



Agenda

Council Meeting

6.30pm, Tuesday 15 August 2023

Richmond Town Hall

Council Meetings

Council Meetings are public forums where Councillors come together to meet as a Council and make decisions about important, strategic and other matters. The Mayor presides over all Council Meetings, and they are conducted in accordance with the City of Yarra Governance Rules.

Council meetings are decision-making forums and only Councillors have a formal role. However, Council is committed to transparent governance and to ensuring that any person whose rights will be directly affected by a decision of Council is entitled to communicate their views and have their interests considered before the decision is made.

Question Time

Yarra City Council welcomes questions from members of the community.

Registration

To ask a question, you will need to register and provide your question by 6.30pm on the day before the meeting. Late registrations cannot be accepted, and you will be unable to address the meeting without registration.

Asking your question

During Question Time, the Mayor will invite everyone who has registered to ask their question. When your turn comes, come forward to the microphone and:

- state your name;
- direct your question to the Mayor;
- don't raise operational matters that have not been previously raised with the organisation;
- don't ask questions about matter listed on tonight's agenda
- don't engage in debate;
- if speaking on behalf of a group, explain the nature of the group and how you are able to speak on their behalf.

You will be provided a maximum of three minutes to ask your question, but do not need to use all of this time.

Comments not allowed

When you are addressing the meeting, don't ask a question or make comments which:

- relate to a matter that is being considered by Council at this meeting;
- relate to something outside the powers of the Council;
- are defamatory, indecent, abusive, offensive, irrelevant, trivial or objectionable;
- deal with a subject matter already answered;
- are aimed at embarrassing a Councillor or a member of Council staff;
- include or relate to confidential information; or
- relate to something that is subject to legal proceedings.

Addressing the Council

An opportunity exists to make your views known about a matter that is listed on the agenda for this meeting by addressing the Council directly before a decision is made.

Registration

To ask address Council, you will need to register by 6.30pm on the day before the meeting. Late registrations cannot be accepted, and you will be unable to address the meeting without registration.

Addressing the Council

Before each item is considered by the Council, the Mayor will invite everyone who has registered in relation to that item to address the Council. When your turn comes, come forward to the microphone and:

- state your name;
- direct your statement to the Mayor;
- confine your submission to the subject being considered;
- avoid repeating previous submitters;
- don't ask questions or seek comments from Councillors or others; and
- if speaking on behalf of a group, explain the nature of the group and how you are able to speak on their behalf.

You will be provided a maximum of three minutes to speak, but do not need to use all of this time.

Comments not allowed

When you are addressing the meeting, don't make any comments which:

- relate to something other than the matter being considered by the Council;
- are defamatory, indecent, abusive, offensive, irrelevant, trivial or objectionable;
- are aimed at embarrassing a Councillor or a member of Council staff;
- include or relate to confidential information; or
- relate to something that is subject to legal proceedings.

Arrangements to ensure our meetings are accessible to the public

Council meetings are held on the first floor at Richmond Town Hall. Access to the building is available either by the stairs, or via a ramp and lift. Seating is provided to watch the meeting, and the room is wheelchair accessible. Accessible toilet facilities are available. Speakers at the meeting are invited to stand at a lectern to address the Council, and all participants are amplified via an audio system. Meetings are conducted in English.

If you are unable to participate in this environment, we can make arrangements to accommodate you if sufficient notice is given. Some examples of adjustments are:

- a translator in your language
- the presence of an Auslan interpreter
- loan of a portable hearing loop
- reconfiguring the room to facilitate access
- modification of meeting rules to allow you to participate more easily.

Recording and Publication of Meetings

A recording is made of all public Council Meetings and then published on Council's website. By participating in proceedings (including during Question Time or in making a submission regarding an item before Council), you agree to this publication. You should be aware that any private information volunteered by you during your participation in a meeting is subject to recording and publication.

Order of business

1. **Acknowledgement of Country**
2. **Attendance, apologies and requests for leave of absence**
3. **Announcements**
4. **Declarations of conflict of interest**
5. **Confirmation of minutes**
6. **Question time**
7. **Council business reports**
8. **Notices of motion**
9. **Petitions and joint letters**
10. **Questions without notice**
11. **Delegates' reports**
12. **General business**
13. **Urgent business**
14. **Confidential business reports**

1. Acknowledgment of Country

“Yarra City Council acknowledges the Wurundjeri Woi Wurrung people as the Traditional Owners and true sovereigns of the land now known as Yarra.

We acknowledge their creator spirit Bunjil, their ancestors and their Elders.

We acknowledge the strength and resilience of the Wurundjeri Woi Wurrung, who have never ceded sovereignty and retain their strong connections to family, clan and country despite the impacts of European invasion.

We also acknowledge the significant contributions made by other Aboriginal and Torres Strait Islander people to life in Yarra.

We pay our respects to Elders from all nations here today—and to their Elders past, present and future.”

2. Attendance, apologies and requests for leave of absence

Attendance

Councillors

- Cr Claudia Nguyen Mayor
- Cr Edward Crossland Deputy Mayor
- Cr Michael Glynatsis Councillor
- Cr Stephen Jolly Councillor
- Cr Herschel Landes Councillor
- Cr Anab Mohamud Councillor
- Cr Bridgid O’Brien Councillor
- Cr Amanda Stone Councillor
- Cr Sophie Wade Councillor

Council staff

Chief Executive Officer

- Sue Wilkinson Chief Executive Officer

General Managers

- Brooke Colbert Governance, Communications and Customer Experience
- Sam Hewett Infrastructure and Environment
- Kerry McGrath Community Strengthening
- Mary Osman City Sustainability and Strategy
- Jenny Scicluna Corporate Services and Transformation

Governance

- Phil De Losa Manager Governance and Integrity
- Rhys Thomas Senior Governance Advisor
- Mel Nikou Governance Officer

3. Announcements

An opportunity is provided for the Mayor to make any necessary announcements.

4. **Declarations of conflict of interest**

Any Councillor who has a conflict of interest in a matter being considered at this meeting is required to disclose that interest either by explaining the nature of the conflict of interest to those present or advising that they have disclosed the nature of the interest in writing to the Chief Executive Officer before the meeting commenced.

5. **Confirmation of minutes**

RECOMMENDATION

That the minutes of the Council Meeting held on Tuesday 18 July 2023 be confirmed.

6. **Question time**

An opportunity is provided for questions from members of the public.

7. Council business reports

Item		Page	Rec. Page	Report Presenter
7.1	Assessment of proposed Development Plan at 81-95 Burnley Street and 26-34 Doonside Street, Richmond	9	111	Lara Fiscalini - Principal Planner
7.2	Amendment C286yara – Open Space Contributions – Peer Review	545	551	Leonie Kirkwood - Project and Planning Coordinator
7.3	Proposed Discontinuance of portion of Road abutting 111 Best Street, Fitzroy North.	718	721	Bill Graham - Coordinator Valuations
7.4	C1644 - Burnley Golf Course Redesign and Risk Mitigation Work	734	736	Sally Jones - Manager Property and Leisure
7.5	Yarra Grants Review Project Terms of Reference	737	744	Cristina Del Frate - Senior Coordinator Equity and Inclusion
7.6	Neighbourhood House Partnership Framework Draft for Endorsement	750	757	Malcolm McCall - Manager Equity and Community Development
7.7	Street Tree Canopy Cover and UFS Target Update	814	823	John Williams - Landscape Architect Streetscapes and Design
7.8	Governance Report - August 2023	824	828	Rhys Thomas - Senior Governance Advisor

8. Notices of motion

Nil

9. Petitions and joint letters

An opportunity exists for any Councillor to table a petition or joint letter for Council's consideration.

10. Questions without notice

An opportunity is provided for Councillors to ask questions of the Mayor or Chief Executive Officer.

11. Delegate's reports

An opportunity is provided for Councillors to table or present a Delegate's Report.

12. General business

An opportunity is provided for Councillors to raise items of General Business for Council's consideration.

13. Urgent business

An opportunity is provided for the Chief Executive Officer to introduce items of Urgent Business.

14. Confidential business reports

The following items were deemed by the Chief Executive Officer to be suitable for consideration in closed session in accordance with section 66(2)(a) of the Local Government Act 2020. In accordance with that Act, Council may resolve to consider these issues in open or closed session.

RECOMMENDATION

1. That the meeting be closed to members of the public, in accordance with section 66(2)(a) of the Local Government Act 2020, to allow consideration of confidential information

Item

5.1 Chief Executive Officer Key Performance Indicators 2023/2024

This item is to be considered in closed session to allow consideration of personal information, being information which if released would result in the unreasonable disclosure of information about any person or their personal affairs.

These grounds are applicable because this report contains information about the employment arrangements of an individual member of staff.

7.1 Assessment of proposed Development Plan at 81-95 Burnley Street and 26-34 Doonside Street, Richmond

Reference	D23/267292
Author	Lara Fiscalini - Principal Planner
Authoriser	General Manager City Sustainability and Strategy
Disclosure	The authoriser, having made enquiries with members of staff involved in the preparation of this report, asserts that they are not aware of any general or material conflicts of interest in relation to the matters presented.

Ward:	Melba
Proposal:	Development Plan approval pursuant to Schedule 15 of the Development Plan Overlay of the Yarra Planning Scheme (81-95 Burnley Street and 26-34 Doonside Street, Richmond).
Existing use:	Harry the Hirer
Applicant:	Gurner
Zoning / Overlays:	Mixed Use Zone Development Plan Overlay – Schedule 15 (81-95 Burnley Street and 26-34 Doonside Street, Richmond) Design and Development Overlay – Schedule 2 (Main Roads and Boulevards) Environmental Audit Overlay Heritage Overlay (HO252 & HO375) Development Contributions Plan Overlay, Schedule 1
Date of Application:	22 December 2021
Application Number:	PLN21/0981

Background

1. Amendment C223yara (the Amendment) was approved by the Minister for Planning on 6 May 2021, with the Amendment seeking to alter the planning controls affecting land at 81-95 Burnley Street and 26-34 Doonside Street, Richmond. The Amendment underwent a comprehensive process, which included a Panel hearing and the release of a Panel report on 23 July 2020.
2. The Panel report recommended that the following changes to the planning controls of this site be undertaken;
 - (a) Rezone the land from Industrial 3 Zone (IN3Z) to Mixed Use Zone (MUZ);
 - (b) Apply the Development Plan Overlay Schedule 15 (DPO15); and,
 - (c) Apply an Environmental Audit Overlay (EAO) to the land.
3. These recommendations were incorporated into the approved Amendment.
4. The proposed rezoning to MUZ allows the land to be used and developed for a mix of uses, including residential, retail and commercial. The Amendment replaced a contextually outdated zone (Industrial) with a more appropriate land use zone that encourages the creation of a dynamic mixed-use environment. It will facilitate housing growth as well as economic growth, whilst providing for affordable housing and public open space for the local area.
5. The application of the Development Plan Overlay (DPO) to the land as a planning mechanism allows the following:

- (a) Manages the built form of new development, with special consideration to sensitive residential areas to the south of the land along Appleton Street;
 - (b) Ensures that new development respects the heritage significance of the land;
 - (c) Provides direction on the location of land uses on the land and facilitates at least 9,000sqm of employment generating uses;
 - (d) Provides a mechanism to deliver 10% affordable housing;
 - (e) Facilitates a new public park along Doonside Street, and a 9m wide pedestrian link between Doonside and Appleton Streets;
 - (f) Provides a mechanism for the delivery of traffic infrastructure to Doonside, Burnley and Buckingham Streets; and
 - (g) Provides a mechanism for the delivery of public realm improvements and the requirement of a Public Realm Plan.
6. A key component of the DPO is the need for a Development Plan (DP) to be prepared and approved to the satisfaction of Council. Once the DP is approved, all permit applications must be generally in accordance with it. An important consequence of the DPO is that there are no statutory rights of public participation once the DP is approved.
7. A proposed DP in response to the DPO was submitted to Council on 22 December 2021. A request for further information was issued on 10 January 2022. A response was subsequently lodged on 7 March 2022, with this package referred to internal Council departments and external consultants. Several concerns were raised at this time, with particular regard to proposed heights and setbacks of the built form.
8. An amended DP seeking to address these concerns was submitted on 20 February 2023. The following changes were incorporated into this updated document;
- (a) Increased street setbacks of the upper levels of Building A to Doonside Street and Burnley Street from 8m to 12m;
 - (b) A stepping down in built form of Building B from 55.9m to 42m towards the public open space (Doonside Park) to the east;
 - (c) Modified architectural composition of Building B;
 - (d) Removal of the cantilever of Building B over the north-south pedestrian link (Park Lane);
 - (e) Reconfiguration of Doonside Park to provide:
 - (i) 576sqm unencumbered space, within a total area of 727sqm;
 - (ii) A 12m frontage to Doonside Street;
 - (f) A second north-south link that connects Doonside Street with Appleton Street (Harry's Lane);
 - (g) Replacement of the rock-climbing wall and fitness zone at the southern end of Park Lane with canopy plantings, bicycle parking, park seating and an urban art opportunity;
 - (h) Revised vehicle access strategy to Doonside Street; and,
 - (i) Revised ground floor area of future commercial tenancies to 12,000 – 16,000sqm.
9. The revised DP was re-referred to external Urban Design and Heritage Consultants and forms the final document upon which this report is based.

The Proposal

10. A key feature of the DP is that the level of detail contained within the document is not as refined as that required by a planning application. The DP allows for the indicative massing and heights of buildings to be approved presenting as a general master plan for the site; however, it does not require detailed outcomes such as internal layouts or final architectural designs. These aspects will be assessed via subsequent planning applications, which must be generally in accordance with the built form outcomes approved in this DP.
11. The DPO specifies that the approved DP must be 'generally in accordance' with the Indicative Framework Plan (IFP) as shown in Figure 1 of Schedule 15 to the DPO within the Yarra Planning Scheme (the Scheme). The IFP contains a general layout for future built form, with the heights and setbacks envisioned for each building. It is noted that the heights and setbacks outlined in the IFP are discretionary and not a mandatory requirement. The IFP is demonstrated in Figure 1.

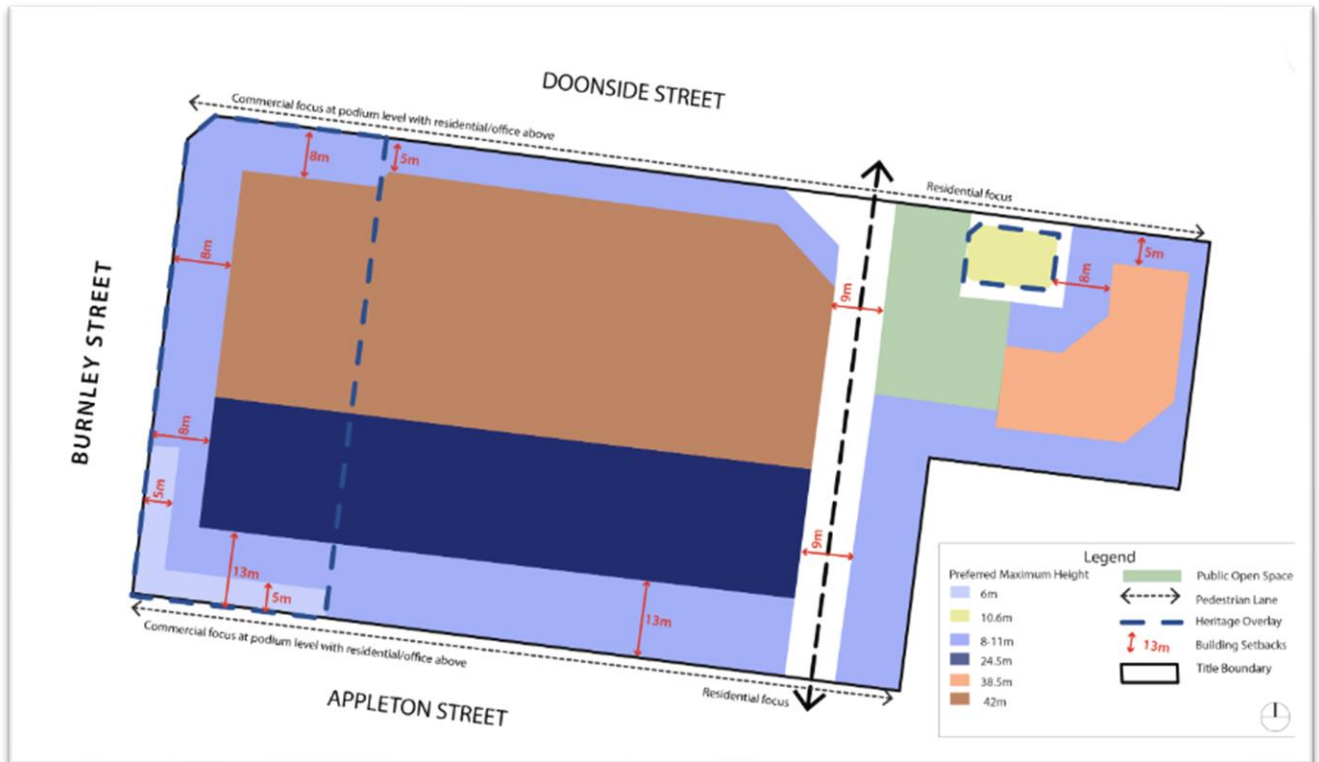


Figure 1: Indicative Framework Plan – DPO15. Source: Yarra Planning Scheme

12. A proposed 'Masterplan' is included within the DP and reproduced at Figure 2. This plan outlines how the DP responds to the IFP, and demonstrates the proposed location of public open space, laneways and built form.

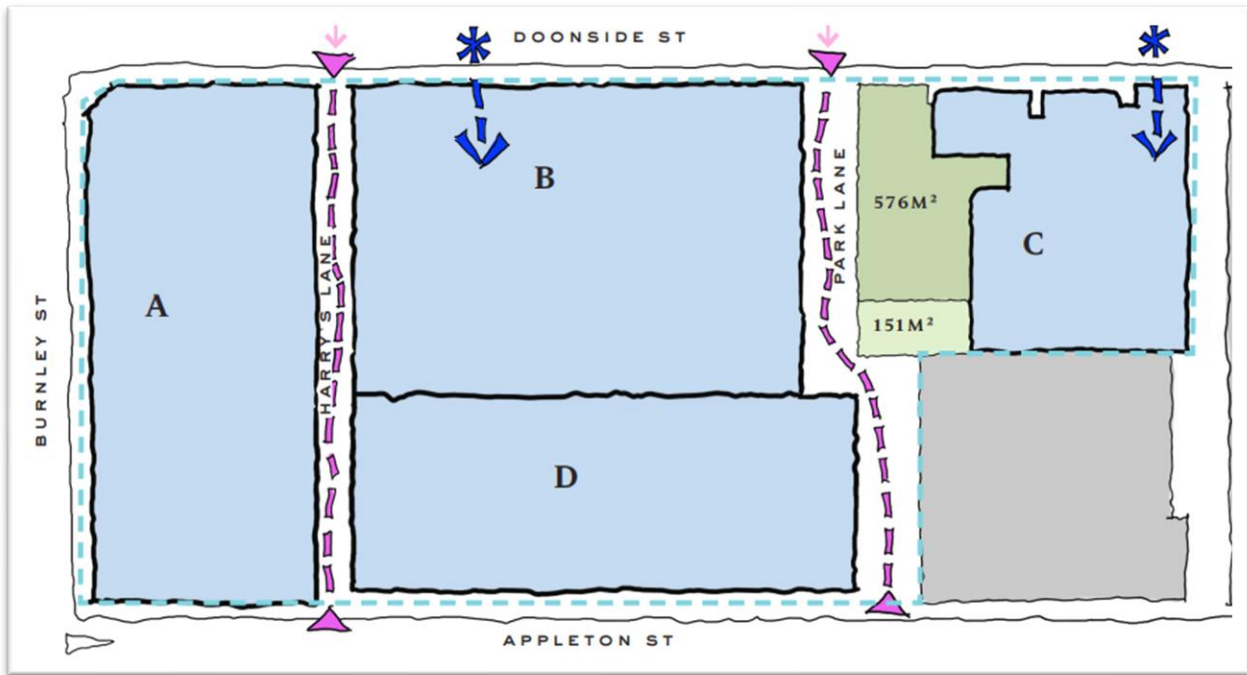


Figure 2: Proposed Masterplan. Source: Development Plan (Gurner 2023)

13. The proposed DP seeks to construct 4 buildings within the site; with indicative heights and massing demonstrated in Figures 3 & 4. Two existing heritage buildings within the site will be largely retained and restored.
14. In total, the precinct will provide between 545-645 dwellings, between 12,000sqm to 16,000sqm of commercial floor area, a new 576sqm park (unencumbered) with an additional green space of 151sqm and two new laneways connecting Doonside and Appleton Streets.

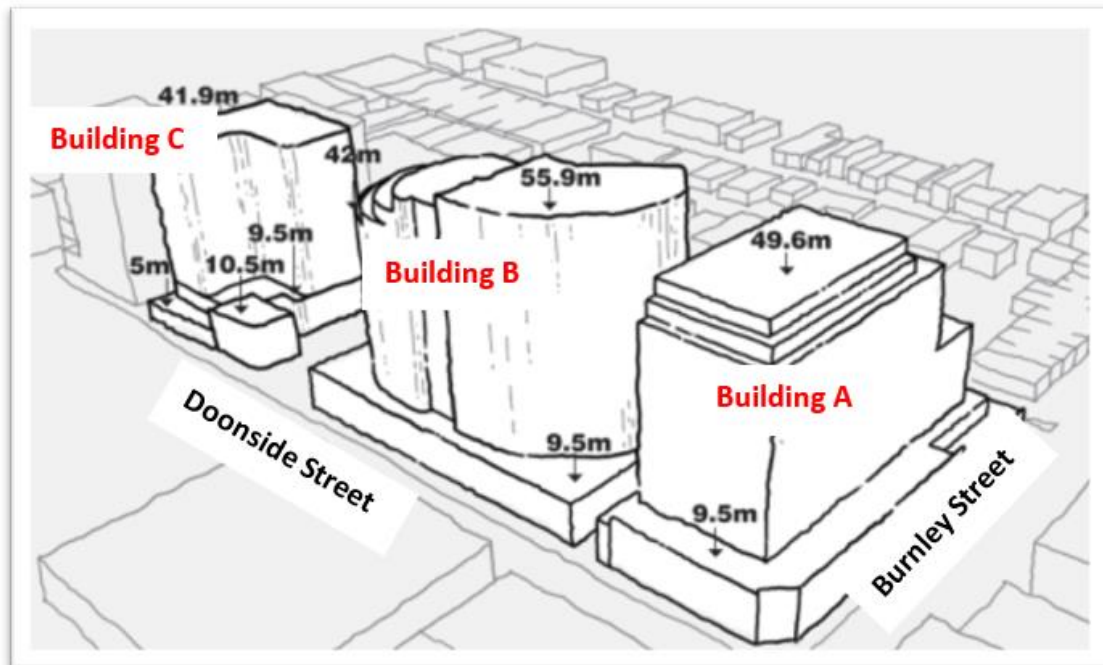


Figure 3: Proposed massing of buildings viewed from north-west. Source: Development Plan (Gurner 2023)

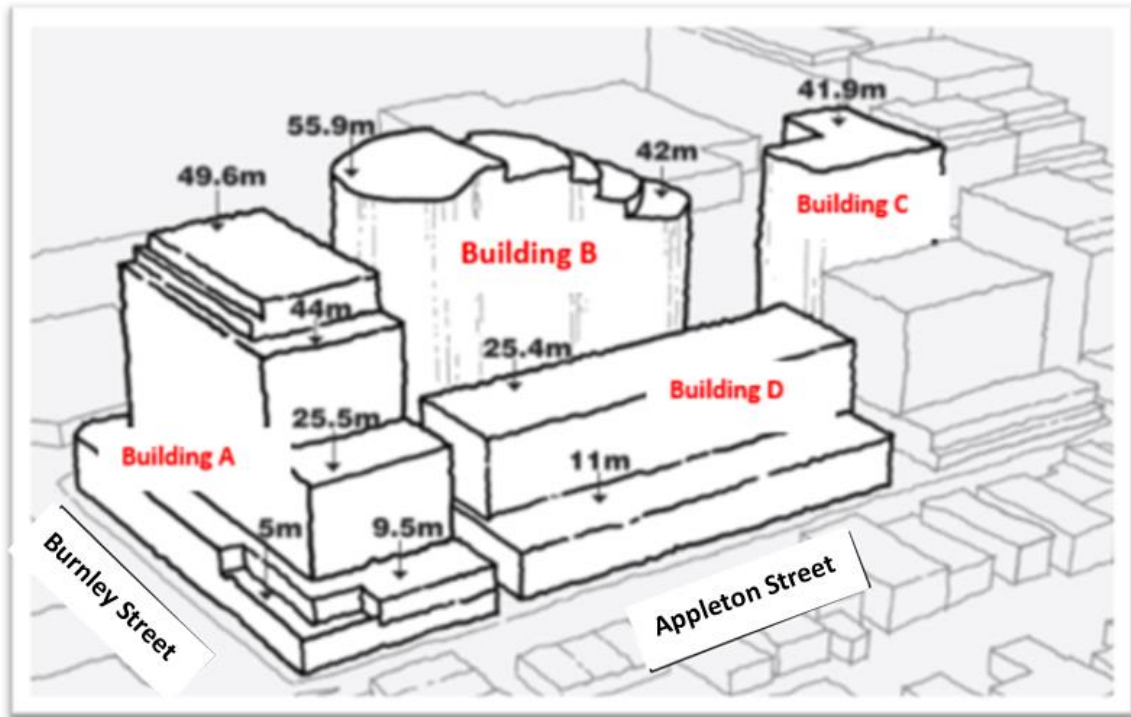


Figure 4: Proposed massing of buildings viewed from south-west. Source: Development Plan (Gurner 2023)

15. The proposed DP divides the site into 4 distinct buildings:
 - (a) Building A – orientated to the western portion of the site with its main frontage to Burnley Street;
 - (b) Building B – centrally located with orientation to Doonside Street;
 - (c) Building C – located in the east of the site, also orientated to Doonside Street; and
 - (d) Building D – centrally located with orientation to Appleton Street.
16. The DP seeks to vary the preferred heights of each building within the precinct, with higher built form than that outlined in the DPO sought.
17. An overview of each building is provided below, along with an outline of the variations between the preferred heights in the DPO and the heights proposed in the DP.

Building A

18. Building A is located on the western side of the site addressing Burnley Street and extends to Doonside Street in the north and Appleton Street in the south. The proposal retains the heritage buildings street walls to all three street interfaces. An image of the retained heritage form is provided below.



Figure 5: 81-95 Burnley Street and Building A. Source: Development Plan (Gurner 2023)

19. The building heights across Building A include a maximum height of 49.6m is (15-16 storeys) with the building reducing in height to 44m (14-15 storeys), 25.5m (8-9 storeys) and 9.5m (3 storeys) to the south.
20. The existing podium of the heritage building is constructed hard-edge to all three street interfaces (at heights of 5m and 9.5m), with the following setbacks of the upper levels proposed;
 - (a) 5m to 8m from Burnley Street (west), with successive upper-level setbacks of 10m and 12m;
 - (b) 8m from Doonside Street (north), with successive upper-level setbacks of 10m and 12m; and
 - (c) 5m to 11m from Appleton Street, with successive upper-level setbacks of 24m and 31m.
21. Building A will contain between 120-135 dwellings with commercial floor space ranging between 4,500sqm to 5,500sqm. Commercial areas are likely to include a multi-level commercial tenancy and a bar/alfresco tenancy at ground level.
22. Building A will be provided with primary pedestrian access from the future 'Harry's Lane' along its western frontage within the site.
23. A comparison table outlining the changes between the preferred heights in the DPO and proposed heights in the DP for Building A is provided below.

Building A	DPO preferred heights	DP proposed heights	Difference in height
Street wall – south-west corner	6m	5m	- 1m
Street wall – Appleton Street	8-11m	9.5m	
Mid-levels	24.5m	25.5m	+ 1m
Upper levels	42m	44m – 49.6m	+ 2m-7.6m

Building B

24. Building B is located on the northern side of the site addressing Doonside Street.
25. Heights will range from 55.9m (approximately 17-18 storeys), with successive height reductions to 42m (approximately 14 storeys) at the eastern end.

26. The podium will extend along Doonside Street at a height of 9.5m, with a curved tower design. The upper levels will be set back between 3m and 5m in the centre, with curved side setbacks extending to 20m at each end.
27. This building will contain between 275-330 dwellings with a commercial floor space at ground level ranging between 4,000sqm to 5,000sqm.
28. Building B will be provided with lobby access from Doonside Street and potential secondary access to the internal laneways.
29. A comparison table outlining the changes between the preferred heights in the DPO and proposed heights in the DP for Building B is provided below.

Building B	DPO preferred heights	DP proposed heights	Difference in height
Podium	8-11m	9.5m	
Upper levels	42m	42m – 55.9m	+ 13.9m

Building C

30. Building C will be located at the eastern end of the site addressing Doonside Street. The proposed new built form will sit behind the retained heritage building at 26 Doonside Street and have an interface with the new open space area to the west.
31. The overall height of this building will be 41.9m (approximately 12 storeys).
32. A lower section of street wall, 5m in height, will sit directly to the east of the heritage façade, with a 9.5m high podium set back 8m and wrapping around the heritage built form. This outcome is demonstrated in Figure 6.

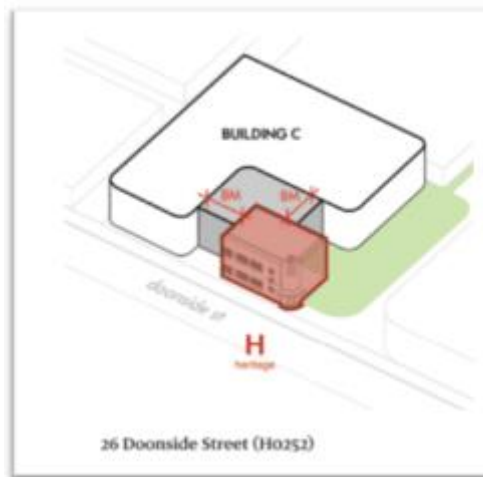


Figure 6: 26 Doonside Street & Building C. Source: Development Plan (Gurner 2023)

33. This building will contain between 65-80 dwellings with a commercial floor space ranging between 1,500sqm to 2,000sqm. Retail tenancies and a gym are anticipated to be located at ground level, with commercial tenancies at level 1.
34. Building C will be provided with lobby access from Doonside Street and potential secondary access to the proposed two new internal laneways.
35. Building C is immediately adjacent to the new open space area orientated to both Doonside Street and the new internal laneway.

36. A comparison table outlining the changes between the preferred heights in the DPO and proposed heights in the DP for Building C is provided below.

Building C	DPO preferred heights	DP proposed heights	Difference in height
Podium	8-11m	5m – 9.5m	- 3m
Upper levels	38.5m	41.9m	+ 3.4m

Building D

37. Building D will be located on the southern side of the site addressing Appleton Street.
38. The overall height will be 25.4m (approximately 7 storeys), with a podium of 11m presenting to the street. The podium will be composed of individual triple-storey townhouse typologies with the tower set back 13m from Appleton Street.
39. The building will contain between 80-100 dwellings with a commercial floor space ranging between 2,000sqm to 3,500sqm. Retail tenancies will be located within a section of the ground floor.
40. Building D will have access opportunities from both laneways. The townhouses are fronting Appleton Street, which will have direct pedestrian access to the footpath. They will also be provided with rear access to the Tower D core for access between parking and the dwellings.
41. A comparison table outlining the changes between the preferred heights in the DPO and proposed heights in the DP for Building D is provided below.

Building D	DPO preferred heights	DP proposed heights	Difference in height
Podium	8-11m	11m	
Upper levels	24.5m	25.4m	+ 0.9m

Open Space and laneways

42. The DPO requires the provision of at least 4.5% of the total site (576sqm) for public open space which fronts Doonside Street and adjoins the pedestrian lane (or a higher percentage if contained in Clause 53.01 of the Yarra Planning Scheme at the time of subdivision). A pocket park, known as Doonside Park, has been provided to address this requirement.

Doonside Park

43. Doonside Park will be located at the northern interface with Doonside Street, with a total landscaped area of 727sqm. An area of 576sqm of this park will be vested to Council once the development is complete and will form a key public area of open space within the precinct. The area of parkland owned by Council will be unencumbered by the basement below and will provide opportunities for deep soil planting.
44. A supplementary area of 151sqm is proposed to the south of the proposed park expanding the greenspace. This area will not be vested in Council as a basement car parking area sits below this space.

Park Lane

45. Park Lane will extend along the western side of Doonside Park in a north-south alignment between Doonside Street in the north to Appleton Street in the south. It will range in width from 9m to 10m and will be the key pedestrian thoroughfare through the precinct. Landscaping and seating will be provided within this space.

Harry's Lane

46. A second laneway, 6m in width, will also extend from north to south. This laneway will be lined with raised garden beds and public seating and will provide an activated frontage between buildings. Commercial tenancies will address this laneway at ground level.
47. The proposed ground floor layout, included at Section 3.3 of the DP and with Doonside Park highlighted by the Planning officer, is shown at Figure 7.

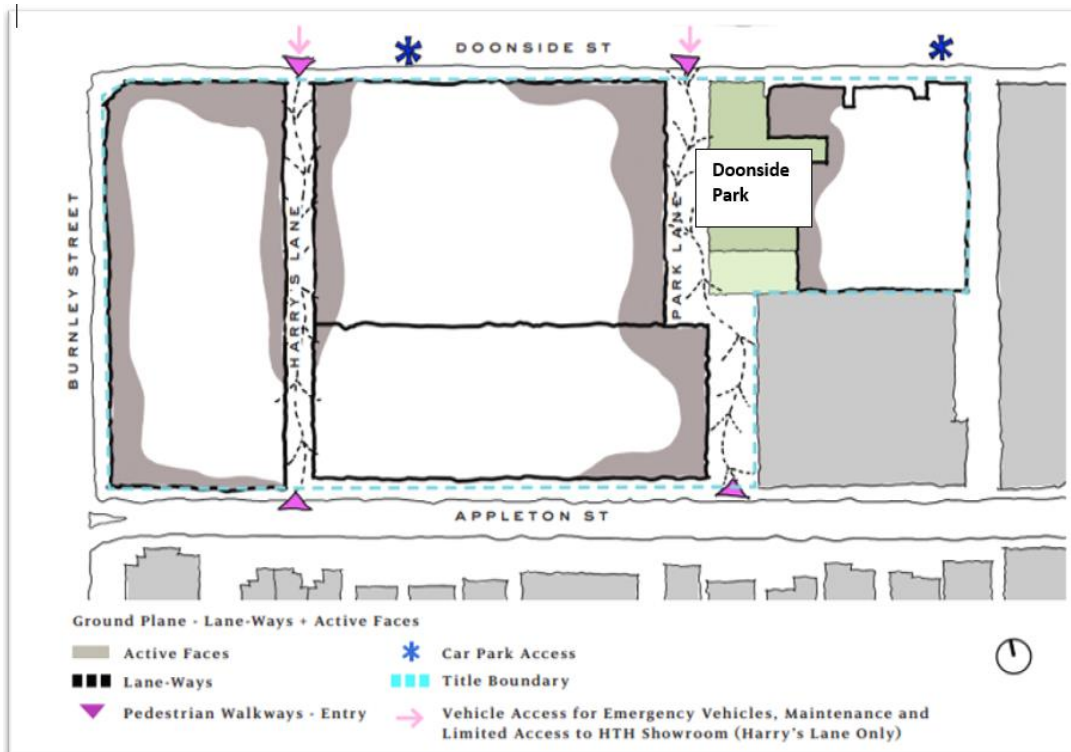


Figure 7: Ground floor layout. Source: Development Plan (Gurner 2023)

Vehicle access

48. A basement will extend under a large component of the site, with two vehicle access points provided from Doonside Street. No vehicle access is proposed from Burnley Street or Appleton Street. All loading and waste will occur on-site, within specific loading zones at basement level, with access from Doonside Street.

Car Parking/Bicycle Parking

49. A summary of the parking provisions is provided in the table below.

Use		Proposed
Bike Parking	Resident	545-645 spaces
	Staff	120-160 spaces
	Visitor	>84 spaces
Motorcycle Parking		15-20 spaces
Car Parking	Car Share	2 spaces
	Commercial Uses	240-270 spaces
	Residents	550-560 spaces
	Total	775-825 spaces (including approx. 80 electric charging)

Materials and Finishes

50. Each building will have a different design language and material palette, with a significant extent of brickwork, masonry and metal proposed for built form adjacent to the retained heritage buildings. Buildings will respond to the industrial history of the site, with lightweight concrete finishes and glazing incorporated throughout. The triple-storey buildings addressing Appleton Street will consist of a townhouse typology, providing individual design responses to articulate this streetscape. The final architectural design of each building will be refined during the planning application stage.

Existing Conditions

Subject Site

51. The subject site is approximately 1.3 hectares in size and has extensive frontages to Burnley Street (80m), Doonside Street (170m) and Appleton Street (130m). The land contains a series of low-rise warehouse and other buildings, parking and hard stand areas. An aerial image of the subject site is provided at Figure 8.

