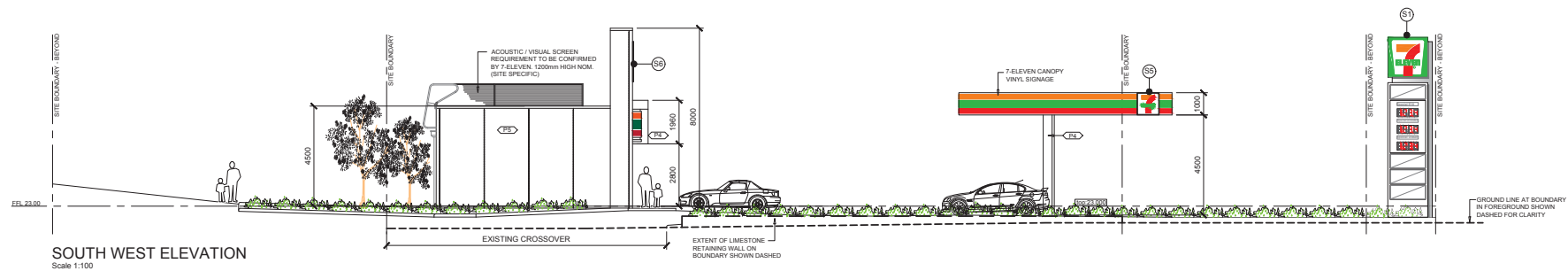
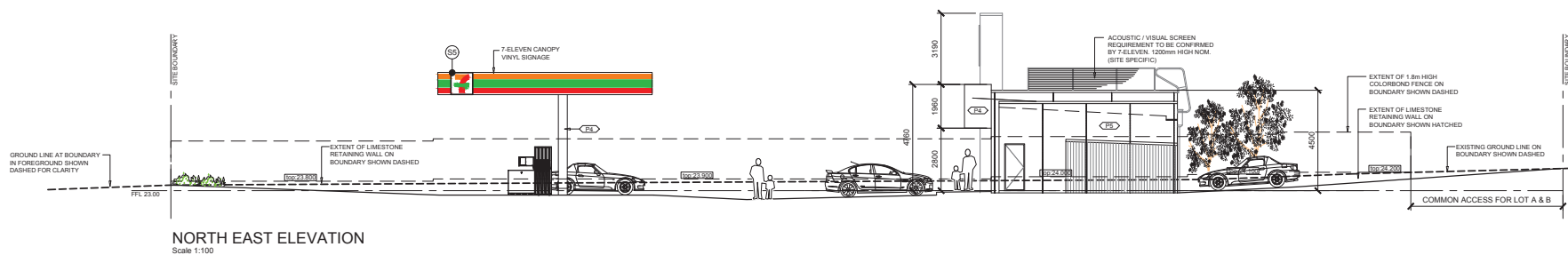
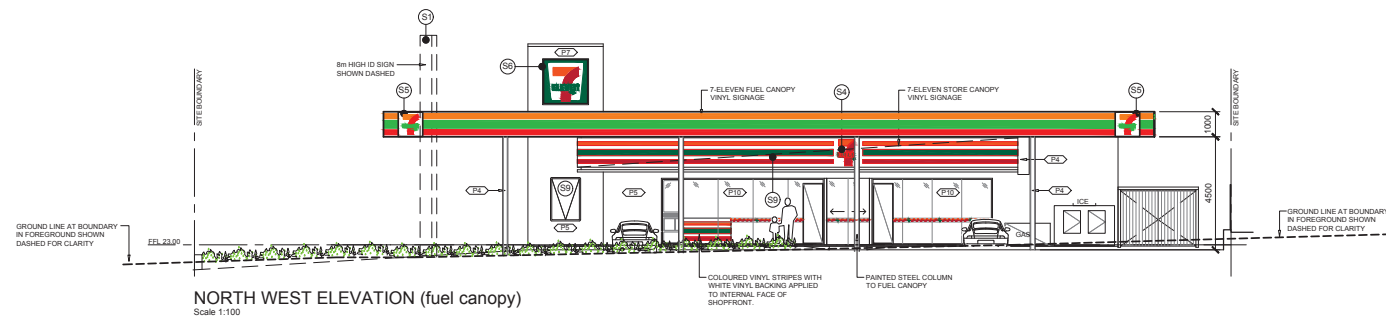
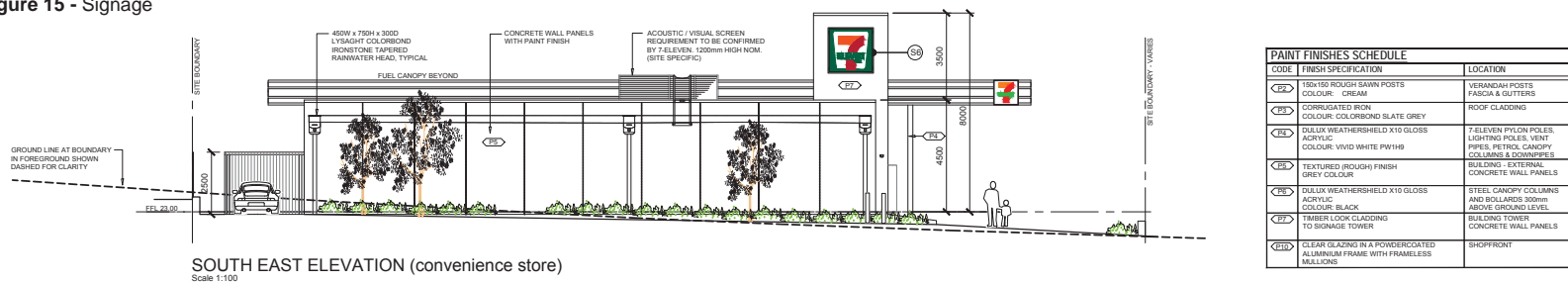
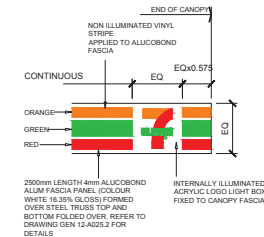
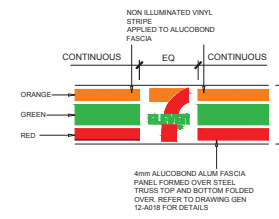
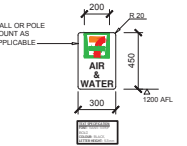
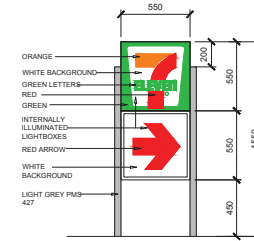
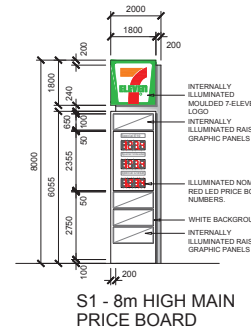
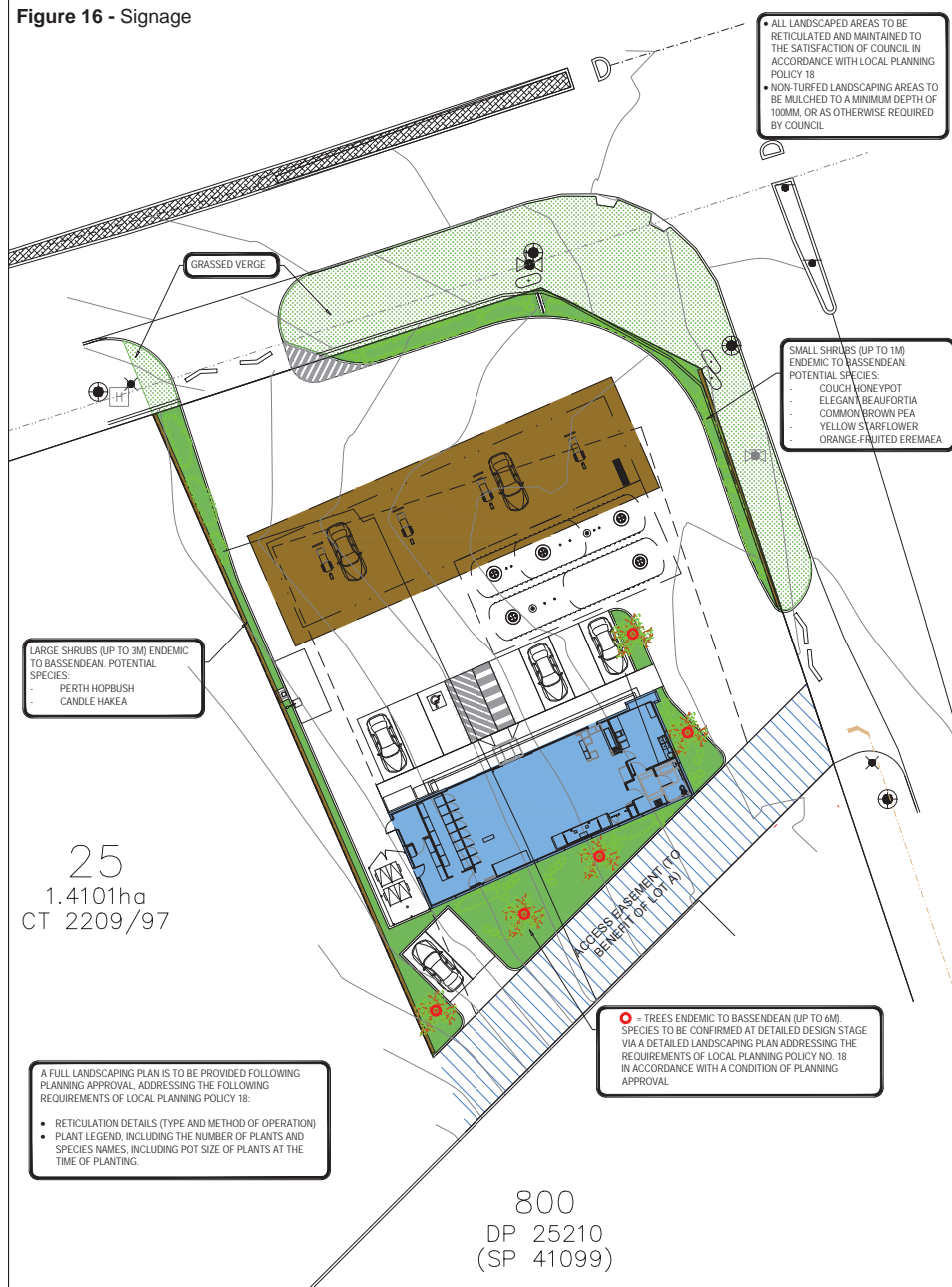


Figure 15 - Signage

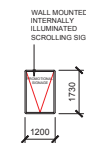
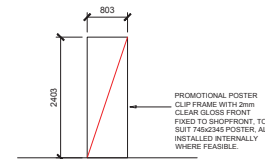
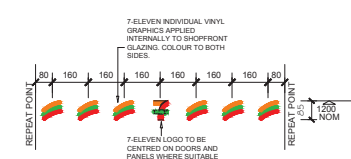
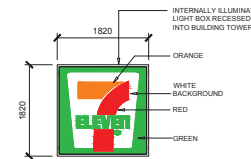


PAINT FINISHES SCHEDULE		
CODE	FINISH SPECIFICATION	LOCATION
CEP	15m/150 ROUGH SWAIN POSTS COLOUR: CREAM	VERANDAS POSTS FASCIA & GUTTERS
CEP	CORRUGATED IRON COLOUR: CORROSIONED SLATE GREY	ROOF CLADDING
CEP	DULUX WEATHERSHED GLOSS KID COLOUR: VIVID WHITE PW10H	7 ELEVEN POPEY LOLES LIFT PIPELS, PETROL, CANOPY LAMPPOSTS & DOWNPIPES
CEP	TEXTURED RUGHOUS FINISH GREY COLOUR	BUILDING - EXTERNAL CONCRETE WALL PANELS
CEP	DULUX WEATHERSHED GLOSS KID COLOUR: BLACK	STEEL CANOPY COLUMNS BUILDING - EXTERNAL ABOVE GROUND LEVEL
CEP	TIMBER LUG CLADDING TO MATCH TOWER	BUILDING TOWER CONCRETE WALL PANELS
CEP	GLASS GLAZING IN A POWERCOATED ALUMINUM FRAME WITH FRAMELESS MULLIONS	SHOPFRONT

Figure 16 - Signage



COLOUR	PANTONE	3M COLOUR REF	ILLUM
ORANGE	PMS 165	7725-14	3030-13
GREEN	PMS 341	7725-55	3030-39
RED	PMS 485	7725-13	3030-43



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Rev No.	Description	Date	By
1	SITE AREA EASEMENT	13.02.18	SPH
2	7-ELEVEN PLANTING GUIDANCE	03.02.18	SPH
3	PLANTING GUIDANCE	13.12.18	SPH
4	CA. 10.02.18	13.12.18	SPH



Project PROPOSED 7-ELEVEN CONVENIENCE STORE
300 COLLIER ROAD, BASSENDEAN WA

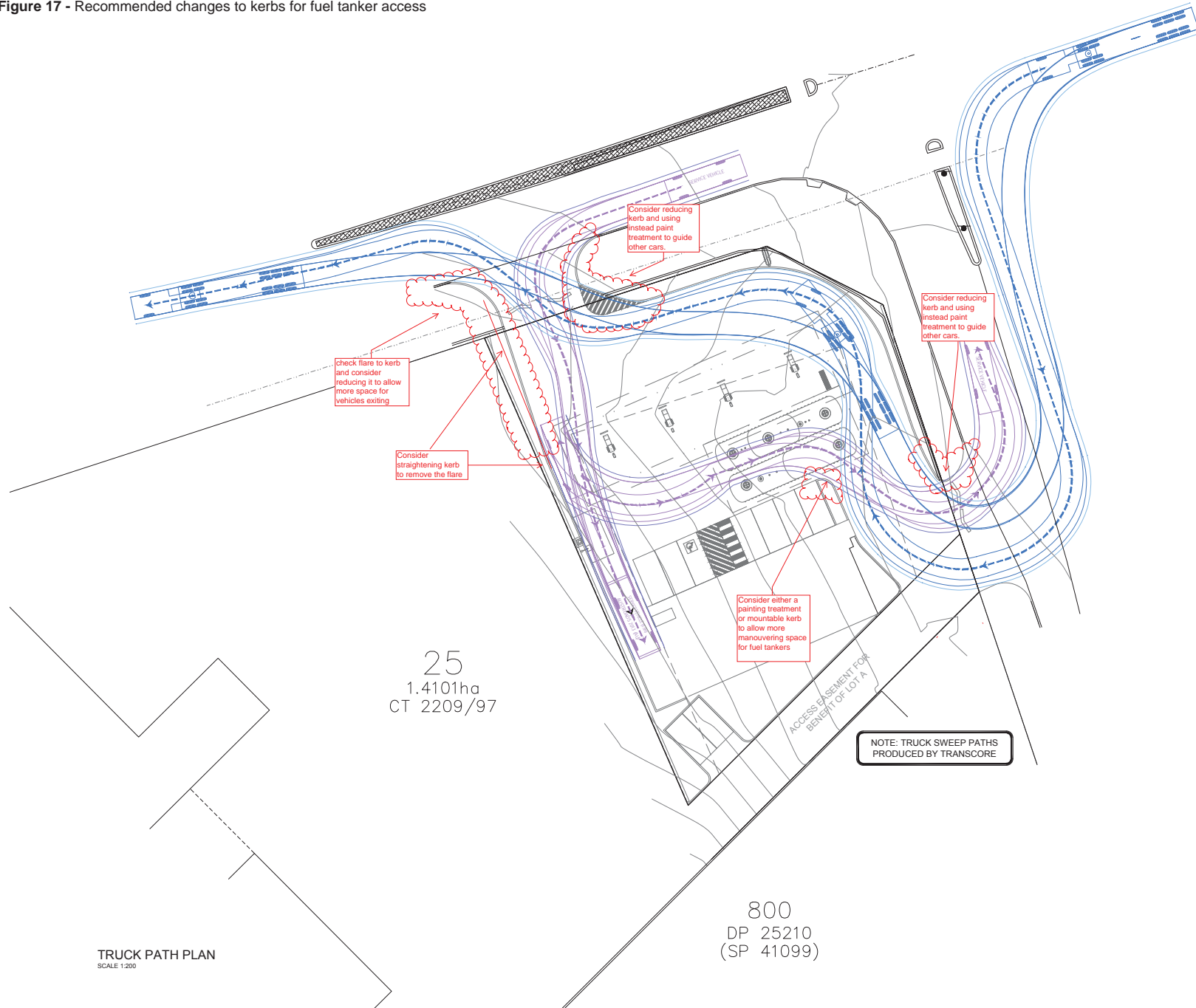
Client 7-ELEVEN

Draw LANDSCAPE PLAN
SIGNAGE DETAILS

Client	RTM	Phase	PAKE
Date	DECEMBER 2018	As Shown	
Drawn by	SPH	Scale	1:100
Approved	SPH	Scale	1:100



Figure 17 - Recommended changes to kerbs for fuel tanker access



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PROJECT WITHOUT THE WRITTEN CONSENT OF THE CLIENT IS PROHIBITED.

Rev No.	Description	Date	By
C	LOT AREA - EASEMENT	13.02.17	800
B	COLLIER ROAD - EASEMENT	13.02.17	800
A	DA ISSUE	13.12.16	800



Project PROPOSED 7ELEVEN CONVENIENCE STORE
300 COLLIER ROAD, BASSENDEAN WA
Client 7 ELEVEN

Sheet TRUCK PATH

Drawn	RP11	FHM CONSULTING
Check	PARK	
Date	DECEMBER 2016	
Scale	AS SHOWN	
Author	20 Working 911 000 000	1616-TP5
Approved	20 Working 911 000 000	



State Administrative Tribunal Reconsideration

Responsible Authority Report

(Regulation 12)

Property Location:	646 - 660 Albany Highway and 1-3 Miller Street, Victoria Park
Development Description:	Amendment to Development Approval – Additional Partial Seventh Storey with 4 Multiple Dwellings, to approved Mixed Use Development Comprising Shops, Restaurants, Offices, Tavern, 101 Multiple Dwellings & One (1) Grouped Dwelling
DAP Name:	Metro Central Joint Development Assessment Panel
Applicant:	Hillam Architects
Owner:	FowlJeff Holdings Pty Ltd and Fowler Group Holdings Pty Ltd
Value of Development:	\$37.0 million
LG Reference:	DA 5.2016.151.1
Responsible Authority:	Town of Victoria Park
Authorising Officer:	Robert Cruickshank Executive Manager Built Life
Department of Planning File No:	JDAP/16/01046
Report Date:	31 August 2017
Application Receipt Date:	25 August 2017
Application Process Days:	6 days
Attachment(s):	<ol style="list-style-type: none">1. Amended plans and correspondence from applicant received 25 August 2017;2. Responsible Authority Report (RAR) dated 3 February 2017 presented to JDAP meeting on 13 February 2017;3. JDAP development refusal (including plans) dated 13 February 2017;4. Responsible Authority Report (RAR) dated 18 July 2017 presented to JDAP meeting on 27 July 2017;5. JDAP development refusal (including plans) dated 27 July 2017;6. Minutes of Design Review Committee Meeting dated 8 April 2016.

Officer Recommendation:

That the Metro Central Joint Development Assessment Panel, pursuant to section 31 of the *State Administrative Tribunal Act 2004* in respect of SAT application DR 72 of 2017, resolves to:

1. **Reconsider** its decision dated 27 July 2017 and **refuse** the JDAP Application reference JDAP/16/01046 and accompanying amended plans dated received 25 August 2017 in accordance with Deemed Clause 68 of the *Planning and Development (Local Planning Schemes) Regulations 2015* and Clause 30 of the Metropolitan Region Scheme, for the proposed Amendment to Development Approval – Additional Partial Seventh Storey with 4 Multiple

Dwellings, to the approved Mixed Use Development Comprising Shops, Restaurants, Offices, Tavern, 101 Multiple Dwellings & One (1) Grouped Dwelling at 646 - 660 Albany Highway and 1-3 Miller Street, Victoria Park, for the following reasons:

Reasons

1. The proposed additional building height and plot ratio further increase the extent of non-compliance with the relevant development standards in the Town of Victoria Park Town Planning Scheme No. 1 Precinct Plan 11, to an extent that it is considered to be excessive and out of context with the likely future development of the locality. As such it is considered that the proposal does not satisfy relevant considerations under Clause 29(3) of Town Planning Scheme No. 1 Scheme Text and Deemed Clause 67 of the *Planning and Development (Local Planning Schemes) Regulations 2015*.
2. The approval of this development will set a precedent for future similar applications along Albany Highway contrary to the orderly and proper planning of the locality.