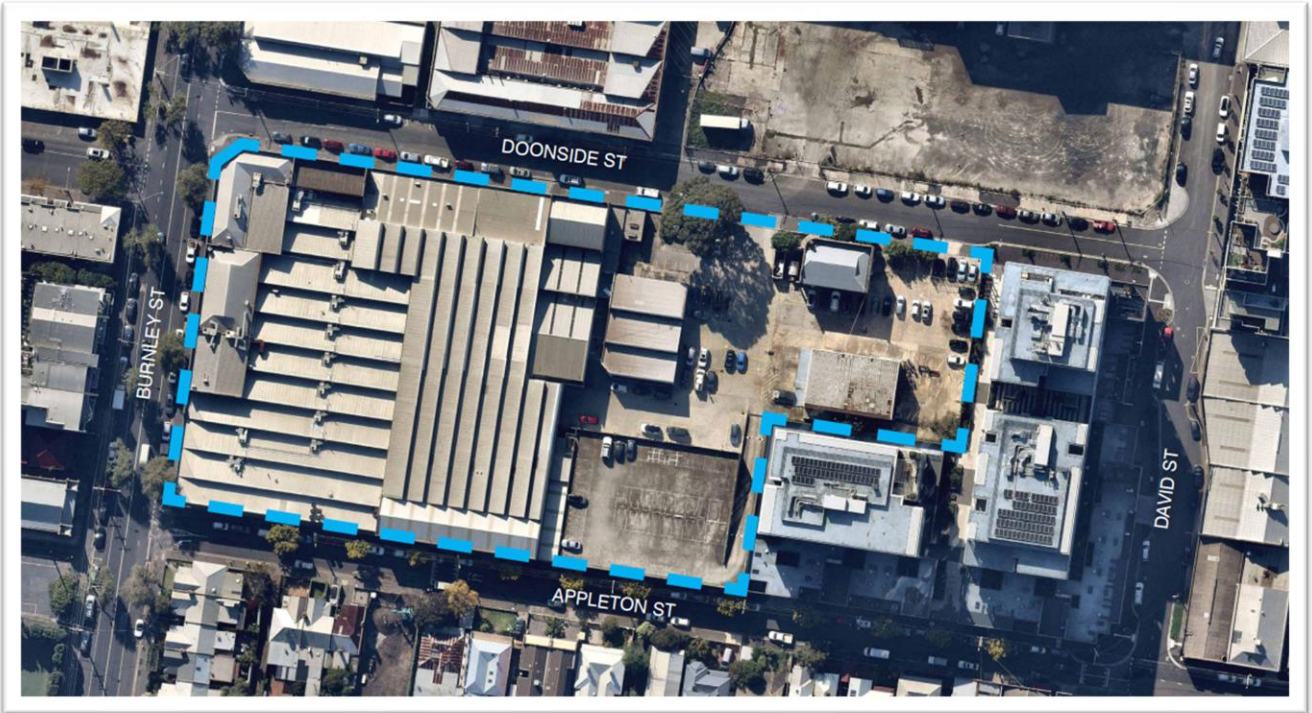


Figure 8: Aerial image of the subject site. Source: Landscape Plan (TCL 2023)

52. Two heritage buildings are located within the site. These are the Russell Manufacturing Co. (former Repco) building on the western side of the land which extends along all three street frontages (81-95 Burnley Street) and the former Repco Offices and Laboratories which addresses Doonside Street (26 Doonside Street). Both of these buildings are located within site specific heritage overlays.



Figure 9: Russell Manufacturing Co. building (81-95 Burnley Street). Source: Landscape Plan (TCL 2023)



Figure 10: former Repco Offices and Laboratories (26 Doonside Street). Source: Landscape Plan (TCL 2023)

53. The site has primary vehicle access to Doonside Street via six crossovers and is currently tenanted by 'Harry the Hirer', a party and marquee hire company.
54. The site is designated as a 'strategic redevelopment site' within Clause 21.03 (Vision) of the Yarra Planning Scheme.

Certificates of title

55. The site comprises two certificates of title:
 - (a) 81-95 Burnley Street, Richmond – Lot 1 on Plan of Subdivision 743081D; and
 - (b) 26-34 Doonside Street, Richmond – Lot 2 on Plan of Subdivision 743081D.
56. There are no easements or restrictive covenants on the certificates of title.

Surrounding Land

57. The subject site is located in an area which includes a mix of high- and low-density residential development, industrial uses, a shopping and office complex, two major arterial roads (Victoria and Burnley Street) and two Major Activity Centres (Victoria Street and Bridge Road). The proximity to these Major Activity Centres (MAC) ensures that the site has good access to a range of amenities and services, including within the Victoria Gardens Shopping Centre immediately to the north of the subject site.
58. The surrounding area features a variety of building styles, primarily consisting of inter-war factory and commercial buildings typically between one and four storeys in height, and an emerging character of contemporary high-rise apartment and mixed-use developments. Scale of development drops from north to south, reducing to low rise dwellings.



Figure 11: Aerial image of subject site and Victoria Gardens. Source: Development Plan (Gurner 2023)

59. Several public transport options are accessible within proximity to the subject site, including:
- (a) Tram Routes 109 (Box Hill- Port Melbourne) and 12 (St Kilda - Victoria Gardens) approximately 350- 400m to the north and north-east of the site respectively, servicing Victoria Street;
 - (b) Tram Routes 48 (Victoria Harbour Docklands - North Balwyn) and 75 (Etihad Stadium - Vermont South) approximately 550m south of the site, along Bridge Road;
 - (c) Bus Route 609 (Hawthorn - Fairfield), approximately 1.2km east of the site;
 - (d) Burnley Station, approximately 1.5km south of the site;
 - (e) North Richmond Station, approximately 1.8km west of the site; and
 - (f) West Richmond Station, approximately 1.9km west of the site.
60. Sustainable travel modes, including cycling and walking, are accessible via the Main Yarra Trail/Capital City Trail off-road bicycle and walking path to the east of the site, along the Yarra River, as well as bicycle and footpaths along Burnley Street to the west.
61. The more immediate interfaces are as follows:

North

62. Immediately to the north of the site is Doonside Street, a local road extending between Burnley Street to the west and David Street to the east. Doonside Street currently accommodates traffic in both directions with restricted on-street car parking on both sides of the road.
63. The Victoria Gardens shopping complex is located on the northern side of Doonside Street. This area contains a floor area of approximately 35,000sqm and 2,000 car spaces. The parcel of land associated with Victoria Gardens extends from the corner of Victoria Street and Burnley Street (north-west) to the corner of Doonside Street and David Street (south-west).
64. The area of land immediately to the north of the subject site is known as the 'Doonside Precinct', with this precinct encompassing land at 53, 61-67, 77-79 Burnley Street, 1-9 Doonside Street and 620 Victoria Street, Richmond. This precinct currently contains a range of single and double-storey buildings, along with at-grade car parking and loading facilities for the shopping complex.
65. The Doonside precinct is subject to a current Section 96A Planning Application which seeks to undertake a combined Planning Scheme Amendment (PSA) and Planning Permit Application (PPA) for the land. The Minister for Planning is the Responsible Authority for this land.
66. An assessment of the combined amendment and application was undertaken by Council planning officers, with Council resolving at its Council meeting of 14 March 2023 that it would write to the Minister outlining recommendations and concerns with the proposed scheme.
67. The PPA sought approval for the demolition and construction of six multi-storey mixed-use buildings. These buildings range from 7 storeys to 17 storeys and contain a total of 839 'build to rent' apartments located across all buildings. Images of this proposal are provided in Figures 12 & 13.
68. At the time of writing this report, no decision has been made by the Minister for Planning.

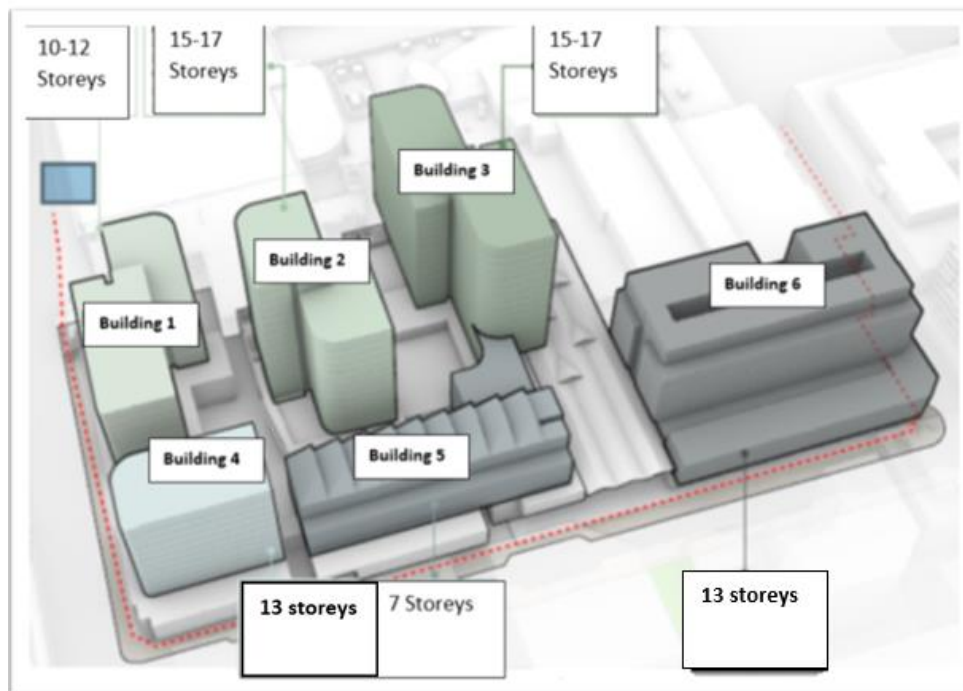


Figure 12: Proposed Building Heights within Doonside Precinct. Source: Planning Officer Report, Council Meeting 14 March 2023.



Figure 13: Proposed Building Heights within Doonside Precinct. Source: Planning Officer Report, Council Meeting 14 March 2023.

69. To the north of the Doonside and Victoria Garden precincts is Victoria Street, a major arterial road defined as being a 'Principal Road Network – TRZ2' within the Scheme. Victoria Street provides an east-west connection through Richmond.
70. On the opposite side of Victoria Street, further north, No. 647 Victoria Street is a multi-storey mixed-use development (Figure 14), with the 'Skipping Girl' Sign to the north-east. Also, to the north-east is the 11-13 storey 'Honeywell' residential development. To the north-west are several taller (8 and 10 storeys) residential developments. These are demonstrated in Figure 15.



Figure 14: No. 647 Victoria Street. Source: Planning Officer Report, Council Meeting 14 March 2023.



Figure 15: Built form to the north-west. Source: Planning Officer Report, Council Meeting 14 March 2023.

East

71. The entire eastern boundary of the site abuts the Embassy Apartment complex. This is an L-shaped development at 36-44 Doonside Street that wraps around the site's eastern and south-eastern boundary. The development contains three buildings, ranging in heights from 9, 10 and 13 storeys. The development contains 289 dwellings, 335 car spaces accessed via Appleton Street and David Street and 414sqm of commercial floor area. The layout of the apartment complex is demonstrated in Figure 16.



Figure 16: Embassy Apartment Complex. Source: Development Plan (Gurner 2023)

72. Built form throughout the complex provides two to three storey street walls addressing all street interfaces, with varied setbacks of the upper levels (Figure 17). The exception to this is the 9-storey street wall addressing Doonside Street at Figure 18.



Figure 17: Embassy Apartments viewed from south-east (2023)

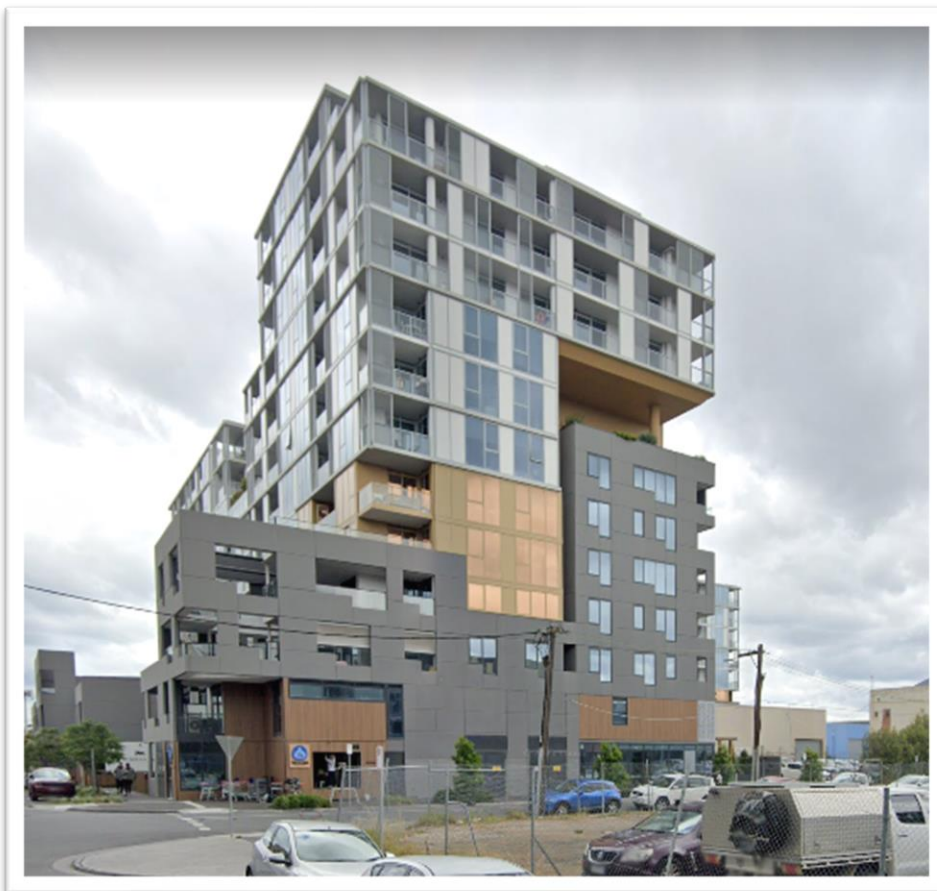


Figure 18: Embassy Apartments viewed from north-east (2023)

73. A significant number of windows and balconies address the subject site in all three buildings. Within Building A of the Embassy Apartments, these habitable spaces are setback between 2.45m to 3.15m from the shared boundary, with greater setbacks provided for the existing Buildings B & C.

South

74. Appleton Street contains a low-rise residential scale, with single and double-storey dwellings extending along the southern side of the streetscape in a fine-grain pattern. Land to the south is located within a mixture of the General and Neighbourhood Residential Zones.



Figure 19: View along Appleton Street

West

75. To the west of the site is Burnley Street, an arterial road extending north-south through Richmond. Burnley Street accommodates a lane of traffic, a bicycle lane and on-street car parking in both directions.
76. Further to the west, on the opposite side of Burnley Street, built form ranges between single storey dwellings up to the more recent 171 Buckingham Street developed at 7-storeys (Figure 20). Towards the Victoria Street intersection, built form typically ranges between 7-8 storeys as it interfaces with the Victoria Gardens Shopping centre.
77. Land addressing Burnley Street has increasingly been redeveloped with residential apartments of a midrise scale. Other nearby uses include a primary school and church on the western side of Burnley Street.



Figure 20: No. 171 Buckingham Street (2023)

Planning Scheme Provisions

Zoning

Mixed Use Zone

78. The purpose of the MUZ is:

- (a) *To implement the Municipal Planning Strategy and the Planning Policy Framework;*
- (b) *To provide for a range of residential, commercial, industrial and other uses which complement the mixed-use function of the locality;*
- (c) *To provide for housing at higher densities;*
- (d) *To encourage development that responds to the existing or preferred neighbourhood character of the area; and*
- (e) *To facilitate the use, development and redevelopment of land in accordance with the objectives specified in a schedule to this zone.*

79. Pursuant to Clause 32.04-2 of the Scheme, the following uses are *Section 1 – Permit not required* uses:

- (a) Dwelling;
- (b) Food and drink premises (if the leasable floor area does not exceed 150sqm);
- (c) Office; and
- (d) Shop (if the leasable floor area does not exceed 150sqm).

80. Pursuant to Clause 32.04-6 of the Scheme, a planning permit is required to construct two or more dwellings on a lot. For an apartment development of five or more storeys, excluding a basement, the objectives, standards and decisions guidelines of Clause 58 apply.

Overlays

81. The subject site is affected by the following overlays:

- (a) Development Plan Overlay (DPO15) – Schedule 15 (81-95 Burnley Street and 26-34 Doonside Street, Richmond);

- (b) Design and Development Overlay – Schedule 2 (Main Roads and Boulevards);
- (c) Environmental Audit Overlay (EAO);
- (d) Heritage Overlay (HO252 & HO375); and
- (e) Development Contributions Plan Overlay, Schedule 1 (DCPO1).

Development Plan Overlay

82. Pursuant to Clause 43.04, the purpose of the DPO is as follows:

- (a) *To implement the Municipal Planning Strategy and the Planning Policy Framework;*
- (b) *To identify areas which require the form and conditions of future use and development to be shown on a development plan before a permit can be granted to use or develop the land; and*
- (c) *To exempt an application from notice and review if a development plan has been prepared to the satisfaction of the responsible authority.*

83. Schedule 15 to the DPO applies to the subject site and outlines the conditions and requirements for permits (Clause 3) and requirements for a Development Plan (Clause 4).

84. The requirements of the Development Plan are as follows:

- (a) *A development plan must be generally in accordance with the Indicative Framework plan as shown in Figure 1, and the vision set out in this schedule, to the satisfaction of the responsible authority;*
- (b) *A development plan must be approved for the whole site, however the land may be developed in stages;*
- (c) *The development plan must include the following sections, all prepared to the satisfaction of the responsible authority:*
 - (i) *Development Plan Vision;*
 - (ii) *Components of the Development Plan;*
 - *Site and Context Information;*
 - *Concept Plans;*
 - *Built Form guidelines;*
 - *Supplementary Documentation;*
 - *Open Space and Landscape;*
 - *Public Realm Plan;*
 - *Housing Diversity Report;*
 - *Transport Works Assessment;*
 - *Environmentally Sustainable Design;*
 - *Drainage;*
 - *Comprehensive Heritage Analysis;*
 - *Noise Impacts;*
 - *Development Staging.*

Design and Development Overlay, Schedule 2 (DD02) 'Main Roads and Boulevards'

85. Pursuant to Clause 43.02-2 of the Scheme, a planning permit is required to construct a building or construct or carry out works.

86. Design objectives of Schedule 2 include the following:

- (a) *To recognise the importance of main roads to the image of the City;*

- (b) *To retain existing streetscapes and places of cultural heritage significance and encourage retention of historic buildings and features which contribute to their identity;*
- (c) *To reinforce and enhance the distinctive heritage qualities of main roads and boulevards;*
- (d) *To recognise and reinforce the pattern of development and the character of the street, including traditional lot width, in building design;*
- (e) *To encourage high quality contemporary architecture;*
- (f) *To encourage urban design that provides for a high level of community safety and comfort;*
- (g) *To limit visual clutter; and*
- (h) *To maintain and where needed, create, a high level of amenity to adjacent residential uses through the design, height and form of proposed development.*

Environmental Audit Overlay (EAO)

87. Pursuant to Clause 45.03-1 of the Scheme, before a sensitive use (residential use, child care centre, kindergarten, pre-school centre, primary school, even if ancillary to another use), children's playground or secondary school commences or before the construction or carrying out of buildings and works in association with these uses commences:
- (a) *A preliminary risk screen assessment statement in accordance with the Environment Protection Act 2017 must be issued stating that an environmental audit is not required for the use or the proposed use; or*
 - (b) *An environmental audit statement under Part 8.3 of the Environment Protection Act 2017 must be issued stating that the land is suitable for the use or proposed use; or*
 - (c) *A certificate of environmental audit must be issued for the land in accordance with Part IXD of the Environment Protection Act 1970; or*
 - (d) *A statement of environmental audit must be issued for the land in accordance with Part IXD of the Environment Protection Act 1970 stating that the environmental conditions of the land are suitable for the use or proposed use.*

Heritage Overlay (HO252 – 26 Doonside Street, Richmond & HO375 – Russell Manufacturing Company Pty Ltd later Repco)

88. Pursuant to Clause 43.01-1 of the Scheme, a planning permit is required to demolish a building, construct a building and construct or carry out works.
89. Both of these overlays are site specific overlays.

Development Contributions Plan Overlay, Schedule 1 (DCP01).

90. The subject site is affected by the Development Plan Contributions Overlay (DPCO) – Schedule 1.
91. Pursuant to Clause 45.06-1 a permit granted in the DCPO must;
- (a) *Be consistent with the provisions of the relevant development contributions plan; and*
 - (b) *Include any conditions required to give effect to any contributions or levies imposed, conditions or requirements set out in the relevant schedule to this overlay.*
92. A planning permit is not required for works under the overlay. However, if a permit was issued in accordance with other permit triggers, conditions should be added to the permit as follows;
- (a) *Prior to the commencement of the development, the Development Infrastructure Levy must be paid to Yarra City Council in accordance with the approved Development Contributions Plan; and*

- (b) *Prior to the issue of a building permit, the Community Infrastructure Levy must be paid to Yarra City Council in accordance with the approved Development Contributions Plan.*

Particular Provisions

Clause 52.06 – Car Parking

93. Pursuant to Clause 52.06-2, before a new use commences, the required car parking spaces must be provided on the land.
94. The proposal intends to provide in the order of 775-825 car parking spaces on-site. Approximately 220-270 car spaces are proposed for the commercial uses, as a mixture of staff and visitor provisions. The remaining circa 550-560 car spaces would be allocated for residents. Between 15-20 motorcycle spaces are proposed, along with 2 car share spaces.
95. The final car parking numbers and assessment will be undertaken via the planning application stage.

Clause 52.34 – Bicycle Facilities

96. Pursuant to Clause 52.34-1, a new use must not commence until the required bicycle facilities and associated signage are provided on the land.
97. The proposal contemplates the following bicycle parking provisions;
- (a) Approximately 140-180 staff bicycle parking spaces;
 - (b) Approximately 545-645 resident bicycle spaces;
 - (c) A minimum of 84 visitor bicycle spaces; and
 - (d) End of Trip facilities are proposed on-site for staff and will achieve a minimum rate of 1 shower/changeroom per 10 bikes.
98. The final bicycle numbers and assessment will be undertaken via the planning application stage.

Clause 53.01 – Public Open Space Contribution and Subdivision

99. A person who proposes to subdivide land must make a contribution to the council for public open space in an amount specified in the schedule to this clause (being a percentage of the land intended to be used for residential, industrial or commercial purposes, or a percentage of the site value of such land, or a combination of both). If no amount is specified, a contribution for public open space may still be required under section 18 of the *Subdivision Act 1988*.
100. The DPO specifies that the development must include the provision of at least 4.5% of the total site (576 square metres) for public open space which fronts Doonside Street and adjoins the pedestrian lane (or a higher percentage if contained in Clause 53.01 of the Yarra Planning Scheme at the time of subdivision). Council is currently reviewing its open space contribution rate and anticipates that the requirement for provision of open space on the land may increase. This aspect will be discussed within the body of the report.

Clause 53.18 – Stormwater Management in Urban Development

101. This clause applies to an application under a provision of a zone to construct a building or construct or carry out works. An application to construct a building or to construct or carry out works:
- (a) *Must meet all of the objectives of Clauses 53.18-5 and 53.18-6; and*
 - (b) *Should meet all of the standards of Clauses 53.18-5 and 53.18-6.*

General Provisions

102. The decision guidelines outlined at Clause 65 of the Scheme are relevant to all applications. Because a permit can be granted does not imply that a permit should or will be granted.

Before deciding on an application, the Responsible Authority must consider a number of matters. Amongst other things, the Responsible Authority must consider the relevant Municipal Planning Strategy and the Planning Policy Framework, as well as the purpose of the zone, overlay or any other provision. An assessment of the application against the relevant sections of the Scheme is contained in this report.

[Planning Policy Framework \(PPF\)](#)

103. The following PPF provisions of the Scheme are relevant:

Clause 11.01-1R – Settlement – Metropolitan Melbourne

104. The relevant strategy of this clause is to:

- (a) *Create mixed-use neighbourhoods at varying densities, including through the development of urban-renewal precincts, that offer more choice in housing, create jobs and opportunities for local businesses and deliver better access to services and facilities.*

Clause 11.02-1S – Supply of Urban Land

105. The relevant strategy of this clause is to:

- (a) *Planning for urban growth should consider:*
 - (i) *Opportunities for the consolidation, redevelopment and intensification of existing urban areas.*

Clause 11.03-1S – Activity Centres

106. The objective of this clause is to:

- (a) *To encourage the concentration of major retail, residential, commercial, administrative, entertainment and cultural developments into activity centres that are highly accessible to the community; and*
- (b) *Relevant strategies include the following;*
 - (i) *Undertake strategic planning for the use and development of land in and around activity centres;*
 - (ii) *Encourage a diversity of housing types at higher densities in and around activity centres;*
 - (iii) *Reduce the number of private motorised trips by concentrating activities that generate high numbers of (non-freight) trips in highly accessible activity centres; and*
 - (iv) *Improve access by walking, cycling and public transport to services and facilities.*

Clause 11.03-2S – Growth Areas

107. The objective of this clause is:

- (a) *To locate urban growth close to transport corridors and services and provide efficient and effective infrastructure to create sustainability benefits while protecting primary production, major sources of raw materials and valued environmental areas.*

Clause 13.04-1S – Contaminated and potentially contaminated land

108. The objective of this clause is:

- (a) *To ensure that potentially contaminated land is suitable for its intended future use and development, and that contaminated land is used safely.*

Clause 13.05-1S – Noise management

109. The objective of this clause is;

- (a) *To assist the management of noise effects on sensitive land uses.*

Clause 15.01 – Built Environment and Heritage

Clause 15.01-1S – Urban design

110. The objective is:

- (a) *To create urban environments that are safe, healthy, functional and enjoyable and that contribute to a sense of place and cultural identity.*

Clause 15.01-1R – Urban design - Metropolitan Melbourne

111. The objective is:

- (a) *To create a distinctive and liveable city with quality design and amenity.*

Clause 15.01-2S – Building design

112. The objective is:

- (a) *To achieve building design and siting outcomes that contribute positively to the local context, enhance the public realm and support environmentally sustainable development.*

113. Relevant strategies include:

- (a) *Ensure a comprehensive site analysis forms the starting point of the design process and provides the basis for the consideration of height, scale and massing of new development;*
- (b) *Ensure development responds and contributes to the strategic and cultural context of its location;*
- (c) *Minimise the detrimental impact of development on neighbouring properties, the public realm and the natural environment;*
- (d) *Ensure the form, scale, and appearance of development enhances the function and amenity of the public realm;*
- (e) *Ensure buildings and their interface with the public realm support personal safety, perceptions of safety and property security;*
- (f) *Ensure development is designed to protect and enhance valued landmarks, views and vistas; and*
- (g) *Ensure development provides safe access and egress for pedestrians, cyclists and vehicles.*

114. This clause also states that planning must consider as relevant:

- (a) *Urban Design Guidelines for Victoria (Department of Environment, Land, Water and Planning, 2017); and*
- (b) *Apartment Design Guidelines for Victoria (Department of Environment, Land, Water and Planning, 2017).*

Clause 15.01-4S – Healthy neighbourhoods

115. The objective of this clause is:

- (a) *To achieve neighbourhoods that foster healthy and active living and community wellbeing.*

Clause 15.01-4R – Healthy neighbourhoods - Metropolitan Melbourne

116. The strategy is:

- (a) *Create a city of 20 minute neighbourhoods, that give people the ability to meet most of their everyday needs within a 20 minute walk, cycle or local public transport trip from their home.*

Clause 15.01-5S – Neighbourhood character

117. The objective of this clause is:

- (a) *To recognise, support and protect neighbourhood character, cultural identity, and sense of place.*

Clause 15.03-1S – Heritage Conservation

118. The objective of this clause is;

- (a) *To ensure the conservation of places of heritage significance.*

Clause 16 – Housing

Clause 16.01-1R – Housing supply – Metropolitan Melbourne

119. Relevant strategies include;

- (a) *Identify areas that offer opportunities for more medium and high density housing near employment and transport in Metropolitan Melbourne;*
- (b) *Facilitate increased housing in established areas to create a city of 20 minute neighbourhoods close to existing services, jobs and public transport; and*
- (c) *Provide certainty about the scale of growth by prescribing appropriate height and site coverage provisions for different areas.*

Clause 16.01-2S – Housing affordability

120. The objective of this clause is;

- (a) *To deliver more affordable housing closer to jobs, transport and services.*

121. The relevant strategy is to;

- (a) *Improve housing affordability by;*
 - (i) *Encouraging a significant proportion of new development to be affordable for households on very low to moderate incomes.*

Clause 17.01 – Employment

Clause 17.02-1S – Business

122. The relevant objective of this clause is:

- (a) *To encourage development that meets the communities' needs for retail, entertainment, office and other commercial services.*

123. Relevant strategies include;

- (a) *Locate commercial facilities in existing or planned activity centres; and*
- (b) *Provide new convenience shopping facilities to provide for the needs of the local population in new residential areas and within, or immediately adjacent to, existing commercial centres.*

Clause 18 – Transport

Clause 18.01-1S – Land use and transport integration

124. The objective of this clause is;

- (a) *To facilitate access to social, cultural and economic opportunities by effectively integrating land use and transport.*

Clause 18.02-1S – Walking

125. The objective of this clause is;

- (a) *To facilitate an efficient and safe walking network and increase the proportion of trips made by walking.*

Clause 18.02-2S – Cycling

126. The objective of this clause is;

- (a) *To facilitate an efficient and safe bicycle network and increase the proportion of trips made by cycling.*

Clause 18.02-2R – Cycling – Metropolitan Melbourne

127. The strategy of this clause is to;

- (a) *Develop local cycling networks and new cycling facilities that support the development of 20-minute neighbourhoods and that link to and complement the metropolitan-wide network of bicycle routes - the Principal Bicycle Network*

Clause 18.02-3S – Public Transport

128. The objective of this clause is;

- (a) *To facilitate an efficient and safe public transport network and increase the proportion of trips made by public transport.*

Clause 18.02-3R – Principal Public Transport Network

129. Relevant strategies include the following;

- (a) *Maximise the use of existing infrastructure and increase the diversity and density of development along the Principal Public Transport Network, particularly at interchanges, activity centres and where principal public transport routes intersect.*

Clause 19.02-6R – Open Space – Metropolitan Melbourne

130. The relevant objective and strategies of this clause are;

- (a) *To strengthen the integrated metropolitan open space network; and*
- (b) *Develop a network of local open spaces that are accessible and of high-quality and include opportunities for new local open spaces through planning for urban redevelopment projects.*

Clause 19.03-1S – Development and infrastructure contributions plans

131. The relevant objective of this clause is;

- (a) *To facilitate the timely provision of planned infrastructure to communities through the preparation and implementation of development contributions plans and infrastructure contributions plans.*

Clause 19.03-3S – Integrated water management

132. The relevant objective of this clause is;

- (a) *To sustainably manage water supply and demand, water resources, wastewater, drainage and stormwater through an integrated water management approach.*

Local Planning Policy Framework (LPPF)

Clause 21 – Municipal Strategic Statement (MSS)

Clause 21.04 – Land Use

Clause 21.04-1 – Accommodation and housing

133. The relevant objectives and strategies of this clause are:

- (a) *Objective 1 To accommodate forecast increases in population.*
 - (i) *Strategy 1.1 Ensure that new residential development has proper regard for the strategies applicable to the neighbourhood in question identified in clause 21.08;*
 - (ii) *Strategy 1.2 Direct higher density residential development to Strategic Redevelopment Sites identified at clause 21.08 and other sites identified through any structure plans or urban design frameworks; and*
 - (iii) *Strategy 1.3 Support residual population increases in established neighbourhoods; and*
- (b) *Objective 2 To retain a diverse population and household structure;*
 - (i) *Support the provision of affordable housing for people of all abilities particularly in larger residential developments and on Strategic Redevelopment Sites.*

Clause 21.04-2 – Activity Centres

134. The relevant objectives and strategies of this clause are:

- (a) *Objective 4 To maintain a balance between local convenience and regional retail roles in Yarra's activity centres:*
 - (i) *Strategy 4.1 Increase the range of retail, personal and business services, community facilities, and recreation activities, within individual centres; and*
- (b) *Objective 5 To maintain the long term viability of activity centres:*
 - (i) *Strategy 5.3 Discourage uses at street level in activity centres which create dead frontages during the day; and*
 - (ii) *Strategy 5.4 Permit residential development that does not compromise the business function of activity centres.*

Clause 21.04-3 Industry, office and commercial

135. The relevant objectives and strategies of this clause are:

- (a) *Objective 8 To increase the number and diversity of local employment opportunities.*

Clause 21.04-5 Parks, gardens and public open space

136. The relevant objectives and strategies of this clause are:

- (a) *Objective 13 To provide an open space network that meets existing and future community needs.*
 - (i) *Strategy 13.1 Apply the Public Open Space Contribution Policy at clause 22.12; and*
 - (ii) *Strategy 13.3 Ensure new development does not have a negative impact on adjoining open space.*

Clause 21.05-1 Heritage

137. The relevant objectives and strategies are:

- (a) *Objective 14 To protect and enhance Yarra's heritage places:*
 - (i) *Strategy 14.2 Support the restoration of heritage places;*

- (ii) *Strategy 14.6 Protect buildings, streetscapes and precincts of heritage significance from the visual intrusion of built form both within places and from adjoining areas;*
- (iii) *Strategy 14.8 Apply the Development Guidelines for sites subject to a Heritage Overlay policy at clause 22.02; and*
- (iv) *Strategy 14.9 Apply the Landmarks and Tall Structures policy at clause 22.03.*

Clause 21.05-2 – Urban design

138. The relevant objectives and strategies of this clause is:

- (a) *Objective 16 To reinforce the existing urban framework of Yarra;*
- (b) *Objective 17 To retain Yarra's identity as a low-rise urban form with pockets of higher development:*
 - (i) *Strategy 17.2 Development on strategic redevelopment sites or within activity centres should generally be no more than 5-6 storeys unless it can be demonstrated that the proposal can achieve specific benefits such as:*
 - *Significant upper level setbacks*
 - *Architectural design excellence*
 - *Best practice environmental sustainability objectives in design and construction*
 - *High quality restoration and adaptive re-use of heritage buildings*
 - *Positive contribution to the enhancement of the public domain*
 - *Provision of affordable housing.*
 - (ii) *Strategy 17.3 Apply the Landmarks and Tall Structures policy at clause 22.03; and*
 - (iii) *Strategy 18.2 Enhance the amenity of laneways by applying the Development Abutting Laneway policy at Clause 22.07;*
- (c) *Objective 21 To enhance the built form character of Yarra's activity centres:*
 - (i) *Strategy 21.1 Require development within Yarra's activity centres to respect and not dominate existing built form;*
 - (ii) *Strategy 21.2 Require new development within an activity centre to consider the context of the whole centre recognising that activity centres may consist of sub-precincts, each of which may have a different land use and built form character;*
 - (iii) *Strategy 21.3 Support new development that contributes to the consolidation and viability of existing activity centres; and*
- (d) *Objective 22 To encourage the provision of universal access in new development.*

Clause 21.05-4 Public environment

139. The relevant objectives and strategies of this clause is:

- (a) *Objective 28: To provide a public environment that encourages community interaction and activity:*
 - (i) *Strategy 28.1 Encourage universal access to all new public spaces and buildings;*
 - (ii) *Strategy 28.2 Ensure that buildings have a human scale at street level;*
 - (iii) *Strategy 28.3 Require buildings and public spaces to provide a safe and attractive public environment;*
 - (iv) *Strategy 28.4 Require new development to consider the opportunity to create public spaces as part of new development;*

- (v) *Strategy 28.5 Require new development to make a clear distinction between public and private spaces;*
- (vi) *Strategy 28.6 Require new development to consider the creation of public access through large development sites, particularly those development sites adjacent to waterways, parkland or activity centres;*
- (vii) *Strategy 28.9 Apply the Public Open Space Contribution policy at clause 22.12; and*
- (viii) *Strategy 28.10 Require site rezonings for new development to consider the inclusion of public domain improvements commensurate with the new use.*

Clause 21.06 - Transport

Clause 21.06-1 Walking and cycling

140. The relevant objectives and strategies of this clause are:

- (a) *Objective 30 To provide safe and convenient pedestrian and bicycle environments:*
 - (i) *Strategy 30.1 Improve pedestrian and cycling links in association with new development where possible.*

Clause 21.06-3 The road system and parking

141. The relevant objectives and strategies of this clause are:

- (a) *Objective 32 To reduce the reliance on the private motor car.*

Clause 21.07-1 Environmentally sustainable development

142. The relevant objectives and strategies of this Clause are:

- (a) *Objective 34 To promote environmentally sustainable development:*
 - (i) *Strategy 34.1 Encourage new development to incorporate environmentally sustainable design measures in the areas of energy and water efficiency, greenhouse gas emissions, passive solar design, natural ventilation, stormwater reduction and management, solar access, orientation and layout of development, building materials and waste minimisation; and*
 - (ii) *Strategy 34.3 Apply the Environmentally Sustainable Development policy at clause 22.17.*

Clause 21.08 – Neighbourhoods

Clause 21.08-9 – North Richmond (north of Bridge Road)

143. The Victoria Street Major Activity centre runs along the northern boundary of this neighbourhood. This activity centre spans approximately 2 kilometres and incorporates a variety of land uses along its length – some vibrant and others more dormant in terms of activity and street frontage. Within the centre are three precincts. The subject site is located within Victoria Street East.

144. This precinct incorporates the area between Grosvenor Street in the west and the Yarra River to the east. It includes a combination of retail, bulky goods, entertainment, residential and office land uses. The centre has a key interface with the Yarra River, which defines its northern and eastern boundaries. Significant parts of this precinct have recently undergone extensive redevelopment. With a number of key sites in the area still up for redevelopment, it will continue to evolve. New development must enhance the landscape qualities of the Yarra River and include active frontages on Victoria Street and the River. The Victoria Gardens development has the capacity to incorporate further residential development.

145. Relevant strategies include;

- (a) *Supporting residential and office growth on the Victoria Street Gardens site; and*
- (b) *Linking the eastern part of the Victoria Street Major Activity Centre with the open space along the Yarra River.*

Relevant Local Policies

Clause 22.02 – Development Guidelines for Sites Subject to the Heritage Overlay

146. This policy applies to all new development included in a heritage overlay. The relevant objectives of this clause are:

- (a) *To conserve Yarra’s natural and cultural heritage;*
- (b) *To retain significant view lines to, and vistas of, heritage places;*
- (c) *To preserve the scale and pattern of streetscapes in heritage places;*
- (d) *To ensure that additions and new works to a heritage place respect the significance of the place; and*
- (e) *To encourage the retention of ‘individually significant’ and ‘contributory’ heritage places.*

Clause 22.03 – Landmarks and Tall Structures

147. The objective of this clause is;

- (a) *To maintain the prominence of Yarra’s valued landmarks and landmark signs; and*
- (b) *This includes the Skipping Girl sign on Victoria Street.*

Clause 22.05 – Interface Uses Policy.

148. The objectives of this clause are:

- (a) *To enable the development of new residential uses within and close to activity centres, near industrial areas and in mixed use areas while not impeding the growth and operation of these areas as service, economic and employment nodes; and*
- (b) *To ensure that residential uses located within or near commercial centres or near industrial uses enjoy a reasonable level of amenity.*

Clause 22.07 – Development Abutting Laneways

149. The objectives of this clause are;

- (a) *To provide an environment which has a feeling of safety for users of the laneway; and*
- (b) *To ensure that development along a laneway is provided with safe pedestrian and vehicular access.*

Clause 22.10 – Built Form and Design Policy

150. This policy applies to all new development not included in a heritage overlay. Relevant objectives aim to;

- (a) *Ensure that new development positively responds to the context of the development and respects the scale and form of surrounding development where this is a valued feature of the neighbourhood character;*

- (b) *Ensure that new development makes a positive contribution to the streetscape through high standards in architecture and urban design;*
- (c) *Limit the impact of new development on the amenity of surrounding land, particularly residential land;*
- (d) *Design buildings to increase the safety, convenience, attractiveness, inclusiveness, accessibility and 'walkability' of the City's streets and public spaces;*
- (e) *Create a positive interface between the private domain and public spaces; and*
- (f) *Encourage environmentally sustainable development.*

Clause 22.11 – Victoria Street East Precinct Policy

151. The Victoria Street East Precinct is undergoing extensive private-sector redevelopment. The Victoria Gardens Shopping Centre and associated apartments are the first stages in the transformation of industrial sites in the area.

152. Key objectives of this clause are:

- (a) *To improve the pedestrian environment along main roads, within the Precinct and along the River corridor, particularly at the intersection of Victoria Street with Burnley and Walmer Streets;*
- (b) *To encourage the use of public transport, cycling and walking for access within the Victoria Street Precinct and between it and other parts of Melbourne;*
- (c) *To provide for adequate access to, from and within redevelopment sites that contributes to the development of an integrated pedestrian and cycling network within the Precinct;*
- (d) *To reduce vehicular traffic conflicts with tram services in Victoria Street without the requirement of future road widening;*
- (e) *To ensure new development contributes to the provision of appropriate physical and social infrastructure to support the change of uses in the Precinct;*
- (f) *To provide for higher intensity residential development within the Major Activity Centre where this will not be discordant with the built form and amenity of residential areas to the west and south of the Precinct;*
- (g) *To encourage high quality urban design and architecture throughout the precinct which contributes to the public realm, including the Yarra River corridor and street scapes;*
- (h) *To ensure that the development or redevelopment of this precinct protects the character and amenity of neighbouring residential areas; and*
- (i) *To ensure access to sunlight and amenity is maintained in public spaces and that sensitive community facilities are protected from overshadowing and other detrimental impacts.*

Clause 22.12 – Public Open Space Contribution

153. This policy applies to all residential proposals, mixed use proposals incorporating residential uses and proposals incorporating residential subdivision.

154. The objectives of this clause are:

- (a) To implement the Yarra Open Space Strategy;
- (b) To identify when and where land contributions for public open space are preferred over cash contributions; and

- (c) To ensure that where appropriate, land suitable for public open space is set aside as part of the design of a development so that it can be transferred to or vested in Council, in satisfaction of the public open space contribution requirement.

155. The site is located in an area where land contributions of public open space are preferred over cash contributions. The DP requires a land contribution of at least 4.5% of the total site. This will be provided in the form of Doonside Park, which will be vested with Council once complete.

Clause 22.16 – Stormwater Management (Water Sensitive Urban Design)

156. The relevant objectives of this clause are:

- (a) *To achieve the best practice water quality performance objectives set out in the Urban Stormwater Best Practice Environmental Management Guidelines, CSIRO 1999 (or as amended). Currently, these water quality performance objectives require:*
 - (i) *Suspended Solids - 80% retention of typical urban annual load;*
 - (ii) *Total Nitrogen - 45% retention of typical urban annual load;*
 - (iii) *Total Phosphorus - 45% retention of typical urban annual load; and*
 - (iv) *Litter - 70% reduction of typical urban annual load; and*
- (b) *To promote the use of water sensitive urban design, including stormwater re-use.*

Clause 22.17 – Environmentally Sustainable Development

157. This policy applies to residential development with more than one dwelling. The overarching objective is that development should achieve best practice in environmentally sustainable development from the design stage through to construction and operation. The Development Plan has specific environmental sustainability standards that will be referenced within the assessment section.

[Other relevant documents](#)

158. Clause 15.01-2S states that planning must consider as relevant:

- (a) *Urban Design Guidelines for Victoria (Department of Environment, Land, Water and Planning, 2017). (UDG)*

159. Schedule to Clause 72.04 of the Yarra Planning Scheme refers to the following Incorporate Documents which are of relevance to the site:

- (a) *Victoria Gardens Building Envelope and Precinct Plan and Precinct 3 Plan - Warehouse Area; and*
- (b) *Victoria Gardens Urban Design Guidelines, May 1997.*

Plan Melbourne

160. Plan Melbourne outlines a vision of Melbourne as a 'global city of opportunity and choice'. This vision is guided by seven key outcomes, each supported by directions and policies towards their implementation. Outcomes relevant to the land-use and built-form changes sought by this proposal include the following:

- (a) *Outcome 1: Melbourne is a productive city that attracts investment, supports innovation and creates jobs;*
- (b) *Outcome 4: Melbourne is a distinctive and liveable city with quality design and amenity; and*
- (c) *Outcome 5: Melbourne is a city of inclusive, vibrant and healthy neighbourhoods:*
 - (i) *Direction 1.1 seeks to create a city structure that strengthens Melbourne's competitive for jobs and investment, particularly regarding supporting the central city to become Australia's largest commercial and residential centre by 2050.*

161. Policy 1.1.1 & 1.1.2 encourages new development opportunities to create grow office floor space amongst residential space is to deliver co-benefits of employment, reduced commuting and transport costs for workers and residents. Urban renewal precincts in and around the central city is acknowledged here to play a major role in delivering high-quality, distinct and diverse neighbourhoods that offer a mix of uses.
162. Policy 4.3.1 seeks to integrate place-making practices into road-space management to ensure the design of streets encourages the use of active transport and facilitates a greater degree of and encounter and interaction between people and places.
163. Direction 5.1 outlines the ambition of creating a city of 20-minute neighbourhoods by encouraging the development of vibrant, mixed-use neighbourhoods linked by a network of activity centres. 'Walkability', 'housing diversity', 'ability to age in place' are identified here as key characteristics of 20-minute neighbourhoods.
164. Direction 5.3 notes the importance of social infrastructure in supporting strong communities.

Yarra Open Space Strategy 2020

165. The Yarra Open Space Strategy was adopted on 1 September 2020 and provides an overarching vision and direction for the future provision, planning, design and management of open space in Yarra to 2031. It considers the current challenges and pressures of an expanding population and inner-city life and how these can be addressed with an expanded and improved public open space network that contributes to a more liveable and sustainable Yarra in the future.

Yarra Housing Strategy

166. The Housing Strategy was adopted on 4 September 2018 and establishes a framework for residential growth for the municipality to meet emerging housing needs and seeks to direct housing growth to appropriate locations. The Strategy identifies opportunities for over 13,000 new dwellings.
167. The subject land is identified in the Housing Strategy for site specific rezoning (reference to Amendment C223) and includes the land in a "high change" area in the Strategic Housing Framework Plan together with land to the north within the Activity Centre, including confined land on the northern side of Victoria Street.
168. Under 'What type of development is likely in high change areas?' the Strategy explains: It is expected that high change areas will support increased residential densities and housing diversity through mixed use, infill and urban renewal apartment development that will establish new character for a site or precinct.

Social and Affordable Housing Strategy

169. Yarra's Social and Affordable Housing Strategy was adopted on 12 November 2019. This document outlines Yarra's future vision for the provision of affordable housing within the municipality and outlines its commitments to pursuing strategies that increase social and affordable housing within the City of Yarra.

Yarra Spatial Economic and Employment Strategy

170. This strategy was adopted on 4 September 2018 and developed to assist Council to understand and capitalise on the municipality's economic strengths over the next 10 to 15 years. The Strategy seeks to provide guidance for the management of growth and change in employment and economic activity, recognising employment land within the municipality as a strategic resource.
171. Relevant strategies for this land include:
 - (a) *Strategy 1 – Support employment growth in Yarra's Activity Centre;*
 - (b) *Strategy 2 – Retain and grow Yarra's major employment precincts;*
 - (c) *Strategy 3 – Identify proposed locations for housing growth; and*

- (d) *Strategy 6 – Retain Yarra’s existing industrial precincts for manufacturing and urban services.*

Victoria in Future 2019

172. Victoria in Future is the official state government projection of population and households. Victoria in Future 2019 (VIF2019) covers the period 2016 to 2056 for Victoria and the major regions. For Local Government Areas (LGA), smaller areas (VIFSAs) and Australian Statistical Geography Standard Areas Level 2 (SA2) and above, it covers the period to 2036. VIF2019 shows Victoria remains the fastest-growing state in the country with our population expected to reach 11.2 million by 2056.

Amendment C269

173. Amendment C269 proposes to update the local policies in the Scheme by replacing the Municipal Strategic Statement (MSS) at Clause 21 and Local Planning Policies at Clause 22 with a Municipal Strategic Strategy and Local Policies within the Planning Policy Framework (PPF), consistent with the structure recently introduced by the State Government.
174. Amendment C269 was on public exhibition between 20 August 2020 and 4 December 2020 and proceeded to a panel hearing in October 2021. The Panel report was released on 18 January 2022. Council resolved on 19 April 2022 that having considered the Panel report, to submit the adopted Amendment to the Minister for Planning for approval.
175. The new clauses are largely reflected in current planning policy, which is generally not contradictory to the proposed re-write of Clauses 21 and 22. However, as this amendment is now a ‘seriously entertained’ planning proposal, a summary and brief assessment of the relevant policies to the proposal is provided in the table below.

Proposed C269 Local Policy reference	
Clause 02.04 – Strategic Framework Plan	The subject site is located in the MUZ, which specifically encourages a range of residential, commercial, industrial and other uses which complement the mixed-use function of the locality
Clause 13.07-1L – Interfaces and amenity	These aspects will be considered in detail within this assessment.
Clause 15.01-1L – Urban Design Clause 15.01-2L – Building Design	The proposal exhibits a high quality architectural and urban design outcome. These aspects will be considered in detail within this assessment.
Clause 15.01-2L - Landmarks	The development has no impact upon the identified landmarks contained within this updated clause.
Clause 15.02-1L - Environmentally Sustainable Development	Environmentally Sustainable Development will be considered in detail within this assessment.
Clause 16.01-2L – Housing Affordability	To facilitate the provision of affordable housing and social housing (public and affordable community housing), including new social housing and upgrades to existing social housing. The policy seeks the provision of a minimum of ten per cent of affordable housing for a major residential development of 50 or more dwellings, unless affordable housing has been provided as part of an earlier rezoning of the site. A commitment to provide a minimum 10% affordable housing has been provided and will be discussed in detail within this report.

Clause 17.01-1L - Employment	The development will provide a number of retail outlets, thereby contributing to employment opportunities within the Richmond area.
Clause 18.02-3L – Sustainable Transport	The provision of bicycle parking for residents, employees and visitors will be discussed in detail to ensure that sustainable transport opportunities are provided.
Clause 18.02-3L – Road System	The road system and the proposal has been assessed by council's Engineering team, who are supportive of the proposal, based on conditions to be discussed later within this report.
Clause 18.02-4L – Car Parking	The proposal seeks a reduction of the carparking requirements to reduce reliance on private vehicle usage associated with the commercial use.
Clause 19.03-3L – Water Sensitive Urban Design	Water Sensitive Urban Design will be discussed within this assessment.
Clause 19.03-5L - Waste	Waste management procedures of the proposal are considered acceptable, having been reviewed by Council's Waste Services team.

Notice of the application

176. Pursuant to Clause 43.04, a purpose of the DPO is:

- (a) *To exempt an application from notice and review if a development plan has been prepared to the satisfaction of the responsible authority.*

177. Clause 43.04-3 notes that if a development plan has been prepared to the satisfaction of the responsible authority, an application under any provision of this planning scheme is exempt from the notice requirements of section 52(1)(a), (b) and (d), the decision requirements of section 64(1), (2) and (3) and the review rights of section 82(1) of the Act.

178. There is no requirement under Schedule 15 of the DPO for notice and review of a development plan to be undertaken.

Referrals

179. The application was referred to the following internal departments and external consultants and their recommendations are contained within the attachments to this report.

Internal Departments

180. The following internal referrals have been provided:

- (a) Open Space Unit;
- (b) Urban Design Unit (on public realm works);
- (c) Environmental Sustainable Development Advisor (ESD);
- (d) Social Planning;
- (e) Strategic Planning;
- (f) Civil Engineering;
- (g) Engineering Services Unit;
- (h) Strategic Transport Unit; and
- (i) City Works.

External Consultants

181. The external consultants were:

- (a) Urban Design (MGS Architects);
- (b) Heritage (Anita Brady Heritage);
- (c) Wind (MEL); and
- (d) Acoustic (SLR Consultants).

OFFICER ASSESSMENT

182. When assessing a submitted DP, Section 4 within Schedule 15 of the DPO outlines the following requirements for any future Development Plan (DP) associated with this site;

- (a) *A development plan must be generally in accordance with the Indicative Framework Plan as shown in Figure 1, and the vision set out in this schedule, to the satisfaction of the responsible authority;*
- (b) *A development plan must be approved for the whole site; however the land may be developed in stages;*
- (c) *The development plan must include the following sections, all prepared to the satisfaction of the responsible authority:*
 - (i) *Section 4.1 – Development Plan Vision;*
 - (ii) *Section 4.2 – Components of the Development Plan;*
 - *Site and Context Information;*
 - *Concept Plans;*
 - *Built Form Guidelines;*
 - *Supplementary Documentation;*
 - *Open Space and Landscape;*
 - *Public Realm Plan;*
 - *Housing Diversity Report;*
 - *Transport Works Assessment;*
 - *Environmentally Sustainable Design;*
 - *Drainage;*
 - *Comprehensive Heritage Analysis;*
 - *Noise Impacts;*
 - *Development Staging.*

183. The following assessment will address the above components and provide detailed discussion on how the proposed DP has met these requirements.

[Section 4.1 - Development Plan Vision](#)

184. The overarching vision of the DP as outlined in Schedule 15 of the DPO is as follows:

- (a) *To become a sustainable, mixed-use residential community, supported by convenience retailing services, community facilities, and employment opportunities augmenting the role of the Victoria Street Activity Centre;*
- (b) *To recognise the opportunity of the site's activity centre context, whilst respecting the low rise residential development to the south;*
- (c) *To protect the reasonable amenity of residential properties on the south side of Appleton Street and to the east of the subject site;*
- (d) *To provide improvements to the public domain, including pedestrian friendly environments along all street frontages, the provision of public open space and a pedestrian laneway;*

- (e) *To provide a high standard of internal amenity, building separation and best practice environmentally sustainable design;*
- (f) *To respect the scale and form of heritage places within and adjacent to the site;*
- (g) *To provide for the conservation of heritage places within the site;*
- (h) *To ensure that new development mitigates any adverse impact it may generate upon local traffic conditions;*
- (i) *To ensure that the primary responsibility for noise attenuation rests with the agent of change;*
- (j) *To ensure new development, does not unreasonably prejudice by way of reason of reverse amenity the ongoing operation of nearby existing commercial, industrial and warehouse businesses, including Victoria Gardens Shopping Centre; and*
- (k) *To provide for the sensitive adaptive re-use of heritage buildings in accordance with the Comprehensive Heritage Analysis referred to in Clause 4.2 of this schedule:*
 - (i) *describes the relationship between the heritage place and any neighbouring or adjacent heritage place/s; and*
 - (ii) *establishes principles for managing the significance of the heritage place and its relationship with its surroundings.*

185. Section 1.1 of the DP outlines the following vision being sought by the proposed development of the site:

- (a) A bona-fide mixed use development commensurate with the sites scale and its activity centre context, with the provision of 12,000 -16,000 square metres of employment generating uses and 545-645 dwellings;
- (b) Four purposefully designed buildings with a form and scale that responds to the sites redevelopment potential and emerging character, which includes a hierarchy of built form that responds to its interfaces;
- (c) Retention and restoration of the existing heritage buildings to allow for their adaptive re-use to accommodate future employment uses and integration with the wider development;
- (d) The prioritisation of pedestrian movements within the site through the provision of a pedestrian laneway network of approximately 1,400 square metres, a minimum of 576 square metres of public open space and 151 square metres of landscaping adjacent to supplement the park;
- (e) Upgrades to the public realm to include new street tree planting, bicycle parking, footpaths and the reinstatement of redundant vehicle crossovers; and
- (f) The management of traffic and loading considerations with vehicle access limited to Doonside Street.

186. This vision is further articulated within the individual components of the DP which will be discussed in detail below, however it is noted that the response above does not reference the following key aspects outlined in Section 4.1 of the DPO:

- (a) *To provide a high standard of internal amenity, building separation and best practice environmentally sustainable design;*
- (b) *To ensure that the primary responsibility for noise attenuation rests with the agent of change; and*
- (c) *To ensure new development, does not unreasonably prejudice by way of reason of reverse amenity the ongoing operation of nearby existing commercial, industrial and warehouse businesses, including Victoria Gardens Shopping Centre.*

187. Section 1.1 should be updated to include a brief outline of how the above requirements will be addressed. A condition will be added to ensure this occurs.

Section 4.2 – Components of the Development Plan

188. The specific requirements of each component are outlined below, with detailed discussion on how the DP seeks to achieve each of these aspects via the proposed development of the land.

Site and Context Information

189. A site analysis that identifies:

- (a) *The key attributes of the land and its context;*
- (b) *Existing or proposed uses on adjoining land;*
- (c) *Other neighbourhood features such as public transport, activity centres, walking and cycling connections; and*
- (d) *Important views to be considered and protected, including views of existing heritage buildings.*

190. Section 2 of the DP provides an outline of the context of the site, including the Statutory Planning Context (Section 2.1), Metropolitan Context (Section 2.2), Neighbourhood Context (Section 2.4) and views around the site at Section 2.6. Other neighbourhood features such as public transport, activity centres and walking and cycling connections are provided within Section 2.3 (Local Networks). This section also contains descriptions and images of the site's interfaces with the Embassy Apartment complex to the east (Section 2.7) and Victoria Gardens to the north (Section 2.8).

191. While some of these sections are relatively detailed, with Sections 2.7 and 2.8 providing comprehensive outlines of the site's interfaces to the east and north, additional information on the site and surrounding context would assist in providing a more thorough overview of the site's attributes and development potential.

192. One change recommended to assist with this is the relocation of part of the current Section 3.2, which outlines the key heritage fabric on the site, to be within Section 2. This page provides a description of the existing heritage buildings forming part of the site and is more relevant to this area of the DP as it would give users a clearer overview of existing built form on the site. Relocating the information under the specific building headings and the c1962 illustration of the Repco/Russell factory to Section 2.1 is recommended, with the 'proposal' information and setback images to remain at Section 3.2.

193. Further to this, the purpose of the 'Design and Development Overlay Map' provided in Section 2.1 is unclear. Of more benefit would be a plan of the subject site, with the planning controls affecting the site clearly demonstrated. This should include the two heritage overlays on the land, with this information not included anywhere within the DP. These are shown in Figure 21 below.

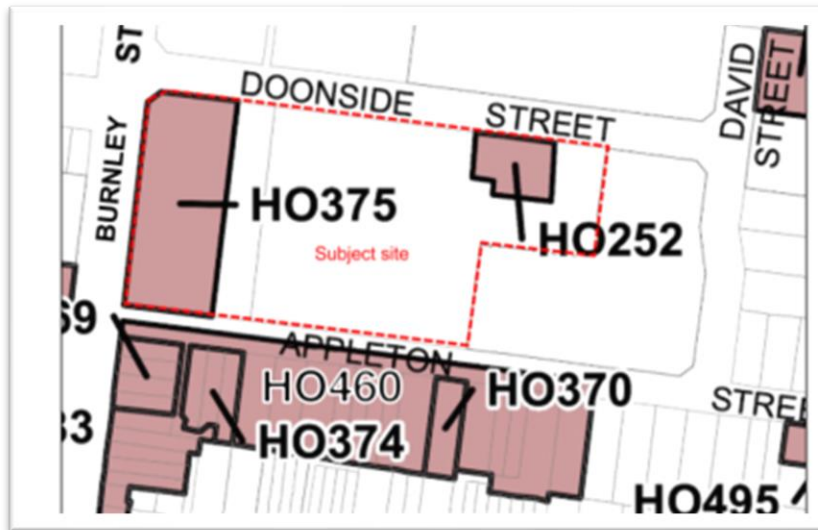


Figure 21: Heritage Overlays within the site. Source: Heritage Analysis (Bryce Raworth 2021)

194. Section 2.3 includes local network maps, demonstrating the context of public transport, roads and walking/cycling opportunities surrounding the site. It would also assist if a map showing the context of the public open space network surrounding the site was shown.
195. As outlined within the 'site and surrounds' section of this report, the site is located in an area characterised by a substantial degree of existing higher density development, and is undergoing significant change, with currently under-utilised land being repurposed to provide a vibrant, mixed-use neighbourhood.
196. This pocket of Richmond is already densely populated, with recently constructed multi-storey developments extending along the northern interface of Victoria Street, and a mixture of existing and emerging multi-level buildings addressing the western side of Burnley Street. In general, these developments range in height from 7 to 11 storeys, with areas of higher built form to 13 storeys also located to the east of the precinct along Doonside Street and David Street.
197. A more detailed response to the neighbourhood context in Section 2.4 would assist in providing further justification for the heights being sought by the development, with the plan provided on page 17 (reproduced below in Figure 22) of the DP presenting a limited overview of the surrounding environment.
198. This Section could be strengthened via the addition of images of higher density development surrounding the site, along with details on existing and approved heights within proximity to the land.



Figure 22: Neighbourhood context plan. Source: Development Plan (Gurner 2023)

199. The existing view study (Section 2.5) does not include adequate views of 26 Doonside Street, with no photographs of the heritage façade of this building. To provide further context of the heritage built form, this section should be updated accordingly.
200. Section 2.6 incorporates views around the site, however many of these are close-range and do not provide a clear context of surrounding built form. A photograph of 171 Buckingham Street has been included twice and will require updating to show the finished building (as opposed to the photograph of scaffolding). Additional photos including the streetscape directly to the west (along Burnley Street) and longer-range views of dwellings along Appleton Street would also allow for a more comprehensive overview of the diverse surrounding context.
201. These alterations to Section 2 of the DP will ensure that a more robust site analysis and a detailed response to the DPO is provided.

Concept Plans

202. The DP outlines the information required to be included in the 'Concept plans' section including:
 - (a) *The total number of dwellings across the entire site;*
 - (b) *The proposed use of each building and estimated floor area for each use;*
 - (c) *At least 9,000m² of Gross Floor Area provided for employment generating activities;*
 - (d) *An indication of the location and approximate commercial and retail yield for the site;*

- (e) *A north south pedestrian lane:*
 - (i) *with a minimum width of 9 metres;*
 - (ii) *that provides safe and pleasant pedestrian and cycling access between Doonside Street and Appleton Street;*
 - (iii) *that receives sunlight between 10am and 2pm at the equinox;*
 - (iv) *that remains publicly accessible to pedestrians at all times; and*
 - (v) *that will not be accessible by private vehicles at any time (with the exception of emergency services and public/authority services);*
- (f) *The provision of at least 4.5% of the total site (576 square metres) for public open space which fronts Doonside Street and adjoins the pedestrian lane (or a higher percentage if contained in Clause 53.01 of the Yarra Planning Scheme at the time of subdivision). The plan must show the area of public open space in square metres and its percentage of overall site area;*
- (g) *Indicative vehicular, pedestrian, cyclist and loading access points and connections; and*
- (h) *Details of any works or treatments proposed to Doonside Street or Appleton Street or the nearby road network.*

203. The development summary at Section 3.12 of the DP outlines that the development will provide between 545-645 new dwellings and between 12,000-16,000sqm of commercial floor area. These details are shown in the table below. For ease of reference, this development summary should be provided earlier within the DP, with the logical location being on the same page as the Proposed Masterplan at Section 3.1.

Building	Residential Dwellings	Commercial Floor Area (sqm)
Building A	120 - 135	4,500 - 5,500
Building B	275 - 330	4,000 - 5,000
Building C	65 - 80	1,500 - 2,000
Building D	80 - 100	2,000 - 3,500
Total	545 - 645	12,000 - 16,000

204. The DPO notes that a development plan must be ‘generally in accordance’ with the Indicative Framework Plan (IFP) as shown in Figure 1 of the DPO and reproduced in Figure 23 below. The IFP incorporates the envisioned future layout of built form throughout the site, including preferred maximum heights and the location of public open space. As demonstrated in the IFP, higher elements of built form are anticipated on the northern side of the site, with a reduction in height towards the lower-scale residential interface to the south.

205. A minimum 9m wide north-south link is required; this will provide pedestrian and cyclist access from Appleton Street in the south through to Doonside Street in the north. The future location of a park on the northern interface is also shown.

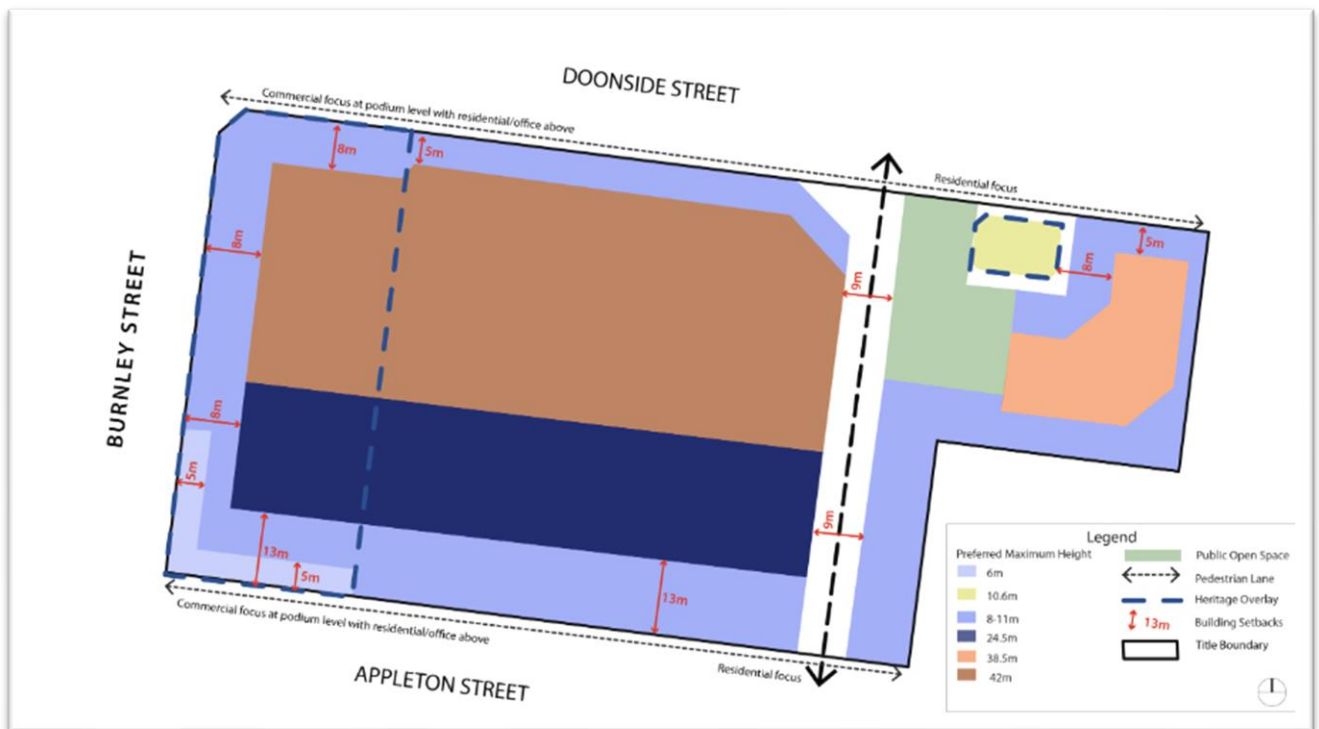


Figure 23: Indicative Framework Plan. Source: Schedule 15 to the DPO – Yarra Planning Scheme

206. A proposed master plan is provided at Section 3.1 of the DP (Figure 24). This plan generally reflects the layout of the IFP; however, a number of departures are sought by the submitted DP.
207. An image of the IFP is provided at page 11 of the DP, within Section 2.1. It would assist users of the DP if an image of the IFP was included on the same page as the proposed master plan, thereby allowing a clear comparison to be undertaken.
208. Additionally, to meet the requirements outlined above, the master plan should also be updated to include the following;
- (a) widths of all proposed laneways,
 - (b) setbacks from all three street boundaries;
 - (c) proposed heights of the buildings; and
 - (d) the provision of at least 4.5% of the total site (576 square metres) for public open space which fronts Doonside Street and adjoins the pedestrian lane (or a higher percentage if contained in Clause 53.01 of the Yarra Planning Scheme at the time of subdivision). The plan must show the area of public open space in square metres and its percentage of overall site area.

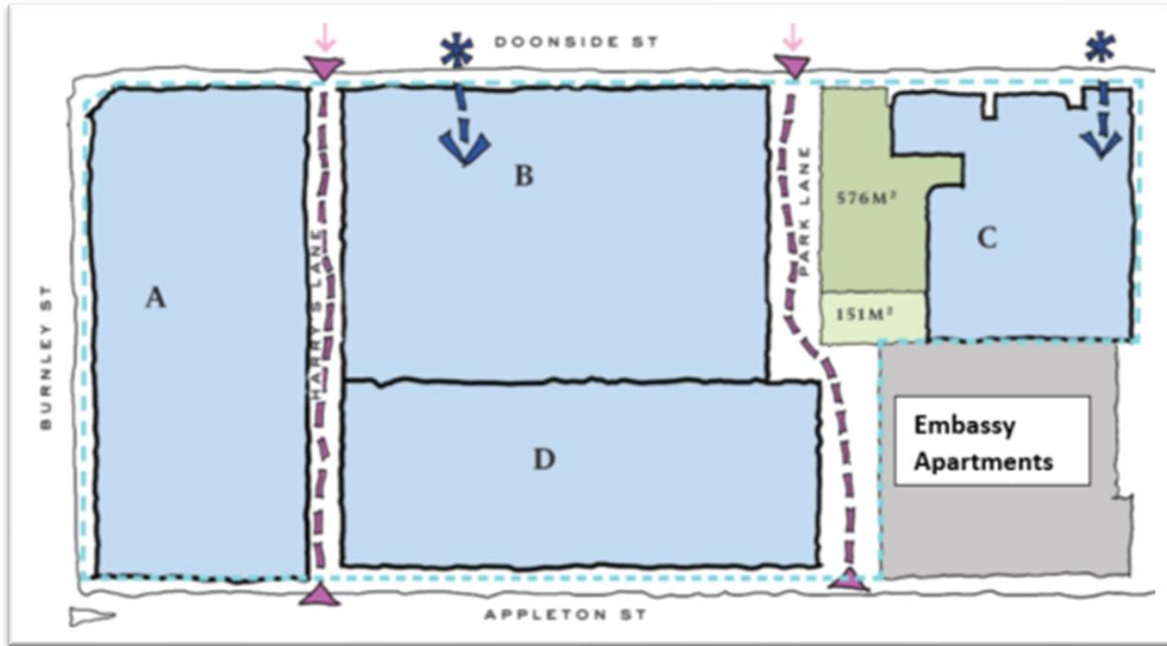


Figure 24: Proposed Master Plan. Source: Development Plan (Gurner 2023)

209. The proposed DP does seek to vary from the IFP. The main changes being sought to the layout of the IFP include the following:
- (a) Removal of the proposed area of built form abutting the existing Embassy Apartments in the south-east corner of the site, resulting in a 'crank' to Park Lane as opposed to a straight laneway. This is due to the eastern wall of Building D being located closer to the eastern boundary;
 - (b) The provision of an additional north-south oriented laneway through the western portion of the site (Harry's Lane);
 - (c) The removal of the splay in the north-east corner of Building B (adjacent to the northern end of Park Lane); and
 - (d) An additional area of public open space and landscaping of 151sqm to the south of Doonside Park.
210. To assist in determining whether the proposed changes shown in the DP are acceptable, comments were sought from an urban design perspective from Professor Rob McGauran (MSG Architects) and from a heritage perspective from Anita Brady. The proposed changes to the IFP and the subsequent layout of the DP are discussed below.

Park Lane

211. The proposed configuration of Park Lane differs from the layout shown in the DPO, with the IFP contemplating a consistent north-south alignment and the DP providing a 'crank' in the alignment due to the removal of built form in the site's south-east corner. A comparison of the two alignments is provided in Figure 25.

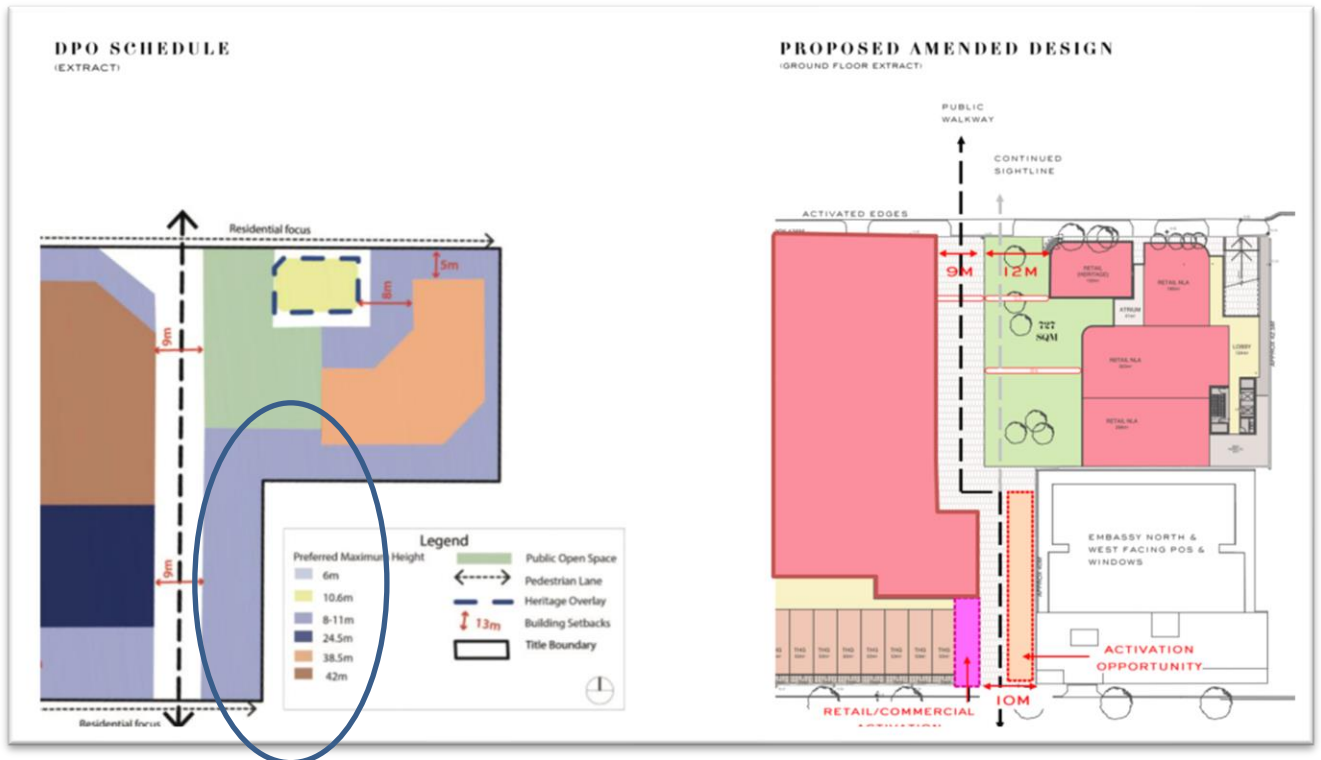


Figure 25: DPO laneway and DP laneway alignments. Source: Urban Design comments (MGS Architects 2023)

212. As shown in purple above, the IFP sought to include a relatively narrow section of built form, 8-11m in height, between Park Lane and the existing Embassy apartments to the east. The rationale behind the location of this building was not discussed in the Panel report that was released following the Panel hearing in 2020, however it is understood that the building was proposed as such to provide a degree of height transition along Appleton Street and to ensure a clear line of sight from north to south is available along the future laneway.
213. The DP seeks to remove this section of built form and replace it with an area of activated/open space, with the eastern wall of Building D subsequently moved eastward, closer to the Embassy apartments. This change would result in the eastern wall of Building D being setback 10m from the eastern boundary with the apartments.
214. Several west-facing windows and balconies are located within the western wall of the existing apartments, with no screening provided. The endorsed plans associated with the Embassy apartments indicate these windows and balconies are set back between 2.45m to 3.15m from the shared boundary. These are demonstrated in Figure 26.



Figure 26: Western wall of the Embassy Apartments (2023)

215. The sections provided at Figure 27 compares the outlook of these apartments based on the parameters sought by the IFP and the amended design proposed within the DP. Based on the IFP outcome, the lower-level apartments would be set back approximately 2.45m from a new triple-storey wall along the shared boundary. The removal of this area of proposed built form seeks to improve the interface and outlook with these apartments.