Details

Zoning	MRS:	Urban
	TPS:	District Centre and Residential R40
Use Class:	Shop - 'P' use; Restaurant - 'P' use; Office - 'P' use; Tavern - 'AA' use; Multiple Dwelling - 'AA' use; Grouped Dwelling ' AA' use	
Strategy Policy:	<ol style="list-style-type: none"> 1. Local Planning Policy 5 – Mixed Residential/Commercial Development; 2. Local Planning Policy 17 – Street Frontage Design Guidelines for District Centres and Commercial Area along Albany Highway; 3. Local Planning Policy 20 - Design Guidelines for Developments with Buildings above 3 Storeys; 4. Local Planning Policy 23 – Parking Policy; 5. Local Planning Policy 30 – Car Parking Standards for Developments along Albany Highway; 6. Local Planning Policy 33 - Guide to Concessions on Planning Requirements for Mixed-Use, Multiple Dwelling and Non-Residential Developments; 	
Development Scheme:	Town of Victoria Park Town Planning Scheme No. 1	
Lot Size:	5,522m ²	
Existing Land Use:	Motor vehicle showroom, vacant Blocks, shops, open air car yard, right-of-way.	

The amended plans dated 25 August 2017 include the following amendments from the plans approved by the JDAP on 21 September 2016:

- The inclusion of a partial seventh storey adjacent to the Albany Highway/Miller Street corner;
- An additional four (4) Multiple Dwellings, contained in the seventh storey, with the total number of units increasing from 101 to 105;
- A plot ratio increase from (1.875 to 1.99);
- A height increase from 20.1 metres to 23.8 metres;
- Additional communal amenity space for residents on the fourth storey;
- A public community meeting facility (meeting rooms) located on the ground floor facing Miller Street, partially replacing an approved office (commercial tenancy 10).
- Two (2) commercial car parking bays have been reallocated to the proposed community meeting facility.
- A residential storeroom (ST 2) has been reallocated for the community meeting facility.
- Slight decrease in size of the commercial tenancy 10.
- Slight increase in size of the commercial tenancy 7.
- Internal changes in location and size of some services areas such as: additional residential stores in the basement, deletion of seven commercial stores within the ground floor, relocation of fire pump, substation and bins store;

The amended plans differ from the plans refused by the JDAP on 27 July 2017 as follows:

- Inclusion of a community meeting facility, located at the ground floor facing Miller Street, partially replacing an approved office in commercial tenancy 10.

The estimated value of the development is \$37 million.

Background:

Discussions between the applicant and Council's Officers commenced in early 2016 in relation to preliminary concepts plans for the site. Subsequently meetings were held with the Town's Design Review Committee on 17 February 2016, 4 March 2016, 16 March 2016 and 8 April 2016 to discuss the preliminary plans. The primary focus of these meetings was to discuss the proposed building massing and street elevations so as ensure that the ground floor picked up on the characteristics of development along Albany Highway, and using differing design treatments to break up the building so as to not read as one large building. Other matters discussed during these meetings included : the non-compliant building height which was proposed to be 7 storeys in height; the non-compliant plot ratio with the density being equivalent to a density of R285; the need for a transition in height from the neighbouring properties; the need for an urban design analysis; the building being treated to read as a collection of buildings rather than one monolithic building; the need to maintain a pedestrian scale; concerns of the U-shape form creating long corridors, a lack of natural lighting and ventilation for internal spaces, and being akin to a hotel form rather than a residential form; the building height being reduced to not exceed a height of 6 storeys; the building height stepping up to a crescendo at the

corner; concerns in relation to the oversupply of residential car bays, particularly in an urban context; and the interface of the internal units with the internal courtyard.

A formal development application was submitted to the Town on 18 May 2016, proposing a maximum 6 storey high building, comprising Shops, Restaurants, Offices, a Tavern, 107 Multiple Dwellings and one (1) Grouped Dwelling.

The proposal was the subject of Community Consultation for 14 days as per Council Policy GEN3 'Community Consultation', from 20 July 2016 to 4 August 2016. During the consultation period, 46 submissions were received, with 38 objecting to the proposal and 8 supporting the proposal.

During the course of processing the application, a series of further amended plans were received addressing matters either raised by Council Officers, the Design Review Committee or the public through the community consultation process, such as: some additional setbacks to the buildings facing Albany Highway, the deletion of 6 Multiple Dwellings (reduction to 101 Multiple Dwellings) and an increased setback and reduced height for the building where it adjoins residential properties at Nos. 15 and 21 Merton Street.

Approval was granted by the JDAP on 21 September 2016 for a Mixed Use Development comprising Shops, Restaurants, Offices, Tavern, 101 Multiple Dwellings & One (1) Grouped Dwelling, subject to several conditions.

The JDAP on 13 February 2017 resolved to refuse an application for proposed Amendment to Development Approval – Additional Partial Seventh Storey with 4 Multiple Dwellings, to the approved Mixed Use Development comprising Shops, Restaurants, Offices, Tavern, 101 Multiple Dwellings & One (1) Grouped Dwelling. The refusal was based on the additional building height and plot ratio being excessive and not consistent with the negotiated outcomes previously reached.

On 3 March 2017 the applicant submitted an application to the State Administrative Tribunal (SAT), for review of the JDAP's decision of 13 February 2017.

On 4 May 2017, a Mediation conference was held at the SAT offices between the parties to discuss the reasons for refusal. The SAT Member made the following Orders:

1. *On or before 25 May 2017 the applicant is to provide to the Town of Victoria Park amended plans and supporting information.*
2. *Pursuant to s 31(1) of the State Administrative Tribunal Act 2004 (WA) the respondent is invited to reconsider its decision on or before 20 July 2017.*
3. *On or before 24 July 2017 the respondent is to advise the applicant and the Tribunal of the outcome of the reconsideration.*
4. *The matter is listed for a further directions hearing at 2 pm on 28 July 2017 at 565 Hay Street, Perth, Western Australia.*

On 18 May 2017, Council received correspondence and a copy of revised plans from the applicant.

The proposal was the subject of Community Consultation for 14 days as per Council Local Planning Policy 37 - 'Community Consultation on Planning Proposals', from 9 June 2017 to 26 June 2017. During the consultation period, 13 submissions were received, with 12 objecting to the proposal and 1 supporting the proposal.

On 27 June 2017 an extension was requested by the applicant and the SAT Member made the following Orders:

1. *Order 2 is amended in that the respondent is now invited to reconsider its decision on or before 4 August 2017.*
2. *Order 3 is amended in that the respondent must now advise the applicant and the Tribunal of the outcome of reconsideration on or before 8 August 2017.*
3. *Order 4 is amended in that the matter is now listed for a directions hearing at 2 pm on 11 August 2017.*

The JDAP on 27 July 2017 reconsidered its decision dated 13 February 2017 and resolved to refuse the application for proposed Amendment to Development Approval – Additional Partial Seventh Storey with 4 Multiple Dwellings, to the approved Mixed Use Development Comprising Shops, Restaurants, Offices, Tavern, 101 Multiple Dwellings & One (1) Grouped Dwelling. The refusal was based on the additional building height and plot ratio being excessive and not consistent with the negotiated outcomes previously reached, and there being no additional community benefit or resident amenity provided.

On 23 August 2017, a Mediation conference was held at the SAT offices between the parties to discuss the reasons for refusal on 27 July 2017, with the applicant tabling further amended plans inclusive of community meeting rooms. The SAT Member made the following Orders:

1. *Pursuant to s 31(1) of the State Administrative Tribunal Act 2004 (WA) the respondent is invited to reconsider the amended plans on or before 11 September 2017.*
2. *The proceeding is adjourned to a further directions hearing at 2.30 pm on 29 September 2017 at 565 Hay Street, Perth, Western Australia.*

On 25 August 2017, Council received correspondence and a copy of revised plans from the applicant (refer to Attachment 1).

Legislation & policy:

Legislation

- *Planning and Development Act 2005, S162;*
- *Town Planning Scheme No. 1 (TPS 1) Clause 29;*
- *TPS 1 Precinct Plan P11 'Albany Highway';*
- *Metropolitan Region Scheme Text Clause 30; and*
- *Planning and Development (Local Planning Schemes) Regulations 2015 – Deemed Clauses 67 and 72.*

State Government Policies

- *Policy 3.1 - Residential Design Codes (R-Codes);*
- *Policy 4.2 – Activity Centres for Perth and Peel; and*
- *Policy 5.4 - Road and Rail Transport and Freight Considerations in Land Use Planning.*

Local Policies

- Local Planning Policy 5 – Mixed Residential/Commercial Development;
- Local Planning Policy 17 – Street Frontage Design Guidelines for District Centres and Commercial Areas Along Albany Highway;
- Local Planning Policy 20 - Design Guidelines for Development with Buildings Above 3 Storeys;
- Local Planning Policy 23 - Parking and Access Policy;
- Local Planning Policy 25 – Streetscape;
- Local Planning Policy 30 – Car Parking Standards for Developments Along Albany Highway; and
- Local Planning Policy 33 – Guide to Concessions on Planning Requirements for Mixed-Use, Multiple Dwelling and Non-Residential Developments.

Planning assessment:

Compliance with Development Requirements

- TPS 1 Scheme Text and Precinct Plan P11;
- Residential Design Codes (R Codes);
- Local Planning Policy 20 - Design Guidelines for Development with Buildings Above 3 Storeys;
- Local Planning Policy 23 - Parking and Access Policy;
- Local Planning Policy 30 – Car Parking Standards for Developments Along Albany Highway; and
- Local Planning Policy 33 – Guide to Concessions on Planning Requirements for Mixed-Use, Multiple Dwelling and Non-Residential Developments

The following is a summary of compliance with key development requirements:

Item	Relevant Provision	Requirement	Proposed	Compliance
Plot Ratio	Precinct Plan P11	Maximum of 1.0 (equivalent to 5,522m ²)	Approved 1.875 (equivalent to 10,355m ²) has been increased to 1.99 (equivalent to 10,990m ²)	Non-Compliant (Refer to Comments below)
Building Height	Precinct Plan P11	Maximum 3 storeys (11.5 metres maximum)	Approved 6 storeys (20.1 metres) has been increased to 7 storeys (23.8 metres)	Non-Compliant (Refer to Comments below)
Primary Street Setback Albany Highway and Miller Street	Precinct Plan P11	Above 3 storeys, no setback requirement. Refer to Building Height above	4.0 metres to Albany Highway 2.0 metres to Miller Street	Non-Compliant (refer to Comments below)

The setbacks of the second storey to the sixth storey are the same as the original development approved by the JADP on 21 September 2016.

Officer Comments

An application to review the JDAP decision of 13 February 2017, was lodged at the State Administrative Tribunal on 3 March 2017, with a subsequent Mediation sessions on 4 May 2017 and 25 August 2017, where Orders by the SAT Member were issued for the respondent to consider its refusal decisions of 13 February 2017 and 27 July 2017 and for the applicant to submit amended plans and information to support the proposal. As a result amended plans were received by the Town of Victoria Park on 18 May 2017 (and refused on 27 July 2017) and 25 August 2017 the subject of this report.

The site comprises a land area of 5522m² and is located at the intersection of Albany Highway and Miller Street, the latter being a regional road. The site has a residential interface to the rear, and commercial neighbours along Albany Highway and on the opposite side of the street.

Strategic Planning Direction

The Town is operating under Town Planning Scheme No.1 (TPS1), gazetted in September 1998. The plot ratio and building height limits for the site are prescribed under the TPS 1 Precinct Plan P11 'Albany Highway'.

In response to previous State government planning strategies such as Network City and Directions 2031, the Town has previously established a strategic planning position of accommodating additional density in areas such as the Burswood Peninsula, the Causeway Precinct, along Albany Highway, and Curtin University/ Bentley Technology Park, so as to minimise the density pressures upon the Town's residential character areas.

In more recent times, the State Government has released the strategic planning document Perth and Peel @ 3.5 million, which anticipates a population within the region of 3.5 million by 2050. In this respect, the document outlines infill housing targets for each local government authority, with the Town required to plan for an additional 19,400 dwellings by this time.

Previous discussions with Officers of the Department of Planning included the Department's Officers suggesting a blanket six (6) storey height limit along the length of Albany Highway as the appropriate form in order for the Town to accommodate additional density along Albany Highway.

It is worth noting that the subject site is actually depicted in artist's impressions contained in the Draft Central Sub-Regional Planning Framework that forms part of the Perth and Peel @ 3.5 documents, as follows:



FIGURE 11: ALBANY HIGHWAY/KENT STREET, VICTORIA PARK - EXISTING



FIGURE 12: ALBANY HIGHWAY/KENT STREET, VICTORIA PARK - VISION FOR HIGHER DENSITY URBAN CONSOLIDATION

Note the subject site to the right containing a 6/7 storey building.

Council Officers acknowledge that additional height and scale along Albany Highway is appropriate and a comprehensive built form study has already been completed by Council Officers, in consultation with the Town's Design Review Committee

Members, to determine appropriate built form changes for various portions of Albany Highway as part of a future project. The Albany Highway Strategic Review has been completed, Elected Members have been briefed and the recommendations of the Review have been considered by a focus group of community members as part of the Evolve community engagement process for the Strategic Community Plan. The recommendations are now being translated into provisions for the adoption of a Local Planning Policy or Scheme Amendment alongside a review of car parking requirements. Once this has been completed, it will be considered by Council and be subject of a formal community consultation process.

As the recommendations are not yet public, Council Officers are unable to provide the JDAP with specific details of the recommendations of the Albany Highway Strategic Review, however the general intent is to move from prescriptive controls to controls determined by building envelopes, and this is likely to result in additional height for many properties along Albany Highway.

Council Officers can confirm that the scale of development proposed for the site is inconsistent with the scale of additional development recommended within the built form study. The recommended height limits have been determined based upon established and recognised urban design principles of maintaining a human scale, not overshadowing the footpath on the opposite side of the street and respecting the scale of adjacent residential development.

The Albany Highway Strategic Review methodology includes

“In this study, nine cross sections have been taken along Albany Highway. The nine sections reflect the diverse characteristics along the highway including:

- Lot size;*
- Access to a rear ROW;*
- Adjacency to existing low-density residential areas;*
- Current land use, specifically car yards;*
- Existence of an activity node such as a major shopping centre;*
- Characteristics of existing built form; and*
- Topography.*

At each cross section a building envelope has been established to determine a volume over an area of land in which a building or buildings can be located. The building envelopes have been established using recession planes which ensure the following principles apply equally to all cross sections:

- Buildings fronting the eastern side of Albany Highway do not overshadow footpaths on the western side at any time of the year;*
- The current ‘village scale’ along Albany Highway is maintained by limiting height along the highway to 3 stories along the highway’s boundary;*
- Building heights can be maximised in mid-Block locations in order to preserve the amenity of neighbouring residential areas; and*
- The spread of development over the site can be maximised including building up to ROWs.’*

It is considered the Town has already been more than flexible in supporting a doubling of the current height limits to six (6) storeys with building elements of three (3) and four (4) storeys appropriately transitioning back into the streetscape, acknowledging that there is an opportunity to create a crescendo at this important corner at the intersection of Kent/Miller/Roberts Roads (the Important Regional Road from Orrong Road to Curtin University) and the Town’s mainstreet of Albany

Highway, and that it could act as a way finding cornerstone to the future Town Centre area.

This additional height has also generated a significant increase in plot ratio. However, the current amendment further increases this to double the permitted under the Scheme, to a greater level than has ever previously been contemplated during the design review process.

Council Officers are disappointed that despite a constructive, collaborative process resulting in a six (6) storey building with excellent design outcomes, the applicant now seeks approval to further increase the building height and size.

The seven storey element of Block 3 is significantly more than that contemplated and is considered to be unreasonable. The scale of the subject proposal is more than any other development on Albany Highway excluding the building at 29 Shepperton Road (at the commencement of Albany Highway) which is seven storeys and considered acceptable only because of its context, located adjacent to the Causeway bus interchange and the Great Eastern Highway/Canning Highway flyover bridge.

Plot Ratio

Under Council's Town Planning Scheme No. 1, Precinct Plan P11 'Albany Highway', the maximum plot ratio permitted is 1.0, being a maximum of 5,522m². The development was approved with a total plot ratio of 10,355m² being equivalent to a plot ratio of 1.875. This current amendment, involving a slight decrease of the approved office (commercial tenancy 10), a slight increase of the commercial tenancy 7 and the inclusion of a seventh storey is further increasing the plot ratio floor area to 1.99 being equivalent to 10,990m².

A concession of 87.5% (4,833m²) has already approved by the JDAP. This amendment seeks an additional concession of 11.5% (635m²), making a total concession of 99% (5,468m²), which is significantly beyond the parameters previously discussed with the applicant prior to and during the assessment process of the original development application.

The additional 11.5% (635m²) of plot ratio is not supported for approval. If approved it will set a precedent for future similar applications along Albany Highway, contrary to the orderly and proper planning of the locality, and contrary to sound urban design principles.

Building Height

The current Town Planning Scheme No. 1, Precinct Plan P11 'Albany Highway', prescribes a maximum building height of 3 storeys or 11.5 metres, with the first two storeys being permitted on the street boundary with a nil setback and the third storey located within a 45° recession plane or 3.1 metres setback, along both Albany Highway and Miller Street.

The building in general was approved by the JDAP with a maximum height of 6 storeys or 20.1 metres in height divided into 4 Blocks (refer to diagrams below), with Blocks 1 and 2 facing Albany Highway, Block 3 at the prominent corner facing both Albany Highway and Miller Street, and Block 4 facing Miller Street. Each building Block has differing setbacks and heights to the street. The subject amendment proposes an additional partial storey located over Blocks 3 and 4 of the approved

LEVEL 5 FLOOR PLAN

Architectural floor plan of Level 5, showing four blocks (BLOCK 1, BLOCK 2, BLOCK 3, BLOCK 4) separated by red lines. The plan includes room numbers, furniture layouts, and structural elements like columns and walls. The title "LEVEL 5 FLOOR PLAN" is at the bottom left.

In this respect it was acknowledged that through the building modulation and greater than 10m setback to the upper floors, that some of the upper floors will not be seen from a pedestrian level, and they will only be seen from a distance

As outlined above, the Department's Draft Central Sub-Regional Planning Framework document depicts a six (6) – seven (7) storey high building on the subject site, albeit this is illustrative only and not necessarily supported by Council in the form indicated.

Page 11

commenced in February 2016, to the extent that the architect and owner were advised that an application proposing seven (7) storeys will not be supported for approval.

Based on the above the proposed 'additional partial seventh storey' is not supported, as it will set an undesirable precedent for future similar applications within the locality, and is contrary to the orderly and proper planning of the locality.

Primary Street Setback

The building has been divided onto four main Blocks, giving the appearance of four (4) buildings and one (1) grouped dwelling.

The Precinct Plan P11 Sheet B (i) - Albany Highway requires the following development standards in relation to 'Set Backs':

"Buildings shall have a nil set back to Albany Highway and nil side set backs except where a pedestrian accessway to the rear of the site is to be provided."

In addition, the Precinct Plan 11 Sheet B (i) outlines that to Albany Highway and adjacent streets, a maximum height at the street boundary of two (2) storeys applies with a 45° recession plane for one (1) additional storey.

The building comprises four (4) Blocks as per the diagram above. The setbacks to Albany Highway and Miller Street, from the ground floor level to the sixth storey level are the same setbacks approved by the JDAP on 21 September 2016, with the exception of a reduction in the setback of a portion of the fourth storey to Block 1, from 10.8 metres to 3.2 metres.

In relation to the reduced setback from 10.8 metres to 3.2 metres along the 4th storey, the applicant in their letter dated 17 May 2017, states: *"To facilitate the above additional residential penthouse tenancies, we are proposing an additional outdoor public amenities area, to be located at level 3 (FFL 28.00AHD). This will incorporate several additional seating/community areas for residences, a BBQ facility and a raised planting perimeter with which will help to soften the building façade from the Albany Hwy streetscape."*

In relation to the proposed setbacks to the seventh storey, the applicant stated in their letter dated 14 June 2017, *"The applicant has carefully amended the previously refused penthouse design with significantly increased street setbacks. This deeply recessed penthouse level has been deliberately setback to reduce the bulk and scale of the addition when viewed from the street. The previously issued street views demonstrate how the penthouses cannot be seen at pedestrian level until one is a considerable distance from the development site."*

In relation to setbacks to the seventh storey to Albany Highway and Miller Street, these amended plans dated 25 August 2017 show the same setbacks of the refused plans on 27 July 2017, as follows:

- The setback of the seventh storey facing Albany Highway, block 3, 4.0 metres for the balconies, and 6.0 metres to the main walls.
- The setback of the seventh storey facing Miller Street, block 3, 2.0 metres for the balconies, and 6.0 metres to the main walls.

While Council Officers do not object to the proposed setbacks per se, Council Officers do have concerns regarding the building height.

Car Parking

In relation to car parking, the proposal exceeds the minimum on-site parking requirements for the residential component.

In relation to car parking for the non-residential development, the original approval included a reciprocal car parking arrangement between the commercial uses. For the proposed community meeting facility two (2) car parking bays have been reallocated in lieu of the removed office use within the commercial tenancy 10, leaving five (5) car parking bays for the other two offices, which is still in compliance. In addition there is a surplus of 14 car parking bays available for use during business hours. After normal business hours the approved reciprocal car parking arrangement will have a surplus of four (4) car parking bays. This is considered acceptable.

Further Considerations

The proposal is located within a District Centre zone, at the intersection of two important streets, Albany Highway and Miller Street, both District Distributors under the Town of Victoria Park road hierarchy, being therefore a prominent location, and gateway to the Town of Victoria Park's Town Centre.

It is acknowledged that a building of six (6) storeys has been approved (20.1 metres in height) which will have a visual impact on the surrounding properties and one (1) additional storey (seventh storey) may go unnoticed by pedestrians at street level due to the setting back of the seventh storey.

Approval of a seven (7) storey building in this location will set a precedent for similar proposals along Albany Highway. Further, if one (1) additional storey is supported then Council's Officers are concerned that this may lead to other applicants seeking further or greater building height variations.

It is acknowledged that the amended plans incorporate the inclusion of an area of communal amenities for residents on Level 3 (fourth storey). However it is considered that the level of amenity provided within this space is compromised by its size and location adjacent to private units and their bedrooms. Furthermore the inclusion of this additional space only provides some benefits (limited) to the residents.

It is noted that the Council's Draft Social Infrastructure Plan (SIP) has identified the need for community meeting spaces within the Town and on this basis the applicant is now proposing to have a community meeting facility located at ground level, facing Miller Street, partially replacing an approved office within commercial tenancy 10.

The applicant in their letter dated 24 August 2017, states: *"The developer is committed to provide a designated community meeting facility on Miller Street. This will be configured as a flexible meeting space which can be booked through the Council for the use of various community groups. The applicant has received advice from Director of Community Life regarding the specific size of the rooms which have been planned accordingly of this revised application."*

It is considered that the inclusion of community meeting rooms will deliver some additional benefit to the community. Council's Local Planning Policy 33 'Guide to Concession on Requirements for Mixed Use, Multiple Dwelling and Non-Residential Developments' outlines the expectations that the greater the extent of variations sought, the greater the extent of design improvements that be delivered. Although a community meeting facility is proposed within these amended plans, Council Officers do not consider that the inclusion of this element is sufficient to warrant the significant additional plot ratio and height sought.

As commented within the above section 'Building Height', the original development application approved by the JDAP on 21 September 2016 was the result of a negotiated outcome with the Town, which represents the 'absolute maximum concessions' that the Town is prepared to accept over and above the existing Town Planning Scheme parameters, mainly in relation to the height of the building, that was consistently expressed by Council Officers and the Design Review Committee during the preliminary discussions with the applicant, project manager and owners of the properties, on 17 February 2016, 4 March 2016, 16 March 2016 and 8 April 2016 and recorded within the minutes of the Design Review Committee Meetings with copies given to the applicant. Therefore the architect and owner were advised that an application proposing seven (7) storeys will not be supported for approval.

In addition, it should be noted that during the previous Community Consultation in relation to the additional seventh storey, a total of 13 submissions were received, 12 objecting and 1 supporting and from the 12 submissions objecting 9 submissions objected the height of the building.

Based on the above the proposed 'additional partial seventh storey' is not supported, as it will set an undesirable precedent for future similar applications within the locality, and is contrary to the orderly and proper planning of the locality.

Design Review Committee

In relation to the approval by the JDAP on September 2016 the Design Review Committee (DRC) supported the proposal as it was considered that the development will make a positive contribution to the Albany Highway streetscape.

However when reviewing the amended plans proposing a seventh storey, the DRC Members commented that although an additional storey is not going to detract negatively upon the streetscape due to the proposed setbacks to Albany Highway and Miller Street, this additional storey is contrary to all discussions during the reviews and approval process of the original application between the Council's Officers and DRC Members with the applicant and owner of the property.

Conclusion:

It is acknowledged that the original development application was supported by Council Officers and approved by the JDAP with significant variations to the requirements of the Town Planning Scheme, particularly in respect to the matters of plot ratio, building height and street setbacks to Albany Highway and Miller Street, with the extent of variations being sought being greater than any other development approved along Albany Highway.

The subject amendment to modify the original approval is seeking further variations to the significant variations already approved and negotiated with the Town through a

collaborative process. Although a community meeting facility is proposed to increase additional community benefits, it is considered that this does not justify the approval of an additional storey to the already height approved that will be inconsistent with the future development of the locality. Additionally it is considered that approval will set an undesirable precedent for future similar applications along Albany Highway, contrary to the orderly and proper planning on the locality.

In view of the above, the application is not supported and is recommended for refusal.

ATTACHMENT 1

AMENDED PLANS AND
CORRESPONDENCE FROM
APPLICANT RECEIVED
25 AUGUST 2017

24 August 2017

Mr Robert Cruickshank
Town of Victoria Park
99 Shepperton Road
Victoria Park WA 6100

Dear Robert,

**RE: AMENDMENT TO DEVELOPMENT APPLICATION
PROPOSED MIXED-USE DEVELOPMENT- 650 ALBANY HWY, VICTORIA PARK**

Further to the development approval to undertake development received on 30th September 2016, and subsequent SAT mediations, we have developed the design to incorporate 4 additional penthouse units, additional residential amenity areas and a community meeting facility. The following revised documents are also enclosed for your consideration:

1. One (1) digital copy of A1 drawings at 1:100 scale of the plan and elevations drawings:

1. A2-01 Basement Plan
2. A2-02 Ground Floor Plan
3. A2-03 Level 1 Plan
4. A2-04 Level 2 Plan
5. A2-05 Level 3 Plan
6. A2-06 Level 4 Plan
7. A2-07 Level 5 Plan
8. A2-08 Level 6 Plan
9. A2-09 Roof Plan
10. A4-01 Elevations 1
11. A4-02 Elevations 2
12. A4-03 Elevations 3

SUMMARY OF REVISIONS:

A. Additional Penthouse Units

We are proposing an increased number of apartments, with 4 new units to be incorporated into an additional level (Level 6 – FFL 35.200AHD). The facade and roofline of the new proposed level utilises substantially more generous setbacks from the site boundary when compared with the lower levels of the building envelope. Additionally, facades are treated with reserved, dark finishes and design in a manner as to remain discreet when viewed from the streetscape. Additional residential stores for these units have been planned on the basement level.

B. Additional Residential Amenities

To facilitate the above additional residential penthouse tenancies, we are proposing an additional outdoor public amenities area, to be located at Level 3 (FFL 28.900AHD). This will

incorporate several additional seating/community areas for residences, a BBQ facility and a raised planting perimeter with which will help to soften the building façade from the Albany Hwy streetscape.

C. Additional Community Meeting Facility

The developer is committed to provide a designated community meeting facility on Miller Street. This will be configured as a flexible meeting space which can be booked through the council for the use of various community groups. The applicant has received advice from Director of Community Life regarding the specific size of the rooms which have been planned accordingly on this revised application.

The developer has also committed to deliver the facility with a kitchenette and universally accessible toilet. Power, data and TV points will be provided for both meeting rooms with an operable partition to enable both rooms to open into a single, larger space. The rooms will be provided with ducted air-conditioning, lined ceilings and carpeted floors. Adequate down lighting will be provided with multiple power points.

2 designated parking allocations will be provided at ground floor within close proximity to the meeting rooms. The developer will be providing supplementary information regarding proposed tenure arrangements with council in due course.

We confirm that no further changes to the approved plans are proposed as part of this application.

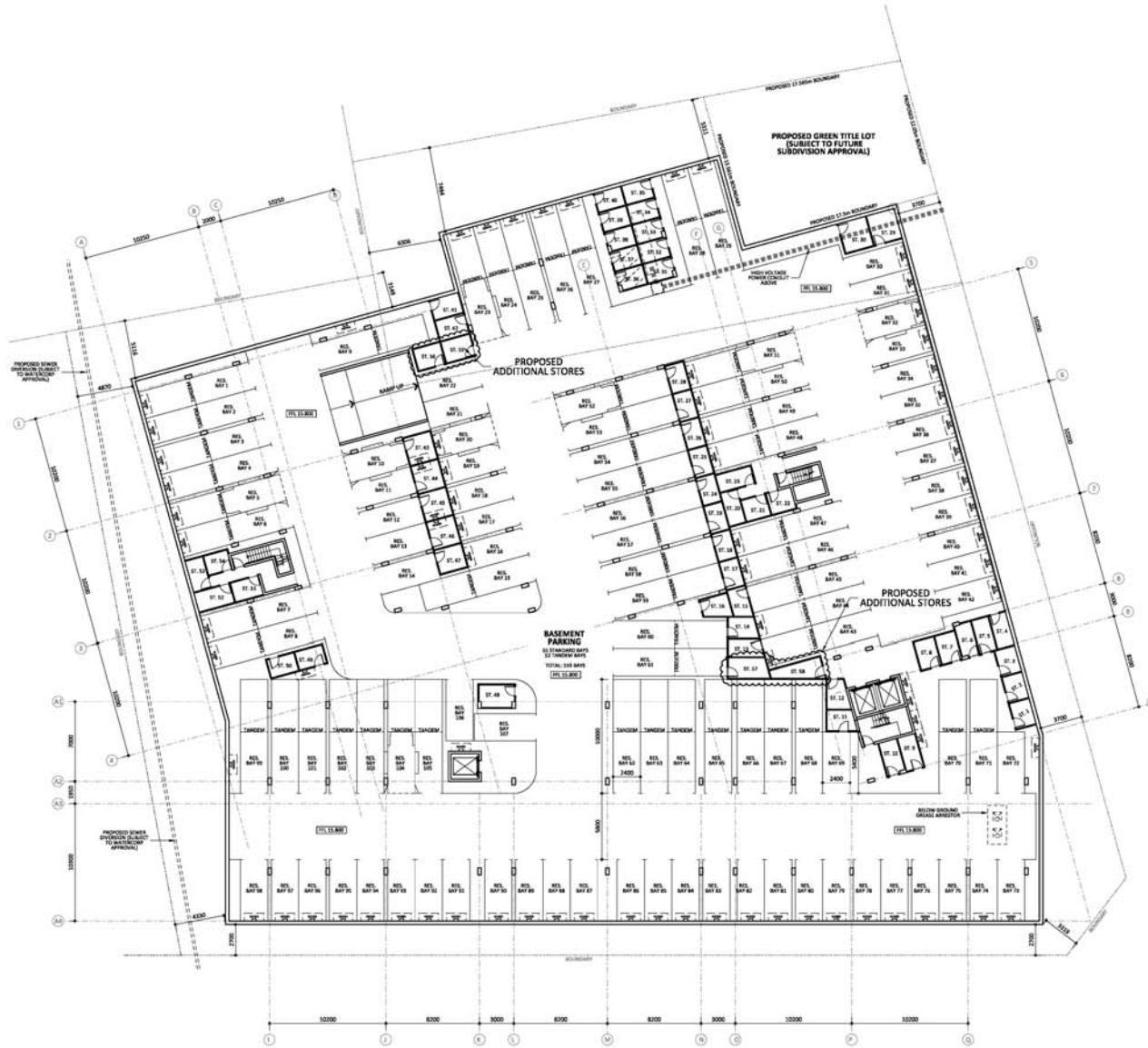
Should you have any queries with regard to the above, please do not hesitate to contact the undersigned.

Yours sincerely,



Tom Letherbarrow
Director

cc Mr Matt Evans, Celsius Developments
Mr Andrew Peirce, Celsius Developments



BASEMENT FLOOR PLAN
SCALE 1:200 @ A1





LEVEL 2 FLOOR PLAN
SCALE 1:200 @ A1



LEVEL 3 FLOOR PLAN
SCALE 1:300 @ A1

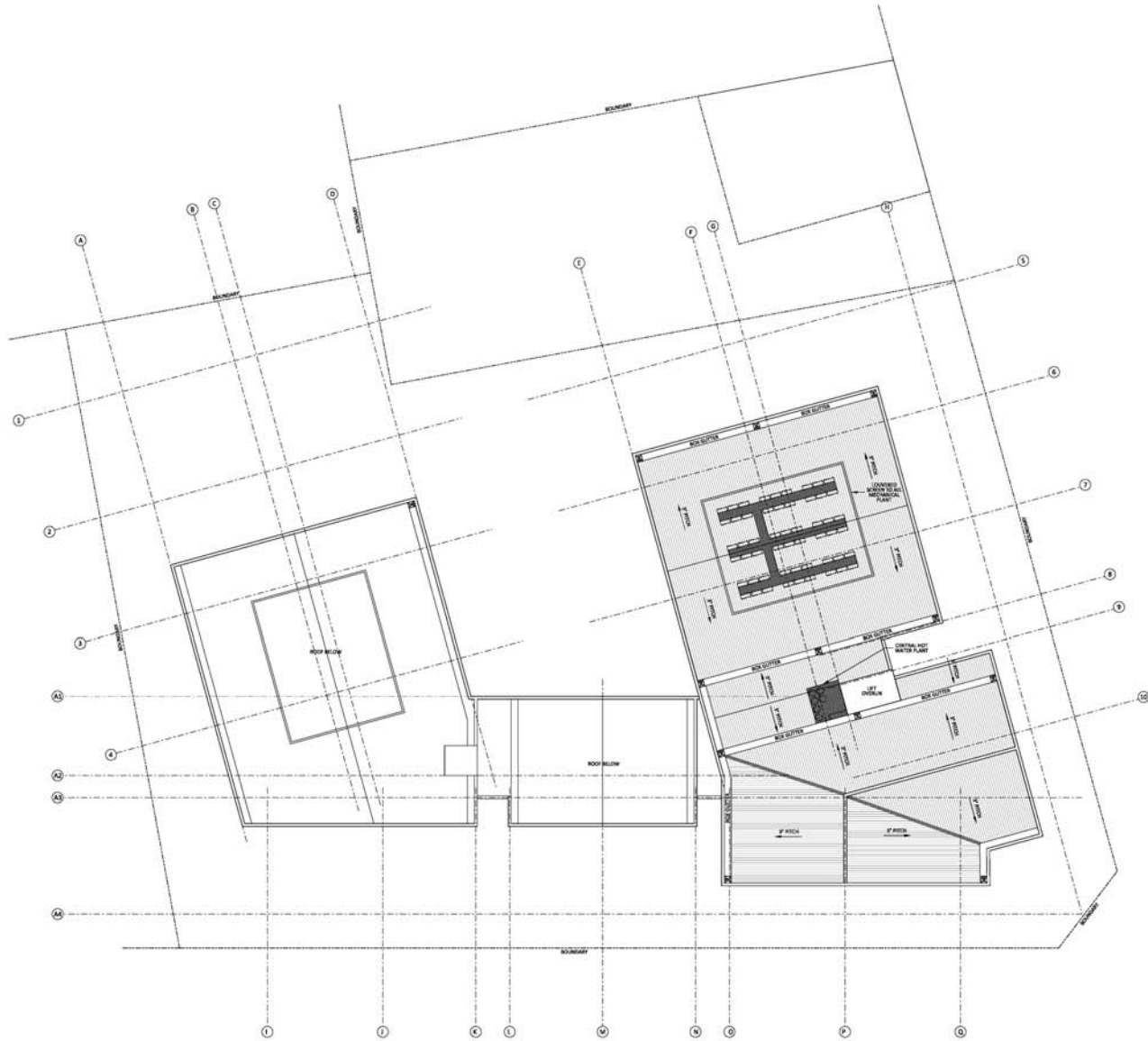


LEVEL 4 FLOOR PLAN
SCALE 1:200@A1



LEVEL 5 FLOOR PLAN
SCALE 1:200 @ A1





ROOF PLAN
SCALE 1:300 @ A1



ALBANY HWY (SOUTH WEST) ELEVATION
SCALE 1:200@A1



MILLER STREET (SOUTH EAST) ELEVATION
SCALE 1:200@A1



NORTH EAST ELEVATION
SCALE 1:200@A1



NORTH WEST ELEVATION
SCALE 1:200@A1



NORTH WEST SECTIONAL ELEVATION
SCALE 1:200@A1



SOUTH EAST SECTIONAL ELEVATION
SCALE 1:200@A1

ATTACHMENT 2

RAR DATED 3 FEBRUARY 2017
PRESENTED TO JDAP ON
13 FEBRUARY 2017



Form 2 - Responsible Authority Report (Regulation 17)

Property Location:	646 - 660 Albany Highway and 1-3 Miller Street, Victoria Park
Application Details:	Amendment to Development Approval – Additional Partial Seventh Storey with 4 Multiple Dwellings and 1 Additional Multiple Dwelling on the Fifth Storey, to approved Mixed Use Development Comprising Shops, Restaurants, Offices, Tavern, 101 Multiple Dwellings & One (1) Grouped Dwelling
JDAP Name:	Metro Central Joint Development Assessment Panel
Applicant:	Hillam Architects
Owner:	FowlJeff Holdings Pty Ltd and Fowler Group Holdings Pty Ltd
LG Reference:	DA 5.2016.151.1
Responsible Authority:	Town of Victoria Park
Authorising Officer:	Robert Cruickshank Executive Manager Built Life
Department of Planning File No:	JDAP/16/01046
Report Date:	3 February 2017
Application Receipt Date:	14 December 2016
Application Process Days:	51 days
Attachment(s):	<ol style="list-style-type: none">1. Aerial Photo of the site;2. Plans and elevations dated received 14 December 2016;3. Town Planning Scheme No. 1 Precinct Plan P11 – ‘Albany Highway Precinct’;4. Minutes of Design Review Committee Meeting dated 8 April 2016;5. Plans approved by DAP on 21 September 2016.

Officer Recommendation:

That the Metro Central Joint Development Assessment Panel resolves to:

1. **Accept** that the DAP Application reference JDAP/16/01046 as detailed on the DAP Form 2 dated 14 December 2016 is appropriate for consideration in accordance with regulation 17 of the *Planning and Development (Development Assessment Panels) Regulations 2011*;
2. **Refuse** the JDAP Application reference JDAP/16/01046 and accompanying plans dated received 14 December 2016 in accordance with the provisions of Clause 38 of the Town of Victoria Park Planning Scheme No. 1 and Clause 30 of the Metropolitan Region Scheme, for the proposed Amendment to Development Approval – Additional Partial Seventh Storey with 4 Multiple Dwellings and 1 Additional Multiple Dwelling on the Fifth Storey, to the approved Mixed Use Development Comprising Shops, Restaurants, Offices,

Tavern, 101 Multiple Dwellings & One (1) Grouped Dwelling at 646 - 660 Albany Highway and 1-3 Miller Street, Victoria Park, for the following reasons:

1. The proposal is non-compliant with Town Planning Scheme No. 1 Clause 38(3) 'Determination of Non-Complying Applications' as it is:
 - (i) inconsistent with:
 - the orderly and proper planning of the locality;
 - the conservation of the amenities of the locality;
 - the likely future development of the locality; and
 - (ii) would have an undue adverse affect on:
 - the occupiers or users of the development;
 - the property in, or the inhabitants of, the locality; and
 - the likely future development of the locality.
2. The development does not satisfy the relevant matters to be considered under Deemed Clause 67 of the Local Planning Schemes Regulations as follows:
 - a) The aims and provisions of this Scheme and any other local planning schemes operating within the Scheme area;
 - b) The requirements of orderly and proper planning including any proposed local planning scheme or amendment to this Scheme that has been advertised under the *Planning and Development (Local Planning Schemes) Regulations 2015* or any other proposed planning instrument that the local government is seriously considering adopting or approving;
 - g) Any local planning policy for the Scheme area;
 - m) The compatibility of the development with its setting including the relationship of the development to development on adjoining land or on other land in the locality including, but not limited to, the likely effect of the height, bulk, scale, orientation and appearance of the development;
 - n) The amenity of the locality including the following –
 - i. Environmental impacts of the development;
 - ii. The character of the locality;
 - iii. Social impacts of the development.
 - (x) The impact of the development on the community as a whole notwithstanding the impact of the development on particular individuals;
 - (zb) Any other planning consideration the local government considers appropriate.

Background:

Property Address:	646 – 660 (Lots 1, 2, 24, 25, 26, 327 and 451) Albany Highway and 1-3 (Lots 66, 329 and 330) Miller Street, Victoria Park
Zoning	MRS: Urban
	TPS: District Centre and Residential R40
Use Class:	Shop - 'P' use; Restaurant - 'P' use; Office - 'P' use;

	Tavern - 'AA' use; Multiple Dwelling - 'AA' use; Grouped Dwelling ' AA' use
Strategy Policy:	<ol style="list-style-type: none"> 1. Local Planning Policy 5 – Mixed Residential/Commercial Development; 2. Local Planning Policy 17 – Street Frontage Design Guidelines for District Centres and Commercial Area along Albany Highway; 3. Local Planning Policy 20 - Design Guidelines for Developments with Buildings above 3 Storeys; 4. Local Planning Policy 23 – Parking Policy; 5. Local Planning Policy 30 – Car Parking Standards for Developments along Albany Highway; 6. Local Planning Policy 33 - Guide to Concessions on Planning Requirements for Mixed-Use, Multiple Dwelling and Non-Residential Developments;
Development Scheme:	Town of Victoria Park Town Planning Scheme No. 1
Lot Size:	5,522m ²
Existing Land Use:	Motor vehicle showroom, vacant Blocks, shops, open air car yard, right-of-way.
Value of Development:	\$37.0 million

An approval was granted by the JDAP on 21 September 2016 for as Mixed Use Development comprising Shops, Restaurants, Offices, Tavern, 101 Multiple Dwellings & One (1) Grouped Dwelling, subject to several conditions.