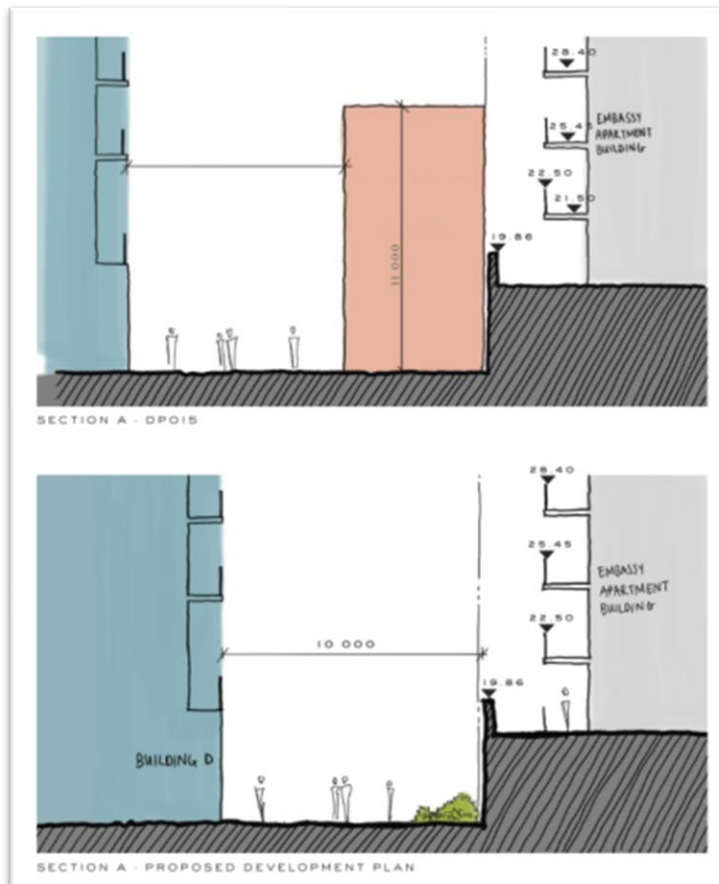


Figure 27: DPO built form requirement (above) and proposed DP outcome (below). Source: Development Plan (Gurner 2023)

216. Council's Strategic Planning officer was not supportive of this amended arrangement, noting that the proposed built form on the eastern side of the laneway as anticipated in the IFP would have provided a gradual increase in height from the podium of Building D to the Embassy apartments. The image in Figure 28 demonstrates how the IFP envisioned this interface, with the lower built form (circled) shown directly abutting the site's eastern boundary.

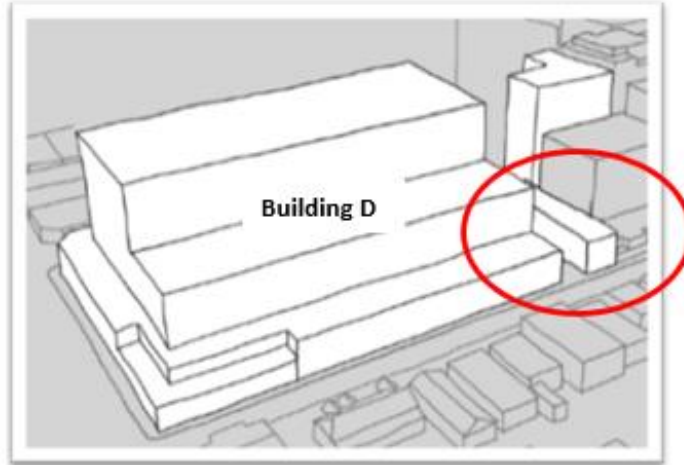


Figure 28: Proposed built form layout as per IFP. Source: Development Plan (Gurner 2023)

217. In comparison, the massing diagram at Figure 29 demonstrates the amended design, with no built form abutting the eastern boundary, and Building D relocated closer to this interface. It also demonstrates the proposed break in built form provided by the new laneway proposed in the western half of the site.

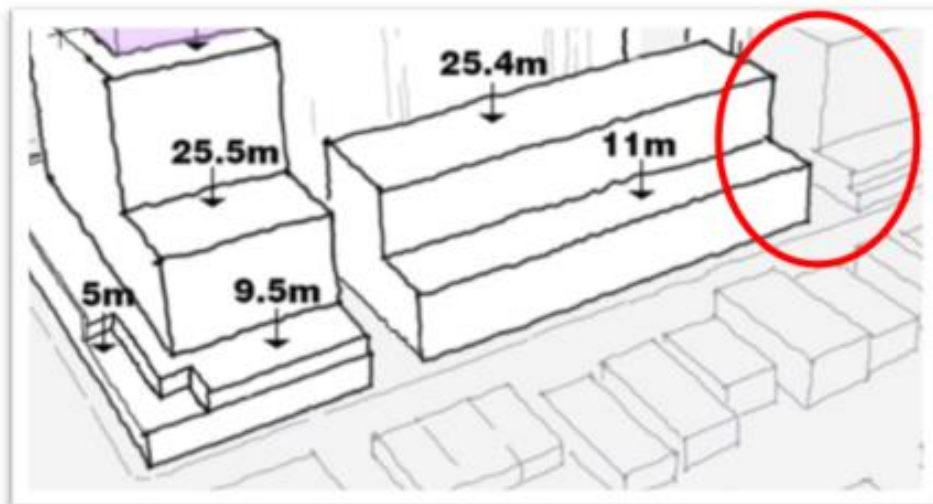


Figure 29: Proposed built form layout as per DP. Source: Development Plan (Gurner 2023)

218. In his original review, Mr McGauran was not supportive of this change, stating the following:

- (a) *The DPO seeks a low-rise human scale interface to the eastern side of this new pedestrian street and the sleeving of the interface with the Embassy apartments to introduce a generous visual break in taller built form when seen from the southern residential neighbourhoods in Appleton Street; and*
- (b) *This separation also ensures good levels of amenity and 24 hr surveillance to the pedestrian street with the envisaged low rise live/work, shophouses/ townhouses/apartments, to the eastern side of the walk enabling enhanced access to daylight for the west facing embassy apartments, the public realm of Appleton Street and the pedestrian walk area.*

219. These comments were based on the initial version of the DP, in which the area on the eastern side of the pedestrian walkway was proposed to be used as a 'fitness area', with the eastern wall potentially used for rock climbing, and subsequently only a narrow laneway would be provided (as shown in Figure 30). Based on the original design, Mr McGauran offered the following commentary:

- (a) *The positioning of the proposed climbing walls and active fitness areas into this small pedestrian zone between two high built forms oriented to this space is problematic; and*
- (b) *These facilities are typically used in the early morning and evenings. Their active use is relied upon to a significant degree for the satisfactory activation of the eastern interface, (otherwise a side fence), and the safety of the walk would come at the cost of the amenity of units to either side that have not in the case of the eastern units in particular, been conceived with this level of noise and activity in mind. Nor have the homes in Appleton Street abutting the area.*

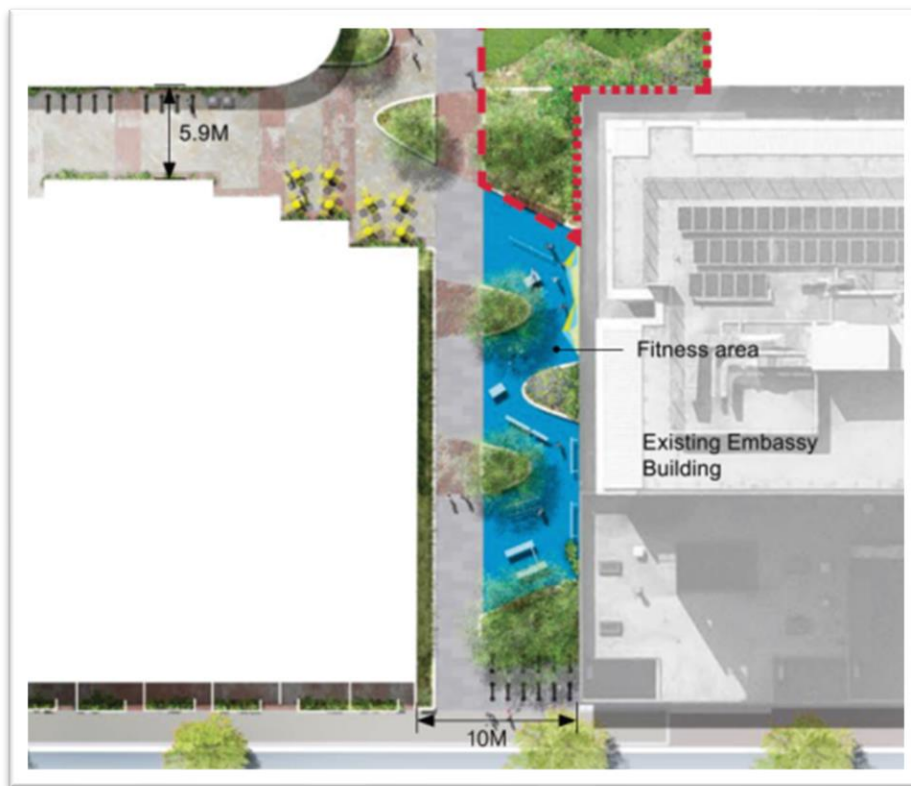


Figure 30: Original layout of Park Lane. Source: Original Development Plan (Gurner 2021)

220. The design of this space was amended in the subsequent DP, as demonstrated in Figure 31. The fitness area was removed, and the pedestrian path was increased to encompass limited landscaping which will provide a more open environment along this thoroughfare.



Figure 31: Proposed layout of Park Lane. Source: Development Plan (Gurner 2023)

221. A render demonstrating how this change would appear from Appleton Street is provided at Figure 32.



Figure 32: Proposed layout of Park Lane. Source: Development Plan (Gurner 2023)

222. One of the initial concerns raised by Mr McGauran was the lack of surveillance available to this path due to the removal of the proposed triple-storey building along the eastern boundary. However, as demonstrated in the render above, it is clear that the proposed eastern interface of Building D will provide generous levels of activation along this laneway, with views also available from the west-facing Embassy apartment balconies. A revised opinion based on the amended design was provided by Mr McGauran below:

- (a) *Subject to the correct treatments to the eastern side of the southern edge of the path, the proposed removal of the previously intended mixed use terraces to the eastern side of the pathway is I think supportable. The removal of 3 storey form on the boundary and substitution with an alternative landscape dominant solution perhaps in association with low intensity children's play or similar spaces could work in such a location with a net benefit for the neighbouring development.*
223. The design outcome demonstrated in Figure 32 will allow relatively unobstructed pedestrian movements along the southern half of Park Lane and will ensure views can be provided from Appleton Street through to the north of the site.
224. To further enhance the outlook from the Embassy apartments, Mr McGauran recommended an additional setback be incorporated into the tower element of Building D from the east. This setback, in the realm of 6m, would increase the separation between the taller section of Building D and the eastern boundary to 16m, thereby providing an overall setback of 18.45m between this building and the balconies of the Embassy apartments (where they are set back 2.45m from the shared boundary). This recommendation sought to reduce perceived visual bulk from the existing apartments and reduce any overshadowing that may occur to the lower levels.
225. This extent of separation exceeds the recommendations outlined in the DPO (under Built Form guidelines) which notes that buildings should be well spaced, with a preferred minimum 9m between buildings above the podium.
226. In contrast, Planning officers consider that the proposed built-form relationship with the adjacent Embassy apartment building is an appropriate one, noting that the separation of Building D will be at least 10m where the apartment building is built to the boundary and between 12.45m and 13.15m for the most part, given the existing balconies and windows are set back from this interface. This degree of separation exceeds that provided by many high-density apartment complexes and exceeds the 9m separation provided between the towers within the Embassy complex itself.
227. The massing diagram in the DP does not indicate where balconies will be located within the east-facing tower wall of Building D. It is likely that balconies at all levels will address this setback, thereby providing a degree of articulation and visual interest within this wall. Further to this, it is considered that the provision of a triple-storey wall abutting the shared boundary would result in more problematic overshadowing to lower-level balconies than the tower of this building would cause. On this basis, the setback as proposed is considered to improve these aspects and provide a more positive outcome which would benefit the internal amenity of the existing dwellings. This section should be updated to ensure that no balconies within the eastern wall of Building D encroach within the 10m setback.
228. The transition in height from the three-storey podium of Building D and the double-storey podium of the existing apartments is considered reasonable, with the one storey height difference providing an acceptable height graduation along the northern streetscape of Appleton Street.
229. Overall, the proposed variation to the layout of the IFP, via the removal of the eastern building and with the setback as proposed, is considered appropriate for the following reasons:
- (a) The removal of the proposed eastern building will reduce morning shadows to the Embassy apartments and afternoon shadows to the southern end of Park Lane;
 - (b) The laneway will be highly activated through the provision of habitable room windows, balconies and commercial frontages at ground level (a condition will require section 3.4 (dot point 3) to be more explicit about commercial and or active frontage along Building D's interface with 'Park Lane');

- (c) Given the Embassy apartment building does not include any screening from habitable room windows or balconies that are oriented towards the site, existing residents of this building will benefit from having an outlook to open space and will assist in providing surveillance over the laneway; and,
 - (d) The layout of the laneway will allow for good visibility and clear sightlines to Victoria Gardens.
230. The change increases the width of the southern portion of Park Lane from 9m to 10m, with a minimum 9m width maintained for the northern half. This increase in width to the southern portion is considered acceptable.
231. Park Lane will provide safe pedestrian and cyclist access between Doonside Street and Appleton Street at all times.
232. The DPO notes that the north-south pedestrian lane must receive sunlight between 10am and 2pm at the equinox. Precinct shadow diagrams are included in Section 3.10 of the DP; these shadow diagrams indicate that the southern section of Park Lane will receive a good degree of sunlight at 11am and midday, with the northern section of the laneway largely in sunlight between 10am and 1pm at the equinox. This outcome is acceptable and will provide a pleasant pedestrian environment within this space.
233. Subject to final design approval that will occur during a planning permit application, officers are satisfied with the proposed layout of Park Lane.

Harry's Lane

234. The development seeks to provide a second north-south laneway in the western half of the site with a minimum width of 6m. This outcome allows for additional activation of the precinct and provides a further break in built form that will articulate the massing and form when viewed from the north and south. The location of the laneway will provide additional views and connectivity through to the future Doonside Precinct to the north, whilst supporting commercial tenancies which will operate internally to the site. The addition of this laneway, including its orientation and width, is a feature that is supported by Mr McGauran and Planning officers.
235. Section 3.3 of the DP indicates that both laneways will be provided with high quality urban design and crime prevention through environmental design (CPTED) principles through a mix of built form uses, landscaping, access to sunlight, shelter, lighting, public seating and bicycle parking and will be universally accessible for persons of limited mobility. The DP also notes that the laneways will be accessible by emergency services, maintenance vehicles and limited access to the Harry the Hirer showroom.
236. The provision of the two laneways meets the requirements outlined above. While the DPO notes that the laneways should not be accessible by private vehicles at any time, it is acknowledged that only Harry's Lane will provide limited access to private vehicles (to the showroom). Park Lane will be accessible for emergency and maintenance vehicles only. Section 7.4 of the Traffic Assessment provided with the DP notes that a temporary loading area for display vehicles and event equipment is proposed at the northern end of Harry's Lane. The DP should be updated to specify that this will occur infrequently.
237. The Traffic Assessment states that access to Harry's Lane will be controlled through traffic management procedures, and bollards will be provided outside of loading periods to restrict vehicle accessibility. These loading activities are expected to be infrequent. As above, this should be specified in the DP.

238. The other two main changes outlined at the beginning of this section, which involve the removal of the splay in the north-east corner of Building B and the additional landscaping adjacent to Park Lane relate to built form, open space and landscaping and will be discussed in detail within the relevant sections of this report.

[Built Form Guidelines](#)

239. *Built form guidelines to assist the implementations of the vision which provide the following:*
- (a) *Maximum building heights and envelopes responding to the site context;*
 - (b) *Building setbacks from street boundaries that ensure that new future development does not overwhelm the scale of the heritage buildings on the site and presents acceptably to lower scale buildings in the vicinity of the site, including dwellings on the south side of Appleton Street;*
 - (c) *Building setbacks from the facades of 81-95 Burnley Street that ensure the heritage building can be understood as having a three-dimensional form;*
 - (d) *Preferred minimum upper level (above podium) setbacks of:*
 - (i) *13 metres from the Appleton Street site boundary;*
 - (ii) *8 metres from the Burnley Street site boundary;*
 - (iii) *8 and 5 metres from the Doonside Street site boundary;*
 - (iv) *9m from habitable room windows or balconies of the Embassy building directly to the east and south;*
 - (e) *Ensure new buildings are well spaced (preferred minimum 9 metres between buildings above podium);*
 - (f) *Buildings set back a minimum of 8 metres (above podium) from the heritage building at 26-34 Doonside Street;*
 - (g) *Inter-floor heights within the heritage buildings on the site to ensure they relate to the existing floor levels and/or fenestration patterns;*
 - (h) *Ensure the retention of key heritage fabric of:*
 - (i) *the Appleton Street, Burnley Street and Doonside Street elevations of 81-95 Burnley Street (former Repco Factory) for the extent of the building within in heritage overlay; and*
 - (ii) *external form of 21 Doonside Street (former Repco Offices and Laboratories), while allowing for adaptive reuse.*
 - (i) *Active frontages to Burnley Street, Doonside Street, open space and the pedestrian lane, as appropriate;*
 - (j) *The design and use of materials must be respectful of the industrial heritage of the site and its surrounds to the north and east, as well as to the residential heritage to the south;*
 - (k) *Provide for high quality architecture and spaces throughout the site and respond to heritage places through, as appropriate:*
 - (i) *create an interesting and varied street wall and podium which is reinforced through a range of parapet heights and rebates of sufficient depth and texture to provide modulation in the street façade;*
 - (ii) *use contemporary architectural detail which complements and responds to the significant elements of the heritage buildings;*
 - (iii) *avoid highly articulated facades above retained heritage buildings;*
 - (iv) *ensure there is solid built form behind retained facades and avoid balconies behind existing openings;*
-

- (v) *providing high quality treatments to the building facades facing the pedestrian lane and streets;*
- (l) *Ensure car parking is screened by buildings and not clearly visible from the street, or otherwise located in basement areas;*
- (m) *Ensure buildings are designed to ameliorate adverse wind conditions at street level, public spaces and lower level dwellings;*
- (n) *Ensure buildings are designed along Appleton Street to break up the form of the street wall;*
- (o) *Minimise vehicle access and traffic movements in Appleton Street;*
- (p) *Ensure buildings are designed and spaced to create a visually interesting skyline, streetscape and coherent precinct;*
- (q) *Ensure that site services and loading areas are carefully designed to minimise impacts on streetscapes, shared spaces and pedestrian footpaths and laneways;*
- (r) *Buildings designed to ensure the effectiveness of new residential development and other noise sensitive uses in protecting their own amenity where potentially affected by existing commercial, industrial and warehouse businesses; and*
- (s) *To encourage sustainable transport initiatives.*

240. Section 4 of the DPO states that a DP must be ‘generally in accordance’ with the IFP, with this plan demonstrating the height and setback expectations for future built form within the site. It is important to note that these expectations are articulated as ‘preferred’ and not ‘mandatory’ heights. The IFP is provided for reference again in Figure 33 below.

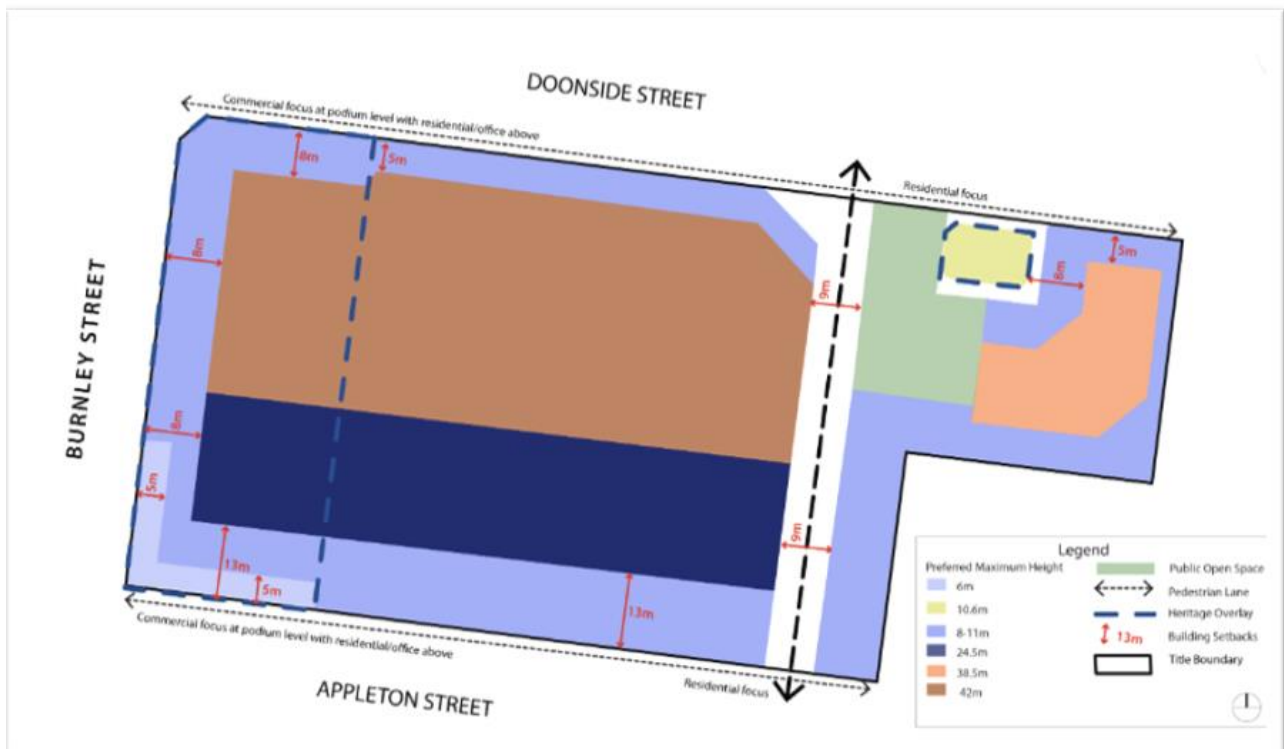


Figure 33: Indicative Framework Plan. Source: Schedule 15 to the DPO – Yarra Planning Scheme

241. The table below provides an overview of the preferred heights outlined in the IFP, and the heights sought by the DP. The variation in height is also shown.

Building		Preferred DPO heights	Proposed DP heights	Variation
Building A	Podium	6m-11m	5m-9.5m	-1m
	Lower tower form	24.5m	25.5m	+1m
	Higher tower form	42m	44m-49.6m	+2m-7.6m
Building B	Podium	8-11m	9.5m	
	Tower	42m	42m-55.9m	+13.9m
Building C	Podium	8-11m	5m-9.5m	-3m
	Tower	38.5m	41.9m	+3.4m
Building D	Podium	8-11m	11m	
	Tower	24.5m	25.4m	+0.9m

242. The existing heritage building at 26 Doonside Street will be fully retained at a height of 10.5m.

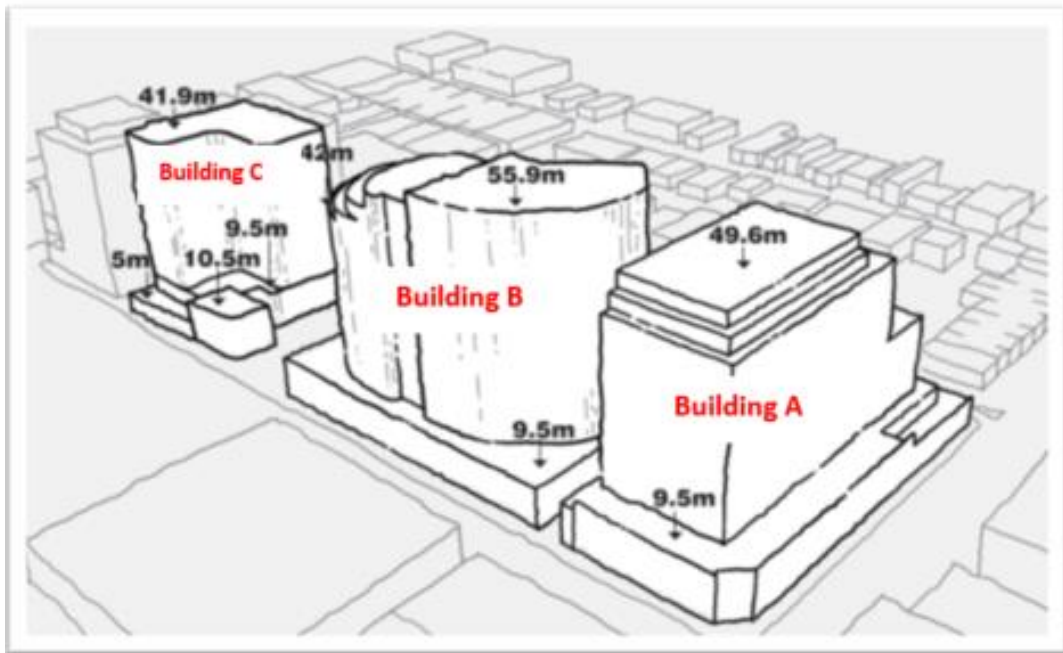


Figure 34: Proposed massing of buildings viewed from north-west. Source: Development Plan (Gurner 2023)

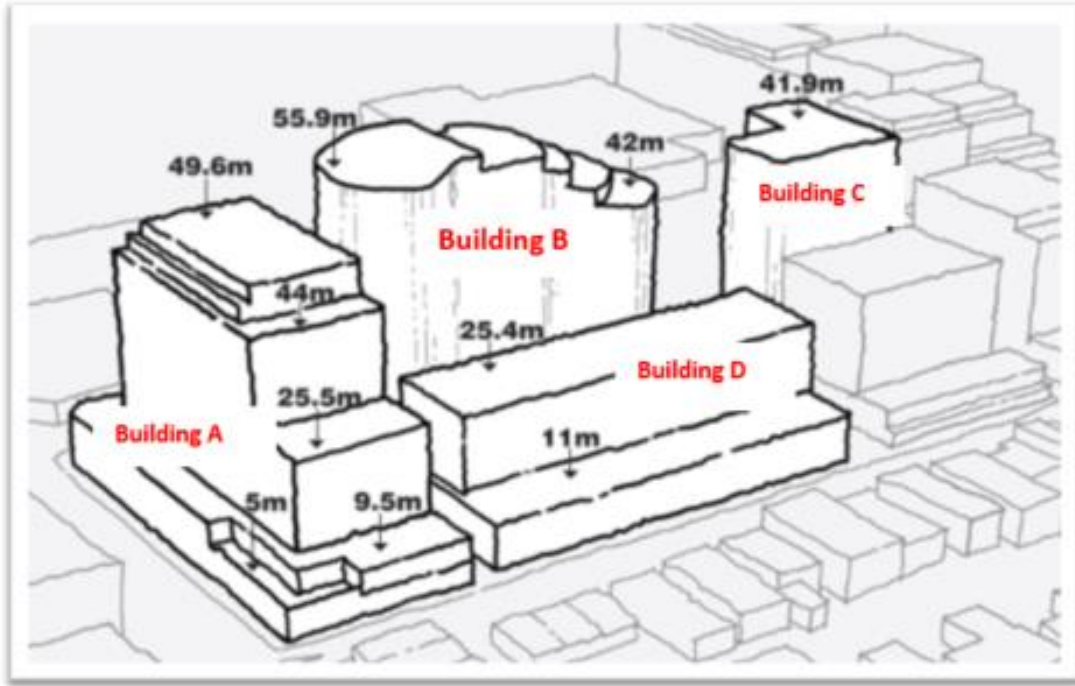


Figure 35: Proposed massing of buildings viewed from south-west. Source: Development Plan (Gurner 2023)

243. In general, the DP seeks to provide greater heights than the preferred heights outlined in the DPO.
244. Figure 35 outlines that the greatest increase in height is proposed to be located on the northern half of the site, with the heights along the southern interface similar to those envisioned in the IFP. The DP states that some parts of the new buildings and building components will be at a lesser height and of less bulk than proposed in the IFP, with articulation and variations of building forms assisting in addressing the bulk of the taller buildings. This will be discussed in detail below.
245. The DP seeks to vary a small number of the preferred setbacks outlined in the DPO, however the extent of changes is relatively minimal in most instances as shown in the table below.

Interface	Building	Preferred DPO setbacks	Proposed DP setbacks	Variation
Burnley Street	Building A	5m-8m	5m-8m	
Doonside Street	Building A	8m	8m	
	Building B	5m	3m, 5m, 20m	-2m +15m
	Building C	5m	5m	
Appleton Street	Building A	5m, 13m	5m, 11m	-2m
	Building D	13m	13m	

246. The proposed setbacks are shown visually in Figure 36.

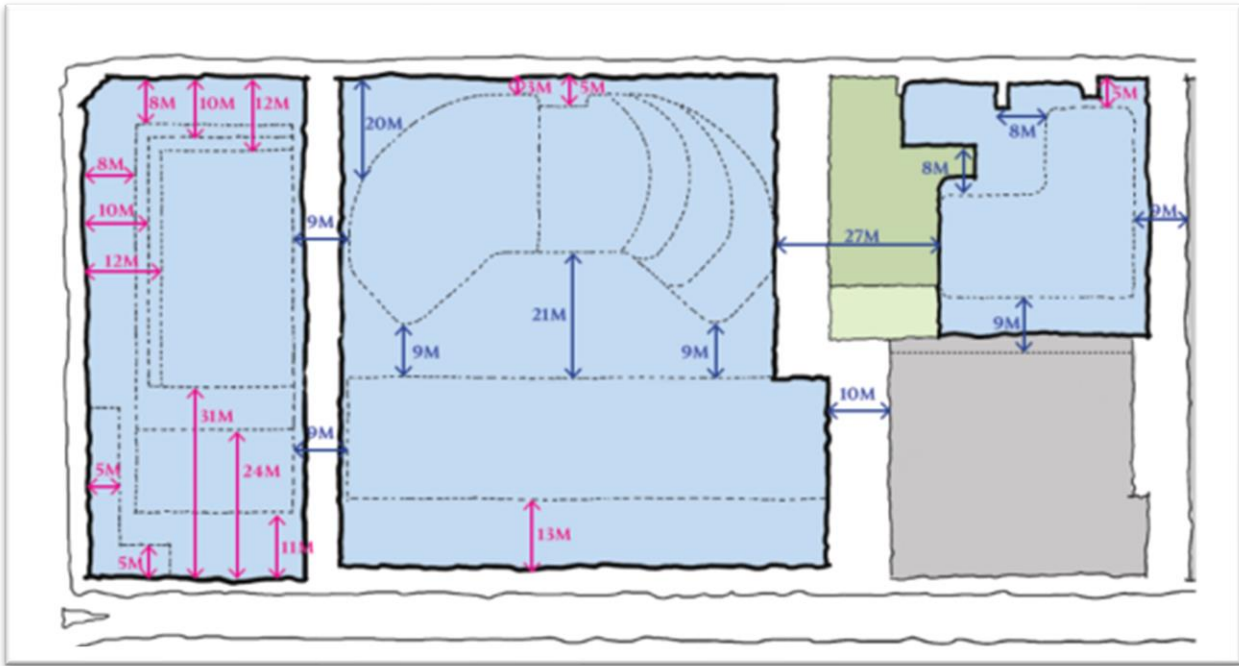


Figure 36: Proposed setbacks within the DP. Source: Development Plan (Gurner 2023)

247. Amendments to the proposed heights and setbacks of the development were originally sought by the Applicant during the Panel hearing and discussed in the subsequent Panel report, with the report noting:
- (a) *The alternative Indicative Framework Plan as proposed by Ms Heggen as part of her evidence differed from the exhibited IFP in the following key respects: increase in the preferred maximum height from 42 metres to 59 metres in the northern part of the land and increase in the preferred maximum height from 24.5 metres to 27.5 metres in the southern part of the land.*
248. This was not supported by the Panel and raised questions of procedure during the hearing. The Panel report also noted that the key question is whether the physical and policy setting would reasonably justify an increase in the preferred maximum height of buildings as proposed, and that 'a significant checkpoint for acceptable increased height was the need to restrict overshadowing to properties on the south side of Appleton Street and the footpath on the western side of Burnley Street'.
249. The increased heights sought during the Panel hearing proposed to extend to a maximum height of 59m to the north and 27.5m to the south. When compared to the preferred heights approved in the DPO, this results in additional heights of 17m and 3m respectively. In comparison, the additional height sought via the DP are between:
- (a) 7.6m and 2m (Building A);
 - (b) 13.9m (Building B);
 - (c) 3.4m (Building C); and
 - (d) An additional height of 0.9m is sought for Building D to the south.
250. The acceptability of the additional height of each building will be discussed individually. Prior to this, the issue surrounding the lack of third-party notice or review rights must be addressed.

251. The use of 'preferred' as opposed to a 'mandatory' requirement for the building heights allows a degree of flexibility and discretion in Council's decision making with regard to acceptable heights throughout the development. This discretion is also provided in the DPO, which notes that a *Development Plan must be generally in accordance with the Indicative Framework Plan*. The 'preferred' and 'generally in accordance' terminology indicates to the community that alternative heights may be sought, and are allowed to be sought, by the Applicant.
252. The concept of what constitutes 'generally in accordance' has been discussed at the Tribunal in a number of matters, including *Canet v Brimbank CC* [2003]; *Casey Garden's Development Pty Ltd v Casey CC* [2009] and *Bachley Street Pty Ltd v Maribyrnong CC* [2013].
253. These matters have established that:
- (a) General accordance is a question of fact, to be assessed on the facts and circumstances of each case;
 - (b) The less precision there is in the primary document/s, the more flexibility is given by the phrase "generally in accordance with";
 - (c) "Generally in accordance" does not require the proposed development to be identical to that described in the development plan or incorporated plan; and
 - (d) It is appropriate to read the development plan or incorporated plan as a whole when making this assessment, and to have regard to the objectives, responses and plans comprising the approved plan.
254. Based on the above, it is Council's role to determine whether the proposed increase in heights sought via the submitted DP are 'generally in accordance' with the approved DPO. This determination relies on a range of urban design and amenity considerations, including the objectives and vision of the DPO.
255. Also relevant is whether the physical and policy setting surrounding the site has changed since the hearing was conducted in 2020. While the policy context has not altered, the proposed redevelopment of the Victoria Gardens site immediately to the north has been considered by Council and is currently awaiting a decision by the Minister. The heights proposed within this site are outlined in Figure 37, with maximum heights in the realm of 17 storeys. Although these heights have not been approved at the time of writing this report, they provide an indication of expectations and potential emerging scale of development within immediate proximity to the site.

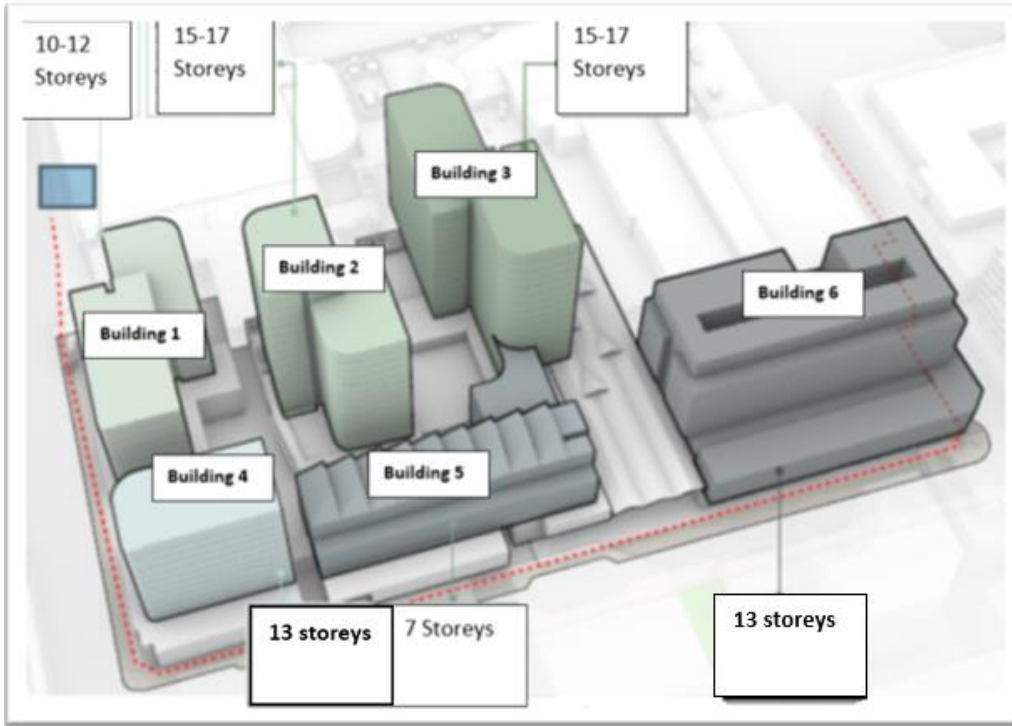


Figure 37: Proposed Building Heights within Doonside Precinct. Source: Planning Officer Report, Council Meeting 14 March 2023.

256. With the above in mind, each building will be discussed in turn.

Building A

257. The DP seeks a maximum height of 49.6m for Building A, exceeding the preferred height by 7.6m. This height reduces to 44m for a length of 7m to the south, and then to 25.5m at the building's southern end. These heights also exceed the preferred heights in the DPO, by 2m and 1m respectively. The podium heights generally meet the preferred heights within the DPO, albeit with a 5m high section as opposed to a 6m high podium in the south-west corner.

258. Figure 38 demonstrates that the highest element of the building will present as a smaller 'cap' to the tower. The setback diagram at Figure 39 indicates that each of the levels within this cap will be set back 2m from the level below. This results in an overall setback of the highest level of 4m from the tower, and 12m from the north and west boundaries.