Previous to this approval by the JDAP, meetings were held with the Town's Design Review Committee on 17 February 2016, 4 March 2016, 16 March 2016 and 8 April 2016 to discuss the preliminary plans. The primary focus of these meetings was discussing the proposed building massing and street elevations so as ensure that the ground floor picked up on the characteristics of development along Albany Highway, and using differing design treatments to break up the building so as to not read as one large building. Other matters discussed during these meetings included : the non-compliant building height as was proposed to be of 7 storeys in height; the non-compliant plot ratio with the density being equivalent to a density of R285; the need for a transition in height from the neighbouring properties; the need for an urban design analysis; the building being treated to read as a collection of buildings rather than one monolithic building; the need to maintain a pedestrian scale; concerns of the U-shape form creating long corridors, a lack of natural lighting and ventilation for internal spaces, and being akin to hotel form rather than a residential form; the building height being reduced to not exceed a height of 6 storeys; the building height stepping up to a crescendo at the corner; concerns in relation to the oversupply of residential car bays, particularly in an urban context; and the interface of the internal units with the internal courtyard.

A formal development application was submitted to the Town on 18 May 2016, proposing a maximum 6 storey high building, comprising Shops, Restaurants, Offices, a Tavern, 107 Multiple Dwellings and one (1) Grouped Dwelling.

The proposal was the subject of Community Consultation for 14 days as per Council Policy GEN3 'Community Consultation', from 20 July 2016 to 4 August 2016. During the consultation period, 46 submissions were received, 38 objecting to the proposal and 8 supporting the proposal.

During the course of processing the application, a series of further amended plans were received addressing matters either raised by Council Officers, the Design Review Committee or the public through the community consultation process, such as: some additional setbacks to the buildings facing Albany Highway, the deletion of 6 Multiple Dwellings (reduction to 101 Multiple Dwellings) and an increased setback and reduced height for the building where it adjoins residential properties at Nos. 15 and 21 Merton Street.

On 14 December 2016 an application was submitted to amend the development approval granted by the JDAP on 21 September 2016, which is the subject of this Responsible Authority Report.

Details

The application proposes an Amendment to Development Approval, comprising an additional partial seventh storey with 4 Multiple Dwellings of three (3) bedrooms each, plus 1 additional Multiple Dwelling of two (2) bedrooms on the fifth storey and modification of the affected elevations, increasing the building height to a maximum of 24.0 metres, at No. 646 - 660 Albany Highway and No. 1-3 Miller Street.

The additional partial seventh storey with 4 multiple dwellings is proposed above the corner of the building fronting Albany Highway and Miller Street, being 1 multiple dwelling facing Albany Highway, 2 multiple dwellings facing Miller Street and 1 multiple dwelling facing the internal courtyard. On the fifth storey, 1 additional multiple dwelling is proposed facing Albany Highway and 1 two (2) bedrooms multiple dwelling is replacing an approved single bedroom multiple dwelling facing Miller Street.

From the second storey to the seventh storey the building proposes 106 dwellings. 23 dwellings are one (1) bedroom dwellings, 67 are two (2) bedroom dwellings and 16 are three (3) bedroom dwellings.

The estimated value of the development is \$37 million.

Legislation & policy:

Legislation

- Planning and Development Act 2005, S162;
- Town Planning Scheme No. 1 (TPS 1) Clause 38
- TPS 1 Precinct Plan P11 'Albany Highway';
- Metropolitan Region Scheme Text Clause 30; and
- Planning and Development (Local Planning Schemes) Regulations 2015 – Deemed Clauses 67 and 72.

State Government Policies

- Policy 3.1 - Residential Design Codes (R-Codes);
- Policy 4.2 – Activity Centres for Perth and Peel; and

- Policy 5.4 - Road and Rail Transport and Freight Considerations in Land Use Planning.

Local Policies

- Local Planning Policy 5 – Mixed Residential/Commercial Development;
- Local Planning Policy 17 – Street Frontage Design Guidelines for District Centres and Commercial Areas Along Albany Highway;
- Local Planning Policy 20 - Design Guidelines for Development with Buildings Above 3 Storeys;
- Local Planning Policy 23 - Parking and Access Policy;
- Local Planning Policy 25 – Streetscape;
- Local Planning Policy 30 – Car Parking Standards for Developments Along Albany Highway; and
- Local Planning Policy 33 – Guide to Concessions on Planning Requirements for Mixed-Use, Multiple Dwelling and Non-Residential Developments; and

Consultation:

Public Consultation

No 'Community Consultation' was undertaken for the subject application. However, the application approved by the JDAP was the subject of community consultation in accordance with Council Policy GEN3 for a period of 14 days, with letters being sent to owners and occupiers of surrounding properties. During the consultation period, 46 submissions were received, 38 objecting to the proposal and 8 supporting the proposal. Among the 46 objections received, 34 objections made reference to the height of the building, 18 objections made reference to the excessive plot ratio and five objections made reference to the street setback to Albany Highway.

Planning assessment:

Compliance with Development Requirements

- TPS 1 Scheme Text and Precinct Plan P11;
- Residential Design Codes (R codes);
- Local Planning Policy 20 - Design Guidelines for Development with Buildings Above 3 Storeys;
- Local Planning Policy 23 - Parking and Access Policy;
- Local Planning Policy 30 – Car Parking Standards for Developments Along Albany Highway; and
- Local Planning Policy 33 – Guide to Concessions on Planning Requirements for Mixed-Use, Multiple Dwelling and Non-Residential Developments

The following is a summary of compliance with key development requirements:

Item	Relevant Provision	Requirement	Proposed	Compliance
Plot Ratio	Precinct Plan P11	Maximum of 1.0 (equivalent to 5,522m ²)	Approved 1.875 (equivalent to 10,355m ²) has been increased to 2.044 (equivalent to 11,288m ²)	Non-Compliant (Refer to Comments below)

Building Height	Precinct Plan P11	Maximum 3 storeys (11.5 metres maximum)	Approved 6 storeys (20.1 metres) has been increased to 7 storeys (24.0 metres)	Non-Compliant (Refer to Comments below)
Primary Street Setback Albany Highway and Miller Street	Precinct Plan P11	Further reduction of street setbacks - Refer to additional Setback Table below		Non-compliant (refer to Comments below)
Parking	Local Planning Policy 30 – Car Parking Standards for Developments Along Albany Highway	Residential: Minimum of 106 bays 1 Bay/Dwelling and none for visitors Required 106 bays	172 bays	Compliant
	Local Planning Policy 23 - 'Parking Policy.'	Commercial: Minimum of 89 bays TOTAL Minimum of 195 BAYS	73 bays (including 4 bays in tandem configuration) and reciprocal commercial parking TOTAL 245 bays	
	Bicycle	Residents – Minimum of 35 spaces Visitors – Minimum of 11 spaces Total – Minimum of 46 spaces	Total - 22 spaces Shortfall increased from 23 spaces to 24 spaces	Non-compliant (refer to Comments below)

ADDITIONAL SETBACK TABLE

Albany Highway Setback					
Storey	Required setback	Proposed setback			Compliance
		Block 1	Block 2	Block 3	
GF	Nil	Nil	Nil	2.6 metres	Compliant
2 nd Storey	Nil	Nil	Nil	2.6 metres	Compliant
3 rd Storey	3.1 metres	Nil	Nil	2.6 metres	Non-Compliant
4 th Storey	No setback requirement. Refer to Building Height above.	10.8 metres	Nil	2.6 metres	Non-Compliant
5 th Storey		10.8 metres	From approved 2.6 metres, reduced to Nil	2.6 metres	Non-Compliant
6 th Storey		10.8 metres	13.0 metres	2.6 metres	Non-Compliant
7 th Storey		N/A	N/A	2.6 metres	Non-compliant
Miller Street Setback					
		Block 3	Block 4	Grouped Dwelling	
GF	Nil	Nil	Nil	6.5 metres average with 1.85 metres minimum;	Compliant
2 nd Storey	Nil	Nil	3.4 metres	6.5 metres average with 1.85 metres minimum	Compliant
3 rd Storey	3.1 metres	Nil	3.4 metres	N/A	Compliant
4 th Storey	No setback requirement. Refer to Building Height above.	Nil	3.4 metres	N/A	Non-Compliant
5 th Storey		Nil	From approved 5.0 metres reduced to 3.4 metres	N/A	Non-compliant
6 th Storey		Nil	From approved 9.0 metres	N/A	Non-Compliant

			reduced to 5.0 metres		
7 th Storey		Nil	9.0 metres	N/A	Non- Compliant

Officer Comments

A Development Application for the above site was received by the Council on 14 December 2016, for an Amendment to Development Approval granted by the JDAP on 21 September 2016, comprising an additional partial seventh storey and an additional dwelling on the fifth floor, therefore modifying the approved building in relation to: building height, plot ratio, the street setback to both Albany Highway and Miller Street, the number of dwellings and the elevations facing both Albany Highway and Miller Street.

The site comprises a land area of 5522m² and is located at the intersection of Albany Highway and Miller Street, the latter being a regional road. The site has a residential interface to the rear, and commercial neighbours along Albany Highway and on the opposite side of the street.

Strategic Planning Direction

The Town is operating under Town Planning Scheme No.1 (TPS1), gazetted in September 1998. The plot ratio and building height limits for the site are prescribed under the TPS 1 Precinct Plan P11 'Albany Highway'.

In response to previous State government planning strategies such as Network City and Directions 2031, the Town has previously established a strategic planning position of accommodating additional density in areas such as the Burswood Peninsula, the Causeway Precinct, along Albany Highway, and Curtin University/ Bentley Technology Park, so as to minimise the density pressures upon the Town's residential character areas.

In more recent times, the State Government has released the strategic planning document Perth and Peel @ 3.5 million, which anticipates a population within the region of 3.5 million by 2050. In this respect, the document outlines infill housing targets for each local government authority, with the Town required to plan for an additional 19,400 dwellings by this time.

Previous discussions with Officers of the Department of Planning included the Department's Officers suggesting a blanket six (6) storey height limit along the length of Albany Highway as the appropriate form in order for the Town to accommodate additional density along Albany Highway.

It is worth noting that the subject site is actually depicted in artist's impressions contained in the Draft Central Sub-Regional Planning Framework that forms part of the Perth and Peel @ 3.5 documents, as follows:



FIGURE 11: ALBANY HIGHWAY/KENT STREET, VICTORIA PARK - EXISTING



FIGURE 12: ALBANY HIGHWAY/KENT STREET, VICTORIA PARK - VISION FOR HIGHER DENSITY URBAN CONSOLIDATION

Note the subject site to the right containing a 6/7 storey building.

Council Officers acknowledge that additional height and scale along Albany highway is appropriate and a comprehensive built form study has already been completed by Council Officers, in consultation with the Town's Design Review Committee

Members, to determine appropriate built form changes for various portions of Albany Highway as part of a future Town Planning Scheme Amendment. The Albany Highway Strategic Review has been completed, Elected Members have been briefed and the recommendations of the Review have been considered by a focus group of community members as part of the Evolve community engagement process for the Strategic Community Plan. The recommendations are now being translated into provisions for the adoption of a Local Planning Policy or Scheme Amendment alongside a review of car parking requirements. Once this has been completed, it will be considered by Council and be subject of a formal community consultation process.

As the recommendations are not yet public, then Council Officers are unable to provide the JDAP with specific details of the recommendations of the Albany Highway Strategic Review, however the general intent is to move from prescriptive controls to controls determined by building envelopes, and this is likely to result in additional height for many properties along Albany Highway.

Council Officers can confirm that the scale of development now proposed for the site is inconsistent with the scale of additional development considered appropriate for the subject portion of Albany Highway within the built form study. So not only is it likely to exceed community expectations for development within the locality but it is also not considered to represent appropriate scale and design by the members of Council's Design Review Committee, whose significant expertise and experience, has led to the outcomes of the built form study.

The recommended height limits have been determined based upon established and recognised urban design principles of maintaining a human scale, not overshadowing the footpath on the opposite side of the street and respecting the scale of adjacent residential development.

The Albany Highway Strategic Review methodology includes

"In this study, nine cross sections have been taken along Albany Highway. The nine sections reflect the diverse characteristics along the highway including:

- Lot size;*
- Access to a rear ROW;*
- Adjacency to existing low-density residential areas;*
- Current land use, specifically car yards;*
- Existence of an activity node such as a major shopping centre;*
- Characteristics of existing built form; and*
- Topography.*

At each cross section a building envelope has been established to determine a volume over an area of land in which a building or buildings can be located. The building envelopes have been established using recession planes which ensure the following principles apply equally to all cross sections:

- Buildings fronting the eastern side of Albany Highway do not overshadow footpaths on the western side at any time of the year;*
- The current 'village scale' along Albany Highway is maintained by limiting height along the highway to 3 stories along the highway's boundary;*
- Building heights can be maximised in mid-Block locations in order to preserve the amenity of neighbouring residential areas; and*
- The spread of development over the site can be maximised including building up to ROWs.'*

It is felt that the Town has already been more than flexible in supporting a doubling of current height limits to 6 storeys with a component of 4 and 3 storeys to appropriately transition back into the streetscape, acknowledging that there is an opportunity to create a crescendo at this important corner at the intersection of Kent/Miller/Roberts Roads (the Important Regional Road from Orrong Road to Curtin University) and the Town's mainstreet of Albany Highway, and that it could act as a way finding cornerstone to the future Town Centre area.

This additional height has also generated a significant increase in plot ratio. However, the current amendment further increases this to more than double that permitted under the Scheme, to a greater level than has ever previously been contemplated during the design review process.

Council Officers are disappointed that what has been a constructive, collaborative process resulting in an excellent design outcome for the community has now been modified to a point where we are no longer able to support it. The current proposal is contrary to any advice or recommendations provided by Council Officers and Design Review Committee members to the applicant and owner throughout the process.

Both the five storey element of Block 2 and seven storey element of Block 3 are significantly more than that contemplated and will result in an unacceptable outcomes if approved. The impact of this excessive height is additionally exacerbated by the reduced street setbacks now proposed. The scale of the subject proposal is more than the Elected Members have been briefed on and more than any other development on Albany Highway excluding the building at 29 Shepperton Road (at the commencement of Albany Highway) which is seven storeys and considered acceptable only because of its context, located adjacent to the Causeway bus interchange and the Great Eastern Highway/Canning Highway flyover bridge.

Plot Ratio

Under Council's Town Planning Scheme No. 1, Precinct Plan P11 'Albany Highway', the maximum plot ratio permitted is 1.0, being a maximum of 5,522m². The development was approved with a total plot ratio of 10,355m² being equivalent to a plot ratio of 1.875 and the subject amendment is further increasing the plot ratio floor area to 2.044 being equivalent to 11,288m².

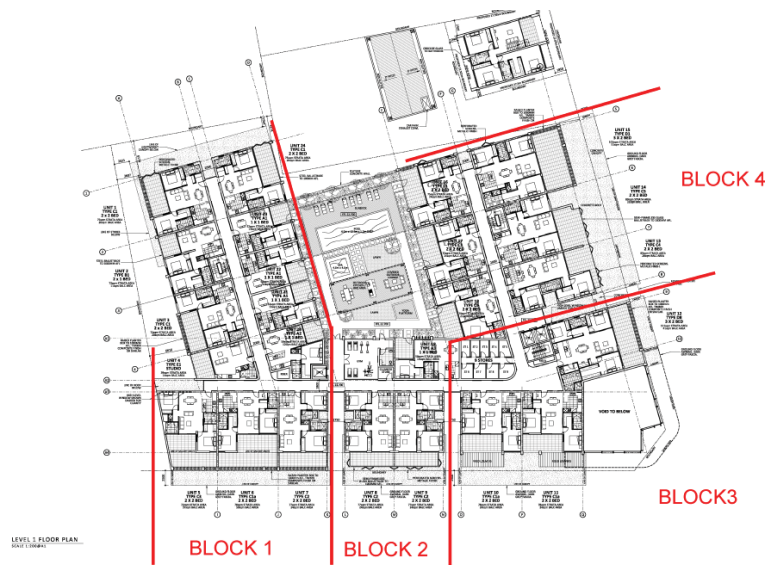
A concession of 87% (4,833m²) has already given by the JDAP and this subject proposal is seeking for an additional concession of 17% (933m²), making a total concession of 104% (5,766m²), which is significantly beyond the parameters previously discussed with the applicant during the assessment process of the original development application.

The additional 17% (933m²) of plot ratio is not supported for approval. If approved it will set a precedent for future similar applications along Albany Highway, contrary to the orderly and proper planning of the locality, and contrary to sound urban design principles.

Building Height

The current Town Planning Scheme No. 1, Precinct Plan P11 'Albany Highway', prescribes a maximum building height of 3 storeys or 11.5 metres, with the first two storeys being permitted on the street boundary with a nil setback and the third storey located within a 45° recession plane or 3.1 metres setback, along both Albany Highway and Miller Street.

The building in general was approved by the JDAP with a maximum height of 6 storeys or 20.1 metres in height divided into 4 Blocks (refer to diagrams below), with Blocks 1 and 2 facing Albany Highway, Block 3 at the prominent corner facing both Albany Highway and Miller Street, and Block 4 facing Miller Street. Each building Block has differing setbacks and heights to the street. The subject amendment proposes an additional partial storey located over Blocks 3 and 4 of the approved building, with a total of 7 storeys with a proposed height of 24.0 metres.



During the preliminary discussions of the original development application with the Design Review Committee, the applicant and owner were advised that any support for an increase in building height would be on the basis of the building height being 2 or 3 storeys adjacent to neighbouring properties, with a crescendo in the height towards the street corner to a maximum 6 storey height in Block 4.

In this respect it was acknowledged that through the building modulation and greater than 10m setback to the upper floors, that some of the upper floors will not be seen from a pedestrian level, and they will only be seen from a distance. However, the subject proposal for an additional partial seventh storey also proposes to reduce a number of the approved building setbacks of the upper floors to Albany Highway (Block 2) and Miller Street (Block 4) thus increasing their visibility and impact.

Along the Albany Highway frontage, the approved building at a nil setback graduates in height from three storeys in Block 1 to four storeys in Block 2 and then six storeys at the corner in Block 3. The subject amendment proposes an increase in building height such that it graduates from three storeys in Block 1 to five storeys in Block 2 and then to seven storeys at the corner in Block 3.

As outlined above, the Department's Draft Central Sub-Regional Planning Framework document depicts a 6-7 storey high building on the subject site, albeit this is illustrative only and not necessarily supported by Council in the form indicated.

It is considered that the original development application approved by the JDAP on 21 September 2016 was the result of a negotiated outcome with the Town, which represents the absolute maximum concessions that the Town is prepared to accept over the existing Town Planning Scheme parameters, given the design attributes of the approved development. This was consistently expressed by Council Officers and the Design Review Committee since preliminary discussions commenced in February 2016, to the extent that the architect and owner were advised that an application proposing seven storeys will not be supported for approval but a crescendo with a maximum of six storeys, towards the prominent corner. (Please refer to Attachment 4 – Minutes of the Design Review committee dated 8 April 2016).

Based on the above the proposed 'additional partial seventh storey' is not supported, as it will set an undesirable precedent for future similar applications within the locality, and is contrary to the orderly and proper planning of the locality.

Primary Street Setback

The building has been divided onto four main Blocks, giving the appearance of four (4) buildings and one (1) grouped dwelling.

The Precinct Plan P11 Sheet B (i) - Albany Highway requires the following development standards in relation to 'Set Backs':

"Buildings shall have a nil set back to Albany Highway and nil side set backs except where a pedestrian accessway to the rear of the site is to be provided."

In addition where related to height, the Precinct Plan 11 Sheet B (i) requires to Albany Highway and adjacent streets, a maximum height at the street boundary of 2 storeys and then a 45° recession plane for one additional storey.

The building comprises four (4) Blocks as per the diagram above. Differing street setbacks are proposed to each building Block as follows:

Albany Highway Setback

Storey	Required setback	Proposed setback			Compliance
		Block 1	Block 2	Block 3	
GF	Nil	Nil	Nil	2.6 metres	Compliant
2 nd Storey	Nil	Nil	Nil	2.6 metres	Compliant
3 rd Storey	3.1 metres	Nil	Nil	2.6 metres	Non-Compliant
4 th Storey	No setback requirement. Refer to Building Height above.	10.8 metres	Nil	2.6 metres	Non-Compliant
5 th Storey		10.8 metres	From approved 2.6 metres, reduced to Nil	2.6 metres	Non-Compliant
6 th Storey		10.8 metres	13.0 metres	2.6 metres	Non-Compliant
7 th Storey		N/A	N/A	2.6 metres	Non-compliant

Miller Street Setback

Storey	Required Setback	Proposed Setback		Compliance
		Block 3	Block 4	
GF	Nil	Nil	Nil	Compliant
2 nd Storey	Nil	Nil	3.4 metres	Compliant
3 rd Storey	3.1 metres	Nil	3.4 metres	Compliant
4 th Storey	No setback requirement. Refer to Building Height above.	Nil	3.4 metres	Non-Compliant
5 th Storey		Nil	From approved 5.0 metres reduced to 3.4 metres	Non-compliant
6 th Storey		Nil	From approved 9.0 metres reduced to 5.0 metres	Non-Compliant
7 th Storey		Nil	9.0 metres	Non-Compliant

In terms of the main building, the building is either at a nil setback or is setback further from the street edges. The setting back of the uppermost floors have been reduced from the original approved by the JDAP, exacerbating the impact and imposing scale of the additional height now sought by the applicant.

Along Albany Highway the setback to the street at the fifth storey in Block 2 has been reduced from an approved setback of 2.6 metres to a nil setback. The additional partial seventh storey in Block 3 is proposed to be setback at 2.6 metres from the street.

Along Miller Street the approved setback to the street at the fifth storey in Block 4 has been reduced from an approved 5.0 metre setback to 3.4 metres. The sixth storey in Block 4 has been reduced from an approved setback of 9.0 metres to 5.0 metres. The proposed new seventh storey in Block 4 is proposed at 9.0 metres setback to the street and in Block 3 the new proposed seventh storey is proposed at a nil setback to the street.

It is considered that these further reductions to street setbacks are outside of the negotiated outcomes as mentioned above, and serve to increase the perceived bulk and scale of the development to the detriment of the streetscape. Therefore, these primary street setback variations are not supported.

Car Parking

In relation to car parking, due to the residential oversupply of car bays approved with the original application, no additional car parking is required.

However in relation to the provision of bicycle spaces the proposal requires 1 more additional bicycle space to the previous shortfall of 23 spaces, making a new shortfall of 24 bicycle spaces.

Conclusion:

It is acknowledged that the original development application was supported by Council Officers and approved by the JDAP with significant variations to the requirements of the Town Planning Scheme, particularly in respect to the matters of plot ratio, building height and street setbacks to Albany Highway and Miller Street, with the extent of variations being sought being greater than any other development approved along Albany Highway.

Further, those aspects of the development that resulted in positive amenity benefits to the streetscape and for future residents, that facilitated Council's support of the already approved very significant scale of development, have now been reduced or removed entirely, such that the proposal is of a larger, more imposing scale, with a reduced level of amenity for the future residents of the development, the streetscape and the community generally. Accordingly, approval of the subject proposal would result in reduced resident and community outcomes and would represent poor decision making.

The subject amendment to modify the original approval is seeking further variations against the negotiated outcome with the Town and if the subject application is approved, it will set an undesirable precedent for future similar applications along Albany Highway, contrary to the orderly and proper planning on the locality.

In view of the above, the application is not supported and is recommended for refusal.

ATTACHMENT 3

JDAP REFUSAL DATED 13
FEBRUARY 2017



LG Ref: 5.2016.151.1
DoP Ref: DAP/16/01046
Enquiries: Development Assessment Panels
Telephone: (08) 6551 9919

Mr Tom Letherbarrow
Hillam Architects
1/15 Roydhouse Street,
Subiaco WA 6008

Dear Mr Letherbarrow

**Metro Central JDAP – Town of Victoria Park – DAP Application 5.2016.151.1
Lots 1, 2, 25, 26, 66, 327 and 451 (646-660) Albany Highway and Lots 329 and
330 (1-3) Miller Street, Victoria Park
Amendment to Development Approval – Additional Partial Seventh Storey with
4 Multiple Dwellings and 1 Additional Multiple Dwelling on the Fifth Storey, to
approved Mixed Use Development Comprising Shops, Restaurants, Offices,
Tavern, 101 Multiple Dwellings & One (1) Grouped Dwelling**

Thank you for your application and plans submitted to the Town of Victoria Park
on 16 December 2016 for the above development at the abovementioned site.

This application was considered by the Metro Central Joint Development Assessment
Panel at its meeting held on 13 February 2017, where in accordance with the
provisions of the Town of Victoria Park Town Planning Scheme No. 1, it was resolved
to refuse the application as per the attached notice of determination.

Please be advised that there is a right of review by the State Administrative Tribunal
in accordance with Part 14 of the *Planning and Development Act 2005*. Such an
application must be made within 28 days of the determination, in accordance with the
State Administrative Tribunal Act 2004.

Should you have any queries with respect to the conditions of approval, please
contact Mr Julio Gonzalez on behalf of the Town of Victoria Park on (08) 9329 4217.

Yours sincerely,

Zoe Hendry

DAP Secretariat

13/02/2017

Encl. DAP Determination Notice

Cc: Mr Julio Gonzalez
Town of Victoria Park





Planning and Development Act 2005

Town of Victoria Park Town Planning Scheme No. 1

Metro Central Joint Development Assessment Panel

Determination on Development Assessment Panel Application for Planning Approval

Location: Lots 1, 2, 25, 26, 66, 327 and 451 (646-660) Albany Highway and Lots 329 and 330 (1-3) Miller Street, Victoria Park

Description of proposed Development: Amendment to Development Approval – Additional Partial Seventh Storey with 4 Multiple Dwellings and 1 Additional Multiple Dwelling on the Fifth Storey, to approved Mixed Use Development Comprising Shops, Restaurants, Offices, Tavern, 101 Multiple Dwellings & One (1) Grouped Dwelling

In accordance with regulation 8 of the *Planning and Development (Development Assessment Panels) Regulations 2011*, the above application for planning approval was **refused** on 13 February 2017, subject to the following:

1. **Accept** that the DAP Application reference JDAP/16/01046 as detailed on the DAP Form 2 dated 14 December 2016 is appropriate for consideration in accordance with regulation 17 of the *Planning and Development (Development Assessment Panels) Regulations 2011*;
1. **Refuse** the JDAP Application reference JDAP/16/01046 and accompanying plans dated received 14 December 2016 in accordance with the provisions of Clause 38 of the Town of Victoria Park Planning Scheme No. 1 and Clause 30 of the Metropolitan Region Scheme, for the proposed Amendment to Development Approval – Additional Partial Seventh Storey with 4 Multiple Dwellings and 1 Additional Multiple Dwelling on the Fifth Storey, to the approved Mixed Use Development Comprising Shops, Restaurants, Offices, Tavern, 101 Multiple Dwellings & One (1) Grouped Dwelling at 646 - 660 Albany Highway and 1-3 Miller Street, Victoria Park, for the following reasons:
 1. The proposal is non-compliant with Town Planning Scheme No. 1 Clause 38(3) 'Determination of Non-Complying Applications' as it is:
 - (i) inconsistent with:
 - the orderly and proper planning of the locality;
 - the conservation of the amenities of the locality;
 - the likely future development of the locality; and
 - (ii) would have an undue adverse affect on:
 - the occupiers or users of the development;
 - the property in, or the inhabitants of, the locality; and
 - the likely future development of the locality.
 2. The development does not satisfy the relevant matters to be considered under Deemed Clause 67 of the Local Planning Schemes Regulations as follows:



- a) The aims and provisions of this Scheme and any other local planning schemes operating within the Scheme area;
- b) The requirements of orderly and proper planning including any proposed local planning scheme or amendment to this Scheme that has been advertised under the *Planning and Development (Local Planning Schemes) Regulations 2015* or any other proposed planning instrument that the local government is seriously considering adopting or approving;
- g) Any local planning policy for the Scheme area;
- m) The compatibility of the development with its setting including the relationship of the development to development on adjoining land or on other land in the locality including, but not limited to, the likely effect of the height, bulk, scale, orientation and appearance of the development;
- n) The amenity of the locality including the following –
 - i. Environmental impacts of the development;
 - ii. The character of the locality;
 - iii. Social impacts of the development.
- (x) The impact of the development on the community as a whole notwithstanding the impact of the development on particular individuals;
- (zb) Any other planning consideration the local government considers appropriate.

DEVELOPMENT ASSESSMENT PANELS REFUSED 13 FEBRUARY 2017

NOTE: Lots 24 & 25 only, have the benefit of a right of carriageway easement over lot 66 (R.O.W.). No other adjacent lots have the benefit of this easement.
Lots 24 & 25 have a Restrictive Covenant registered. We recommend that a copy of the covenant is obtained from Landgate then seek legal advice whether the covenant has items that need to be addressed.

Lot	Survey Plan	C/T
1 & 2	Plan 1938	Vol: 1685 Fol: 987
24	Diagram 1259 OF VIC	Vol: 1685 Fol: 273
25 & 66	Diagram 1259 OF VIC	Vol: 1685 Fol: 272
26	Diagram 56930	Vol: 1545 Fol: 898
327	Plan 2916	Vol: 1205 Fol: 955
329	Plan 2916	Vol: 1685 Fol: 988
330	Plan 2916	Vol: 1430 Fol: 968
451	Deposited Plan 302453	Vol: 1685 Fol: 987

LEGEND/KEY	
	Gutter Line
	Overhead Powerline
	Abandoned Gas Main
	Gas Main
	Water Main
	Sewer Main
	Bore
	Gully
	Water Meter
	Sewer Connection
	Sewer Manhole
	Light Pole
	Power Dome
	Power Pole
	Unidentified Pit
	Telstra Pit
	Sign
	Tree

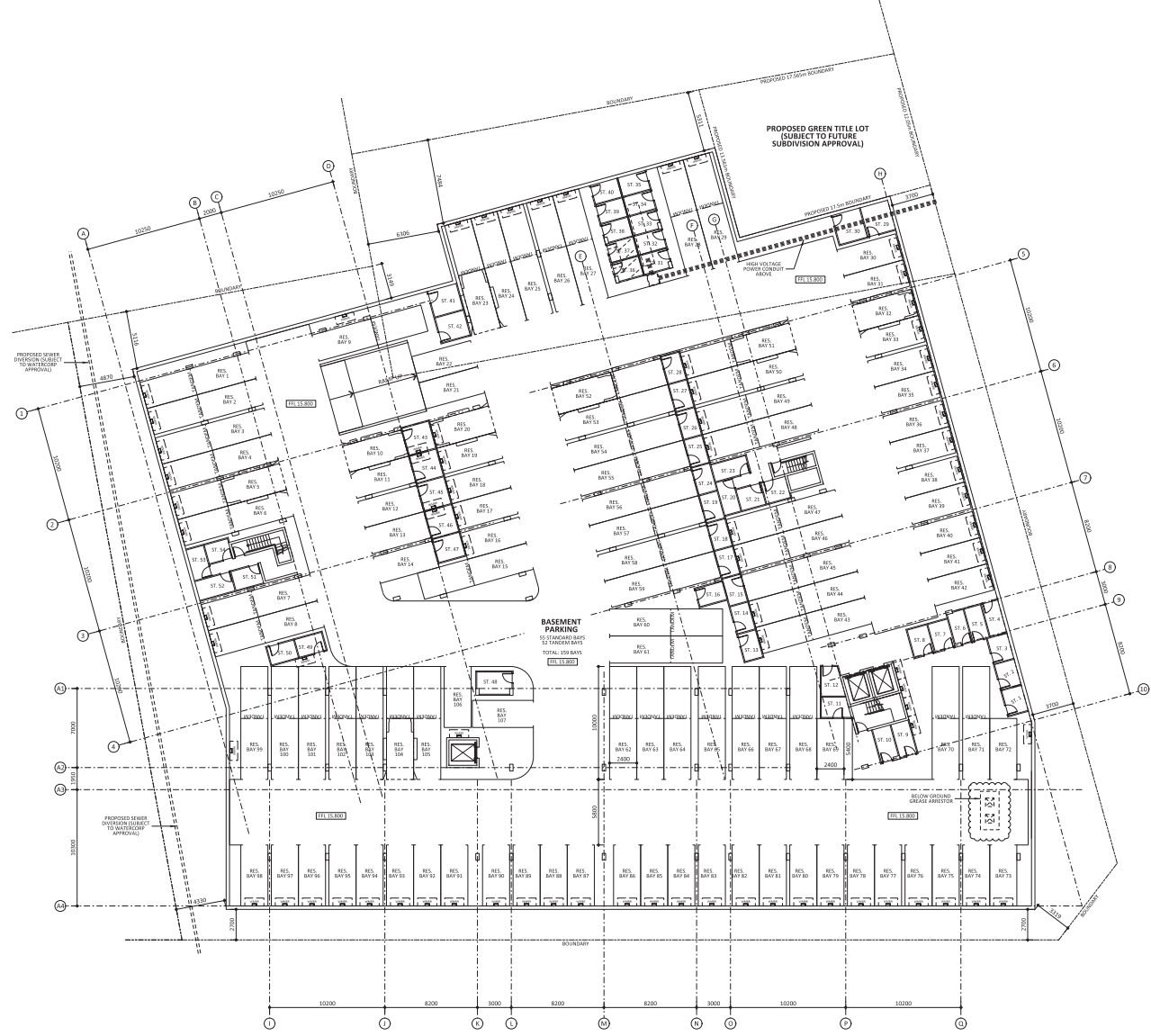


TBM deck spike in bitumen equals RL 18.09 AHD Based on SSM KEWDALE 68 RL 19.18 AHD (Landgate Geodetic Section) Contractor to check datum before adopting levels	Note: Features are related to fence-lines only. No connection made to boundaries. REPEG RECOMMENDED	Date: 14/12/2015 15/12/2015	FEATURE AND CONTOUR SURVEY ON CORNER OF ALBANY HIGHWAY AND MILLER STREET, VICTORIA PARK our ref. 6072-15	Rev	Date	Description	Surv	Drawn	Feature Survey by THE LAND DIVISION PLANNING SURVEYING DESIGN PO Box 2444, Malaga, WA 6090 Tel 089 209 3232 Fax 089 249 2551
		Scale: 1:300@A2		0	22/12/15	Feature Survey	SHT	SHT	
		Client: Fowljeff Holding Pty Ltd							
	Position and depth of services to be confirmed on site by contractor								

NOTES: 1) CONSULT LEGAL ADVICE ON EASEMENTS, ENCUMBRANCES AND CAVEATS THAT MAY APPEAR ON THE CERTIFICATE OF TITLE. 2) LEVELS ON ADJOINING PROPERTIES ARE APPROXIMATE DUE TO ACCESS RESTRICTIONS. 3) SERVICES PLOTTED AS VISUALLY SEEN ON SITE AND ARE APPROXIMATE. 4) SEWER POSITION AND LEVELS FROM WATER CORPORATION PLANS. 5) CONSULT DIAL BEFORE YOU DIG TO CHECK LOCATION OF UNDERGROUND SERVICES. 6) BEWARE OF OVERHEAD POWER LINE HAZARDS. 7) CONSULT TLD ON ANY ANOMOLY BEFORE DESIGN AND CONSTRUCTION.

DEVELOPMENT ASSESSMENT PANELS REFUSED 13 FEBRUARY 2017

TOWN OF VICTORIA PARK
Received: 14/11/2018



BASEMENT FLOOR PLAN
SCALE 1:200 @ A1

TOWN OF VICTORIA PARK
Received: 14/12/2018

PROPOSED GREEN TITLE LOT
(SUBJECT TO FUTURE
SUBDIVISION APPROVAL)

TBM
deck spike
in bitumen
RL 18.09

LOT 402
2 storey
brick and steel
residence.
FL inaccessible

LOT 405
2 storey
brick and tile
building.
Approx FL: 19.17

LOT 451
167m²
right of way

ALBANY HIGHWAY

HILLAM
ARCHITECTS

COPYRIGHT
THIS DRUG
PROPERTY
RETAINED.
OF U.S.A.

SCALE
1:200 @ A1

DATE ISSUED	DWG. NAME
13.12.16	GROUND FLOOR PLAN

DWG No.	REV
A2-02	F

TOWN OF VICTORIA PARK
Received: 14/12/2018



TOWN OF VICTORIA PARK
Received: 14/12/2018



DEVELOPMENT ASSESSMENT PANELS REFUSED 13 FEBRUARY 2017

TOWN OF VICTORIA PARK
Received: 14/11/2018



LEVEL 3 FLOOR PLAN
SCALE 1:200 @ A1

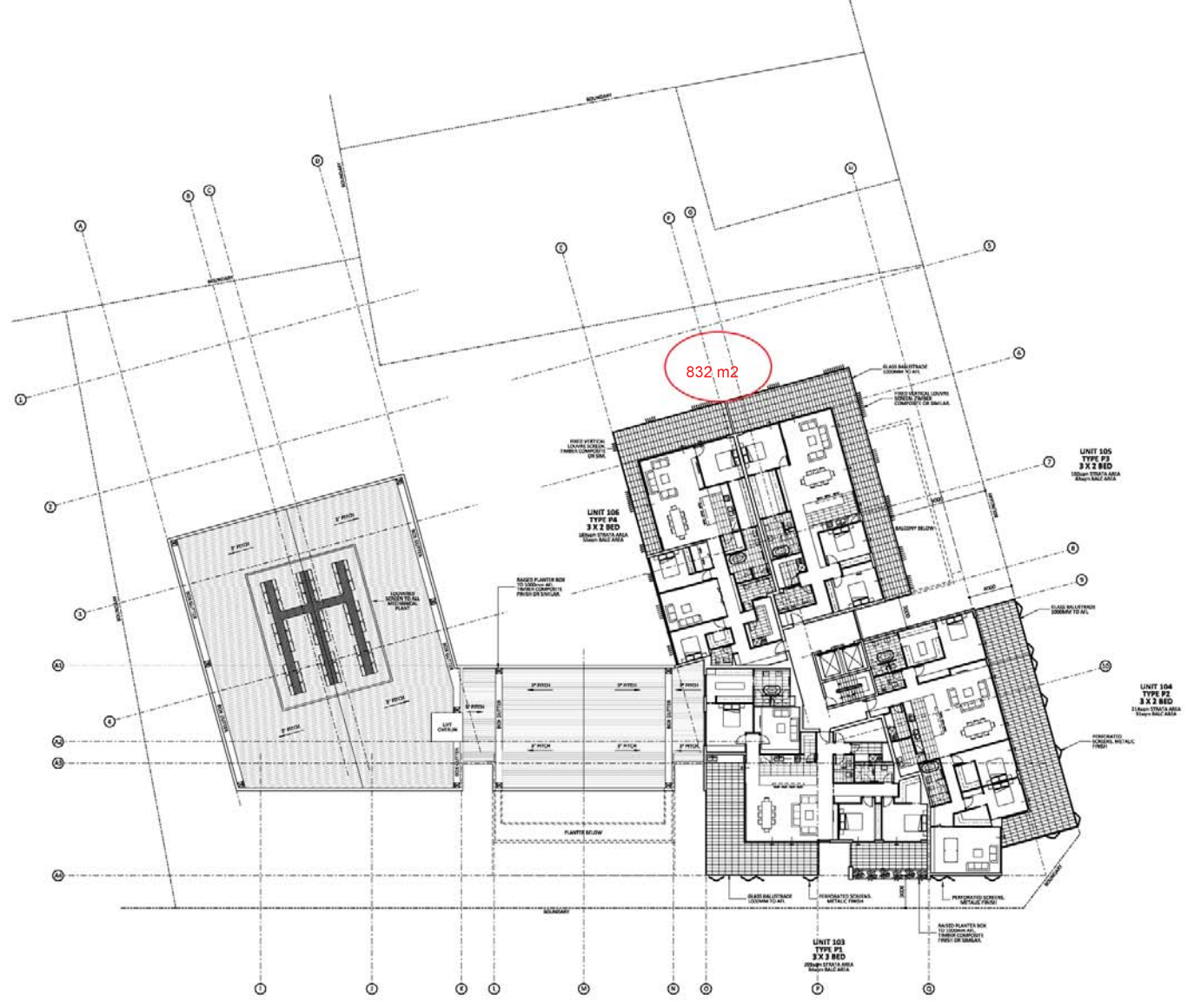
TOWN OF VICTORIA PARK
Received: 14/12/2016