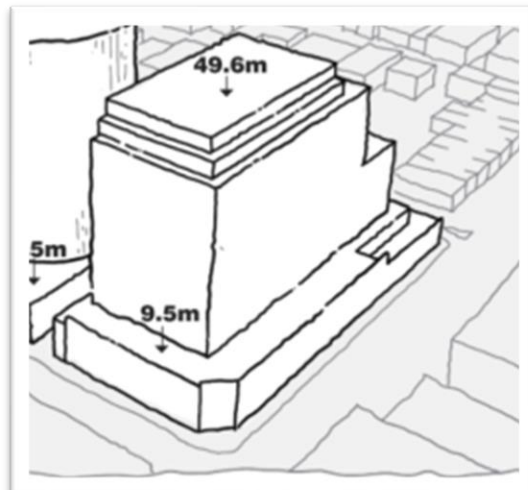


Figure 38: Upper level setbacks of Building A. Source: Development Plan (Gurner 2023)

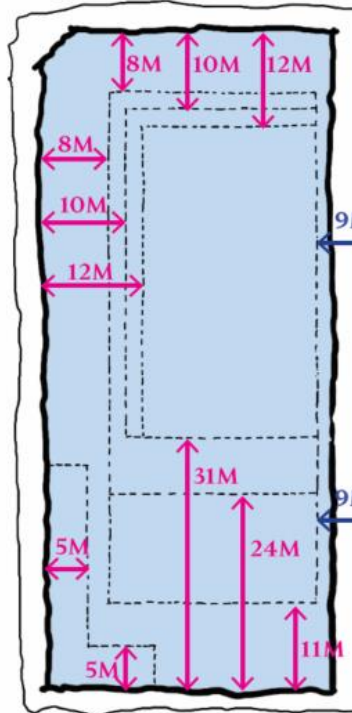


Figure 39: Upper level setbacks of Building A. Source: Development Plan (Gurner 2023)

259. The building cap would equate to approximately 15-16 storeys in height. The design relies on the most visible section of the building being the lower heights of 44m and 25.5m, equating to approximately 14 and 8 storeys respectively.
260. The consecutive setbacks of the upper levels allow them to be generally concealed from various vantage points surrounding the site. To demonstrate this, Figure 40 provides an indicative image of Building A when viewed from the intersection of Burnley Street and Doonside Street, with sightline diagrams at Figures 41 & 42 indicating that the additional two levels will not be visible when viewed from key vantage points along Burnley Street. The sightline diagrams confirm that the height of the tower will obscure visibility of the upper-most form. This ensures that the northern section of the building would present as 14-storeys when viewed from the street.



Figure 40: View of Building A from north-west. Source: Development Plan (Gurner 2023)

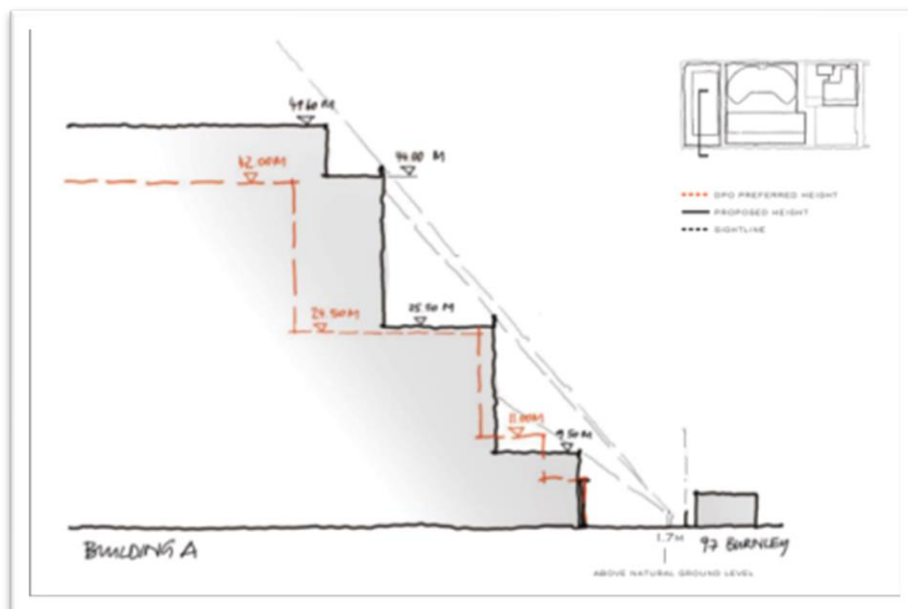


Figure 41: Sightline of Building A from Burnley Street. Source: Development Plan (Gurner 2023)

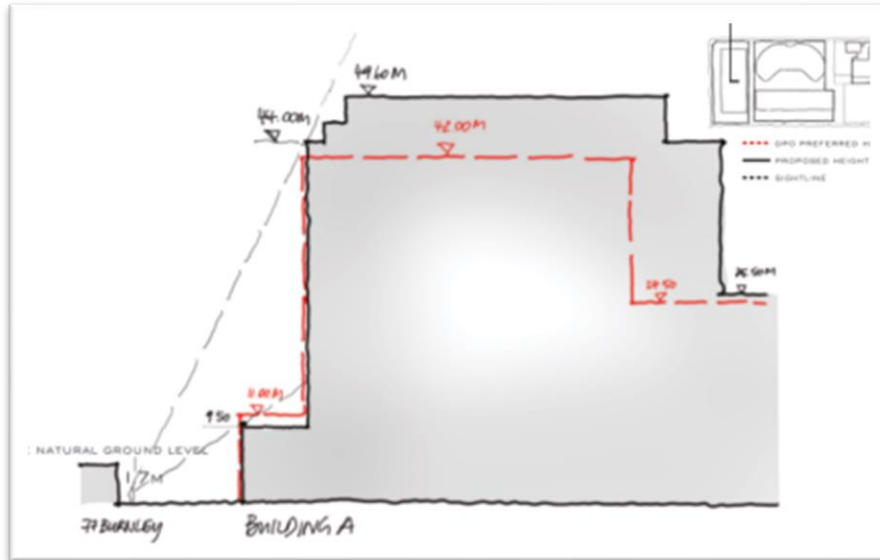


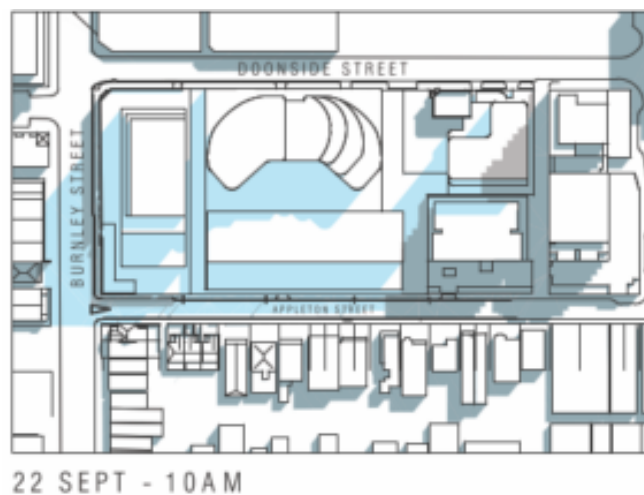
Figure 42: Sightline of Building A from Burnley Street. Source: Development Plan (Gurner 2023)

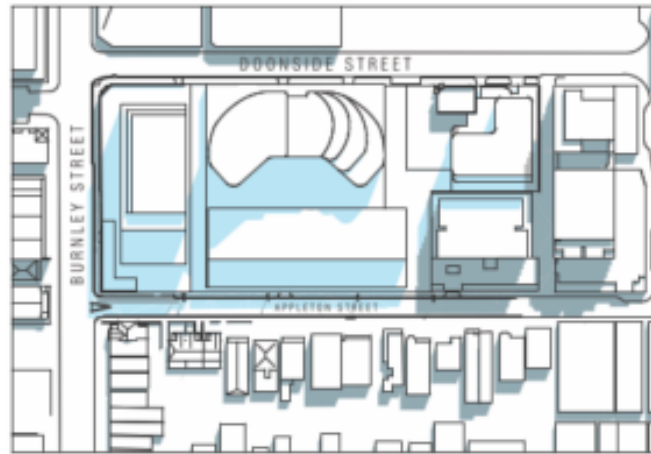
261. The limited visibility of the building 'cap' relies on the tower also extending marginally above the preferred height of 42m, to 44m. Mr McGauran was supportive of the additional height of 2m for the tower element; however, he did not consider that the additional height of the cap had been appropriately managed with regards to shadow impacts or visual bulk to Burnley Street.
262. Planning officers do not agree with this assessment. As demonstrated, visually the additional two storeys will not impact upon views from Burnley Street; the staggered setbacks of these levels have achieved this outcome. This allows the building to present visually at a lower height and it is considered that this setback addresses the visual bulk concerns highlighted by Mr McGauran.
263. The progressive setbacks of these levels have also ensured that additional shadows from the extra height will be mitigated. Respective setbacks of 10m and 12m from the tower element would result in no additional shadows from the top two levels falling beyond the IFP building heights. This outcome is demonstrated in the images below, with the shadows cast by the two upper levels shown in red.



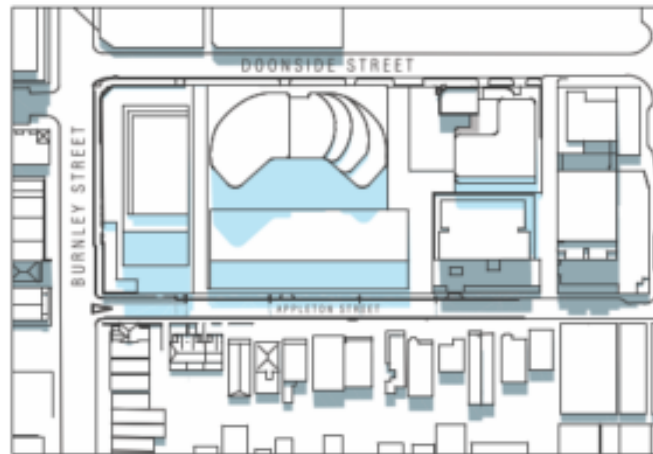
Figure 43: Additional shadows cast by two upper-most levels of Building A. Source: Applicant email 3 August 2023

264. The lack of any additional shadows cast by the extra height is a key point to the acceptability of the proposed building envelope. The shadow diagrams provided in Section 3.10 of the DP demonstrate that no overshadowing of residential properties on the south side of Appleton Street between 10am and 2pm will occur and no overshadowing of the footpath on the western side of Burnley Street from 11am will occur as a result of the proposed greater height. These shadow diagrams are replicated below.

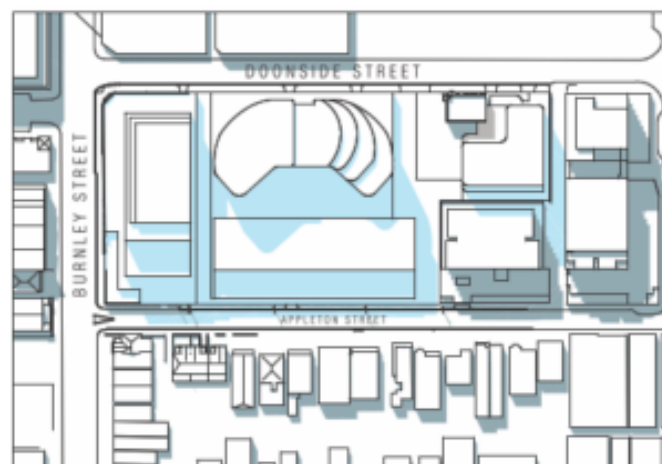




22 SEPT - 11AM



22 SEPT - 12PM



22 SEPT - 01PM

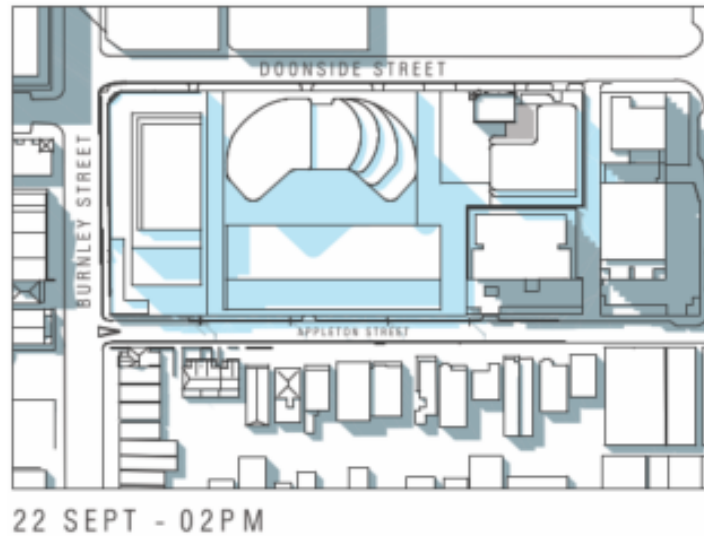


Figure 44: Proposed shadows between 10am-2pm. Source: Development Plan (Gurner 2023)

265. Given this outcome, it is considered that the two main concerns raised by Mr McGauran have been adequately addressed, with the design and setbacks of the 'cap' mitigating any unreasonable visual bulk or overshadowing to the surrounding sites.
266. The panel report noted that *'the preferred maximum height of 42 metres in the proposed Amendment would be at the upper end when compared with recent developments and approvals. Examples of higher developments in precincts distant from the subject site while still within the City of Yarra are outcomes of differing local contexts, development site conditions and planning scheme provisions. As such, these are not considered to carry sufficient weight to support a greater maximum height than that in the exhibited Amendment'*.
267. As outlined previously, the context of heights within the immediate surrounds has altered since the hearing was conducted, and it is acknowledged that the development of the Victoria Gardens site, whilst not approved, will result in substantial changes to the surrounding scale. This argument, when combined with the existing context of higher density development in the realm of 13 storeys around the site, is not considered to be as applicable to the current scheme. As noted, the building will largely present as a 14-storey building from street level.
268. In support of exceeding the preferred heights of this building, the DP notes the following;
- (a) The visibility of the building is generally consistent with the preferred building heights when viewed from the opposite footpaths on Doonside Street, Burnley Street and Appleton Street;
 - (b) The siting of the maximum building heights is at its least sensitive interface, with a transition of heights down from north to south provided; and,
 - (c) No overshadowing of residential properties on the south side of Appleton Street between 10am and 2pm will occur and no overshadowing of the footpath on the western side of Burnley Street from 11am will occur as a result of the greater height.

269. The Panel report supported the transition in heights throughout the site, which was included in both versions presented at the hearing, noting that *'the outcome of both these proposals is the positioning of lower built form at the southern edge of the subject land, stepping down from higher built form to the north. This would address the interface with the fine-grain residential character of the heritage area south of Appleton Street'*.
270. The DP maintains the graduated heights to the south as demonstrated in Figure 45, with the upper levels closest to the southern interface 25.5m in height, reducing to podiums of 9.5m and 5m towards the southern boundary. The 49.6m high section of building is setback 31m from the southern boundary; this provides a generous buffer between the lower built form to the south and appropriately manages views from this interface. The lower podium heights also provide an appropriate response to the residential properties on the southern side of Appleton Street. While the 25.5m section of building exceeds the preferred height by 1m, this difference is considered inconsequential and would not result in unreasonable visual impacts when viewed from surrounding land.

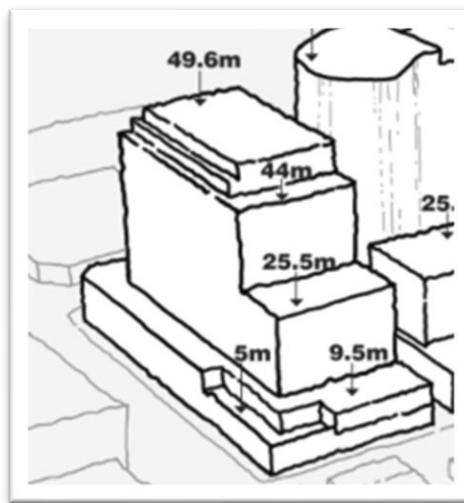


Figure 45: Height transition to the south in Building A. Source: Development Plan (Gurner 2023)

271. The acceptability of the increased heights is intrinsically related to the proposed setbacks of the building. In general, the setbacks meet the requirements of the DPO, with the main departure being the 11m setback of the lower tower form from Appleton Street, as opposed to 13m. The 11m setback is still considered to be a generous response, with the height of the podium appropriately screening views from street level and the setback ensuring that a clear degree of separation is provided between the lower and mid-rise built forms.
272. As demonstrated in Figure 46, these setbacks ensure the retention of key heritage fabric of the Appleton Street, Burnley Street and Doonside Street elevations of 81-95 Burnley Street for the extent of the building within the heritage overlay (HO375).

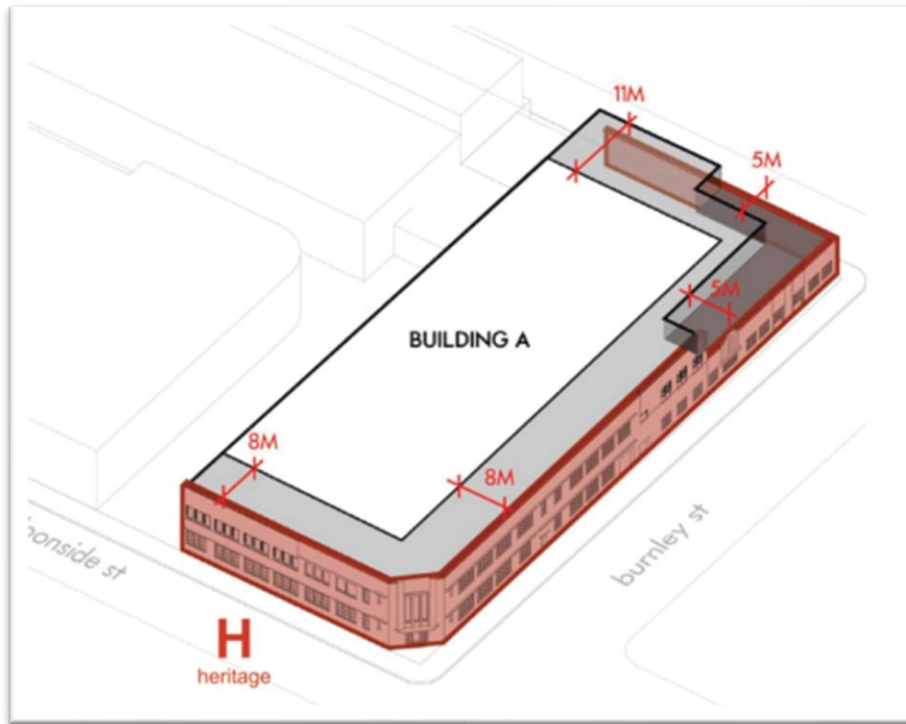


Figure 46: Proposed setbacks of Building A. Source: Development Plan (Gurner 2023)

273. This outcome was confirmed by Ms Brady as follows:

- (a) *Regarding the proposed setbacks to the new works from the facades of 81-95 Burnley Street, these generally achieve the preferred outcome of retaining a sense of the three-dimensional form of the building. This is also assisted by the retention of the three streetscape facades, as included in the Heritage Overlay. While an upper storey addition with a more limited setback is proposed for the single-storey part of the building to the corner of Burnley and Appleton streets, this too has a setback which reduces its impact, and is an acceptable outcome here.*

274. Further to this, Ms Brady notes:

- (a) *Regarding the proposed setbacks to the new buildings and works, in relation to the heritage buildings and streetscape interfaces, those identified at DPO15 are largely achieved. While there is some variation in consistency with DPO15, this is not to the detriment of the heritage buildings and is an acceptable outcome.*

275. This outcome is consistent with the requirements outlined in the 'built form guidelines', with the building setbacks from street boundaries ensuring that new future development does not overwhelm the scale of the heritage buildings on the site and presents acceptably to lower scale buildings in the vicinity of the site, including dwellings on the south side of Appleton Street. The setbacks also ensure that key heritage fabric is retained, with the DPO seeking to provide for the conservation of heritage places within the site.

276. The DP itself does not contain details about the restoration of the existing heritage fabric, however Section 3 stipulates that conditions of any permits issued must include a schedule of conservation works for the retained facades and a heritage maintenance plan to ensure the ongoing retention of the heritage built form.

277. While Ms Brady was supportive of the setbacks as proposed, she originally recommended a reduction in height of the northern half of Building A, noting that a height more closely approximating the preferred height in the DPO would result in a less impactful heritage outcome. However, this response was based on information provided with the original DP, with her review noting that a sightline analysis and 3D modelling of the proposed development from key viewpoints in the public realm would enable an assessment of the visual impact of the development on the heritage places within the site. This information was subsequently provided in the updated DP (via the render at Figure 37) and reviewed by Ms Brady, who noted *'for Building A, the setback to the upper levels has reduced the visibility and addressed the potential visual impact of the extra height. This makes the latter more acceptable in heritage terms'*.
278. Based on the above discussion, Planning officers are supportive of the amended envelope being sought for Building A. The additional height has been appropriately managed via the use of setbacks and a variation in massing throughout the building, with off-site amenity impacts effectively responded to. It is considered that the modified design will sit comfortably within the context of existing and emerging heights within the immediate area and is generally in accordance with the outcome sought by the DPO.

Building B

279. Building B seeks the most substantial departure to the preferred height requirements, with an overall height of 55.9m being sought. This extends 13.9m above the preferred height of the DP, with a reduction in height to 42m at its eastern end. The stepping down of height to the east is demonstrated in Figure 47.



Figure 47: Proposed heights of Building B. Source: Development Plan (Gurner 2023)

280. The increased height sought during the hearing was 59m, resulting in an additional height of 17m above the preferred height. The DP still seeks to exceed the preferred height; however, the exceedance has reduced, and the eastern side of the building would align with the preferred height of 42m. This building is located furthest from the more sensitive interfaces to the south and west, with the lower height to the east providing a graduation in scale towards the lower built form anticipated in this direction. It is noted that this building is not located within a heritage overlay.
281. The Panel report notes that *'An important policy direction for this precinct is to facilitate a transition from the scope of the taller, more robust building forms in and around the Victoria Gardens Shopping Centre to the more conventional residential areas beyond. The Panel considers that the emerging context in the vicinity of the subject site (which includes many recent approvals that are consistent with this) should be given substantive weight in assessing preferred maximum heights for the Amendment'*.

282. As outlined earlier, the Panel relied on the existing context surrounding the site when writing their report. It was acknowledged throughout the report that the site is designated as a 'strategic redevelopment site' within the Activity Centre context, and the provision of taller built form throughout the site would maximise housing yield. The delivery of more dwellings would also benefit the extent of affordable housing available within the development, with 10% of the dwellings to be provided as affordable housing. This aspect will be discussed in detail later within this report.
283. The context of the immediate surrounds has altered since the report was written. Section 3.9 of the DP states; *'In the intervening period since the release of the Panel report in July 2020, through consultation with Salta Properties, a redevelopment of Victoria Gardens to include additional commercial offerings and approximately 700-800 dwellings is being contemplated. The scale of any subsequent buildings is unknown, however it represents a change to the emerging context that informed the Panel's position in relation to building heights and will enable a transition from Victoria Street (north) to Appleton Street'*.
284. As shown in Figure 34 of this report, heights being sought within Victoria Gardens extend to a maximum of 17-storeys. The heights sought for Building B would range from approximately 17 storeys to approximately 14 storeys at its eastern end.
285. The sightline diagram at Figure 48 demonstrates how the additional height will be viewed from Doonside Street. Visually the building will present as higher built form from this interface than that envisioned in the DPO. However, the sightline diagram also shows the additional setback proposed for this building at its eastern and western ends. While the central section of tower will be setback 3m and 5m from the northern interface, this setback will extend to 20m at both ends of the curved building frontage. The curved design of the façade will reduce visibility of the building from various vantage points and provide a more visually interesting outcome than that anticipated in the DPO. The curved design of the building is demonstrated in the setback diagram at Figure 49 and render at Figure 50.

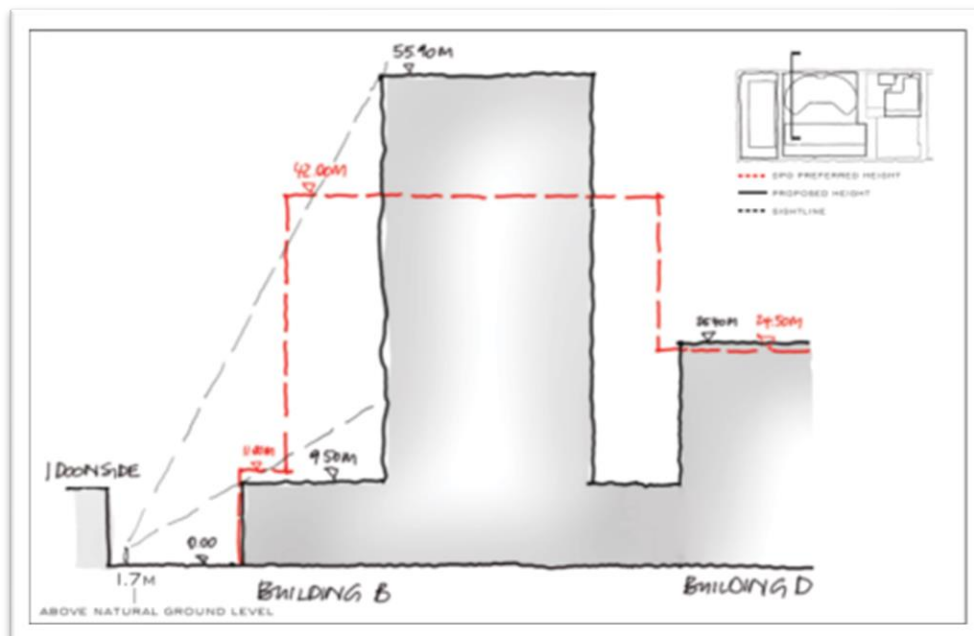


Figure 48: Sightline diagram from Doonside Street to Building B. Source: Development Plan (Gurner 2023)

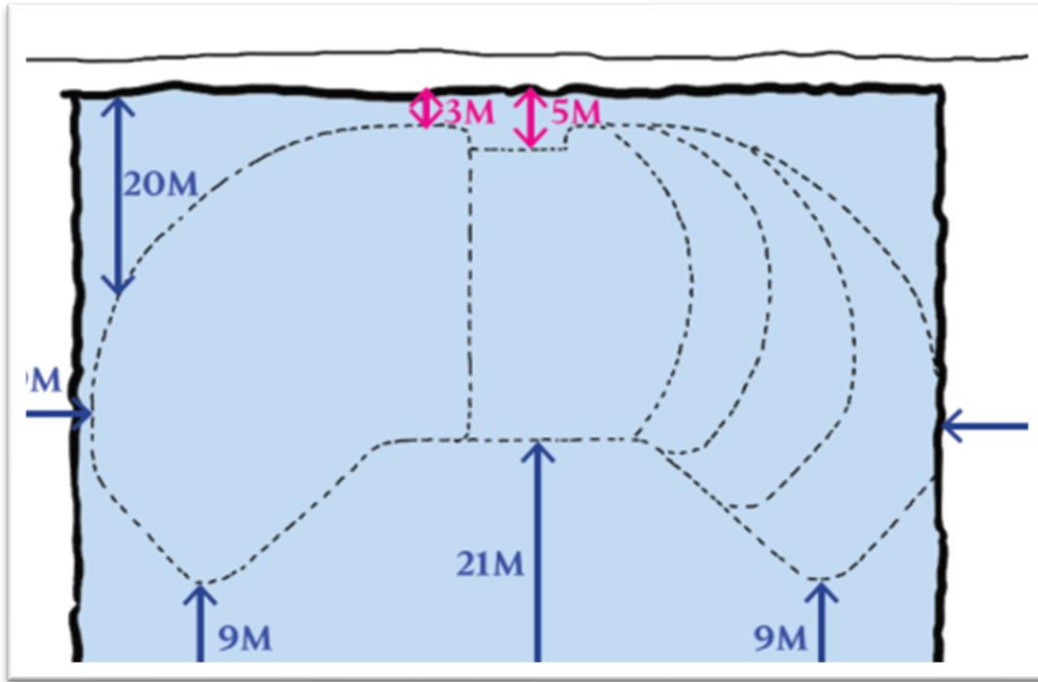


Figure 49: Proposed setbacks of Building B from Doonside Street. Source: Development Plan (Gurner 2023)



Figure 50: Render of Building B from north-west. Source: Development Plan (Gurner 2023)

286. Council's Strategic Planning team were not convinced that the tapered setback at either end of this building would sufficiently reduce the mass of Building B when viewed from oblique angles and were not of the opinion that the taller height being sought, along with the greater setbacks, would result in a varied or interesting skyline along Doonside Street.

287. In contrast, Mr McGauran noted:

- (a) *I think there is a case for the increase in height of Building B centrally located between the proposed east and west lanes on Doonside Street with the tallest built form to the west, with a setback from the laneway interface and the eastern side scaling down as previously envisaged to protect amenity in the adjoining park and pedestrian links.*

288. Planning officers share Mr McGauran's view. The IFP within the DPO allows for a consistent 5m setback to extend along the full frontage of Doonside Street. The DPO also did not include a second laneway between Buildings A & B. The break in built form provided by Harry's Lane, along with the varied setbacks proposed from Doonside Street, are considered to result in a visually appropriate outcome which allows for a variation in heights along the streetscape, and throughout the precinct as a whole. The variation in height provided within the building itself contributes to this response, with the graduation in scale to the east providing an acceptable transition to the heritage building at 26 Doonside Street.

289. The higher built form will respond appropriately to the anticipated 'more robust' heights being sought within the Victoria Gardens precinct, and the varied setbacks from Doonside Street will allow for suitable visual breaks when viewed in conjunction with future buildings from the western and eastern ends of Doonside Street.

290. Further to this, the additional height will not result in any additional overshadowing impacts to the south, and as demonstrated in Figures 51 & 52, visibility of the taller built form will be generally obscured from Appleton Street protecting the amenity of the sensitive residential interfaces to the south. The reduction in height to the east will also ensure that shadow impacts to the future Doonside Park on the eastern side of the building will be appropriately managed. On this basis, an increase in height for the western portion of this building is supported.

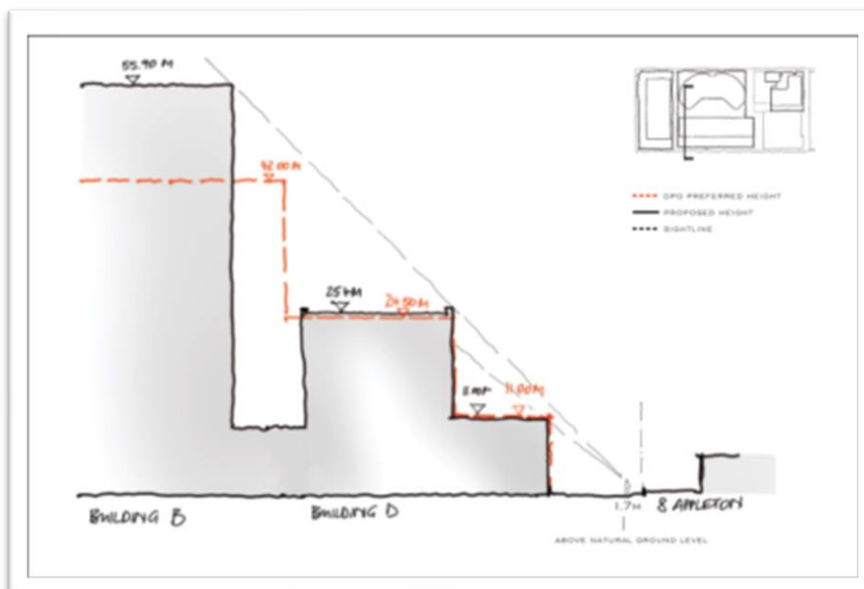


Figure 51: Sightline diagram from Appleton Street to Building B. Source: Development Plan (Gurner 2023)

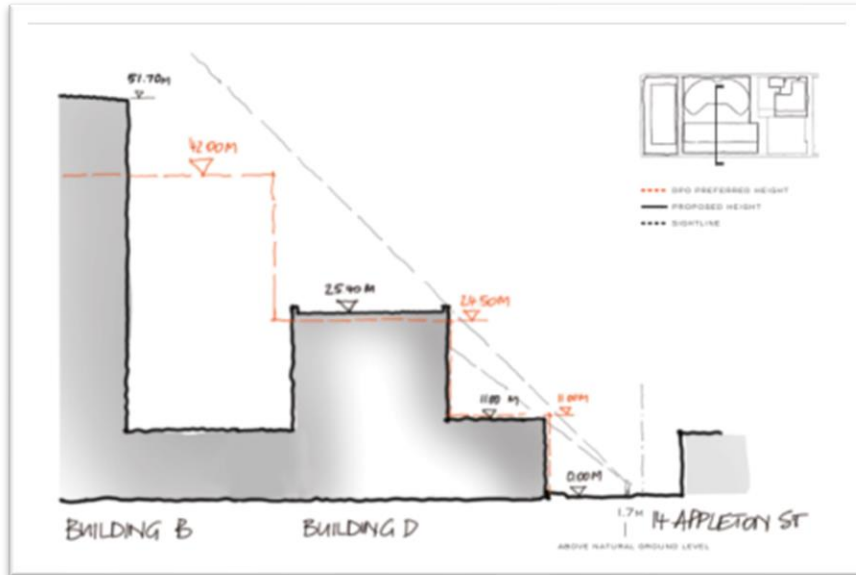


Figure 52: Sightline diagram from Appleton Street to Building B. Source: Development Plan (Gurner 2023)

291. The other variation to the preferred parameters of this building is the section of 3m setback from Doonside Street. As shown in Figure 49, this portion of the setback is relatively limited, with the central section of the façade set back 5m from the boundary, and the setbacks extending in a curved design to reach 20m to the east and west. The variation provided by the proposed setbacks is considered to result in a visually interesting upper-level response, with the greater side setbacks reducing any visual impacts that may otherwise be generated by the reduced depth. This outcome is supported.
292. One of the changes sought by the DP and highlighted within an earlier section of this report is the removal of the splay in the north-east corner of Building B at the entrance to Park Lane. This splay is demonstrated in Figure 53, however has not been replicated in the podium design of Building B (Figure 54).

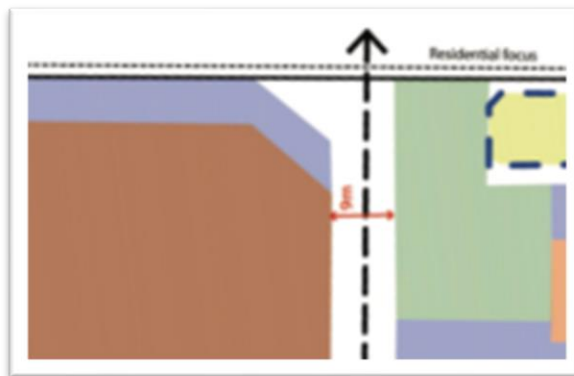


Figure 53: Building B layout in the IFP. Source: Schedule 15 to the DPO – Yarra Planning Scheme

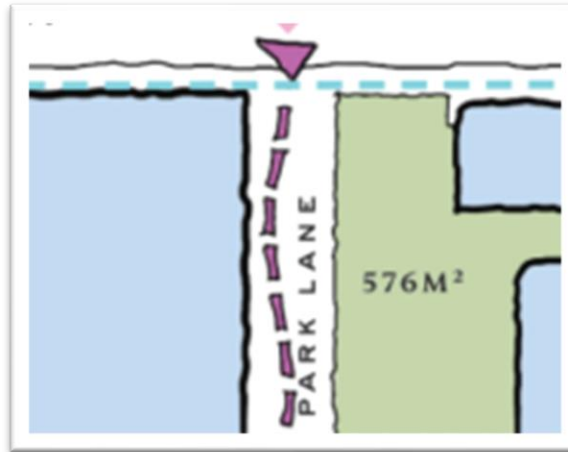


Figure 54: Building B layout in DP Source: Development Plan (Gurner 2023)

293. The removal of this chamfered corner from the design would necessitate the removal of a significant native tree within the title boundary of the site, with a tree of this size providing urban cooling, wind mitigation and biodiversity benefits to the streetscape and adjacent open space. Details of the tree are provided in Figure 55.



Figure 55: Existing tree on Doonside Street. Source: Council Urban Design Comments (2022)

294. Council’s Urban Design team’s review highlighted that to remove a significant tree within the City of Yarra, a separate application must be submitted. An independent Arborist would be engaged by Council to assess the tree. It is considered unlikely that permission for the removal of the tree would be given if the tree is not dead, dying or dangerous. To alleviate this outcome, it is recommended that the chamfered ‘splay’ as demonstrated in the IFP should be reinstated to this corner, to allow the retention of the significant tree.

Building C

295. Building C is located to the side and rear of 26-34 Doonside Street, which is within HO252. The DPO seeks to ensure retention of the key heritage fabric associated with this heritage building by providing setbacks of 8m from the retained building. As demonstrated in Figure 56, these setbacks have been provided.

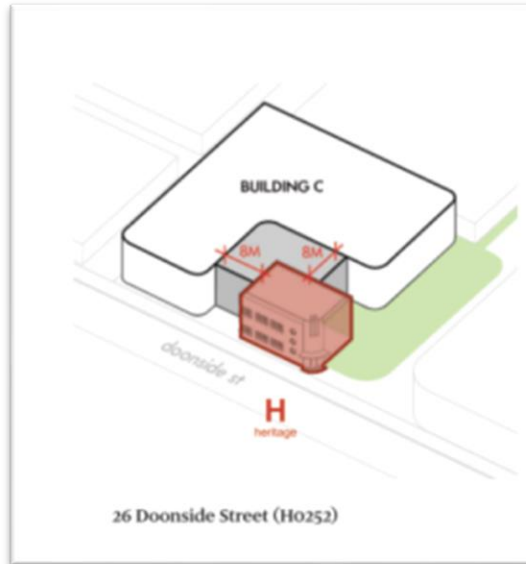


Figure 56: Setbacks of Building C from heritage fabric Source: Development Plan (Gurner 2023)

296. With regards to height, the IFP indicates a preferred podium height of 8-11m for this building, with a tower of 38.5m. The proposed podium ranges from 5m to 9.5m, with the tower extending to 41.9m, some 3.4m above the preferred height (Figure 57).
297. The DP notes that the height and form of Building C is complimentary to the neighbouring Embassy apartments (approximately 39m in height) and visually engages with the existing heritage building in the foreground. No concerns were raised by Mr McGauran regarding unreasonable visual impacts associated with the increase height sought by this building, with Ms Brady noting that *'no reduction in height is suggested for Building C'*.