TOWN OF VICTORIA PARK
Received: 14/12/2016

DEVELOPMENT ASSESSMENT PANELS REFUSED 13 FEBRUARY 2017

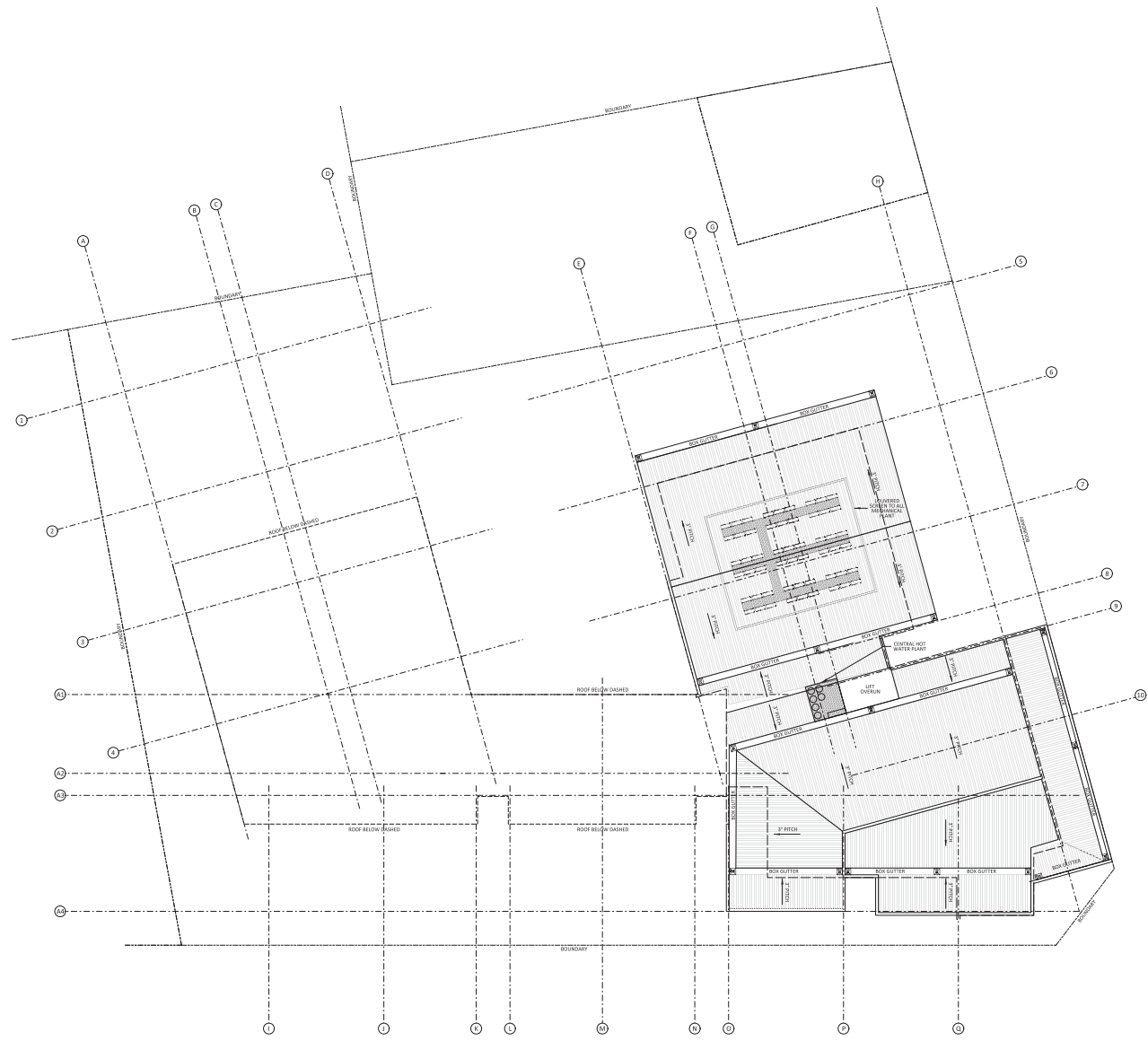
TOWN OF VICTORIA PLAN
Received: 14/11/2016



LEVEL 6 FLOOR PLAN
SCALE 1:200 @ A1

DEVELOPMENT ASSESSMENT PANELS REFUSED 13 FEBRUARY 2017

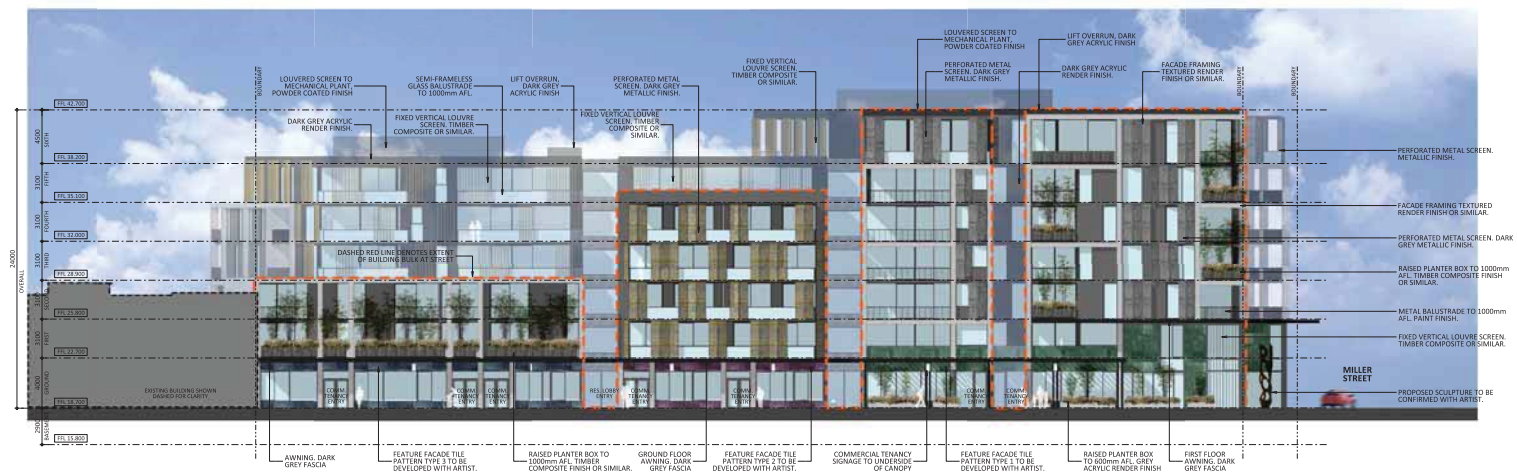
TOWN OF VICTORIA PARK
Received: 14/11/2018



ROOF PLAN
SCALE 1:200 @ A1

DEVELOPMENT ASSESSMENT PANELS REFUSED 13 FEBRUARY 2017

TOWN OF VICTORIA PARK
Received: 14/11/2018



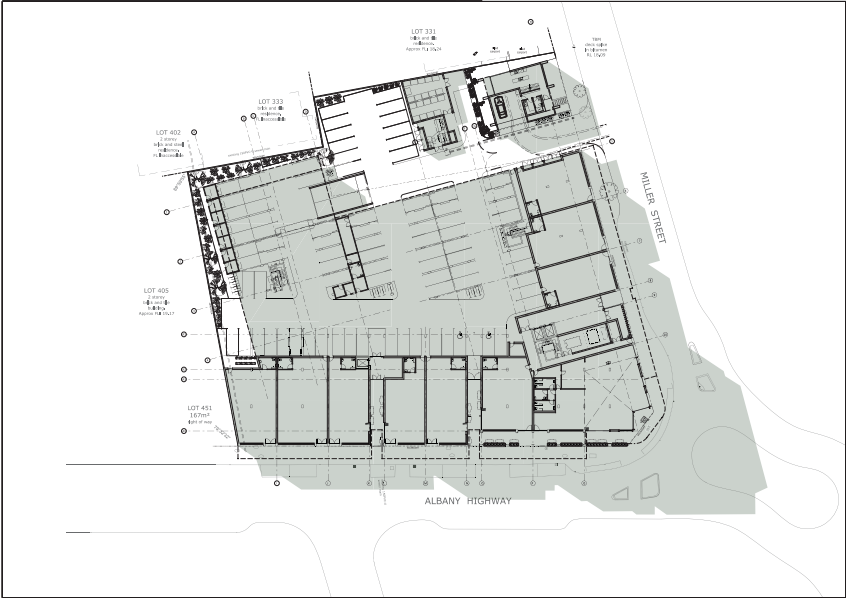
ALBANY HWY (SOUTH WEST) ELEVATION
SCALE 1:200@A1



MILLER STREET (SOUTH EAST) ELEVATION
SCALE 1:200@A1

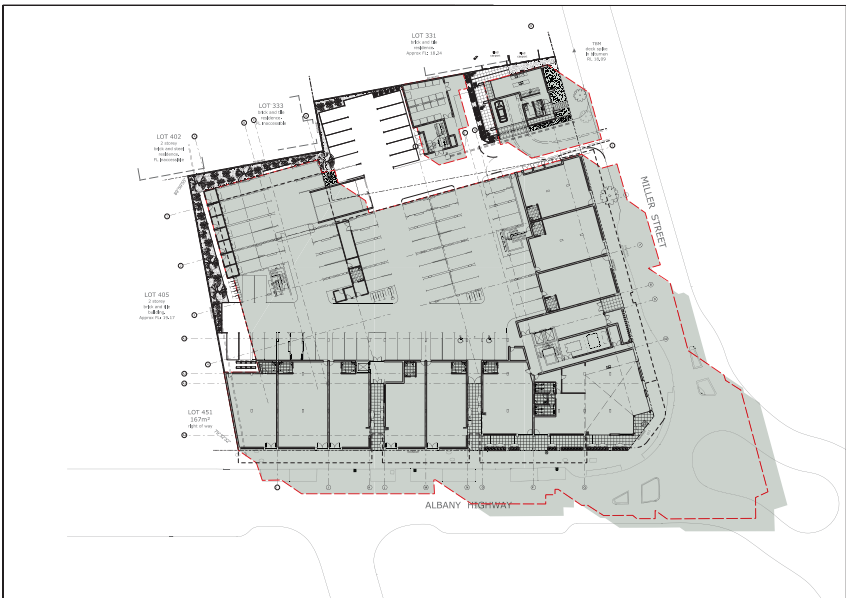
DEVELOPMENT ASSESSMENT PANELS REFUSED 13 FEBRUARY 2017

TOWN OF VICTORIA PARK
Received: 14/11/2018



APPROVED SCHEME

SCALE 1:150 @ A1
EXTENT OF OVERSHADOWING AT 12:00PM
ON THE 21st OF JUNE SHOWN HATCHED



PROPOSED SCHEME

SCALE 1:150 @ A1
EXTENT OF OVERSHADOWING AT
12:00PM ON THE 21st OF JUNE SHOWN
HATCHED
EXTENT OF APPROVED SCHEME SHOWN
IN RED
~4.5% INCREASE IN OVERSHADOWING

DEVELOPMENT ASSESSMENT PANELS REFUSED 13 FEBRUARY 2017



DEVELOPMENT ASSESSMENT PANELS REFUSED 13 FEBRUARY 2017



DEVELOPMENT ASSESSMENT PANELS REFUSED 13 FEBRUARY 2017



ATTACHMENT 4

RAR DATED 18 JULY 2017
PRESENTED TO JDAP ON
27 JULY 2017



State Administrative Tribunal Reconsideration

Responsible Authority Report

(Regulation 12)

Property Location:	646 - 660 Albany Highway and 1-3 Miller Street, Victoria Park
Development Description:	Amendment to Development Approval – Additional Partial Seventh Storey with 4 Multiple Dwellings, to approved Mixed Use Development Comprising Shops, Restaurants, Offices, Tavern, 101 Multiple Dwellings & One (1) Grouped Dwelling
DAP Name:	Metro Central Joint Development Assessment Panel
Applicant:	Hillam Architects
Owner:	FowlJeff Holdings Pty Ltd and Fowler Group Holdings Pty Ltd
Value of Development:	\$37.0 million
LG Reference:	DA 5.2016.151.1
Responsible Authority:	Town of Victoria Park
Authorising Officer:	Robert Cruickshank Executive Manager Built Life
Department of Planning File No:	JDAP/16/01046
Report Date:	18 July 2017
Application Receipt Date:	18 May 2017
Application Process Days:	62 days
Attachment(s):	<ol style="list-style-type: none">1. Amended plans and correspondence from applicant received 18 May 2017;2. Additional information from applicant received 14 June 2017;3. Responsible Authority Report (RAR) dated 3 February 2017 presented to JDAP meeting on 13 February 2017;4. JDAP development refusal (including plans) dated 13 February 2017;

Officer Recommendation:

That the Metro Central Joint Development Assessment Panel, pursuant to section 31 of the *State Administrative Tribunal Act 2004* in respect of SAT application DR 72 of 2017, resolves to:

1. **Reconsider** its decision dated 13 February 2017 and **refuse** the JDAP Application reference JDAP/16/01046 and accompanying amended plans dated received 24 May 2017 in accordance with Deemed Clause 68 of the *Planning and Development (Local Planning Schemes) Regulations 2015* and Clause 30 of the Metropolitan Region Scheme, for the proposed Amendment to Development Approval – Additional Partial Seventh Storey with 4 Multiple Dwellings, to the approved Mixed Use Development Comprising Shops, Restaurants, Offices, Tavern, 101 Multiple Dwellings & One (1) Grouped

Dwelling at 646 - 660 Albany Highway and 1-3 Miller Street, Victoria Park, for the following reasons:

Reasons

1. The proposal is non-compliant with Town Planning Scheme No. 1 Clause 29(3) 'Determination of Non-Complying Applications' as it is:
 - (i) inconsistent with:
 - the orderly and proper planning of the locality;
 - the conservation of the amenities of the locality;
 - the likely future development of the locality; and
 - (ii) would have an undue adverse affect on:
 - the occupiers or users of the development;
 - the property in, or the inhabitants of, the locality; and
 - the likely future development of the locality.
2. The development does not satisfy the relevant matters to be considered under Deemed Clause 67 of the *Planning and Development (Local Planning Schemes) Regulations 2015* as follows:
 - a) The aims and provisions of this Scheme and any other local planning schemes operating within the Scheme area;
 - b) The requirements of orderly and proper planning including any proposed local planning scheme or amendment to this Scheme that has been advertised under the *Planning and Development (Local Planning Schemes) Regulations 2015* or any other proposed planning instrument that the local government is seriously considering adopting or approving;
 - g) Any local planning policy for the Scheme area;
 - m) The compatibility of the development with its setting including the relationship of the development to development on adjoining land or on other land in the locality including, but not limited to, the likely effect of the height, bulk, scale, orientation and appearance of the development;
 - n) The amenity of the locality including the following –
 - i. Environmental impacts of the development;
 - ii. The character of the locality;
 - iii. Social impacts of the development.
 - (y) any submissions received on the application;
 - (zb) Any other planning consideration the local government considers appropriate.
3. The approval of this development will set a precedent for future similar applications along Albany Highway contrary to the orderly and proper planning of the locality.

Details

Zoning	MRS:	Urban
	TPS:	District Centre and Residential R40
Use Class:		Shop - 'P' use; Restaurant - 'P' use; Office - 'P' use; Tavern - 'AA' use; Multiple Dwelling - 'AA' use; Grouped Dwelling ' AA' use
Strategy Policy:		1. Local Planning Policy 5 – Mixed Residential/Commercial Development; 2. Local Planning Policy 17 – Street Frontage Design Guidelines for District Centres and Commercial Area along Albany Highway; 3. Local Planning Policy 20 - Design Guidelines for Developments with Buildings above 3 Storeys; 4. Local Planning Policy 23 – Parking Policy; 5. Local Planning Policy 30 – Car Parking Standards for Developments along Albany Highway; 6. Local Planning Policy 33 - Guide to Concessions on Planning Requirements for Mixed-Use, Multiple Dwelling and Non-Residential Developments;
Development Scheme:		Town of Victoria Park Town Planning Scheme No. 1
Lot Size:		5,522m ²
Existing Land Use:		Motor vehicle showroom, vacant Blocks, shops, open air car yard, right-of-way.

The amended plans include the following amendments from the plans approved by the JDAP on 21 September 2016:

- The inclusion of a partial seventh storey adjacent to the Albany Highway/Miller Street corner;
- An additional four (4) Multiple Dwellings, contained in the seventh storey, with the total number of units increasing from 101 to 105;
- A plot ratio increase from 1.875 to 2.0;
- A height increase from 20.1 metres to 23.8 metres;
- Elevational changes including a seventh storey;
- Additional community amenity space on the fourth storey.

The amended plans differ from the plans refused by the JDAP on 13 February 2017 as follows:

- Reduction of the Albany Highway street setback from 10.8 metres to 3.2 metres for a portion of Block 1 on the fourth storey by increasing the size of the balcony to the south west unit and inclusion of an additional community amenity space;
- Two (2) units on the fifth storey facing Albany Highway, block 2, being converted back to a single two (2) bedroom unit;
- A two (2) bedroom unit on the fifth floor facing Miller Street, block 4 converted

- back to one single bedroom unit;
- Balcony facing Miller Street on the sixth storey, block 4, has been deleted;
- The setback of the seventh storey facing Albany Highway, block 3, have been increased from 2.5 metres to 4.0 metres for the balconies, and from 3.0 metres to 6.0 metres to the main walls.
- The setback of the seventh storey facing Miller Street, block 4, have been increased from a nil setback to 2.0 metres for the balconies, and from 4.0 metres to 6.0 metres to the main walls.

The estimated value of the development is \$37 million.

Background:

Discussions between the applicant and Council's Officers commenced in early 2016 in relation to preliminary concepts plans for the site. Subsequently meetings were held with the Town's Design Review Committee on 17 February 2016, 4 March 2016, 16 March 2016 and 8 April 2016 to discuss the preliminary plans. The primary focus of these meetings was to discuss the proposed building massing and street elevations so as ensure that the ground floor picked up on the characteristics of development along Albany Highway, and using differing design treatments to break up the building so as to not read as one large building. Other matters discussed during these meetings included : the non-compliant building height which was proposed to be 7 storeys in height; the non-compliant plot ratio with the density being equivalent to a density of R285; the need for a transition in height from the neighbouring properties; the need for an urban design analysis; the building being treated to read as a collection of buildings rather than one monolithic building; the need to maintain a pedestrian scale; concerns of the U-shape form creating long corridors, a lack of natural lighting and ventilation for internal spaces, and being akin to a hotel form rather than a residential form; the building height being reduced to not exceed a height of 6 storeys; the building height stepping up to a crescendo at the corner; concerns in relation to the oversupply of residential car bays, particularly in an urban context; and the interface of the internal units with the internal courtyard.

A formal development application was submitted to the Town on 18 May 2016, proposing a maximum 6 storey high building, comprising Shops, Restaurants, Offices, a Tavern, 107 Multiple Dwellings and one (1) Grouped Dwelling.

The proposal was the subject of Community Consultation for 14 days as per Council Policy GEN3 'Community Consultation', from 20 July 2016 to 4 August 2016. During the consultation period, 46 submissions were received, with 38 objecting to the proposal and 8 supporting the proposal.

During the course of processing the application, a series of further amended plans were received addressing matters either raised by Council Officers, the Design Review Committee or the public through the community consultation process, such as: some additional setbacks to the buildings facing Albany Highway, the deletion of 6 Multiple Dwellings (reduction to 101 Multiple Dwellings) and an increased setback and reduced height for the building where it adjoins residential properties at Nos. 15 and 21 Merton Street.

Approval was granted by the JDAP on 21 September 2016 for a Mixed Use Development comprising Shops, Restaurants, Offices, Tavern, 101 Multiple Dwellings & One (1) Grouped Dwelling, subject to several conditions.

The JDAP on 13 February 2017 resolved to refuse an application for proposed Amendment to Development Approval – Additional Partial Seventh Storey with 4 Multiple Dwellings, to the approved Mixed Use Development comprising Shops, Restaurants, Offices, Tavern, 101 Multiple Dwellings & One (1) Grouped Dwelling. The refusal was based on the additional building height and plot ratio being excessive and not consistent with the negotiated outcomes previously reached.

On 3 March 2017 the applicant submitted an application to the State Administrative Tribunal (SAT), for review of the JDAP's decision of 13 February 2017.

On 4 May 2017, a Mediation conference was held at the SAT offices between the parties to discuss the reasons for refusal. The SAT Member made the following Orders:

- 1. On or before 25 May 2017 the applicant is to provide to the Town of Victoria Park amended plans and supporting information.*
- 2. Pursuant to s 31(1) of the State Administrative Tribunal Act 2004 (WA) the respondent is invited to reconsider its decision on or before 20 July 2017.*
- 3. On or before 24 July 2017 the respondent is to advise the applicant and the Tribunal of the outcome of the reconsideration.*
- 4. The matter is listed for a further directions hearing at 2 pm on 28 July 2017 at 565 Hay Street, Perth, Western Australia.*

On 18 May 2017, Council received correspondence and a copy of revised plans from the applicant (refer to Attachment 3).

On 27 June 2017 an extension was requested by the applicant and the SAT Member made the following Orders:

- 1. Order 2 is amended in that the respondent is now invited to reconsider its decision on or before 4 August 2017.*
- 2. Order 3 is amended in that the respondent must now advise the applicant and the Tribunal of the outcome of reconsideration on or before 8 August 2017.*
- 3. Order 4 is amended in that the matter is now listed for a directions hearing at 2 pm on 11 August 2017.*

Legislation & policy:

Legislation

- *Planning and Development Act 2005, S162;*
- *Town Planning Scheme No. 1 (TPS 1) Clause 29;*
- *TPS 1 Precinct Plan P11 'Albany Highway';*
- *Metropolitan Region Scheme Text Clause 30; and*
- *Planning and Development (Local Planning Schemes) Regulations 2015 – Deemed Clauses 67 and 72.*

State Government Policies

- *Policy 3.1 - Residential Design Codes (R-Codes);*

- Policy 4.2 – Activity Centres for Perth and Peel; and
- Policy 5.4 - Road and Rail Transport and Freight Considerations in Land Use Planning.