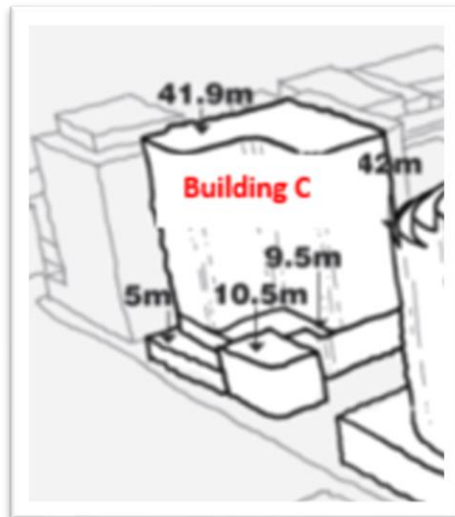


Figure 57: Proposed heights of Building C. Source: Development Plan (2023)

298. The lower street wall to the east allows the heritage building to retain its prominence within the streetscape and aligns with the built form guidelines by creating an interesting and varied street wall and podium which is reinforced through a range of parapet heights. The render at Figure 58 indicates that Building C will also incorporate a curved design response to the façade. This allows for a degree of continuity with the design of Building B, whilst also reflecting the design of the retained heritage building. These design details provide a sympathetic outcome that appropriately responds to the heritage built form, and it is not considered that the additional height being sought will cause any detriment to this outcome.



Figure 58: Indicative design of Building C. Source: Development Plan (2023)

299. The additional height is also not considered to result in any unreasonable visual or shadow impacts to Park Lane or Doonside Park, which will sit directly to the west of this building. From a pedestrian perspective, the extra height is unlikely to be perceivable, with the proximity to the park and laneway ensuring that any overshadowing of these spaces will be caused by the lower levels of this building. Additional shadows caused by the upper level would fall upon the surrounding roofs. Given the location of this building on the northern side of the precinct, views from Appleton Street will be appropriately restricted by existing and future built form. Based on the above, the additional height being sought for Building C is supported.

Building D

300. Building D is located on the southern side of the site and therefore has the most sensitive interface with the lower scale residential dwellings along Appleton Street. Building D is not located within the heritage overlay.
301. The DPO outlines a preferred podium height of 8-11m for this building, with a tower of 24.5m. The DPO also specifies a preferred setback of 13m from the Appleton Street boundary, and 9m from habitable room windows or balconies of the Embassy building directly to the east. The preferred setbacks have been achieved, with the height of the tower proposed at 25.4m. This is a 0.9m increase above the preferred height in the DPO.

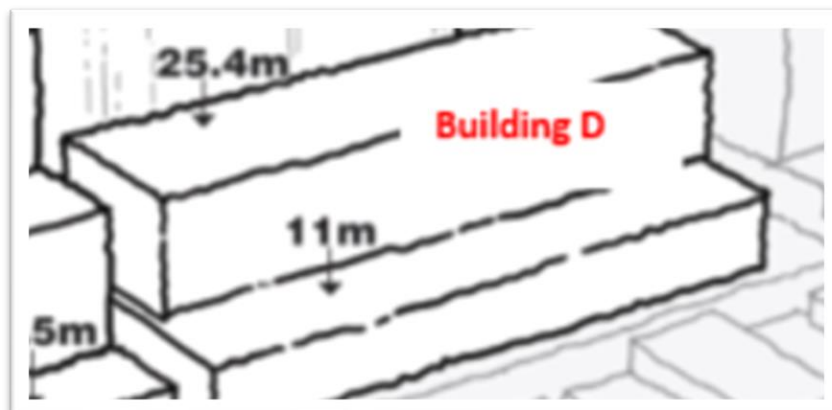


Figure 59: Proposed heights of Building D. Source: Development Plan (2023)

302. The heights and setbacks of Building D are considered acceptable, with the minor exceedance of 0.9m to the tower element marginal in the context of the development as a whole. Given the podium height and tower setbacks meet the preferred parameters of the DPO, overshadowing to the southern side of Appleton Street will be suitably addressed and visual impacts are not considered to increase to any unreasonable degree.
303. The main alteration to the design of this building is the removal of built form from the eastern side of Park Lane and the subsequent increase in façade length along Appleton Street. This aspect of the DP has been discussed previously within this report. As noted in this discussion, Mr McGauran recommended an additional setback be incorporated into the tower element of Building D from the east. This setback, in the realm of 6m, would increase the separation between the taller section of Building D and the eastern boundary to 16m, thereby providing a setback of 18.45m between this building and the balconies of the Embassy apartments.
304. This change was not considered necessary, with the proposed setback between these buildings already considered to be an appropriate outcome resulting in an improved response for west-facing apartments within the Embassy complex.
305. Instead, of relevance is a suitable response to the design guideline within the DPO which seeks to *'ensure buildings are designed along Appleton Street to break up the form of the street wall'*.
306. The DP confirms that the streetwall within Building D will be composed of triple-storey townhouses, with emphasis placed on expressing a textured and engaging street front to reflect the sense of scale and fine grain street character of the dwellings along the southern side of Appleton Street. An example of typical designs of these townhouses are provided in Section 3.11 of the DP and reproduced below.

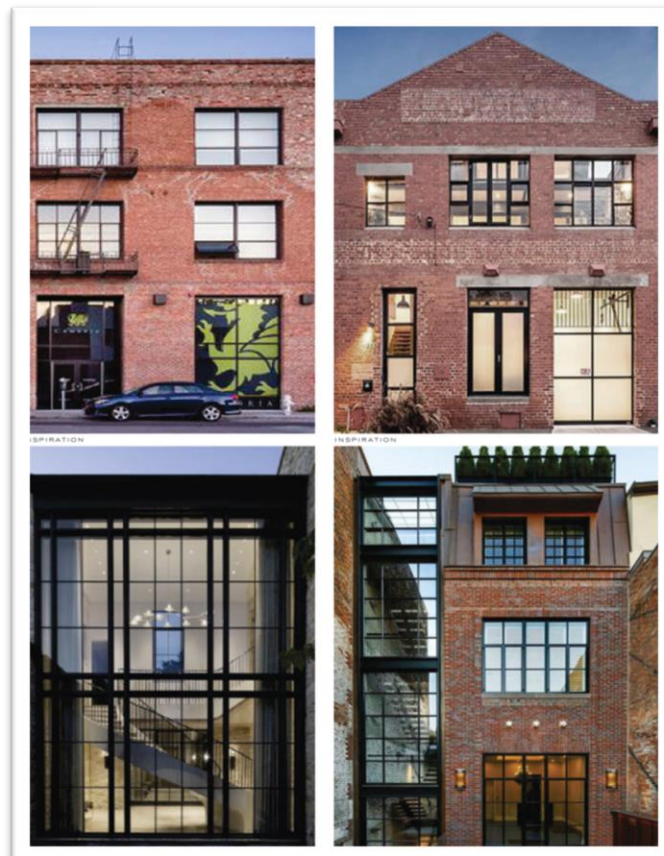


Figure 60: Indicative design of podium level dwellings in Building D. Source: Development Plan (2023)

307. The level of articulation provided in this design response is considered to provide a visually diverse outcome which appropriately addresses concerns about the massing of this façade. Further to this, the break within the streetwall provided by Harry's Lane to the west is a positive benefit of the amended layout, as are the views along Park Lane that will be available further to the east. Based on the above, the additional height being sought for Building D is supported.

Wind

308. While the proposed heights and setbacks of each building are supported from neighbourhood character and off-site amenity perspectives, an important aspect which will assist in determining whether the proposed building envelopes are appropriate is whether the development has been *designed to ameliorate adverse wind conditions at street level, public spaces and lower-level dwellings* as required in the guidelines outlined earlier.

309. A number of wind reports were submitted throughout the course of the application, with the most recent undertaking wind tunnel modelling to ascertain whether the proposed massing of the buildings could achieve safe and comfortable wind conditions throughout the precinct. It is highlighted that the preparation of a wind report is not a specific requirement outlined in DPO15, with detailed responses to wind testing expected as part of any future planning permit application once the architectural detailing of each building is resolved.

310. However, it was considered prudent to undertake a degree of testing at the initial stage to ensure that acceptable wind conditions could be achieved by the proposed development outcomes sought in the DP.

311. In consultation with Council's wind engineers (MEL Consultants), the wind report included the preparation of a model which was subsequently tested in a wind tunnel. The model included the basic massing approach identified within the DP and did not include any wind ameliorating devices such as screens, balustrades, balconies or vegetation. The results of the modelling indicated that wind conditions for many trafficable outdoor locations within and around the development will be suitable for their intended uses, however it also concluded that some areas would experience strong winds which will exceed the relevant criteria for safety and/or the existing site conditions. Additional wind tunnel testing was conducted with the inclusion of treatments for these areas. The results of the updated modelling indicated that the mitigation measures used in the subsequent tests were effective and would ensure that all trafficable areas within and around the development would meet the relevant safety limit criterion.

312. A summary of some of the treatments used for this testing include the following;

- (a) Doonside Park – 1m-1.5m high raised garden beds along the western edge, 2.5m high impermeable screens in strategic locations within the park and additional screening/bench seating to heights ranging from 1m to 2.5m;
- (b) Building A – A 1.5m high balustrade at level 2, an awning along the northern and western facades and a canopy to the east;
- (c) Building B – awnings along the northern façade at level 2 and a canopy to the east; and,
- (d) Building C – 3m high screen along the north-west and east perimeters at level 2, a canopy above this screen and strategic placement of balconies.

313. The majority of these measures are not considered to be acceptable outcomes, particularly given their locations within the most visible areas of the retained heritage buildings (Buildings A & C) and the potential to disrupt views within Doonside Park.

314. Further to this, the review by MEL Consultants noted that the in-principle mitigation strategies include street trees in the public realm (outside site boundaries) and landscaping. The planning application for the development will be assessed against Clause 58.04-4 (Wind impact objectives) of the Scheme, with this standard noting that trees and landscaping should not be used to mitigate wind impacts. This does not apply to sitting areas, where trees and landscaping may be used to supplement fixed wind mitigation elements.
315. As noted, the provision of a wind report is not a specific requirement of the DPO as it is difficult to fully assess the final wind outcomes at this early stage. The mitigation strategies suggested in the report are therefore based on the 'worst-case' scenario and have been provided to demonstrate that there are measures that could address unreasonable impacts if necessary. The report highlights that *'as the design is developed for the planning permit application, further modelling will be undertaken to optimise the scale and extent of the required treatments to suit the detailed design'*.
316. The planning application will include the details of each building, with the layout and location of balconies, indents, architectural features, balustrades and screening incorporated into the final drawings. It is anticipated that the inclusion of these features will negate the need for the majority of the mitigation treatments outlined above. To ensure that this occurs, the following disclaimer should be added to Section 3.9 of the DP:
- (a) The scale, siting and technique of the wind mitigation measures outlined within the Wind report prepared by Windtech (dated 13 July) are subject to further review, including any impacts on built form located within heritage overlays, Park Lane and Doonside Park, as part of any future planning permit applications and to the satisfaction of the Responsible Authority.
317. This will allow further reviews to be undertaken once the design of the development is refined. At that stage, if the necessary safety and comfort criterion cannot be met without resulting in unreasonable impacts to the heritage buildings or open space, alternative built form responses including alterations to building heights and setbacks may be required.
318. In summary, based on the above discussion, it is considered that the building heights and proposed envelopes as sought in the DP respond appropriately to the context of the site and reflect the emerging and anticipated context of the surrounding land. The spacing proposed between the towers achieve or exceed the expectations of the DPO, which stipulates a minimum of 9m should be provided. The degree of separation between buildings allows for a visually interesting skyline and streetscape along all frontages. It is acknowledged that this view was not shared by Council's Strategic Planning officer, who noted that *'the heights vary between 2 and 3 storeys between Buildings A, B and C. When these buildings are viewed from the oblique or from the public realm these minor height differences are unlikely to provide for a visually interesting skyline but rather overwhelming uniformity. The height difference between Buildings B and C provides the best example of visual interest between buildings, due to the greatest height difference and varied upper level setbacks'*.
319. Other issues were raised in the Strategic Planning comments; however, it is highlighted that these comments were based on the original version of the DP. The 'background' section of this report outlines the changes that were undertaken in the current version, with these including (but not limited to);
- (a) Increased setbacks of the upper levels of Building A from Burnley Street and Doonside Street;
 - (b) Reduction in height to 42m for the eastern side of Building B;
 - (c) Amended layout of both laneways, with Doonside Park increased in width and the fitness area removed from the southern end of Park Lane; and,
 - (d) Cantilevered section of Building B removed from above Park Lane.

320. These changes addressed many of the concerns raised in the Strategic Planning comments, and also result in improved solar access within and surrounding the development. With regards to the comments regarding a 'varied skyline and streetscape', Planning officers do not share these views. The IFP proposes Building A & Building B to be a uniform height of 42m. This outcome is considered inferior with regards to variations in heights, with the contrasting massing proposed within the DP providing a more visually interesting outcome. The stepped design of the roof on Building B, and its relationship with the lower height of Building C also provides a positive response. These aspects of the development are supported.
321. Further to this, from a heritage perspective the proposed heights and setbacks achieve an appropriate outcome. However, the DP provides limited information on a number of built form guidelines relating to heritage, with Ms Brady noting that *'the DP doesn't include sufficient detail to fully assess the visual external impact of any new internal/inter-floor heights within the heritage buildings, and nor is detail provided on the presence of 'solid built form behind retained facades'. No balconies appear to be present 'behind existing openings', although again the detail is not fully available'*.
322. A new section should be incorporated into Section 3 of the DP to provide a comprehensive response to the built form guidelines from a heritage perspective. This could be amalgamated with Section 3.11, which provides details on the architectural responses proposed for each building but expanded to confirm that the inter-floor heights within the heritage buildings on the site will relate to the existing floor levels and fenestration patterns, and that balconies and built form will not be visible behind existing openings within the heritage facades.
323. With regards to the building finishes and materials proposed for built form within the heritage overlays, Ms Brady notes the following:
- (a) *The renders indicate brickwork and multi paned windows for Building A, which appear generally sympathetic to H0375. The curved form of Building C as it wraps to the rear of 26 Doonside Street, and the horizontal emphasis of the expressed floor plates are also sympathetic to the Modern heritage building. More generally, the new buildings across the site display diverse approaches and materials which are broadly acceptable in developments of this type, and within a range which Clause 22.02 contemplates for such developments associated with heritage places.*
324. The proposed design throughout the development is supported. The material palette is respectful of the heritage fabric on-site, as well as to the residential heritage precinct along Appleton Street. The variation in materials provide a visually interesting precinct wide outcome.
325. Clause 43.04-2 of the DPO notes that any permit granted for the site must be 'generally in accordance' with the development plan. It is acknowledged that this allows further flexibility for greater heights to be sought via the permit process. On this basis, Section 3.9 should be updated to include a paragraph which provides as follows: *The maximum building heights as specified for each of buildings A, B C and D are maximum heights not preferred maximum heights. These building heights have already, in some cases, exceeded the building heights shown in the Indicative Framework Plan forming part of DPO15 and are not intended to be further increased.*
326. This wording does not prevent the approval of greater heights if they are considered 'generally in accordance' with the DP, however a full assessment would be required at the time a permit application is submitted.

327. Further to this, the following requirements for future plant/equipment should be incorporated into the DP:
- (a) A requirement that future plant and equipment, including screening, for all buildings must comply with all of the following:
 - (i) Be no more than 3.6m above the maximum building height;
 - (ii) Occupy no more than 50% of the roof area;
 - (iii) Be set back a minimum of 3m from all building edges; and,
 - (iv) Be fully screened from view.
328. The DP indicates that car park access will be provided from two entrances on Doonside Street; one at the eastern end of Building C and one within the frontage of Building B. All car parking is proposed within the basement, with no visibility from any street frontage. This outcome ensures no vehicle access or traffic movements will impact Appleton Street. Traffic impacts from the development will be discussed in detail later within this report.
329. Also to be addressed within later sections of this assessment is the public realm and interface response, noise attenuation and sustainable transport initiatives.

Supplementary Documentation

330. The DPO requires additional supplementary information be provided including *massing diagrams that model the proposed built form envelopes based on the indicative heights and setbacks*
331. *Shadow diagrams that demonstrate:*
- (a) *no overshadowing of private properties on the southern side of Appleton Street beyond that caused by a building of 11m when measured between the hours of 10:00am and 2:00pm at the September Equinox;*
 - (b) *no overshadowing of the footpath on the western side of Burnley Street from 11 am at the September Equinox; and*
 - (c) *appropriate access to sunlight within the proposed park between the hours of 10am and 2pm at the September Equinox to provide a reasonable standard of amenity and useability as a principally passive open space.*
332. *Indicative palette of building materials and architectural treatments throughout the site.*

Massing

333. Four massing diagrams have been included in the DP within Section 3.8. These diagrams include views from north and south along Burnley Street, and from vantage points within Doonside Street and Appleton Street. Two additional diagrams which give overall views of the site from the north and south are provided in Section 3.9. These diagrams show the massing outcomes envisioned for the site, along with the proposed heights of the podium and tower elements of all buildings. A combination of these diagrams provides an appropriate response to modelling the proposed built form envelopes, however the following amendments should be provided to allow clear reading of the massing strategies:
- (a) View C within Section 3.8 (page 49) should be updated to show Building B in the background for clarity;
 - (b) The site layout keys on pages 46 & 48 should specify the buildings (i.e., Building A, Building B etc.) as shown on the Masterplan at page 33; and,
 - (c) The building height diagrams at Section 3.9 should be updated to include the following:
 - (i) Name of each building;
 - (ii) The direction the development is being viewed from; and,

- (iii) The names of the adjacent streets.

Overshadowing

334. Section 3.10 provides shadow diagrams at the times required by the DPO, with these shadow diagrams replicated at Figure 40 of this report. The extent of shadows cast by the development meet the requirements outlined above, with no overshadowing to the southern properties along Appleton Street between 10am and 2pm, and no overshadowing of the western footpath of Burnley Street from 11am onwards at the equinox.
335. As demonstrated in these diagrams, minor additional areas of shadowing will affect Doonside Park at 10am, 11am and 2pm. The existing heritage building adjacent to the park will cast shadows within this space at 9am, however these will dissipate from 10am onwards. The combined extent of overshadowing from existing and new built form is considered reasonable. An appropriate degree of sunlight access at the equinox will allow for an acceptable standard of amenity and useability within this space, as required by the DPO, with the majority of the park and in particular the northern half of this space, accessing a generous extent of direct sunlight throughout the day.

Materials

336. Section 3.11 of the DP provides an outline of the building finishes and materials and the proposed architectural language to be adopted for each individual building. A selection of indicative images has been provided; these images are a combination of artist impressions of the proposed design and background inspiration. A brief outline of the vision of each design has also been provided. Whilst a render of the proposed final design of the three-storey townhouses along Appleton Street has not been provided, this is due to the varied designs that will be adopted along this streetwall. The example images shown on page 76 are considered to provide an acceptable representation of what is proposed. The images provide an indicative palette of building materials and architectural treatments throughout the site, as required by the DPO.

Open Space and Landscape

337. *A Landscape Concept Plan must be prepared that provides:*
- (a) *Indicative dimensions of open space in all parts of the site at ground level to the satisfaction of the Responsible Authority;*
 - (b) *An overall landscape masterplan for the site that includes landscape concepts for proposed open space and improvements along Appleton Street and Doonside Street;*
 - (c) *Deep planting opportunities for canopy trees within the proposed public open space, free from basement incursion;*
 - (d) *A written description of the management of the open space, pedestrian lane and other landscaped areas, including sustainable irrigation principles such as water sensitive urban design opportunities; and*
 - (e) *Details of how the Landscape Concept Plan responds to any requirements of the site remediation strategy for the land.*
338. A Landscape Report was submitted with the DP; this report was prepared by TCL and dated 14 February 2023. The report includes the following information;
- (a) Landscape Concept Plan;
 - (b) Public Realm Plan;
 - (c) Information on public realm upgrades;
 - (d) Irrigation and WSUD details;
 - (e) Maintenance details; and,

(f) Site remediation details.

339. Key elements of this report are replicated in Section 4.2 of the DP.

340. The majority of landscaping within the site, including the only opportunity for deep soil planting, is within the proposed Doonside Park. Section 4.2 of the DP provides an image of this park (Figure 61) which confirms that 576sqm of open space is free from basement incursion. It is important to note that the 576sqm equates to the 4.5% as required by Clause 53.01 of the Yarra Planning Scheme; the DPO outlines that this percentage must be compliant with the existing provisions of the Planning Scheme at the time of subdivision. Council is currently reviewing its open space contribution rate and anticipates that the requirement for provision of open space on the land may increase. This requirement for the provision of public open space should be replicated in Section 4.2 of the DP.

341. Further to this, the DPO stipulates that the pedestrian lanes within the site must be publicly accessible to pedestrians at all times. Section 4.2 states that Doonside Park and Harry's Lane will be publicly accessible day and night. This statement should be updated to include Park Lane, and to clarify that unfettered public access will be provided throughout all of these spaces 24 hours a day, 7 days a week.

342. An additional 151sqm of landscaping is also proposed directly to the south of this space. The provision of this additional area of open space is supported. Indicative locations for seating, garden beds and bicycle hoops are included on the plans, with a generous area of lawn provided. It is noted that the area of Doonside Park unencumbered by the basement (576sqm) will be vested with Council once the development is completed, in accordance with Clause 52.01 of the Scheme.

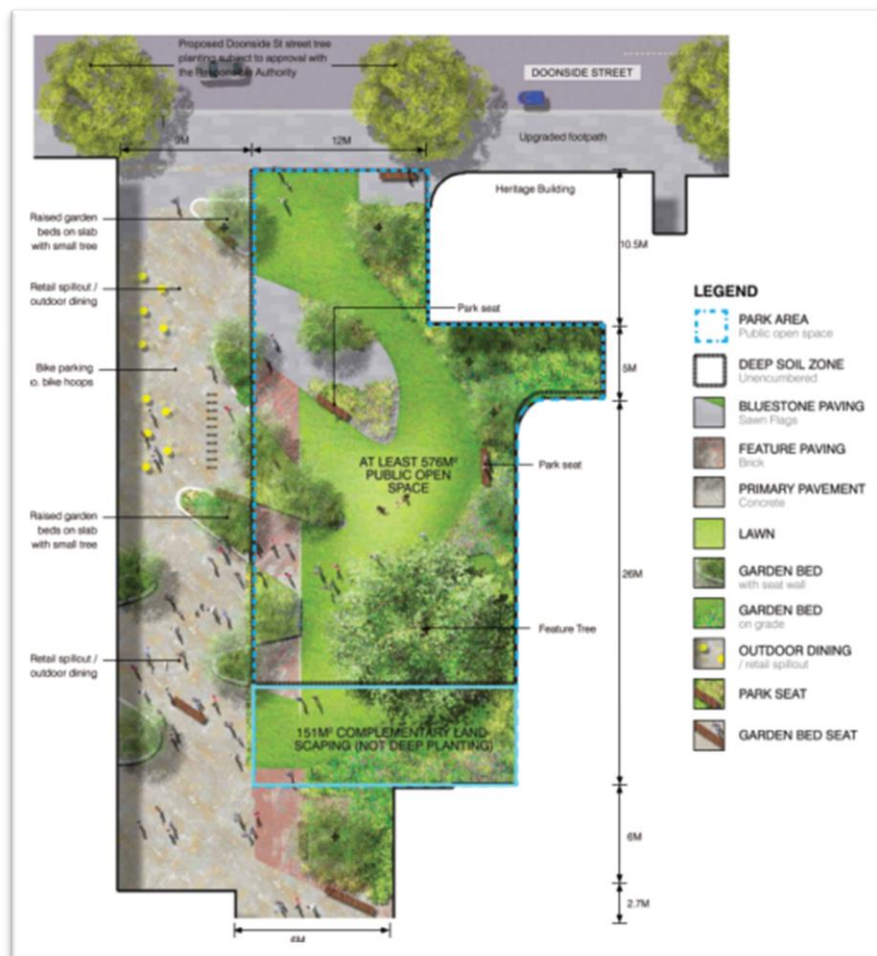


Figure 61: Indicative design of Doonside Park. Source: Development Plan (2023)

343. The original Landscape Plan and DP was reviewed by Council's Open Space team, with several issues raised. While these comments highlighted that Doonside Park is narrower and more linear than envisioned in the DPO, this aspect was amended in the updated DP, with the dimensions of the park modified to reflect the layout and width demonstrated in the IFP.
344. The overarching issue raised by Council's Open Space officer was the lack of detail provided within the plan, with general comments as follows:
- (a) It is unclear how the layout of garden beds within Doonside Park respond to and respect the retained heritage building at 26 Doonside Street;
 - (b) Limited details have been provided on irrigation and Water Sensitive Urban Design (WSUD); and,
 - (c) Limited details have been provided on the site remediation process.
345. The issue of how Doonside Park responds to the adjacent heritage building at 26 Doonside Street relates to a criterion outlined in the Built Form Guidelines and raised by Mr McGauran, in that no information has been provided about the proposed adaptive reuse of this building. As noted in the Open Space comments:
- (a) *There is no narrative provided for the landscape concept, which should be provided at a masterplan scale. The design with supporting annotation, needs to clearly show how it relates to the Repco office and the site history, this relationship should be expressed on an aesthetic, historical and physical level; and*
 - (b) *On a basic level this needs to include consideration of desire lines to the Repco office, circulation around the building, entry and exit locations of the building, view lines that need to be protected and/or enhanced, a legible material palette and layout that provides cohesion with the adjacent heritage building whilst still being read as new and separate.*
346. While the layout of garden beds in Doonside Park may at this stage be indicative, Planning officers agree that a masterplan should define the overall design intent, and in this instance, reference the heritage of the site. It should also provide explanatory notes as to how the heritage of the site has been considered in the landscape design. As outlined earlier within this report, the existing view study at Section 2.5 of the DP does not contain any images of the southern elevation of 26 Doonside Street. Consideration of these views are important for appropriate adaptive re-use of the building and when designing adjacent open space, particularly if existing entrances to the heritage building will be reinstated. The Landscape Report should be updated to discuss how the general layout of the park will reference this building, with the landscape concept plan at Section 4.2 to be updated to show how garden beds will respond to indicative locations of future entrances/windows within the heritage façade.
347. The Water Sensitive Urban Design (WSUD) and irrigation information indicates that street trees will receive passive irrigation from the road stormwater runoff, and where garden beds are flush with pavements, stormwater runoff will also be directed to this planting. Open Space comments note that there are very limited opportunities for this to occur as most of the planting within pavements is in raised planters and the edge of Doonside Park appears to be at a higher grade when compared to the pavement level. This provides limited opportunity for the overland flow of stormwater. When the drawings are further developed, more opportunities should be considered to allow for passive irrigation.
348. The Landscape Plan notes that stormwater will also be directed into tanks in the basement and used for irrigation of the planters and Doonside Park. While the storage of stormwater within the basement is appropriate for use to irrigate private open space and private landscaping, it is not appropriate for Doonside Park. As noted previously, this open space will be vested to Council once the development is complete, and Council will be responsible for the maintenance of all aspects of the open space which includes the irrigation system.

Irrigation controllers as well as the water supply must be able to be controlled by Council officers and be accessible at all times.

349. To ensure this occurs, the Landscape Plan will need to address how Doonside Park can be irrigated sustainably and on an ongoing basis by Council.
350. A high-level landscape management plan (noted under maintenance) is provided in the landscape report. From the information provided it is unclear how proposed hanging plants along the laneways will be maintained and if the planters will have enough soil to support healthy tree growth. These requirements will be required in more detailed planning drawings at the planning application stage.
351. The Landscape Report notes all existing site soil will be removed and replaced with topsoil. There are no details on how much soil will be removed. Given there are no details on the site contamination it is not possible to determine if the remediation of the site by the method noted in the Landscape Report is satisfactory for the proposed future use. A more detailed discussion on how the land will be effectively remediated is required within this section of the DP.
352. Currently only one canopy tree is proposed within Doonside Park. Additional opportunities for deep soil planting and mature trees within this park should be provided.
353. The Landscape Concept Plan at Section 4.2 shows indicative locations of street trees, with a notation on the Burnley Street trees indicating that they are 'subject to removal'. The removal of these trees is unlikely to be supported by Council, and this notation should be deleted. As discussed previously, the significant tree at the northern end of Park Lane should be retained, with this tree to be shown on the plan. Further to this, the proposed street trees along Doonside Street and Appleton Street should be removed from the Landscape Concept Plan, with these works related to the public realm. Further public realm works will be discussed below.

Public Realm Plan

354. *A Public Realm Plan that details how the development will contribute towards improving the public realm adjacent to the site and provide the following information:*
- (a) *Principles for how future development will contribute to improving the public realm and promoting inviting, pedestrian-friendly public spaces;*
 - (b) *The locations of public realm infrastructure works such as footpaths, bike paths, street lighting and furniture, and street trees, including:*
 - (i) *streetscape and public realm improvements to Doonside Street;*
 - (ii) *streetscape and public realm improvements to Appleton Street; and*
 - (iii) *a minimum nine (9) metre wide pedestrian lane connecting Doonside Street and Appleton Street generally in accordance with the Indicative Framework Plan at Figure 1.*
355. Section 4.3 of the DP is titled 'Public Benefit', with this section providing commentary on positive outcomes associated with the proposed DP. Section 4.3 should be dedicated instead to demonstrating the information required in the DPO (outlined above) by giving an overview of proposed public realm and streetscape works. This would require Section 4.3 to be amended to refer to 'Public Realm'. The information currently included on pages 90 & 91 can remain, as it gives an overview of features achieved by the design, however this section requires additional information as discussed below.
356. A 'Public Realm Plan' is included at page 18 of the Landscape Report and replicated below. This plan should be included in Section 4.3 of the DP.

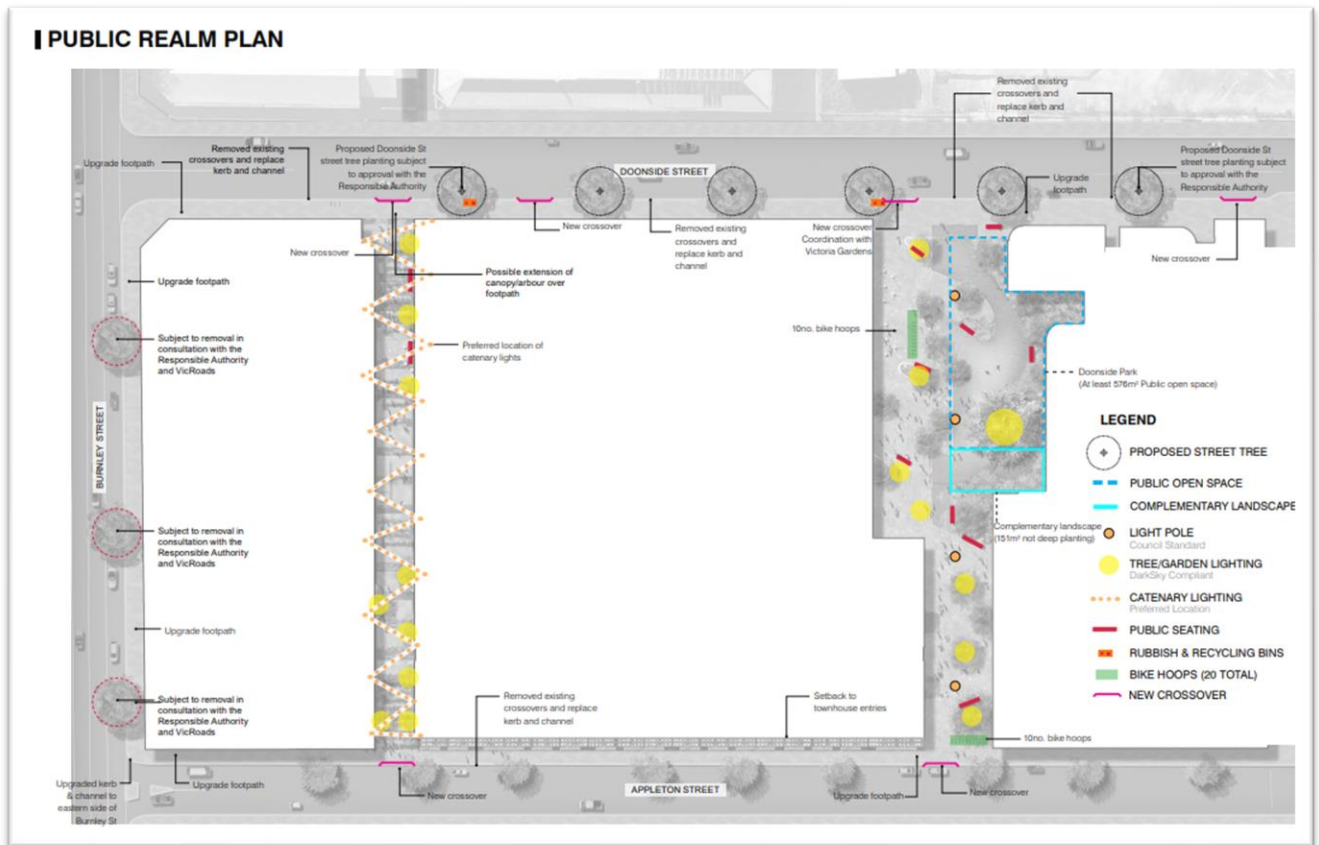


Figure 62: Public Realm plan. Source: Landscape Plan (TCL 2023)

357. The plan provides information on the removal of existing crossovers, addition of new crossovers, upgrades to footpaths and potential location of street trees. A written response in the Landscape Plan provides further detail, noting that the development will contribute to the public realm with upgrades to Doonside, Appleton and Burnley Street interfaces through garden bed and tree planting, by upgrading footpaths and additional public seating, bike hoops and bins.
358. Council's urban designer noted that not enough detail has been provided to make an informed assessment of the development's streetscape interfaces, however it is noted that the majority of these details will be provided at planning permit stage. These additional details will include items such as on-street parking, carpark ramps, garden beds, kerb outstands, service cabinet locations and designs, pedestrian entries and building awnings. It is considered reasonable at this stage however to confirm that the width and design of roller doors and services must be limited and integrated with the overall design and that any future substations be located within the basement.
359. The Plan includes a total of 20 bicycle hoops, in two separate locations along Park Lane. The number and location of visitor spaces will be discussed within the Traffic section of this report; however, 20 spaces are not sufficient. A substantial increase in visitor spaces will be required for a precinct of this scale.

360. The plan includes indicative locations of new street trees on Doonside Street; noting that the final location will be subject to Council's approval. This outcome is supported. Notations also indicate that the three trees along the Burnley Street boundary are 'subject to removal in consultation with the Responsible Authority and VicRoads'. It is unclear from the report why the plane trees along Burnley Street are indicated for removal, particularly given the heritage façade directly adjacent to these trees will be maintained. These mature plane trees are in good health and Council's arborists are not supportive of their removal. This notation should be amended to confirm that these trees will be retained.
361. Given the increased usage of the precinct, further information on how future pedestrian, cyclist and vehicular circulation is achieved should be provided. This should include the following:
- (a) An indication of proposed north-south pedestrian crossings of Doonside Street to the Victoria Gardens precinct. Whilst this aspect will be further coordinated with traffic/civil through the detailed design process, this section of the DP should provide a discussion on future outcomes; and,
 - (b) Proposed east-west pedestrian connections across Burnley Street and any proposed enhancements to the Burnley / Doonside Street intersection given the increased pedestrian and vehicular use.
362. In addition, given the scale of the development, it is recommended that the existing power lines extending along the northern side of Appleton Street be undergrounded to further improve the public realm outcome along this streetscape.
363. The requirements outlined above will ensure that a general overview of future improvements to the public realm is provided. At the planning application stage, a more detailed Public Realm Plan must be submitted to Council for assessment and approval prior to the issuing of any permit. This plan must include the following information;
- (a) Details of the functional layout of the civil and streetscape infrastructure proposed within the public areas adjacent to the development frontages;
 - (b) Confirmation that the footpath and kerb and channels along all frontages will be reconstructed to Council standards, and design grades will be compliant with the Disability Discrimination Act (DDA); and
 - (c) The final design of the Doonside Street road reserve in conjunction with the Victoria Gardens development to the north. This design must provide a fully coordinated layout, with the finished surface levels (FSL) of Doonside Street to ensure the accessways along this interface are integrated into the design.

Housing Diversity Report

364. *A Housing Diversity and Adaptability Report that provides the following information:*
- (a) *A demographic analysis of the types of people and households anticipated to live within the development based on the proposed dwelling design and bedroom mix;*
 - (b) *The model to provide 10% of the total number of dwellings as affordable housing; and*
 - (c) *Demonstrate how the development plan responds to the particular housing needs of future residents across their lifetime.*
365. A Housing Diversity & Adaptability Report was prepared by ASR Research (dated 21 December 2021). Key components of this report have been provided within Section 5.1 of the DP and are summarised below.
366. The development will provide between 545 to 645 apartments, with the following indicative breakdown;
- (a) 30% - 1 bedroom;

- (b) 60% - 2 bedroom; and
 - (c) 10% - 3 bedroom.
367. The DP outlines a demographic analysis of the types of people and households anticipated to live within the development based on the proposed dwelling design and bedroom mix. This analysis reflects the current profile of household types of people living in high density developments across the City of Yarra which currently consists of:
- (a) A high proportion of lone person households (38%);
 - (b) Couple families with no children (30%);
 - (c) Group households (10%);
 - (d) One parent family (10%); and
 - (e) Couple families with children (9%).
368. When compared to Richmond North and the whole of City of Yarra, the proposed development will deliver:
- (a) A much higher proportion of 1-bedroom dwellings (30%) compared to North Richmond (21%) and the City of Yarra (18%);
 - (b) A much higher proportion of 2-bedroom dwellings (60%) compared to North Richmond (40%) and the City of Yarra (20%); and
 - (c) A much lower proportion of 3-bedroom dwellings (10%) compared to Richmond North (23%) and the City of Yarra (40%).
369. Given the anticipated dwelling yield, the proposed development will likely generate a requirement for 55 to 65 affordable homes, based on the provision of 10% of the total number of dwellings as affordable housing as required by the DPO.
370. The DP notes that the developers of the subject site have commenced discussions with a number of Registered Housing Associations. Based on the analysis presented in the report, the DP notes that the following rental demographic groups should be prioritised:
- (a) Very low to low-income lone person households;
 - (b) Very low to low-income couples with no dependents; and
 - (c) Very low to low-income families (with one or two parents) and dependent children.
371. The broad process the proponent will undertake to pursue this option will consist of the following steps:
- (a) The proponent will interview a range of interested Registered Housing Associations to partner with;
 - (b) Select one preferred partner;
 - (c) Confirm the number and type of apartments required and what the likely target population target groups for these dwellings will be;
 - (d) Determine where and how the affordable housing dwellings are to be located within the development; and
 - (e) A broad model of provision will then need to be negotiated and confirmed between the developer and the Registered Housing Association.
372. The DP and accompanying report were reviewed by Council's Social Strategy team, who highlighted that while the DP states 10% of its delivery will be for 3-bedroom dwellings, the proposal indicates that it will not deliver affordable dwellings with 3 bedrooms to rent or purchase as *'none of the income ranges satisfy the key criteria'*. This means that none of the income ranges classed as very low, low or moderate could afford to rent or purchase a 3-bedroom apartment in the development, even at a more affordable price.

373. The report classifies families and dependent children on the upper end of the low-income range and the moderate income range as a suitable group to rent a 1 bedroom unit. However, a one-bedroom unit is unlikely to be a suitable option for families and dependent children. In the absence of affordable 3-bedroom apartments, the development only offers one dwelling size (2-bedroom unit) that would adequately accommodate a family and dependent children
374. The proposal does not allow for larger families to be accommodated through affordable housing. Yarra's *Social and Affordable Housing Strategy* identifies that single parent families, Aboriginal and Torres Strait Islander people, and Key Workers with large families may require larger dwelling sizes than other priority groups. These groups have the potential to be excluded from the development.
375. It is considered that the overall proportion of 3-bedroom units should be increased to better reflect the needs of the community. While just 10% of apartments have been allocated as 3-bedroom apartments, 29% of the population (households living in high density developments across the municipality) have the potential to require a 3-bedroom unit.
376. Further to this, the report does not demonstrate a breakdown of data on the number of children in families (with one or two parents) within Yarra, making it difficult to gage the necessary provision of 2- and 3-bedroom units. This information should be included.
377. The applicant is encouraged to continue conversations with Registered Housing Associations to determine how the purchase could be positioned to receive grant funding from state government or other funding sources that allow for a price reduction for 3-bedroom apartments that would meet the necessary income ranges. This commitment should be included in the DP.
378. Section 3.1 of the DPO notes that the following condition must be added to any future planning permit for this development:
- (a) *An agreement with the responsible authority under section 173 of the Planning and Environment Act 1987 which requires that the owner must facilitate the provision of 10 percent of the total number of dwellings (being the total number of dwellings provided within the DPO15 area) as affordable housing by:*
 - (i) *Entering into an arrangement with a registered agency under the Housing Act 1983 for the provision of the affordable housing within the DPO15 area to a Registered Agency; and/or*
 - (ii) *Making other arrangements for the provision of affordable housing in conjunction with a not for profit (registered with the Australian Charities and Not-for-profits Commission) to the satisfaction of the responsible authority; and/or*
 - (iii) *Making other arrangements for the provision of affordable housing as defined at Section 3AA of the Planning and Environment Act 1987, to the satisfaction of the Responsible Authority.*
 - (b) *The owner, or other person in anticipation of becoming the owner, must meet all of the expenses of the preparation and registration of the agreement, including the reasonable costs borne by the responsible authority.*
379. This ensures that the provision of affordable housing will be a mandatory requirement of this development.

Transport Works Assessment

380. *A Traffic Works Assessment prepared by a suitably qualified traffic engineer to the satisfaction of the responsible authority and Vic Roads. The Transport Works Assessment must include:*

- (a) *An existing conditions assessment, including existing and approved vehicle and loading access arrangements associated with the Victoria Gardens Shopping Centre with capacity to interact with traffic from the development;*
- (b) *Details of any development staging;*
- (c) *Consultation with the owner of the Victoria Gardens Shopping Centre;*
- (d) *A site layout plan showing convenient and safe primary vehicle access, including;*
 - (i) *primary vehicle access to and from Doonside Street;*
 - (ii) *any vehicle access to Appleton Street to be a secondary access point; and*
 - (iii) *no direct vehicle access to or from the site via Burnley Street; and*
- (e) *Details regarding the layout, cross section and function of any internal street or laneway network;*
- (f) *On site car parking and bicycle parking provisions and allocations;*
- (g) *Expected traffic volumes and impact on the existing road network, including but not necessarily limited to Doonside Street, Appleton Street and Burnley Street. This assessment is to include details of any assumptions relied upon;*
- (h) *The Transport Works Assessment must include consideration of any development stages and approved/current development applications within the immediate area surrounding the site. The assessment is to:*
 - (i) *identify mitigating works required for each development stage in the development plan;*
 - (ii) *assess whether a two way or a four way signalised intersection between Burnley Street/Doonside Street/Buckingham Street is required and the trigger for providing the signalised intersection to the satisfaction of VicRoads; and*
 - (iii) *identify a new intersection layout and operation, if required, approved by VicRoads in consultation with the Responsible Authority.*
- (i) *Details of any works or treatments proposed to Doonside Street or Appleton Street or the nearby road network;*
- (j) *Determine the likely increases to pedestrian and bicycle movements generated by the site and the likely distribution of those movements. Demonstrate how the subject site will prioritise those movements and provide convenient connections to existing infrastructure;*
- (k) *Measures to reduce conflict and improve pedestrian and bicycle amenity (if applicable);*
- (l) *Indicative loading arrangements, with loading to be undertaken on site and conflict between the loading bay(s) and car parking areas and non-motorised transport to be minimised;*
- (m) *Estimate the type and number of loading/unloading activities associated with the development and provide information on appropriate loading/unloading facilities to service the various uses proposed;*
- (n) *Access to the site by trucks is to be via Doonside Street; and*
- (o) *Details regarding on-site waste collection, with waste vehicles accessing the site from Doonside Street.*

381. Section 6 of the DP includes a written summary of the requirements outlined above and references the Traffic Works Assessment Report prepared by Traffix Group (dated December 2021) which provides responses to the above requirements in greater detail.

382. An existing conditions assessment was undertaken by Traffix Group (Traffix); this provides information on the surrounding road network and outlines the current vehicle access arrangements to the Victoria Gardens site to the north. These details are based on consultation with the owner of Victoria Gardens, as required by the DPO. Given the anticipated future development of this site, these details may alter, however the Traffic Report has acknowledged that car parking is likely to be accessed via David Street to the east (thereby relying predominantly on Doonside Street) with loading to continue on-site.
383. The DPO requires the provision of a site layout plan showing convenient and safe primary vehicle access, including:
- (a) primary vehicle access to and from Doonside Street;
 - (b) any vehicle access to Appleton Street to be a secondary access point; and,
 - (c) no direct vehicle access to or from the site via Burnley Street.
384. Section 6.1 specifies that the DP contemplates a four-stage development, starting at the Burnley Street frontage and progressing to the east. To provide further detail of this outcome, the proposed 'Staging Diagram' as shown in Section 11.1 of the DP should be replicated in the form of a 'Transport/Access Plan' in Section 6.1, with the location of vehicle entrances included on the plan. It should also be clearly outlined that the main vehicle entrance and the location of loading and waste areas will be included in Stage 1, along with the relevant section of basement.
385. This plan should also demonstrate the following;
- (a) Confirmation of the main access point that will cater for loading and waste vehicles;
 - (b) The internal dimensions of laneways;
 - (c) An indicative location of where visitor bicycle parking will be provided (including numbers of visitor spaces in each location); and,
 - (d) A notation confirming that all visitor spaces will be provided as horizontal rails/hoops and located at ground level.

Car parking allocation

386. Page 99 of the DP outlines the proposed car parking provision anticipated by the development as follows;
- (a) Residential – 550-560 spaces;
 - (b) Commercial – 240-270 spaces; and
 - (c) Car Share – 2 spaces.
387. The DP seeks a reduction in the statutory parking requirements under Clause 52.06 of the Scheme. The table below outlines the provision proposed under the DP and the comparison rates in the Scheme.

Use	Statutory Requirement Yarra Planning Scheme	DP provision
One-bedroom dwelling	1 space to each 1-bed dwelling	0.7-0.9 spaces to each 1-bedroom dwelling
Two-bedroom dwelling	1 space to each 2-bed dwelling	1 space to each 2-bedroom dwelling
Three-bedroom dwelling	2 spaces to each 3-bed dwelling	1.5-2 spaces to each 3-bedroom dwelling
Office	3 spaces to each 100sqm	1 space to each 100sqm
Shop/Food and drink premise	3.5 spaces to each 100sqm	1 space to each 100sqm

Restricted Retail	2.5 spaces to each 100sqm	2.5 spaces to each 100sqm
Gymnasium	To the satisfaction of the RA	2 spaces to each 100sqm

388. The above rates were reviewed by Council’s Engineering team, who concluded that the residential on-site parking rates are appropriate having regard to the site’s proximity to public transport options and services and the proposed commercial on-site parking rates are typical of rates that have been reviewed and supported for other developments in the past. The rates will be discussed with regard to each use in turn.

Residential

389. The Traffic Report provides an overview of car ownership data based on the 2016 Census (Australian Bureau of Statistics), which notes the following average car ownership rates for all apartment types:

- (a) 0.75 cars per one-bedroom dwelling;
- (b) 0.98 cars per two-bedroom dwelling; and
- (c) 1.13 cars per three-bedroom dwelling.

390. The report highlights that these rates (and lower) were presented at the Panel hearing, where it was generally accepted that reduced residential parking provisions could be supported.

391. A reduction in residential on-site car parking via the DP is supported by Planning officers, based on the following;

- (a) It is in line with Council’s sustainable transport policies and objectives;
- (b) The site has good access to public transport;
- (c) It reduces the traffic impacts of the proposal and supports sustainable transport modes;
- (d) Residents will not have access to parking permits and those without on-site car parking will not be able to maintain a car on-street given the prevailing parking restrictions; and,
- (e) Geographically, the site is well positioned in terms of public transport services, bicycle infrastructure, major shopping centres, businesses, essential facilities and potential places of employment and education.

Office

392. A review of ABS ‘journey to work’ data for the 2016 Census identifies that 54% of employees in the Richmond SA2 statistical area use alternate transport modes (other than cars) to travel to work.

393. The proposed development has excellent accessibility to public transport and bicycle infrastructure. Further, on-street parking in the surrounding area is predominantly short-term in nature specifically during business hours, and there is limited free-of-charge long-term parking available. The general approach across the municipality is to apply a target rate of 1 space per 100sqm for staff parking, with many examples of significant office developments throughout Richmond, Cremorne and Collingwood with car parking at levels at, or less than, this rate.

394. This rate is consistent with that presented at the Panel hearing, which was not contested.

Shop & Restricted Retail

395. The DP includes a mixture of retail uses of various sizes and locations. In general, the smaller shop tenancies are likely to operate as service retail, providing convenient access to food and drink, retail and other essential services. The proposed development will include over 14,000sqm of commercial floor area and in excess of 500 new dwellings and is therefore likely to draw a fair proportion of its trade from the new residential uses within the site.
396. The smaller tenancies would typically generate only staff demands for car parking, at a rate of 1 space per 100sqm, therefore the rate nominated in the DP is acceptable.
397. It is likely that there will be a larger shop/grocer tenancy, as well as the Harry the Hirer tenancy that may generate some visitor car parking demands. There will still be a significant proportion of walk-up trade for these uses, and therefore it is considered that the rate of 2.5 spaces per 100sqm is appropriate.

Gymnasium

398. The NSW RTA Guide to Traffic Generating Developments suggests parking provisions for gymnasiums of 3 spaces per 100sqm for a gym located within a central business district. The case study data provided by Traffix supports this generation, however, this rate is considered conservative, as a significant proportion of the patronage of the gym is likely to come from the residential and commercial uses within the proposal. Accordingly, a target rate of 2 spaces per 100sqm is acceptable for the gymnasium use. Gym patronage typically peaks of an early morning and late afternoon / early evening, with higher patronage expected at the start of the week, diminishing toward the weekend.
399. The Traffic Report notes that each of the commercial uses will have a varying peak, with the highest levels expected to occur on weekends. The higher levels were expected to be in the realm of 210 vehicles, based on the analysis provided in detail throughout the report. The provision of 240-270 commercial on-site spaces will therefore cater for these demands.
400. Surveys undertaken by Traffix in 2020 identified a total of 302 on-street car parking spaces within the immediate area. Of these spaces, 130 are long-term (8P) or unrestricted, with the remainder a combination of short-term restrictions and permit parking. This provides additional opportunities for parking within the surrounding streets.

Bicycle parking allocation

401. The DP proposes the following bicycle parking provisions/allocations:
- (a) Employee parking will be provided at a typical rate of 1 space per 100sqm (approximately 140-180 staff parking spaces);
 - (b) Resident parking will be provided at a minimum rate of 1 space per dwelling, with these spaces located within separate secure areas (approximately 545-645 spaces); and
 - (c) Parking for visitors will primarily be provided at ground level (with the DP noting that it may also be within the basement) and will achieve minimum rates of 1 space per 10 dwellings, plus 1 space per 500sqm of commercial floor area (a minimum of 84 spaces).
402. End of Trip (EoT) facilities are proposed on-site for staff and will achieve a minimum rate of 1 shower/changeroom per 10 bikes. They will be conveniently located to encourage use by staff for all buildings.

403. Council's Strategic Transport officer reviewed these allocations and requested further details on aspects of the bicycle provision, however the majority of these, including the final number of resident and employee spaces, can be dealt with via the planning application. This will allow for the number of dwellings and commercial floor space to be finalised.
404. One aspect that should be clarified at this initial stage is the number and location of visitor spaces. The DP currently notes that visitor spaces may be provided within the basement. This outcome is not supported, with all visitor bicycle parking to be located at ground level, within areas easily accessible and visible. All visitor spaces should also be provided as horizontal rails/hoops. It is essential to ensure that the layout and scale of public open space at ground level can accommodate these spaces.
405. Strategic Transport advice states that the best-practice provision for visitor spaces requires a rate of 0.25 visitor spaces to each dwelling; based on between 545 to 645 dwellings this number would range between 136 to 161 spaces. The Strategic Transport review recommends a minimum of 120 visitor bicycle spaces. As these spaces are required at ground level, dedicated (but indicative) locations for these spaces should be nominated on the 'Transport/Access Plan' discussed earlier. These details should also be replicated in the 'Public Realm Plan' at Section 4.3, with the DP updated to reflect these numbers.
406. With regards to resident and employee bicycle parking, the DP should specify that the number of secure compounds will be limited, and the EoT facilities will be located with direct access to all employee parking.
407. A Green Travel Plan (GTP) is required under future planning applications in the DPO. The GTP must demonstrate that the development supports sustainable transport alternatives to the motor car, provides on-site car share spaces and considers the opportunity for bicycle parking and storage facilities.
408. Strategic Transport comments note that Council's BESS guidelines encourage the use of fuel efficient and electric vehicles. The provision of electric car charging in 10% of spaces is proposed by the development. While this outcome is supported, further information is sought on:
- (a) Access arrangements proposed to electric car chargers;
 - (b) The types of chargers proposed to be provided (e.g. slow or fast charging, connecting cable);
 - (c) Proposed charging facilities for electric bicycles; and,
 - (d) The number of spaces available from 'Day 1' of the development and in future staging.
409. It is also recommended that further EV charging points are installed during construction. To allow for easy future expanded provision for electric vehicle charging, all car parking areas should be electrically wired to be 'EV ready'. A minimum 40A single phase electrical sub circuit should be installed to these areas for this purpose.
410. The provision of two car share spaces in the development is welcome. However, given the site's significant use and the increasing demand of car share, particularly in inner city areas, it is strongly recommended that additional car share spaces be allocated in consultation with car share companies to ascertain demand in the area.
411. The planning application and GTP will be required to address these issues in detail, with the DP updated to require principles of EV charging stations and additional car share will be provided.

Traffic

412. A comprehensive traffic assessment was undertaken by Traffix Group utilising SIDRA Analysis. SIDRA is a computer program originally developed by the Australian Road Research Board, which can be used to analyse the operation and capacity of intersections. A number of scenarios were contemplated in response to the DPO requirements, as follows;
- (a) Existing 'Base Case' Analysis – these identified conditions of existing network volumes (inclusive of approved and constructed development) and subsequent SIDRA analysis of the intersection of Burnley Street/Doonside Street and Burnley Street/Buckingham Street;
 - (b) Proposed Development Traffic Generation & Impact – This identified the projected trip generation of the site (inclusive of all modes) and established future intersection volumes to identify the need for intersection upgrades and at what stage; and,
 - (c) Allowing for Additional Surrounding Development – this identified what impact there will be on the intersection and network operations as a result of the additional development contemplated on the Victoria Gardens site to the north.
413. To provide details on the current operation of the existing intersection at Burnley Street and Doonside Street, SIDRA Analysis was undertaken for the AM and PM peak hours. The results of the existing analysis identified that the intersection currently operates under 'excellent' conditions with most movements at the intersection having relatively manageable delays and queues. However, Section 5.3.4 of the Traffic Report notes that the intersection is reaching capacity primarily due to the right turn egress in the PM peak hour.
414. To estimate the future trip generation of the site once it is developed, Traffix relied upon the ABS Journey to Work data for Richmond, as well as previous VISTA (Victorian Integrated Survey of Travel and Activity) data from Ratio Consultants. Based on this information, the proposal could be expected to generate a total of 815 movements during the AM peak hour, inclusive of 175 movements by private vehicle, 9 motorcycle trips, 135 pedestrian trips, 124 bicycle trips, 260 public transport trips and 114 other trips. During the PM peak hour, the proposal could be expected to generate a total of 1,115 trips, inclusive of 295 vehicle movements by private vehicle, 10 motorcycle trips, 165 pedestrian trips, 154 bicycle trips, 342 public transport trips and 151 other trips.
415. As noted previously, the application proposes all access to the site to occur from Doonside Street and therefore it is expected that the majority (approximately 80%) of traffic generated by the site will utilise the intersection at Burnley Street and Doonside Street. It is expected that the remaining 20% will utilise River Street to the east.
416. Based on these findings, Traffix concluded that from a road network capacity perspective, Stages 1, 2 and 3 could be delivered without the signalised intersection, with the development yields proposed by these stages able to be accommodated by the existing intersection. Signals would be required at the completion of Stage 4 of the development. No mitigating works are identified for other intersections.
417. This outcome is based on the development being constructed in stages; however, the Applicant has indicated to Council that a precinct wide delivery is preferred, with the stages provided as a contingency plan. To allow for this outcome, the DP should be updated to clarify that if the development is undertaken on a precinct wide scale, the intersection will be signalised concurrently. The timing of the signalisation of the intersection may also be impacted if development of the Victoria Gardens site occurs prior to this development.
418. This aspect was discussed in the Planning officer report for the Victoria Gardens development, which noted that it is evident that the combined traffic generated by both major developments will result in the requirement for signalisation of the Burnley and Doonside Street intersection.

419. This outcome should be accounted for in the DP.
420. The DPO requires consideration of what form the signalised intersection should take and requires an assessment as to “whether a two way or a four way signalised intersection between Burnley Street/Doonside Street/Buckingham Street is required “. Traffix concluded that due to the close spacing of the intersections, any signalisation of Doonside Street would require either incorporation of Buckingham Street into the signals, or implementation of physical controls to make movements to/from Buckingham Street left-in/left-out, or even full closure of the eastern end of the road.
421. On this basis the DP references the preparation of a Concept Plan showing potential signalisation of the two intersections to form a 4-way intersection. This outcome would deliver improved and appropriate pedestrian, cycle and vehicular movements and controls. The DP notes that further discussions on the functional layout plan of the signalised intersection will occur between the applicant, Council and DoT (Department of Transport).
422. These finding are consistent with the requirement under Section 3.1 of the DPO, which notes that the following conditions apply to permits:
- (a) *Except for a permit granted in accordance with clause 1.0 of this Schedule, a permit must contain conditions that give effect to the provisions and requirements of the approved development plan, and the following conditions:*
 - (i) *An agreement with VicRoads and the responsible authority under section 173 of the Planning and Environment Act 1987 for the provision of works which are identified in the Traffic Impact Assessment Report prepared and approved in accordance with this schedule. The works may include but are not limited to:*
 - *Mitigating works required for each development stage in the development plan; and*
 - *A two way or a four way signalised intersection between Burnley Street/Doonside Street/Buckingham Street if required, approved by VicRoads in consultation with the responsible authority.*
423. As outlined above, the traffic studies undertaken by Traffix indicate that an additional 135 pedestrian trips and 124 bicycle trips could occur at the AM peak, with 165 pedestrian trips and 154 bicycle trips anticipated at the PM peak. One of the requirements of the DPO is to determine the likely increases to pedestrian and bicycle movements generated by the site and the likely distribution of those movements, and to recommend measures to reduce conflict and improve pedestrian and bicycle amenity.
424. Council’s Strategic Transport officer noted that the proposed signalisation of the intersection as discussed may induce car demand and encourage the use of Buckingham Street and other local thoroughfares to the west of Burnley Street. This in turn may result in conflicts with vehicles, bicycles and pedestrians. To alleviate this, the following measures are recommended;
- (a) Provide physical protection of the Burnley Street on-road bike lanes (particularly given that Burnley Street is cited as “the key linkage for residents, staff and visitors to access the site via bicycle” in Section 3.2.2 of the Traffic Report);
 - (b) Provide physically protected bicycle facilities on Doonside Street to allow safe and direct access into the subject site;
 - (c) Provide bicycle head start lanterns in any proposed traffic signal programming; and,
 - (d) Provide ‘green paint’ line marking through the intersection in accordance with Council and VicRoads standards.

425. These recommendations should be incorporated into Section 6.1.
426. The DPO requires details of any works or treatments proposed to Doonside Street, Appleton Street or the nearby road network. Section 6.1 specifies that the footpath along Doonside Street at the site frontage will be reconstructed, however it notes that as no access is proposed via Appleton Street, limited improvements or modifications are necessary. This view is not shared by Council Officers.
427. While no vehicle access is proposed via Appleton Street, a significant degree of pedestrian and cyclist access will be generated along this thoroughfare. Further to this, the construction of the new buildings, the provision of underground utilities and the transporting of materials to the site will impact on Council assets. Trenching and areas of excavation for underground services invariably deteriorates the condition and integrity of footpaths, kerb and channel, laneways and road pavements of the adjacent roads. Heavy vehicle movements also often scour and deteriorate the condition of the road pavement. On this basis, the footpaths and kerb and channels along the property's road frontages must be reconstructed once the development is completed. The DP must be updated to reflect this.

Loading/waste

428. Section 6.1 of the DP provides details on how loading/unloading and waste collection will occur within the development. All loading is proposed on-site with dedicated ramps and zones provided. The DP notes that a separate access ramp will also be provided for cars to improve management of vehicle conflicts. Approximately 28 loading and waste movements are expected to be generated by the development per day, including vans and trucks. All loading access will be via 8.8m Medium Rigid Vehicles or smaller and will be provided with dedicated on-site loading zones.
429. Waste collections will be managed by private contractor and collected on-site with separate collections for different uses. A Waste Management Plan will be prepared with future planning applications that contemplates collection of 4 waste streams for each use as required by the Sustainability Victoria Guidelines. These loading and waste arrangements are considered acceptable.
430. As noted previously, a temporary loading area for display vehicles and event equipment is proposed at ground floor, within the northern section of Harry's Lane. Access to the loading area will be provided via a crossover to Doonside Street, with vehicles reversing into the laneway and exiting the site in a forward direction. It is anticipated that these loading activities will be infrequent. To ensure this aspect is managed appropriately, a Loading Management Plan will be required at planning permit stage. The DP should be updated to reference this plan, with a further amendment to specify that all other loading and waste activities will be undertaken within the basement.

Environmentally Sustainable Design (ESD)

431. *An environmentally sustainable design assessment must be prepared that sets out how future development may achieve:*
- (a) *Water sensitive urban design objectives and requirements pursuant to the Yarra Planning Scheme; and*
 - (b) *Environmentally sustainable design objectives and requirements pursuant to the Yarra Planning Scheme.*
432. An Environmentally Sustainable Design Framework was prepared by ADP Consulting (dated 03 May 2023 - Revision 4) with a summary of proposed components of future ESD documents outlined in Section 7.1 (Sustainability Commitments) of the DP.

433. In response to item (a), the DP states that the development will rely on either the STORM tool or MUSIC assessment to demonstrate Best Practice pollutant removal targets are met in line with clauses 22.16-2 and 53.18-5 of the Scheme. A combination of rainwater tanks, raingardens, proprietary devices and other treatment options will be explored when proposing a compliant stormwater solution.
434. The DP also notes that an SMP report will be prepared in accordance with clause 22.17-2 of the Scheme, with this document addressing objectives relating to energy, water, IEQ, stormwater, transport, waste and urban ecology. The SMP will focus on how improvements on minimum energy efficiency requirements for dwellings will be achieved. To do so, a BESS or Greenstar assessment is to be included to support the SMP report and ESD initiatives.
435. Outlined in Section 7.1 are the following ESD aspirations for the site:
- (a) Target of a net zero carbon development;
 - (b) To exceed the 80% minimum daylight requirement for internal amenity to dwellings;
 - (c) No natural gas connections to dwellings; and
 - (d) Align with an embedded energy network provider to procure 100% Greenpower or equivalent renewable energy for the development.
436. The DP and accompanying ESD assessment were reviewed by Council's ESD Advisor. While the objectives and aspirations outlined in the DP are supported in principle, further details on how these will be achieved should be provided to ensure that future ESD commitments throughout the development can be attained. Recommendations on details that should be presented in the DP and additional information to be included in the ESD assessment are outlined accordingly.
437. Regarding the WSUD objectives, the DP indicates that either the STORM tool or a MUSIC assessment will be undertaken to demonstrate that best practice pollutant removal targets are met. A MUSIC assessment is the preferred method in this instance, being more conducive to achieving better outcomes for a precinct of this scale, with the STORM tool not appropriate for such a large development. It is also Council's preference that the MUSIC modelling be undertaken on a precinct-wide scale at the start of the process, as opposed to a fragmented approach via separate planning applications.
438. The staging of the development will be discussed in detail later within this report; however, the Applicant has indicated that the preference is for the development to be delivered in one stage. While this is the preference, a contingency plan allowing a four-stage development has been submitted. Council's ESD Advisor noted that it is more likely for best practice WSUD outcomes to be achieved if the associated infrastructure and treatment options are determined at the preliminary stage, and on a precinct wide scale.
439. To capture this, the DP will require amending to confirm that development of a precinct level WSUD strategy utilising MUSIC modelling to demonstrate compliance with best practice stormwater pollutant reduction objectives will be undertaken. This modelling will be required in conjunction with the first planning application submitted to Council and must encompass the entire development. This outcome is more likely to achieve an integrated water management approach and will be required as a condition.
440. The ESD aspirations for the site are referenced in Section 7.1, however there is no supporting information provided. Further details on each aspect should be included in the DP. While each individual building will be required to submit an individual SMP to meet the standards set out in ESD Policy, the ESD expectations for the site are greater, given its scale and strategic location. Previous comments from ESD Advisors have been incorporated into updated versions of the ESD Assessments throughout this process, however these have not been incorporated into an updated DP. All of the updated information should be reflected in the DP, as outlined below.

Target of a net zero carbon development

441. This aspiration should be modified to clearly articulate the approach to achieving net zero carbon (e.g., a hierarchy of interventions - prioritising energy efficiency to reduce energy use and avoidance of gas, with operational emissions avoided through use of 100% renewable electricity either through Greenpower or renewable energy generated on-site).

To exceed the 80% minimum daylight requirement for internal amenity dwellings

442. The most recent version of the ESD Assessment was updated to confirm that the development will achieve the minimum daylight requirements to meet best practice BESS IEQ, with this ensuring that acceptable daylight will be achieved within commercial areas and not just in dwellings. The DP requires updating to reflect this change.

No natural gas connections to dwellings

443. As with the commitment above, the ESD Assessment was updated to note that no gas connections will be provided throughout the entire development, not just dwellings, however this commitment has not been updated in the DP. To ensure consistency, with DP must be updated to clarify that no gas connection will be provided, and the development is committed to be all-electric.

Align with an embedded energy network provider to procure 100% Greenpower or equivalent renewable energy for the development.

444. This aspiration is supported and is acceptable to maintain within this section of the DP with the current wording.
445. Further to the above, the following aspirations should be incorporated into Section 7.1 of the DP;
- (a) A precinct vegetation cover target (specifying a percentage of the site area, using the Green Factor Tool as a guide);
 - (b) A precinct urban heat reduction target (specifying a percentage of the site area which will meet SRI targets or be vegetated);
 - (c) A landfill diversion target for operational waste and development of a precinct waste management plan to drive its implementation, with this to be consistent with the landfill diversion target of 80% recently added to the ESD Assessment; and,
 - (d) Reductions in embodied carbon for the entire development, focusing on the top 4 – 6 materials, with this to be consistent with the embodied carbon reduction opportunities included in the updated ESD Assessment.
446. Prior to approval of the DP, a revised ESD Assessment is required which sets out whole of site goals and targets as a framework that can guide subsequent individual SMP's for each individual building. The current assessment specifically states that subsequent SMP reports will utilise one of the following tools:
- (a) Either a Built Environment Sustainability Scorecard – A minimum 50% score, or
 - (b) A Green Star Buildings – 4 Star certified rating.
447. This outcome is supported.

448. To provide more stringent outcomes on a precinct wide scale, the ESD assessment should also be updated to include mention of net zero development and commitment to *'an all-electric design, including solar panels, achieving 7-star NatHERS average rating and using either 100% offsite renewable energy sources (Green Power) or 5% of on-site renewable energy production'*.
449. To ensure the above is achieved, the assessment should be updated as follows;
- (a) Update the commitment relating to net zero / renewable energy procurement/generation to include mention of embedded networks and clarify that electricity sources will be 100% renewable (either through 100% GreenPower or a combination of GreenPower and on-site renewable energy production); and
 - (b) Update subheading from "Target New Zero Development" to "Target Net Zero Development"

Drainage

450. *A drainage assessment must be prepared that includes:*
- (a) *A catchment analysis of the existing storm water drainage system in Burnley Street and Doonside Street;*
 - (b) *A capacity assessment for the existing drainage system into which future development will be discharged; and*
 - (c) *A flood analysis which determines the overland flow depth within the road reserve during a 1 in 100-year flood.*
451. A Drainage Assessment was prepared by Reeds Consulting (8 August 2022) and reviewed by Council's Civil Engineers. Section 8.1 of the DP references key aspects of this report and outlines brief responses to the requirements above.
452. The catchment analysis of existing stormwater drainage is an appropriate response, with Council Engineers having no issue with the information provided.
453. The capacity assessment outlines estimate of the capacities of existing Council drains in Burnley Street and Doonside Street. It is Council's preference that these specific figures be removed from the DP, and instead the following wording is provided in this section:
- (a) *More accurate assessments and surveys will be undertaken to update the preliminary flooding report and subsequently inform the finished floor levels for the proposed ground floor levels.*
454. A flood analysis which determines the overland flow depth within the road reserve during a 1 in 100-year flood was undertaken. The information provided in the DP is relatively specific, with Council Engineers recommending this section be updated to provide the following wording:
- (a) *The flood analysis which determines the overland flow depth within the road reservations during a 1 in 100 year flood utilises the catchment analysis and existing capacity assessment of the drainage system to generate the gap flow measured against the capacity of the road reserve;*
 - (b) *Under instruction from Council's Engineering department, a preliminary flood assessment has been undertaken to reassure the development is not impacted by estimated water levels adjacent to the development under certain rain events;*
 - (c) *A more accurate assessment of the flooding impacts must be undertaken prior to the establishment of the finished floor levels (FFL's) of the development. The flood analysis must utilise as constructed survey levels of adjacent infrastructure (road, drainage, etc) as well as proposed design levels for the ultimate outcome of Doonside Street; and*

- (d) *The flood assessment will be completed under instruction of Council, and once approved, will dictate the FFL's of the ground floor plans. The flood assessment must be undertaken prior to the endorsement of the plans under the planning permit.*

455. In addition to the above, Council Engineers have recommended that the following information be included within the DP.

Legal point of discharge and onsite detention

456. *The legal point of discharge will be allocated for the development based on the capacities of the Council drainage infrastructure within the area. If existing properties discharges (as part of the consolidated development site) are to be redirected to alternative catchments, then an assessment of the proposal must be undertaken and approved by Council.*

457. *The Permissible Site Discharge (PSD) is the peak flow rate allowed to be discharged from the proposed development to the nominated LPD (stormwater network). The PSD must be limited to:*

- (a) *a 20% AEP flow rate (~1 in 5 ARI); and*
- (b) *the equivalent of a 70% impervious site coverage, or the pre-developed discharge rate if it is less than 70% impervious site coverage.*

458. *All developments that require on-site detention must detain, at a minimum, the 10% AEP storm event. However, for cases where a safe overland flow path cannot be provided or where flows exceeding pipe capacity may impact the development or adjacent, upstream, or downstream properties, the requirement will be to detain the 1% AEP storm event.*

459. *The drainage design must be completed in accordance with Council's standards and requirements.*

460. The amended wording recommended for this section of the DP provides certainty that the necessary works will be undertaken prior to any permit being issued and replaces some of the more specific outcomes with general statements that will allow a degree of flexibility when the final design detail is submitted and reviewed.

461. Section 8.1 should be updated accordingly, with the Drainage Assessment by Reeds Consultants also revised to ensure a consistent outcome is achieved.

Comprehensive Heritage Analysis

462. *A Comprehensive Heritage Analysis must be prepared by a suitably qualified professional that includes the following, having regard to the heritage expert assessments prepared for Amendment C223yara:*

- (a) *Written description of the heritage places;*
- (b) *History of the heritage places;*
- (c) *Assessment of significance of individual elements; and*
- (d) *Copies of the existing Statements of Significance of HO252 and HO375.*

463. A Heritage Analysis was prepared by Bryce Raworth (dated December 2021). This document was reviewed on behalf of Council by Anita Brady. Ms Brady confirmed that the requirements outlined above have been adequately provided in the report. The Heritage Report will be attached as an appendix to the DP.

464. The heritage assessment provided at Section 9.1 of the DP is brief and does not provide specific details of the heritage fabric within the site. Whilst heritage is discussed earlier within the DP, to provide context to this section it would be beneficial if photographs of the heritage places were provided. Clear reference to the Heritage Analysis prepared by Bryce Raworth should also be included.
465. The DPO states that the following documents will be required when a planning application is submitted for the development:
- (a) A schedule of conservation works for the retained facades of the heritage buildings at 81-95 Burnley Street and the exterior form of the heritage building at 26-34 Doonside Street, including time frames for each action to the Responsible Authority's satisfaction;
 - (b) Archival recordings of the heritage buildings (81-95 Burnley Street and 26-34 Doonside Street) to the responsible authority's satisfaction prior to any demolition on the site; and
 - (c) A heritage maintenance plan defining the ongoing cyclical repair and maintenance for the retained facades of the heritage buildings at 81-95 Burnley Street and the exterior form of the heritage building at 26-34 Doonside Street to the responsible authority's satisfaction.
466. In addition, Section 3.2 of the DPO states the following:
- (a) A permit application must include, where relevant:
 - (i) A Heritage Impact Statement prepared by a suitably qualified professional that assesses the impact of the proposed development on the heritage values of the heritage place; and
 - (ii) A sightline analysis and 3D modelling of the proposed development from key view points in the public realm to enable an assessment of the visual impact of the development on the heritage places within the site.
467. These requirements ensure that detailed information documenting the reinstatement and conservation of key heritage fabric within the site will be submitted at the planning permit stage. These future permit requirements should be included within this section of the DP.

Noise impacts

468. *Development that includes residential or other sensitive uses must be designed and constructed to include noise design and noise attenuation measures that achieve the noise levels that are calculated by applying the method in Schedule B of State Environment Protection Policy No. N-1 'Control of Noise from Commerce, Industry and Trade (SEPP N-1). (or the equivalent environment reference standard to be introduced under the Environment Protection Amendment Act 2018). For the purpose of assessing whether the above noise standards are met, the noise measurement point shall be located inside a habitable room of a noise sensitive residential use with windows and doors closed.*
469. Section 10.1 of the DP outlines the approach that will be taken to address this requirement, noting that the acoustic report to accompany any subsequent permit application will include a summary of the EPA Noise Protocol requirements, including the determination of noise limits for the project based on assumed background noise levels in the area. It also notes that the report will recommend noise control measures to be developed further as the design progresses.
470. An Acoustic Report was prepared in support of the DP by ADP Consulting (ADP) and reviewed on behalf of Council by SLR Consultants (SLR). In their review, SLR referred to the original 'Development Plan Vision' outlined in Section 4.1 of the DPO, which provides insight into the intention of the acoustic requirements. These include the following:

- (a) *To ensure that the primary responsibility for noise attenuation rests with the agent of change; and*
- (b) *To ensure new development, does not unreasonably prejudice by way of reason of reverse amenity the ongoing operation of nearby existing commercial, industrial and warehouse businesses, including Victoria Gardens Shopping Centre.*

471. A site investigation of the existing surrounds was completed to determine existing noise levels for the environment and surrounds for a proposed mixed-use redevelopment of the site. Current standards associated with the development have been reviewed and assessed in accordance with existing site constraints. Preliminary construction standards have been provided to ensure that relevant guidelines are satisfied.
472. The Acoustic Report prepared by ADP (4 June 2023 – Version 4) addresses design criteria and provides preliminary advice for the following:
- (a) the impact of operations on nearby sensitive receivers (including noise emission from emergency plant and equipment);
 - (b) internal noise levels;
 - (c) sound insulation between noisy areas and sensitive spaces within the development; and,
 - (d) vibration requirements for uses with potential to generate impact noise/structure borne sound (e.g. gyms and pools).
473. The design criteria and acoustic treatment concepts in this report demonstrate the pathways by which these will be addressed by ADP and the project team through further analysis, recommendations, and coordination as the design progresses. The future requirements that the development must meet are outlined below:
- (a) All retail/commercial tenancies must demonstrate compliance with the EPA Noise Protocol Part 1;
 - (b) Internal sound insulation of the residential component of the development must comply with the NCC requirements as a minimum.;
 - (c) The road traffic noise intrusion criteria of 35dBIAeq,8h for living rooms and 40dBIAeq,16h for sleeping areas must be met;
 - (d) Commercial noise emissions, including plant noise emissions, from any base-building systems and commercial tenancies within the subject development are required to comply with the EPA Noise Protocol Part I noise limits;
 - (e) Any noise and vibration transmitted by commercial gyms within the proposed development is required to comply with the noise and vibration limits scheduled in Section 3.2.7 (noise) and Section 3.2.6 (vibration) of the ADP Acoustic Report respectively; and,
 - (f) Impact noise will need to be addressed in the outdoor terraces/amenity to protect the amenity of residents in apartments within the building.
474. To ensure the above are met, the current wording within Section 10.1 will be replaced with that outlined above, and the Acoustic Report prepared by ADP dated 20 June 2023 (Revision 4) will be added as an appendix and referenced within this section.