Local Policies

- Local Planning Policy 5 – Mixed Residential/Commercial Development;
- Local Planning Policy 17 – Street Frontage Design Guidelines for District Centres and Commercial Areas Along Albany Highway;
- Local Planning Policy 20 - Design Guidelines for Development with Buildings Above 3 Storeys;
- Local Planning Policy 23 - Parking and Access Policy;
- Local Planning Policy 25 – Streetscape;
- Local Planning Policy 30 – Car Parking Standards for Developments Along Albany Highway; and
- Local Planning Policy 33 – Guide to Concessions on Planning Requirements for Mixed-Use, Multiple Dwelling and Non-Residential Developments.

Consultation:

Public Consultation

In accordance with Council Local Planning Policy 37 - 'Community Consultation on Planning Proposals' the amended plans were the subject of community consultation in relation to the 'additional height and plot ratio' for a period of 14 days, with letters being sent to owners and occupiers of surrounding properties. The consultation process started on 9 June 2017 and finished on 26 June 2017. During the consultation period, 13 submissions were received, 12 objecting to the proposal and 1 supporting the proposal.

The submissions have been summarised as follows:

CONSULTATION: SUBMISSIONS OBJECTING	
Comments received	Officer's comments
Nine (9) submissions objecting to the proposed height of the building.	Supported. It should be acknowledged that the building has already been approved to a height of six (6) storeys, which exceeds the height limit under the Scheme. This matter is addressed further in the Comments section below.
Three (3) objections to the increase in plot ratio	Noted. The application proposes a further increase in the plot ratio by 0.125 (687m ²). This is addressed further in the Comments section below.
Two (2) submissions expressing concerns in relation to the proposal not having enough car parking for the residential dwellings and therefore residents and visitors will park on the	Noted. The application proposes a total of 172 car bays for the residential dwellings, being in excess of the minimum requirement of 106 car bays.

nearby streets.	
Seven (7) objections refer to general issues such as increase in traffic congestion, overlooking, blocking views, blocking sun, noise, demolition of existing structures, removal of asbestos, etc.	Noted. However these issues are largely not related to the issues the subject of consultation (height of the building and plot ratio.)

CONSULTATION: SUBMISSIONS SUPPORTING	
Comments Received	Officer's Comments
One (1) submission supports the additional seventh storey.	Noted.

Planning assessment:

Compliance with Development Requirements

- TPS 1 Scheme Text and Precinct Plan P11;
- Residential Design Codes (R Codes);
- Local Planning Policy 20 - Design Guidelines for Development with Buildings Above 3 Storeys;
- Local Planning Policy 23 - Parking and Access Policy;
- Local Planning Policy 30 – Car Parking Standards for Developments Along Albany Highway; and
- Local Planning Policy 33 – Guide to Concessions on Planning Requirements for Mixed-Use, Multiple Dwelling and Non-Residential Developments

The following is a summary of compliance with key development requirements:

Item	Relevant Provision	Requirement	Proposed	Compliance
Plot Ratio	Precinct Plan P11	Maximum of 1.0 (equivalent to 5,522m ²)	Approved 1.875 (equivalent to 10,355m ²) has been increased to 2.0 (equivalent to 11,042m ²)	Non-Compliant (Refer to Comments below)
Building Height	Precinct Plan P11	Maximum 3 storeys (11.5 metres maximum)	Approved 6 storeys (20.1 metres) has been increased to 7 storeys (23.8 metres)	Non-Compliant (Refer to Comments below)

Primary Street Setback Albany Highway and Miller Street	Precinct Plan P11	Above 3 storeys, no setback requirement. Refer to Building Height above	4.0 metres to Albany Highway 2.0 metres to Miller Street	Non-Compliant (refer to Comments below)
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The setbacks of the second storey to the sixth storey are the same as the original development approved by the JADP on 21 September 2016.

Officer Comments

An application to review the JDAP decision of 13 February 2017, was lodged at the State Administrative Tribunal on 3 March 2017, with a subsequent Mediation session on 4 May 2017, where an Order by the SAT Member was issued for the respondent to consider its decision of 13 February 2017 and for the applicant to submit amended plans and information to support the proposal. As a result amended plans were received by the Town of Victoria Park on 18 May 2017.

The site comprises a land area of 5522m² and is located at the intersection of Albany Highway and Miller Street, the latter being a regional road. The site has a residential interface to the rear, and commercial neighbours along Albany Highway and on the opposite side of the street.

Strategic Planning Direction

The Town is operating under Town Planning Scheme No.1 (TPS1), gazetted in September 1998. The plot ratio and building height limits for the site are prescribed under the TPS 1 Precinct Plan P11 'Albany Highway'.

In response to previous State government planning strategies such as Network City and Directions 2031, the Town has previously established a strategic planning position of accommodating additional density in areas such as the Burswood Peninsula, the Causeway Precinct, along Albany Highway, and Curtin University/ Bentley Technology Park, so as to minimise the density pressures upon the Town's residential character areas.

In more recent times, the State Government has released the strategic planning document Perth and Peel @ 3.5 million, which anticipates a population within the region of 3.5 million by 2050. In this respect, the document outlines infill housing targets for each local government authority, with the Town required to plan for an additional 19,400 dwellings by this time.

Previous discussions with Officers of the Department of Planning included the Department's Officers suggesting a blanket six (6) storey height limit along the length of Albany Highway as the appropriate form in order for the Town to accommodate additional density along Albany Highway.

It is worth noting that the subject site is actually depicted in artist's impressions contained in the Draft Central Sub-Regional Planning Framework that forms part of the Perth and Peel @ 3.5 documents, as follows:



FIGURE11: ALBANY HIGHWAY/KENT STREET, VICTORIA PARK - EXISTING



FIGURE12: ALBANY HIGHWAY/KENT STREET, VICTORIA PARK - VISION FOR HIGHER DENSITY URBAN CONSOLIDATION

Note the subject site to the right containing a 6/7 storey building.

Council Officers acknowledge that additional height and scale along Albany Highway is appropriate and a comprehensive built form study has already been completed by Council Officers, in consultation with the Town's Design Review Committee Members, to determine appropriate built form changes for various portions of Albany Highway as part of a future project. The Albany Highway Strategic Review has been completed, Elected Members have been briefed and the recommendations of the Review have been considered by a focus group of community members as part of the Evolve community engagement process for the Strategic Community Plan. The recommendations are now being translated into provisions for the adoption of a Local Planning Policy or Scheme Amendment alongside a review of car parking requirements. Once this has been completed, it will be considered by Council and be subject of a formal community consultation process.

As the recommendations are not yet public, Council Officers are unable to provide the JDAP with specific details of the recommendations of the Albany Highway Strategic Review, however the general intent is to move from prescriptive controls to controls determined by building envelopes, and this is likely to result in additional height for many properties along Albany Highway.

Council Officers can confirm that the scale of development proposed for the site is inconsistent with the scale of additional development recommended within the built form study. The recommended height limits have been determined based upon established and recognised urban design principles of maintaining a human scale, not overshadowing the footpath on the opposite side of the street and respecting the scale of adjacent residential development.

The Albany Highway Strategic Review methodology includes

"In this study, nine cross sections have been taken along Albany Highway. The nine sections reflect the diverse characteristics along the highway including:

- Lot size;*
- Access to a rear ROW;*
- Adjacency to existing low-density residential areas;*
- Current land use, specifically car yards;*
- Existence of an activity node such as a major shopping centre;*
- Characteristics of existing built form; and*
- Topography.*

At each cross section a building envelope has been established to determine a volume over an area of land in which a building or buildings can be located. The building envelopes have been established using recession planes which ensure the following principles apply equally to all cross sections:

- Buildings fronting the eastern side of Albany Highway do not overshadow footpaths on the western side at any time of the year;*
- The current 'village scale' along Albany Highway is maintained by limiting height along the highway to 3 stories along the highway's boundary;*
- Building heights can be maximised in mid-Block locations in order to preserve the amenity of neighbouring residential areas; and*
- The spread of development over the site can be maximised including building up to ROWs.'*

It is considered the Town has already been more than flexible in supporting a doubling of the current height limits to six (6) storeys with building elements of three

(3) and four (4) storeys appropriately transitioning back into the streetscape, acknowledging that there is an opportunity to create a crescendo at this important corner at the intersection of Kent/Miller/Roberts Roads (the Important Regional Road from Orrong Road to Curtin University) and the Town's mainstreet of Albany Highway, and that it could act as a way finding cornerstone to the future Town Centre area.

This additional height has also generated a significant increase in plot ratio. However, the current amendment further increases this to double the permitted under the Scheme, to a greater level than has ever previously been contemplated during the design review process.

Council Officers are disappointed that despite a constructive, collaborative process resulting in a six (6) storey building with excellent design outcomes, the applicant now seeks approval to further increase the building height and size.

The seven storey element of Block 3 is significantly more than that contemplated and is considered to be unreasonable. The scale of the subject proposal is more than any other development on Albany Highway excluding the building at 29 Shepperton Road (at the commencement of Albany Highway) which is seven storeys and considered acceptable only because of its context, located adjacent to the Causeway bus interchange and the Great Eastern Highway/Canning Highway flyover bridge.

Plot Ratio

Under Council's Town Planning Scheme No. 1, Precinct Plan P11 'Albany Highway', the maximum plot ratio permitted is 1.0, being a maximum of 5,522m². The development was approved with a total plot ratio of 10,355m² being equivalent to a plot ratio of 1.875 and the subject amendment that includes a seventh storey is further increasing the plot ratio floor area to 2.0 being equivalent to 11,042m².

A concession of 87.5% (4,833m²) has already approved by the JDAP. This amendment seeks an additional concession of 12.5% (687m²), making a total concession of 100% (5,520m²), which is significantly beyond the parameters previously discussed with the applicant prior to and during the assessment process of the original development application.

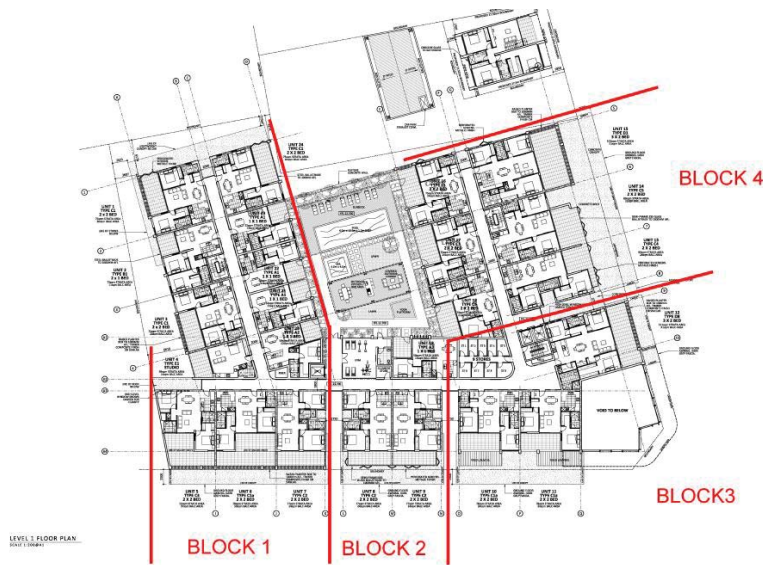
The additional 12.5% (687m²) of plot ratio is not supported for approval. If approved it will set a precedent for future similar applications along Albany Highway, contrary to the orderly and proper planning of the locality, and contrary to sound urban design principles.

Building Height

The current Town Planning Scheme No. 1, Precinct Plan P11 'Albany Highway', prescribes a maximum building height of 3 storeys or 11.5 metres, with the first two storeys being permitted on the street boundary with a nil setback and the third storey located within a 45° recession plane or 3.1 metres setback, along both Albany Highway and Miller Street.

The building in general was approved by the JDAP with a maximum height of 6 storeys or 20.1 metres in height divided into 4 Blocks (refer to diagrams below), with Blocks 1 and 2 facing Albany Highway, Block 3 at the prominent corner facing both Albany Highway and Miller Street, and Block 4 facing Miller Street. Each building

Block has differing setbacks and heights to the street. The subject amendment proposes an additional partial storey located over Blocks 3 and 4 of the approved building, with a total of seven (7) storeys and a maximum proposed height of 23.8 metres from the natural ground level.



During the preliminary discussions of the original development application with the Design Review Committee, the applicant and owner were advised that any support for an increase in building height (to six (6) storeys) would be on the basis of the building height being two (2) or three (3) storeys adjacent to neighbouring properties, with a crescendo in the height towards the street corner to a maximum six (6) storey height in Block 4.

In this respect it was acknowledged that through the building modulation and greater than 10m setback to the upper floors, that some of the upper floors will not be seen from a pedestrian level, and they will only be seen from a distance

Along the Albany Highway frontage, the approved building at a nil setback graduates in height from three (3) storeys in Block 1 to four (4) storeys in Block 2 at a nil setback and then six (6) storeys at the corner in Block 3 with a 3.0 metres setback. The subject amendment proposes an increase in building height to seven (7) storeys at the corner in Block 3 with a combined setback of 3.0 and 6.0 metres.

As outlined above, the Department's Draft Central Sub-Regional Planning Framework document depicts a six (6) – seven (7) storey high building on the subject site, albeit this is illustrative only and not necessarily supported by Council in the form indicated.

It is considered that the original development application approved by the JDAP on 21 September 2016 was the result of a negotiated outcome with the Town, which represents the absolute maximum concessions that the Town is prepared to accept over and above the existing Town Planning Scheme parameters, given the design

attributes of the approved development. This was consistently expressed by Council Officers and the Design Review Committee since preliminary discussions commenced in February 2016, to the extent that the architect and owner were advised that an application proposing seven (7) storeys will not be supported for approval.

Based on the above the proposed 'additional partial seventh storey' is not supported, as it will set an undesirable precedent for future similar applications within the locality, and is contrary to the orderly and proper planning of the locality.

Primary Street Setback

The building has been divided onto four main Blocks, giving the appearance of four (4) buildings and one (1) grouped dwelling.

The Precinct Plan P11 Sheet B (i) - Albany Highway requires the following development standards in relation to 'Set Backs':

"Buildings shall have a nil set back to Albany Highway and nil side set backs except where a pedestrian accessway to the rear of the site is to be provided."

In addition, the Precinct Plan 11 Sheet B (i) outlines that to Albany Highway and adjacent streets, a maximum height at the street boundary of two (2) storeys applies with a 45° recession plane for one (1) additional storey.

The building comprises four (4) Blocks as per the diagram above. The setbacks to Albany Highway and Miller Street, from the ground floor level to the sixth storey level are the same setbacks approved by the JDAP on 21 September 2016, with the exception of a reduction in the setback of a portion of the fourth storey to Block 1, from 10.8 metres to 3.2 metres.

Additionally, in comparison to the refused plans, the setbacks of the seventh floor from the street boundaries has increased as follows :

- The setback of the seventh storey facing Albany Highway, block 3, have been increased from 2.5 metres to 4.0 metres for the balconies, and from 3.0 metres to 6.0 metres to the main walls.
- The setback of the seventh storey facing Miller Street, block 4, have been increased from a nil setback to 2.0 metres for the balconies, and from 4.0 metres to 6.0 metres to the main walls.

In relation to the reduced setback from 10.8 metres to 3.2 metres along the 4th storey, the applicant in their letter dated 17 May 2017, states: *"To facilitate the above additional residential penthouse tenancies, we are proposing an additional outdoor public amenities area, to be located at level 3 (FFL 28.00AHD). This will incorporate several additional seating/community areas for residences, a BBQ facility and a raised planting perimeter with which will help to soften the building façade from the Albany Hwy streetscape."*

In relation to the proposed setbacks to the seventh storey, the applicant has stated in their letter dated 14 June 2017, *"The applicant has carefully amended the previously refused penthouse design with significantly increased street setbacks. This deeply recessed penthouse level has been deliberately setback to reduce the bulk and scale*

of the addition when viewed from the street. The previously issued street views demonstrate how the penthouses cannot be seen at pedestrian level until one is a considerable distance from the development site.”

While Council Officers do not object to proposed setbacks per se, Council Officers do have concerns regarding the building height.

Car Parking

In relation to car parking, the proposal exceeds the minimum on-site parking requirements.

Further Considerations

The proposal is located within a District Centre zone, at the intersection of two important streets, Albany Highway and Miller Street, both District Distributors under the Town of Victoria Park road hierarchy, being therefore a prominent location, and gateway to the Town of Victoria Park's Town Centre.

It is acknowledged that a building of six (6) storeys has been approved (20.1 metres in height) which will have a visual impact on the surrounding properties and one (1) additional storey (seventh storey) may go unnoticed by pedestrians at street level due to the setting back of the seventh storey.

Approval of a seven (7) storey building in this location will set a precedent for similar proposals along Albany Highway. Further, if one (1) additional storey is supported then Council's Officers are concerned that this may lead to other applicants seeking further or greater building height variations.

It is acknowledged that the amended plans incorporate the inclusion of an area of communal amenities for residents on Level 3 (fourth storey). However it is considered that the level of amenity provided within this space is compromised by its size and location adjacent to private units and their bedrooms. Furthermore the inclusion of this additional space only provides some benefits (limited) to the residents. The inclusion of this space, nor any of the other amendments to the plans, deliver additional benefit to the community in comparison to the approved development. It is considered that there are not sufficient positive additional outcomes provided commensurate to the additional height and plot ratio proposed.

In this regard, Council's Local Planning Policy 33 'Guide to Concession on Requirements for Mixed Use, Multiple Dwelling and Non-Residential Developments' outlines the expectations that the greater the extent of variations sought, the greater the extent of design improvements that be delivered. Council Officers and the Design Review Committee do not believe that any substantial additional benefits have been provided for either the residents of the development, or the general community, in return for the significant additional plot ratio and height sought.

Design Review Committee

In relation to the approval by the JDAP on September 2016 the Design Review Committee (DRC) supported the proposal as it was considered that the development will make a positive contribution to the Albany Highway streetscape.

However when reviewing the current application proposing a seventh storey, the DRC Members commented that although an additional storey is not going to detract negatively upon the streetscape due to the proposed setbacks to Albany Highway

and Miller Street, this additional storey is contrary to all discussions during the reviews and approval process of the original application between the Council's Officers and DRC Members with the applicant and owner of the property. Additionally the DRC members were concerned that the further variations benefit the landowner, but do not provide a meaningful benefit to the occupants of the development, or any benefit at all to the community. On this basis as well as the amendments not delivering any additional community benefits, the proposed additional seventh storey is not supported for approval.

Conclusion:

It is acknowledged that the original development application was supported by Council Officers and approved by the JDAP with significant variations to the requirements of the Town Planning Scheme, particularly in respect to the matters of plot ratio, building height and street setbacks to Albany Highway and Miller Street, with the extent of variations being sought being greater than any other development approved along Albany Highway.

The subject amendment to modify the original approval is seeking further variations to the significant variations already approved and negotiated with the Town through a collaborative process. Additionally significant variations are sought without a commensurate increase in the level of residential amenity or the delivery of any additional community benefits. Additionally it is considered that approval will set an undesirable precedent for future similar applications along Albany Highway, contrary to the orderly and proper planning on the locality.

In view of the above, the application is not supported and is recommended for refusal.

ATTACHMENT 5

JDAP REFUSAL DATED
27 JULY 2017



LG Ref: 5.2016.151.1
DAP Ref: DAP/16/01046
Enquiries: (08) 6551 9919

State Administrative Tribunal
565 Hay Street
PERTH WA 6000

Dear Sir/Madam

STATE ADMINISTRATIVE TRIBUNAL REVIEW OUTCOME – DR72/2017

Property Location:	Lots 1, 2, 25, 26, 66, 327 and 451 (646-660) Albany Highway and Lots 329 and 330 (1-3) Miller Street, Victoria Park
Application Details:	Multiple Dwellings and 1 Grouped Dwelling

Please be advised that the Metro Central Joint Development Assessment Panel reconsidered the above-mentioned development application, SAT ref DR72/2017, pursuant to section 31 of the *State Administrative Tribunal Act 2004* on 27 July 2017.

The Notice of Determination is attached.

Yours sincerely,

DAP Secretariat

2 August 2017

Encl: Amended DAP Determination Notice

Cc: Mr Bob Fowler
433 Riverton Drive East, Shelley WA 6148

State Solicitor's Office
GPO Box F317
PERTH WA 6001

Mr Julio Gonzales
Town of Victoria Park

Planning Appeals





Planning and Development Act 2005

Town of Victoria Park Town Planning Scheme No. 1

Metro Central Joint Development Assessment Panel

Determination on Development Assessment Panel Application for Planning Approval

Property Location: Lots 1, 2, 25, 26, 66, 327 and 451 (646-660) Albany Highway and Lots 329 and 330 (1-3) Miller Street, Victoria Park

Application Details: Multiple Dwellings and 1 Grouped Dwelling

Pursuant to section 31 of the *State Administrative Tribunal Act 2004*, the Metro Central JDAP, at its meeting on 27 July 2017, has reconsidered its decision dated 21 September 2016 in respect to the above application, SAT Ref. DR72/2017 and has resolved to:

1. **Reconsider** its decision dated 13 February 2017 and **refuse** the JDAP Application reference DAP/16/01046 and accompanying amended plans dated received 24 May 2017 in accordance with Deemed Clause 68 of the *Planning and Development (Local Planning Schemes) Regulations 2015* and Clause 30 of the Metropolitan Region Scheme, for the proposed Amendment to Development Approval – Additional Partial Seventh Storey with 4 Multiple Dwellings, to the approved Mixed Use Development Comprising Shops, Restaurants, Offices, Tavern, 101 Multiple Dwellings & One (1) Grouped Dwelling at 646 - 660 Albany Highway and 1-3 Miller Street, Victoria Park, for the following reasons:

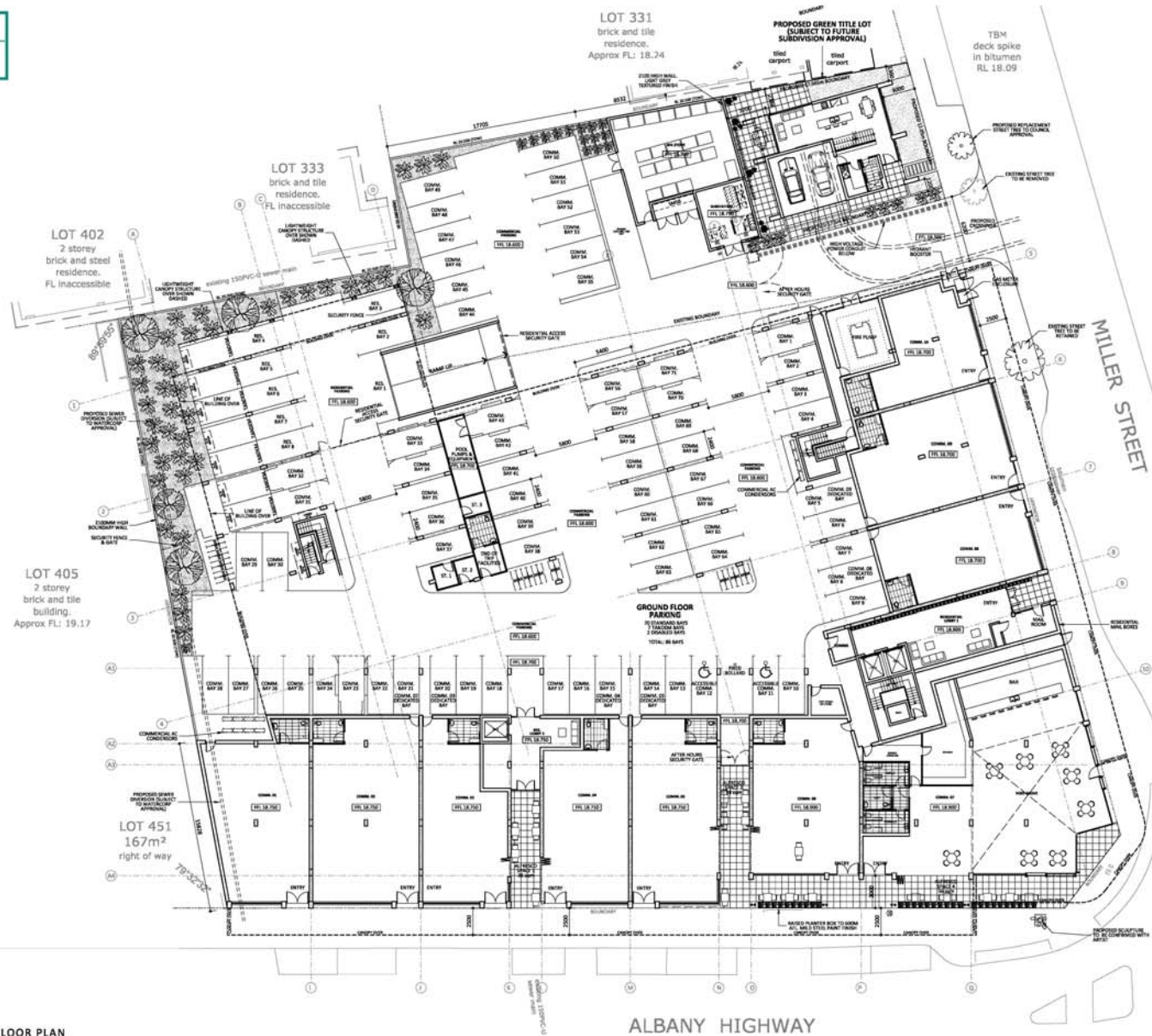
Reasons

1. The proposal is non-compliant with Town Planning Scheme No. 1 Clause 29(3) 'Determination of Non-Complying Applications' as it is:
 - (i) inconsistent with:
 - the orderly and proper planning of the locality;
 - the conservation of the amenities of the locality;
 - the likely future development of the locality; and
 - (ii) would have an undue adverse affect on:
 - the occupiers or users of the development;
 - the property in, or the inhabitants of, the locality; and
 - the likely future development of the locality.
2. The development does not satisfy the relevant matters to be considered under Deemed Clause 67 of the *Planning and Development (Local Planning Schemes) Regulations 2015* as follows:
 - a) The aims and provisions of this Scheme and any other local planning schemes operating within the Scheme area;
 - b) The requirements of orderly and proper planning including any proposed local planning scheme or amendment to this Scheme that has been advertised under the *Planning and Development (Local Planning Schemes) Regulations 2015* or any other proposed planning instrument that the local government is seriously considering adopting or approving;
 - g) Any local planning policy for the Scheme area;



- m) The compatibility of the development with its setting including the relationship of the development to development on adjoining land or on other land in the locality including, but not limited to, the likely effect of the height, bulk, scale, orientation and appearance of the development;
 - n) The amenity of the locality including the following –
 - i. Environmental impacts of the development;
 - ii. The character of the locality;
 - iii. Social impacts of the development.
 - (y) any submissions received on the application;
 - (zb) Any other planning consideration the local government considers appropriate.
3. The approval of this development will set a precedent for future similar applications along Albany Highway contrary to the orderly and proper planning of the locality.

Where an approval has so lapsed, no development shall be carried out without further approval having first been sought and obtained, unless the applicant has applied and obtained Development Assessment Panel approval to extend the approval term under regulation 17(1)(a) of the *Planning and Development (Development Assessment Panels) Regulations 2011*.

DEVELOPMENT
ASSESSMENT PANELREFUSED
27-Jul-2017

DEVELOPMENT
ASSESSMENT PANEL
REFUSED
27-Jul-2017



LEVEL 1 FLOOR PLAN
SCALE 1:200 @ A1



LEVEL 2 FLOOR PLAN
SCALE 1:200@A1

DEVELOPMENT
ASSESSMENT PANEL

REFUSED

27-Jul-2017



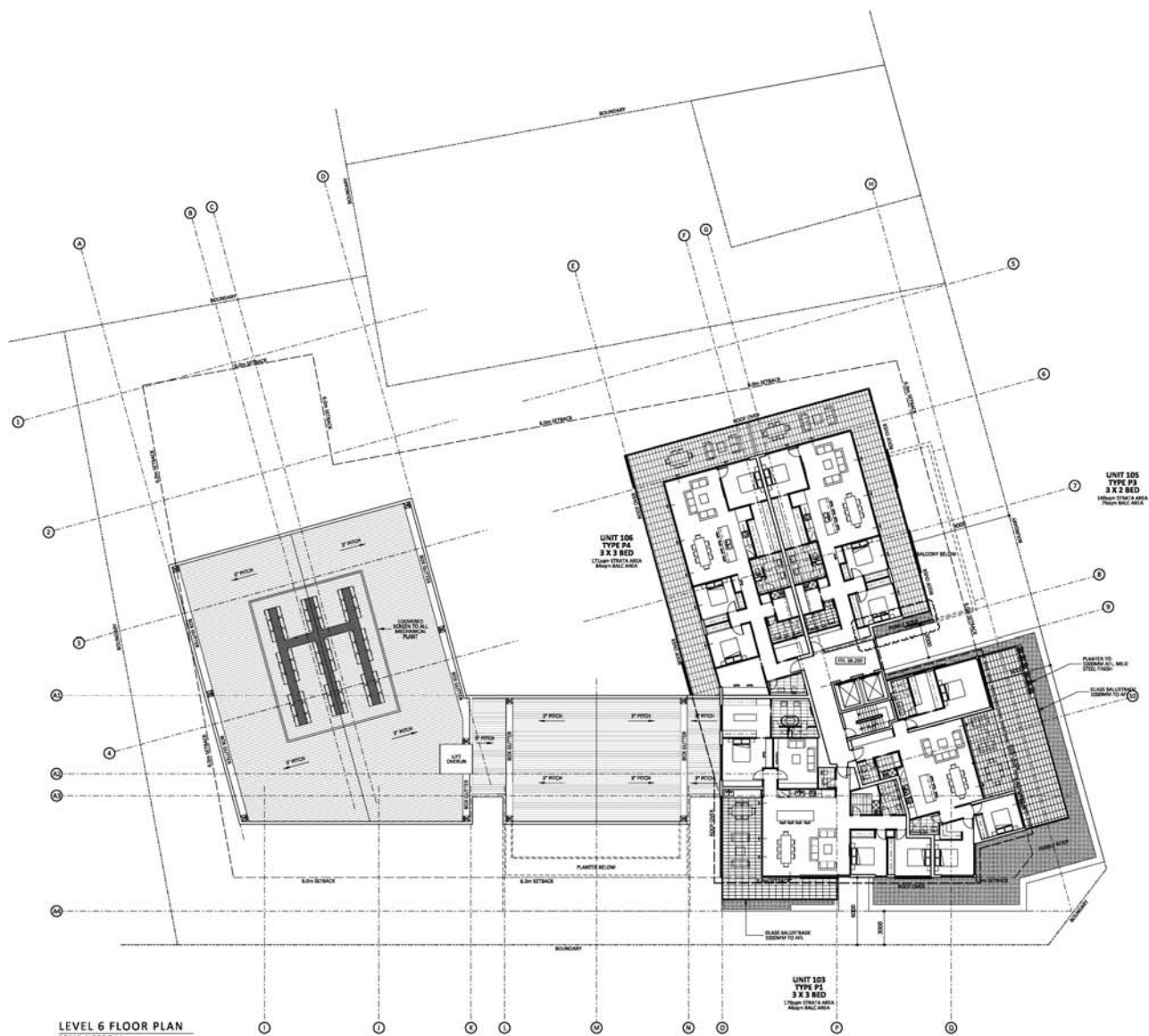
LEVEL 3 FLOOR PLAN
SCALE 1:200@A1



LEVEL 4 FLOOR PLAN
SCALE 1:200@A1

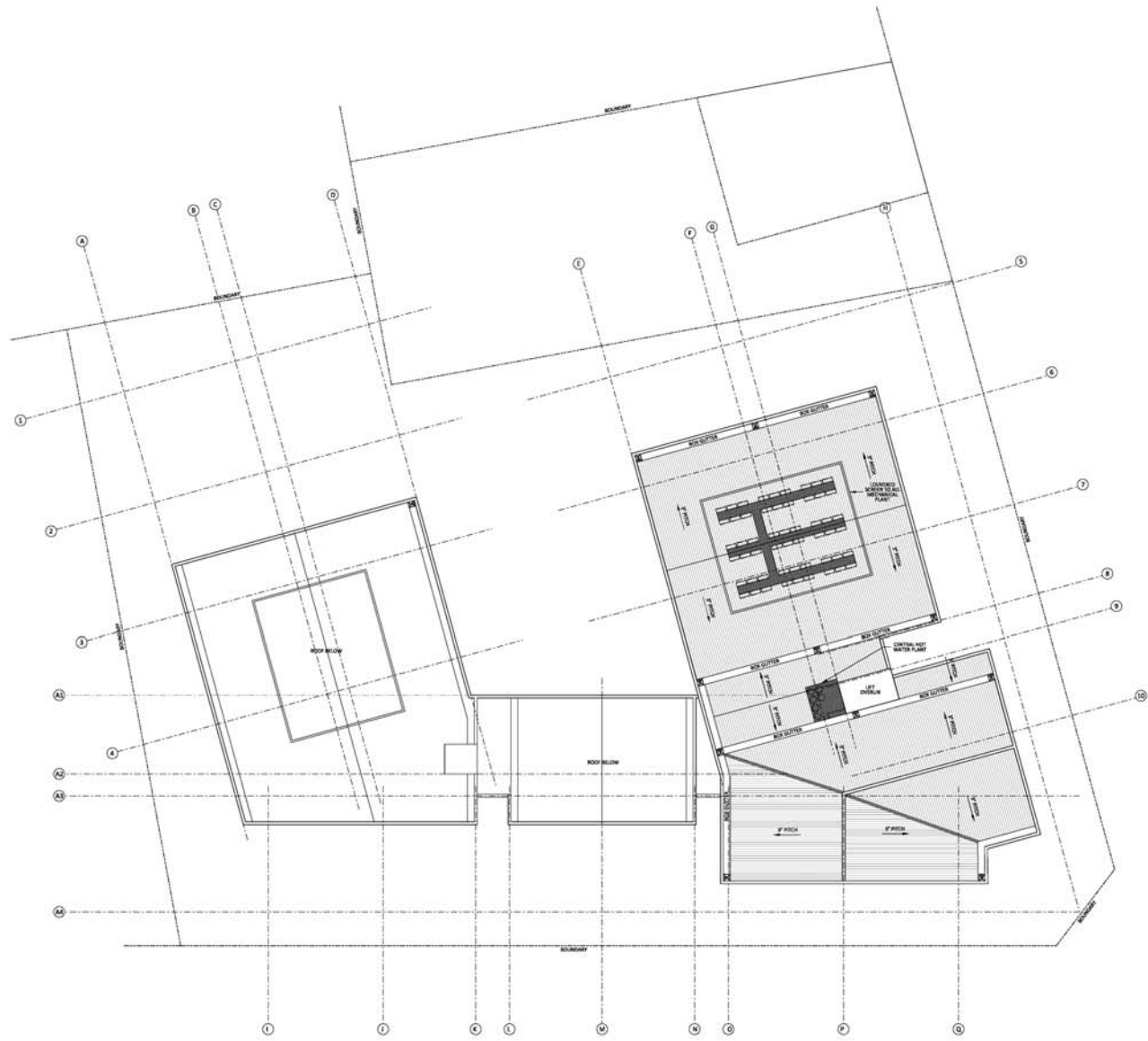


LEVEL 5 FLOOR PLAN
SCALE 1:200@A1



LEVEL 6 FLOOR PLAN
SCALE 1:200@A1

DEVELOPMENT
ASSESSMENT PANEL
REFUSED
27-Jul-2017



ROOF PLAN
SCALE 1:200 @ A1



DEVELOPMENT
ASSESSMENT PANEL
REFUSED
27-Jul-2017



NORTH EAST ELEVATION
SCALE 1:200 @ A1



NORTH WEST ELEVATION
SCALE 1:200 @ A1

DEVELOPMENT
ASSESSMENT PANEL

REFUSED

27-Jul-2017

NORTH WEST SECTIONAL ELEVATION
SCALE 1:200@A1SOUTH EAST SECTIONAL ELEVATION
SCALE 1:200@A1

DEVELOPMENT
ASSESSMENT PANEL
REFUSED
27-Jul-2017



ALBANY HWY WEST STREET VIEW DA APPROVED SEPTEMBER 2016



ALBANY HWY WEST STREET VIEW PROPOSED DAP FORM 2 - AMENDED DA



ALBANY HWY WEST STREET VIEW DAP FORM 2 REFUSED FEBRUARY 2017



CNR ALBANY HWY MILLER STREET VIEW DA APPROVED SEPTEMBER 2016



CNR ALBANY HWY MILLER STREET VIEW PROPOSED DAP FORM 2 - AMENDED DA



CNR ALBANY HWY MILLER STREET VIEW DAP FORM 2 REFUSED FEBRUARY 2017



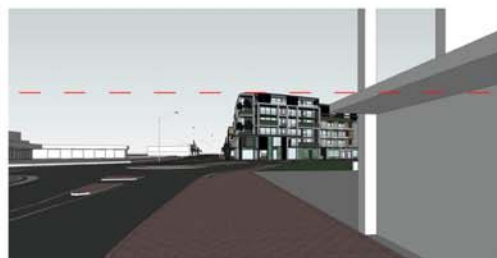
MILLER STREET VIEW DA APPROVED SEPTEMBER 2016



MILLER STREET VIEW PROPOSED DAP FORM 2 - AMENDED DA



MILLER STREET VIEW DAP FORM 2 REFUSED FEBRUARY 2017



ALBANY HWY EAST VIEW DA APPROVED SEPTEMBER 2016



ALBANY HWY EAST VIEW PROPOSED DAP FORM 2 - AMENDED DA



ALBANY HWY EAST VIEW DAP FORM 2 REFUSED FEBRUARY 2017

APPENDIX 1

ATTACHMENT 6

MINUTES OF DRC MEETING
DATED 8 APRIL 2016



**NOTES OF THE SUB-GROUP OF THE TOWN OF VICTORIA PARK DESIGN REVIEW COMMITTEE
TO DISCUSS THE PRELIMINARY PROPOSAL FOR NO. 650 ALBANY HIGHWAY, VICTORIA PARK
ON FRIDAY 8 APRIL 2016**

Attendance:

Council Officers:

Rochelle Lavery - Director Future Life and Built Life
Robert Cruickshank – Executive Manager Built Life
Julio Gonzalez – Planning Officer

Design Review Committee Members:

Rochelle Lavery - Director Future Life and Built Life
Robert Cruickshank – Executive Manager Built Life
Linley Lutton
Malcolm Mackay
Tony Blackwell

Applicant's Attendees:

Andrew Peirce – Celsius Developments
Matt Evans – Celsius Developments
Sean van der Poel – Hillam Architects
Tom Letherbarrow – Hillam Architects
Bob Fowler – Fowljeff Holdings P/L

Apologies:

Nil

The meeting commenced at 9.15AM.

DRC Comments:

- It was commented that the corner canopy at second storey level may not provide weather protection to pedestrians and it may worth to analyse its extension towards the road, but ensuring that trucks turning the corner don't hit the canopy.
- Despite discussions and advice given to the applicant and owner, during the last 3 reviews of the proposal, the proposal still shows 7 storeys rather than an increase in building height to a maximum of 6 storeys at the corner. This advice was contained within the minutes of the past 3 meetings given to the applicant.
- The owner expressed, as a justification for the additional level, that the seventh storey will contain only 4 units to be owned by the owner and his family.

- Along this section of Albany Highway the current density is R60 and the maximum allowable height is 3 storeys (or 11.5 metres). The proposal is seeking discretion on density as the application is proposing a density equivalent of R204 and 4 additional storeys. The support of Council Officers for a building height of up to 6 storeys is already a significant variation.
- The Town of Victoria Park has been in discussions with the Western Australian Planning Commission for several years in relation to this issue and a maximum height of 6 storeys was agreed, therefore 7 storeys is not supported. The applicant and owners should be aware that even a 6 storey height limit is pending future Public Community Consultation.
- It is acknowledged that the proposal has achieved a great improvement. The architectural form is good. The elevations are very good setting a good bench mark. The general form make sense. Very pleasant.
- The proposal has been well segmented, to read as 3 buildings but related by DNA. Palette materials is good; the rise of the canopy on the corner is good; the two storey corner looks very good; the section of the building next to the corner along Albany Highway, may have the ordering changed to further improvement.
- In relation to car parking, there is concern that providing 2 or more bays per dwelling is an oversupply for an urban context. With apartments, cultural values have to be shifted and moved with. Car parking is not a justification for additional storey.
- In relation to the first floor plan, the building break along Miller Street should be opened all the way till the courtyard.
- Elevations along Albany Highway are looking great but the elevation along Miller Street needs to be improved. The solution is not just stepping; the elevation needs an end.
- There are some concerns in relation to the proposed landscaping located within some balconies, because after some time it may disappear due to the lack of maintenance. However the applicant commented that the landscaping will be set within by Laws; contracts will be signed with the new resident owners that it has to be maintained. Strata Management and Management Plan may regulate and ensure that landscaping will be maintained.
- It was acknowledged that the composition is still good as architecture does not rely on the landscaping.

The meeting closed at 10.15AM.

Minutes prepared by:
 Julio Gonzalez
 Planning Officer