Development Staging

475. *A staging plan to provide an indication of the likely staging of the development of land, specifically:*
- (a) *The expected sequencing of development;*

- (b) *The expected sequencing of works identified in the Public Realm Plan approved in accordance with this schedule;*
- (c) *Likely vehicle access points, road infrastructure works and traffic management; and*
- (d) *Interface/access treatments.*

476. Section 11.1 of the DP indicates that the project is proposed to be delivered in one stage, with four stages provided as a contingency. If four stages were undertaken, they would be generally in accordance with the staging plan outlined at Figure 63 below.



Figure 63: Proposed Staging diagram. Source: Development Plan (Gurner 2023)

477. Additional notations on this page address potential issues with the staging sequence, with particular regards to vehicle entrances and services. These include the following (where relevant);

- (a) The location of the main vehicle entry to the basement will be included in stage one;
- (b) The location of loading areas and waste collection will be included in stage one;
- (c) The extent of basement will be determined by the required level of carparking provision to service the relevant stages;
- (d) Temporary structures will be used to hoard off the sections of basement that will not be constructed until the appropriate time;
- (e) All incoming services including the electrical substation will be included in the first stage;
- (f) All subsequent stages will be able to plug into the initial service connections;
- (g) Provision of the southern portion of Park Lane in stage three;
- (h) Completion of the new public open space park in stage four; and

- (i) If the project is required to be staged then interim measures will be put in place to ensure the activation of the constructed laneway network and associated retail frontage.
478. Council Engineers were satisfied with the order of staging with regards to traffic generation and its impact on the Burnley Street/Doonside Street intersection. However, they noted that the staging of the works would have to consider the provision of upgraded or new utility services, with this undertaken on a precinct wide scale. Similarly, the drainage and civil infrastructure design would have to consider the site as a whole. This section should be updated to clarify that all of these aspects will be finalised prior to the commencement of Stage 1, with a detailed staging of works plan submitted as part of the planning application process.
479. Mr McGauran raised concerns with the proposed sequence of staging, and recommended that the sequence be reversed, with Building C and the adjacent Doonside Park to be completed in Stage 1. He also noted that Building B should be constructed prior to Buildings A & C, given the main vehicle access will be located within this building.
480. These changes are not considered necessary. The delivery of Doonside Park in the centre of what will be an ongoing construction site is not a feasible outcome; the amenity of this space would be severely compromised, and it is unlikely that any landscaping/vegetation could be adequately maintained under these circumstances. Landscaping is generally the final delivery of a development; this allows the open space to be used for construction storage and is a more logical outcome.
481. With regards to vehicle access, Section 11.1 confirms that the location of the main vehicle entry to the basement will be included in Stage 1, along with the loading and waste areas. This outcome is supported.
482. One aspect not discussed within Section 11.1 is when the public realm improvements, particularly within Doonside Street, will be delivered. It is assumed these will be undertaken towards the end of construction. Clarification on the delivery of these works will be required.

Conclusion

483. The proposed outcomes sought in the Development Plan are supported, with the heights, setbacks and building envelopes generally in accordance with the Indicative Framework Plan at Schedule 15 of the Development Plan Overlay. Where changes have been sought, it is considered that these modifications are in keeping with the existing and emerging character of the surrounding area, will not result in unreasonable off-site amenity impacts and are generally consistent with the outcomes envisioned by the DPO.
484. The proposal is considered to achieve the vision set out in the Schedule, subject to a range of changes outlined in the recommendation section of this report.

RECOMMENDATION

That Council:

- (a) will be satisfied with the proposed Development Plan when the following changes are made to the document to the satisfaction of the General Manager, City Sustainability and Strategy at which time the proposed Development Plan will be endorsed:

Section 1.1 (Project Vision)

1. The text of section 1.1 is to be amended to provide a brief overview on how the following requirements of Section 4.1 of the DPO will be achieved:
 - (a) To provide a high standard of internal amenity, building separation and best practice environmentally sustainable design;
 - (b) To ensure that the primary responsibility for noise attenuation rests with the agent of change; and
 - (c) To ensure new development, does not unreasonably prejudice by way of reason of reverse amenity the ongoing operation of nearby existing commercial, industrial and warehouse businesses, including Victoria Gardens Shopping Centre.

Section 2 (Site & Context Information)

2. Section 2.1 is to be amended to include;
 - (a) The information regarding the heritage buildings within HO252 & HO375 and the 'c1962 illustration of the Repco/Russell factory' that is currently included in Section 3.2; and,
 - (b) Replace the 'Design and Development Overlay Map' with a site map annotating all planning controls and demonstrating the location of the two Heritage Overlays (HO252 & HO375) within the site.
3. Section 2.3 is to be amended to include a separate map showing the context of surrounding public open space.
4. Section 2.4 is to be amended to include images and heights of existing/emerging higher density buildings surrounding the site.
5. Section 2.5 is to be amended to include a façade view of 26 Doonside Street.
6. Section 2.6 is to be amended to include;
 - (a) A current photograph of 171 Buckingham Street (and removal of second photograph of this building);
 - (b) Views of buildings along the western side of Burnley Street immediately opposite the site; and
 - (c) Long range views along Appleton Street.

Section 3 (Concept Plans and Built Form Guidelines)

7. Section 3.1 is to be amended as follows:
 - (a) The extract from Rick Jamieson is to be removed;
 - (b) The development summary table currently located at Section 3.12 should also be shown at section 3.1;
 - (c) An image of the Indicative Framework Plan as shown in the DPO schedule should be included;
 - (d) The Masterplan is to include the following;
 - (i) widths of all proposed laneways;
 - (ii) setbacks from all three road boundary interfaces;

- (iii) proposed heights of the building areas A, B C and D; and
 - (iv) the provision of at least 4.5% of the total site (576 square metres) for public open space in an area which fronts Doonside Street and adjoins the pedestrian lane (or a higher percentage if contained in Clause 53.01 of the Yarra Planning Scheme at the time of subdivision). The masterplan must show the area of public open space in square metres and its percentage of overall site area.
8. The podium design of Building B is to be amended to incorporate a splay within the north-east corner of the building, to allow the retention of the existing tree on Doonside Street.
9. Section 3.2 is to be amended to remove the description of the two heritage buildings and the 'c1962 illustration of the Repco/Russell factory', with this information relocated to Section 2.1.
10. Section 3.4 is to be amended to include:
- (a) No encroachment of balconies into the 10m setback of Park Lane; and
 - (b) Amend dot point 3 to clearly state commercial and active frontages to Park Lane.
11. View C in Section 3.8 is to be amended to show Building B in the background.
12. Section 3.9 is to be amended to include:
- (a) A requirement that future plant and equipment, including screening, for all buildings must comply with all of the following;
 - (i) Be no more than 3.6m above the maximum building height;
 - (ii) Occupy no more than 50% of the roof area;
 - (iii) Be set back a minimum of 3m from all building edges; and,
 - (iv) Be fully screened from view;
 - (b) A notation confirming that the scale, siting and technique of the wind mitigation measures outlined within the Wind report prepared by Windtech (dated 13 July) are subject to further review, including any impacts on built form located within heritage overlays, Park Lane and Doonside Park, as part of any future planning permit applications and to the satisfaction of the Responsible Authority; and
 - (c) A paragraph which provides as follows: The maximum building heights as specified for each of buildings A, B C and D are maximum heights not preferred maximum heights. These building heights have already, in some cases, exceeded the building heights shown in the Indicative Framework Plan forming part of DPO15 and are not intended to be further increased.
13. The building height/massing diagrams at Section 3.9 are to be amended to include the following;
- (a) Identify each building as A, B C or D;
 - (b) Indicate the direction the development is being viewed from; and,
 - (c) The names of the adjacent streets.
14. Section 3.11 is to be amended to include:
- (a) Text to state that the inter-floor heights within the heritage buildings on the site will relate to the existing floor levels and fenestration patterns; and
 - (b) Text to state that balconies will not be located behind existing openings within heritage facades.
15. The site layout keys on pages 46 & 48 are to be amended to identify the building as A, B C or D as shown on the Masterplan.

Section 4 (Open Space and Landscape)

16. The Landscape Report is to be amended to include:

- (a) Text to require the design of Doonside Park to reference the heritage building at 26 Doonside Street;
 - (b) A brief explanation on how Doonside Park will be irrigated on an ongoing basis by Council; and
 - (c) Additional text to outline how the site will be remediated.
17. The Landscape Concept Plan at Section 4.2 is to be amended as follows:
- (a) Text to be included which requires garden beds/layout to respond to indicative locations of future entrances/windows within the heritage façade of 26 Doonside Street;
 - (b) Remove the indicative street tree locations along Doonside Street and Appleton Street;
 - (c) Remove the notation on the Burnley Street trees indicating that they are ‘subject to removal’;
 - (d) Show the location of the existing tree within the subject site at the northern end of Park Lane; and
 - (e) Show additional deep soil planting and mature trees within Doonside Park.
18. Section 4.2 (page 82) is to be amended to include text that Park Lane is to be publicly accessible (in addition to Doonside Park and Harry’s Lane), with the text stating ‘unfettered public access will be provided throughout all of these spaces 24 hours a day, 7 days a week’.
19. Section 4.2 is to be amended to note that the provision of public open space must be compliant with the provisions of Clause 53.01 of the Yarra Planning Scheme at the time of subdivision.
20. The title of Section 4.3 amended to ‘Public Realm’, with the ‘Public Realm Plan’ at page 18 of the Landscape Report included in this section.
21. The Public Realm Plan is to be amended as follows;
- (a) Remove the notation on the Burnley Street trees indicating that they are ‘subject to removal’;
 - (b) Show the indicative location of where visitor bicycle parking will be provided (including numbers of visitor spaces in each location to a total of 120 spaces);
 - (c) Insert a notation confirming that all visitor bicycle spaces will be provided as horizontal rails/hoops and located at ground level (not within the basement);
 - (d) Insert text that states that the width and design of roller doors and services must be limited and integrated with the overall design, with the visibility of ramps minimised;
 - (e) Insert text stating that any future sub-stations are to be located within the basement;
 - (f) Indicate where a north-south pedestrian crossing of Doonside Street to the Victoria Gardens precinct will be located;
 - (g) Show proposed east-west pedestrian connections across Burnley Street and any proposed enhancements to the Burnley / Doonside Street intersection; and,
 - (h) Show electricity poles extending along the northern side of Appleton Street as to be undergrounded to the satisfaction of the relevant power authority and Council.

Section 5 (Housing Diversity)

- 22. Amend the proportion of 3-bedroom apartments throughout the development to be higher.
- 23. Show the data on the number of children in families (with one or two parents) within the City of Yarra.

24. Include text to provide a commitment to explore opportunities with Registered Housing Associations to determine how the purchase could be positioned to receive grant funding from State government or other funding sources that allow for a price reduction for 3-bedroom apartments that would meet the necessary income ranges.

Section 6 (Transport Works)

25. Include a 'Transport/Access Plan' in Section 6.1 which includes the following;
- (a) Details of each stage, with confirmation that the main vehicle entrance and the location of loading and waste areas will be included in Stage 1, along with the relevant section of basement;
 - (b) The internal dimensions of laneways;
 - (c) An indicative location of visitor bicycle parking (including numbers of visitor spaces in each location to a total of 120 spaces); and
 - (d) A notation confirming that all visitor spaces will be provided as horizontal rails/hoops and located at ground level.
26. Section 6.1 is to be amended to specify that the number of secure compounds for employee/resident bicycle spaces will be limited, and all End-of-Trip facilities will be located with direct access to employee parking.
27. Section 6.1 is to be amended to confirm that the timing of the delivery of the signalisation of the Burnley Street/Doonside Street/Buckingham Street intersection will account for the following;
- (a) The potential for the development to be delivered in one stage (in which case the intersection must be delivered concurrently to the overall development); and
 - (b) The development of the Victoria Gardens site to the north (which may necessitate an earlier delivery if applicable).
28. Section 6.1 is to be amended to confirm that the following features will be incorporated into any future signalisation of the Burnley Street/Doonside Street/Buckingham Street intersection:
- (a) Physical protection of the Burnley Street on-road bike lanes;
 - (b) The provision of physically protected bicycle facilities on Doonside Street to allow safe and direct access into the subject site;
 - (c) The provision of bicycle head start lanterns in any proposed traffic signal programming; and,
 - (d) The provision of 'green paint' line marking through the intersection in accordance with Council and VicRoads standards.
29. Section 6.1 is to be amended to confirm that the footpaths and kerb and channels along Doonside Street, Burnley Street and Appleton Street directly adjacent to the subject site will be reconstructed to the satisfaction of the Responsible Authority once the development is completed.
30. Section 6.1 is to be amended to include details of future EV charging stations and additional car share provisions.
31. Section 6.1 is to be amended to require a Loading Management Plan to be submitted with any future planning permit applications. The Loading Management Plan must require;
- (a) All loading and waste activities to be undertaken within the basement; and,
 - (b) The loading area within Harry's Lane is used as infrequently as is practical.

Section 7 (Environmentally Sustainable Design)

32. Section 7.1 (Sustainability Commitments) is to be amended to include the following commitment;
- (a) A precinct-wide Water Sensitive Urban Design (WSUD) strategy is to be developed utilising MUSIC modelling to demonstrate compliance with best practice stormwater pollutant reduction objectives will be undertaken in conjunction with the first planning application submitted to Council. The WSUD strategy must encompass the entire development.
33. The 'ESD Aspirations' section at Section 7.1 is to be amended to include the following:
- (a) Details on how the development will achieve net zero carbon (e.g., a hierarchy of interventions - prioritising energy efficiency to reduce energy use and avoidance of gas, with operational emissions avoided through use of 100% renewable electricity either through Greenpower or renewable energy generated on-site);
 - (b) Confirmation that the entire development (residential and commercial) will achieve the minimum daylight requirements to meet best practice BESS IEQ;
 - (c) Confirmation that the development will be all-electric;
 - (d) The provision of a precinct-wide vegetation cover target (specifying a percentage of the site area, using the Green Factor Tool as a guide);
 - (e) The provision of a precinct-wide urban heat reduction target (specifying a percentage of the site area which will meet SRI targets or be vegetated);
 - (f) A landfill diversion target for operational waste and development of a precinct-wide waste management plan to drive its implementation, with this to be consistent with the landfill diversion target of 80% in the ESD Assessment; and,
 - (g) Reductions in embodied carbon for the development, focusing on the top 4 – 6 materials, with this to be consistent with the embodied carbon reduction opportunities included in the ESD Assessment.
34. The Environmentally Sustainable Design Framework prepared by ADP Consulting (dated 3 May 2023) is to be amended to include the following:
- (a) Precinct-wide goals and targets as a framework that can guide subsequent individual SMP's for each individual building, utilising one of the following tools:
 - (i) Built Environment Sustainability Scorecard – A minimum 50% score, or
 - (ii) A Green Star Buildings – 4 Star certified rating.
 - (b) Confirmation of a net zero development and commitment to 'an all-electric design, including solar panels, achieving 7-star NatHERS average rating and using either 100% offsite renewable energy sources (Green Power) or 5% of on-site renewable energy production';
 - (c) A commitment relating to net zero/renewable energy procurement/generation to include mention of embedded networks and clarification that electricity sources will be 100% renewable (either through 100% GreenPower or a combination of GreenPower and on-site renewable energy production); and
 - (d) Amend the subheading on page 8 from "Target New Zero Development" to "Target Net Zero Development".

Section 8 (Drainage)

35. Section 8.1 is to be amended to replace the existing wording under the heading '*A capacity assessment for the existing drainage system into which future development will be discharged*' with the following wording:

- (a) The capacity assessment of the existing drainage system has been based on Reeds adopting the drainage sizes shown on available Council MOCS information. Without access to detailed design plans or Council GIS information at the issue date of this report, it was assumed that the existing drains have been laid at constant depth hence their grades (and capacities) were estimated based on review of existing road longitudinal grades. Given the relatively flat nature of the landform this is a reasonable assumption; and
 - (b) More accurate assessments and surveys will be undertaken to update the preliminary flooding report and subsequently inform the finished floor levels for the proposed ground floor levels.
36. Section 8.1 is to be amended to replace the existing wording under the heading '*A flood analysis which determines the overland flow depth within the road reserve during a 1 in 100-year flood*' with the following wording:
- (a) The flood analysis which determines the overland flow depth within the road reservations during a 1 in 100-year flood utilises the catchment analysis and existing capacity assessment of the drainage system to generate the gap flow measured against the capacity of the road reserve;
 - (b) Under instruction from Council's Engineering department, a preliminary flood assessment has been undertaken to reassure the development is not impacted by estimated water levels adjacent to the development under certain rain events;
 - (c) A more accurate assessment of the flooding impacts must be undertaken prior to the establishment of the finished floor levels (FFL's) of the development. The flood analysis must utilise as constructed survey levels of adjacent infrastructure (road, drainage, etc) as well as proposed design levels for the ultimate outcome of Doonside Street; and
 - (d) The flood assessment will be completed under instruction of Council, and once approved, will dictate the FFL's of the ground floor plans. The flood assessment must be undertaken prior to the endorsement of the plans under the planning permit.
37. Section 8.1 is to be amended to include the following wording under a new heading '*Legal point of discharge and onsite detention*':
- (a) The legal point of discharge will be allocated for the development based on the capacities of the Council drainage infrastructure within the area. If existing properties discharges (as part of the consolidated development site) are to be redirected to alternative catchments, then an assessment of the proposal must be undertaken and approved by Council;
 - (b) The Permissible Site Discharge (PSD) is the peak flow rate allowed to be discharged from the proposed development to the nominated LPD (stormwater network). The PSD must be limited to:
 - (i) a 20% AEP flow rate (~1 in 5 ARI); and
 - (ii) the equivalent of a 70% impervious site coverage, or the pre-developed discharge rate if it is less than 70% impervious site coverage;
 - (c) All developments that require on-site detention must detain, at a minimum, the 10% AEP storm event. However, for cases where a safe overland flow path cannot be provided or where flows exceeding pipe capacity may impact the development or adjacent, upstream, or downstream properties, the requirement will be to detain the 1% AEP storm event; and
 - (d) The drainage design must be completed in accordance with Council's standards and requirements.

Section 9 (Comprehensive Heritage Analysis)

38. Section 9.1 (Heritage Assessment) is to be amended to include:
- (a) Photographs of the two heritage buildings at 81-95 Burnley Street and 26 Doonside Street; and
 - (b) Reference to the Heritage Analysis prepared by Bryce Raworth (dated December 2021).
39. The following text to be inserted into Section 9.1:
- (a) The following documents will be required when a planning application is submitted for the development:
 - (i) A schedule of conservation works for the retained facades of the heritage buildings at 81-95 Burnley Street and the exterior form of the heritage building at 26-34 Doonside Street, including time frames for each action to the Responsible Authority's satisfaction;
 - (ii) Archival recordings of the heritage buildings (81-95 Burnley Street and 26-34 Doonside Street) to the responsible authority's satisfaction prior to any demolition on the site;
 - (iii) A heritage maintenance plan defining the ongoing cyclical repair and maintenance for the retained facades of the heritage buildings at 81-95 Burnley Street and the exterior form of the heritage building at 26-34 Doonside Street to the responsible authority's satisfaction;
 - (iv) A Heritage Impact Statement prepared by a suitably qualified professional that assesses the impact of the proposed development on the heritage values of the heritage place; and
 - (v) A sightline analysis and 3D modelling of the proposed development from key view points in the public realm to enable an assessment of the visual impact of the development on the heritage places within the site.

Section 10 (Noise Impacts)

40. Section 10.1 (Noise Assessment) is to be amended to include the following wording;
- (a) All retail/commercial tenancies must demonstrate compliance with the EPA Noise Protocol Part 1;
 - (b) Internal sound insulation of the residential component of the development must comply with the NCC requirements as a minimum.;
 - (c) The road traffic noise intrusion criteria of 35dBIAeq,8h for living rooms and 40dBIAeq,16h for sleeping areas must be met;
 - (d) Commercial noise emissions, including plant noise emissions, from any base-building systems and commercial tenancies within the subject development are required to comply with the EPA Noise Protocol Part I noise limits;
 - (e) Any noise and vibration transmitted by commercial gyms within the proposed development is required to comply with the noise and vibration limits scheduled in Section 3.2.7 (noise) and Section 3.2.6 (vibration) of the ADP Acoustic Report respectively; and
 - (f) Impact noise to be addressed in the outdoor terraces to protect the amenity of residents in apartments within the building.

Section 11 (Development Staging)

41. Section 11.1 is to be amended to include the following;
- (a) Confirmation that all upgraded/new utility, drainage and civil infrastructure services will be provided on a precinct-wide scale; and

- (b) Clarification on when public realm and streetscape improvements will be delivered.

Attachments

- 1** [↓](#) Attachment 1 - PLN21/0981 - 81-95 Burnley Street & 26-34 Doonside Street, Richmond - Final Development Plan
- 2** [↓](#) Attachment 2 - PLN21/0981 - 81-95 Burnley Street & 26 -34 Doonside Street Richmond - Final Landscape Report
- 3** [↓](#) Attachment 3 - PLN21/0981 - 81-95 Burnley Street & 26 -34 Doonside Street Richmond - Final Traffic Report
- 4** [↓](#) Attachment 4 - PLN21/0981 - 81-95 Burnley Street & 26-34 Doonside Street, Richmond - Wind Tunnel testing
- 5** [↓](#) Attachment 5 - PLN21/0981 - 81-95 Burnley Street & 26-34 Doonside Street, Richmond - Final ESD report
- 6** [↓](#) Attachment 6 - PLN21/0981 - 81-95 Burnley Street & 26 -34 Doonside Street Richmond - Final Acoustic Report
- 7** [↓](#) Attachment 7 - PLN21/0981 - 81 - 95 Burnley Street & 26 - 34 Doonside Street Richmond - Final Housing Diversity Report
- 8** [↓](#) Attachment 8 - PLN21/0981 - 81 - 95 Burnley Street & 26 - 34 Doonside Street Richmond - Final Heritage Report
- 9** [↓](#) Attachment 9 - PLN21/0981 - 81-95 Burnley Street & 26-34 Doonside Street, Richmond - Final Drainage Report

1
[



DEVELOPMENT PLAN

81-95 BURNLEY STREET & 26-34 DOONSIDE STREET
RICHMOND

IN ACCORDANCE WITH SCHEDULE 15
TO THE DEVELOPMENT PLAN OVERLAY
OF THE YARRA PLANNING SCHEME

FEBRUARY 2023

GURNER™

CONTENTS

Client Gurner™
Client Astrodome
Architects Fender Katsalidis
Planner Contour Consultants
Ground Plane Retail F&B Studios
Heritage Bryce Raworth
Landscape and Public Realm TCL
ESD & Acoustic ADP
Traffic Traffix
Waste Leigh Design

1.0 Our Vision	6	4.0 Open Space And Landscape	78
1.1 Project Vision	6	4.1 Site Analysis	80
		4.2 Landscape Concept	82
2.0 Site And Context Information	9	4.2 Public Benefit	90
2.1 Statutory Planning Context	10		
2.2 Metropolitan Context	12	5.0 Housing Diversity	92
2.3 Local Networks	14	5.1 Housing Diversity And Adaptability Assessment	94
2.4 Neighbourhood Context	16		
2.5 Existing View Study	18	6.0 Transport Works	96
2.6 Views Around Site	20	6.1 Transport Works	98
2.7 Interface with The Embassy	26		
2.8 Victoria Gardens	28	7.0 Environmentally Sustainable Design	102
		7.1 Sustainability Commitments	103
3.0 Concept Plans And Built Form Guidelines	30		
3.1 Proposed Masterplan	32	8.0 Drainage	104
3.2 Key Heritage Fabric	34	8.1 Stormwater, Drainage And Flood Analysis	106
3.3 Ground Floor Plane	36		
3.4 Park Lane	38	9.0 Comprehensive Heritage Analysis	108
3.5 Harry's Lane	40	9.1 Heritage Assessment	109
3.6 Doonside Park	42		
3.7 Building Setbacks	44	10.0 Noise Impacts	110
3.8 Massing	46	10.1 Noise Assessment	111
3.9 Heights	50		
3.10 Shadow Diagrams	62	11.0 Development Staging	112
3.11 Building Finishes and Materials	66	11.1 Development Staging Plan	114
3.12 Development Summary	76		

1.0 OUR VISION

4

HARRY THE HIRER ("HARRYS") HAS BEEN LOCATED ON BURNLEY STREET FOR OVER 35 YEARS, TRANSFORMING WHAT WAS A DERELICT FACTORY BACK IN 1990 INTO A BUSTLING BUSINESS OPERATING FROM THAT ICONIC BLUE BUILDING THAT HAS FOUND IT'S WAY INTO THE FABRIC OF NORTH RICHMOND.

OUR INTENT THROUGH THE AMENDMENT PROCESS WAS TO ALWAYS FORM A STRATEGIC PART OF THE NEXT TRANSFORMATION OF THE SITE THROUGH THE DEVELOPMENT OF A NEW HARRYS OFFICE & SHOWROOM OCCUPYING THE KEY BURNLEY STREET & DOONSIDE STREET CORNER OF THE SITE.

AFTER ENDURING A DEVASTATING TWO YEARS OF COVID, THE SITE REDEVELOPMENT AND THE NEW HARRYS HEADQUARTERS WILL HELP THE BUSINESS RETURN BIGGER AND BETTER, AND THAT MEANS BEING A MAJOR EMPLOYER FOR THE CITY OF YARRA FOR THE NEXT 30 YEARS AT LEAST.



RICK JAMIESON
OWNER OF HARRY THE HIRER & TENET FOR OVER
30 YEARS ON SITE.

5

Harry the Hirer (Harrys) is the 30-year tenant of the site and synonymous with the fabric of Richmond. Rick Jamieson, the owner of Harrys, has a vision to anchor the Harrys business and its employees on the subject site for the next generations and beyond. Astrodome, the landowner and a related entity to Harrys, along with GURNER™ are excited to deliver a project that will secure the Harrys business long term on the site and continue to deliver employment to the Richmond area.

1.1 PROJECT VISION

This development plan has been prepared in accordance with the requirements of schedule 15 to clause 43.04 (DPO15) of the yarra planning scheme.

The Development Plan Vision is:

- A bona-fide mixed use development commensurate with the sites scale and its activity centre context, with the provision of 12,000 - 16,000 square metres of employment generating uses and 545-645 dwellings.
- Four purposefully designed buildings with a form and scale that responds to the sites redevelopment potential and emerging character, which includes a hierarchy of built form that responds to its interfaces.
- Retention and restoration of the existing heritage buildings to allow for their adaptive re-use to accommodate future employment uses and integration with the wider development.
- The prioritisation of pedestrian movements within the site through the provision of a pedestrian laneway network of approximately 1,400 square metres, a minimum of 576 square metres of public open space and 151 square metres of landscaping adjacent to supplement the park.

- Upgrades to the public realm to include new street tree planting, bicycle parking, footpaths and the reinstatement of redundant vehicle crossovers.
- The management of traffic and loading considerations with vehicle access limited to Doonside Street.



2.0 SITE & CONTEXT INFORMATION

2.1 Statutory Planning Context

2.2 Metropolitan Context

2.3 Local Networks

2.4 Neighbourhood Context

2.5 Existing View Study

2.6 Views Around Site

2.7 Interface with The Embassy

2.8 Victoria Gardens

2.1 STATUTORY PLANNING CONTEXT

10 The following planning controls apply to the subject site:

- Mixed Use Zone
- Design and Development Overlay, Schedule 2
- Development Contributions Plan Overlay, Schedule 1
- Development Plan Overlay, Schedule 15
- Environmental Audit Overlay
- Heritage Overlay, Schedule 252 and 375

The purpose of the Development Plan Overlay is as follows:

- To implement the Municipal Planning Strategy and the Planning Policy Framework.
- To identify areas which require the form and conditions of future use and development to be shown on a development plan before a permit can be granted to use or develop the land.
- To exempt an application from notice and review if a development plan has been prepared to the satisfaction of the responsible authority.

Schedule 15 to the Development Plan Overlay applies to the subject site and outlines the conditions and requirements for permits (Clause 3) and requirements for Development Plan (Clause 4).

The requirements of the Development Plan are as follows:

- A development plan must be generally in accordance with the Indicative Framework Plan as shown in Figure 1, and the vision set out in this schedule, to the satisfaction of the responsible authority.
- A development plan must be approved for the whole site, however the land may be developed in stages.
- The development plan must include the following sections, all prepared to the satisfaction of the responsible authority:
 - Development Plan Vision
 - Components of the Development Plan



Design And Development Overlay Map

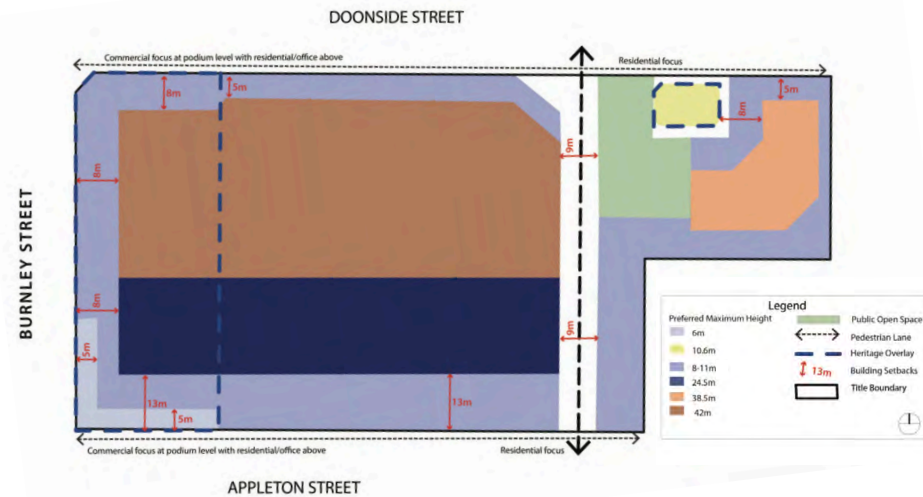


Figure 1 of Development Plan Overlay, Schedule 15

2.2 METROPOLITAN CONTEXT

¹² The site is located within the suburb of Richmond, 3km from the Melbourne CBD. Richmond includes three major activities centres along Victoria Street, Bridge Road and Swan Street, all within close proximity of the subject site.

Richmond is conveniently located to access broader amenities, including public open space, education facilities and public transport.

As a result of the proximity to the Melbourne CBD and amenities, the built form along main roads and strategic redevelopment sites within and around Richmond has evolved rapidly.



2.3 LOCAL NETWORKS



Public Transport Network:

The site is located within the Principal Public Transport Network and is within walking distance of tram lines along Victoria Street and Bridge Road. More broadly, the Hurstbridge Railway line is located to the sites west.



Walkability Network:

The local context offers good walkability opportunities and connections to local shopping precincts including Victoria Gardens Shopping Centre. When walking north up Burnley Street, Victoria Street is just over a 10 minute walk as well as the Main Yarra Trail and the Yarra River which can also be accessed via Appleton Street to River Street. Going south on Burnley Street takes you to the cafes, restaurants and shopping on Bridge Road.



Cycling Network:

City Cycling routes and linkages to the Main Yarra Trail are located via north-south connections adjacent to the site along Burnley Street. There is also an east connection to River Street via Appleton Street to the Main Yarra Trail.



Road Network Hierarchy:

A relatively uniform network of arterial roads, streets and laneways exists within the site context. This uniform hierarchy does not currently extend into the site due to the island nature of the site historically.

- primary street
- tertiary street
- secondary street

2.4 NEIGHBOURHOOD CONTEXT

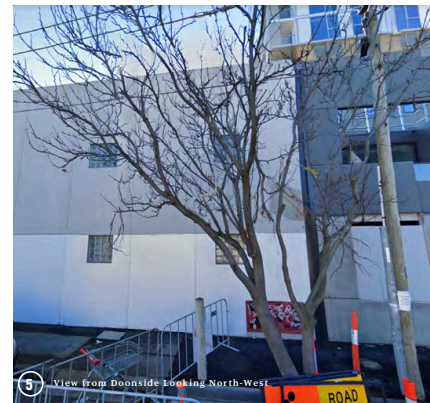
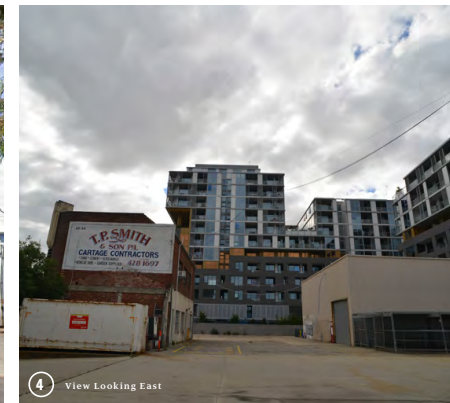
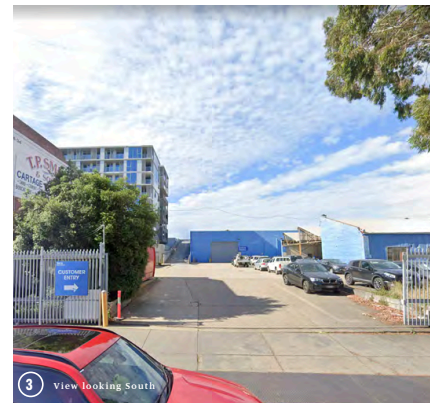
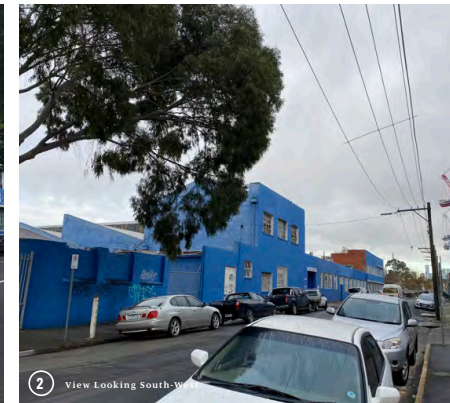
¹⁶ Diversity of neighbourhood is an evident feature of this Richmond location. Four distinct neighbourhood character precincts can be identified as:

- 1. High Density Housing
- 2. Fine Grain Residential
- 3. Composite Industrial & Commercial
- 4. Victoria Gardens



2.5 EXISTING VIEW STUDY

18 The site's proximity to the city and the Yarra River provides picturesque views both east and west. The Melbourne CBD skyline is visible from the western portion of the site, while the upper floors on the eastern portion will have views of the Yarra River and its environs. The blended neighbourhood characteristics of the surrounding Richmond suburbs and precincts will also provide views for south facing residents, and the expansive greenery of Studley Park for the north facing upper floor apartments.



2.6 VIEWS AROUND SITE

20



81-95 BURNLEY ST & 26-34 DOONSIDE ST RICHMOND

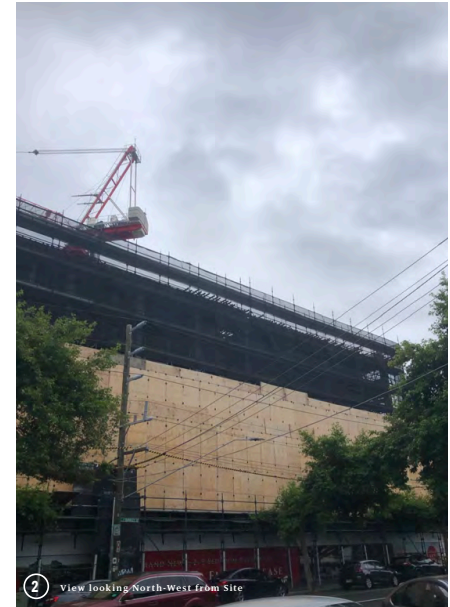
GURNER™

DEVELOPMENT PLAN

21



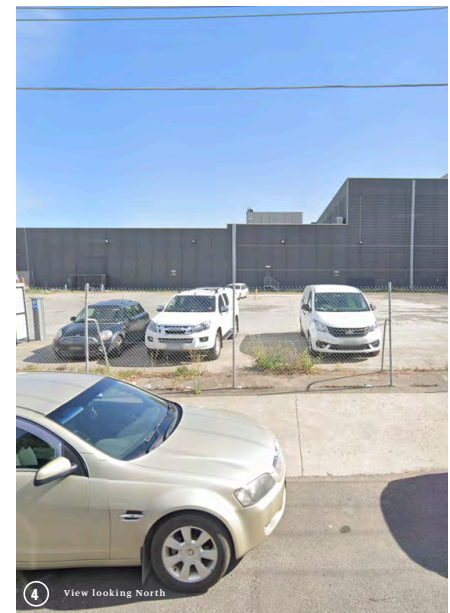
1 View looking South down Burnley St



2 View looking North-West from Site



3 View looking East down Doonside



4 View looking North

81-95 BURNLEY ST & 26-34 DOONSIDE ST RICHMOND

GURNER™

DEVELOPMENT PLAN

2.6 VIEWS AROUND SITE

22



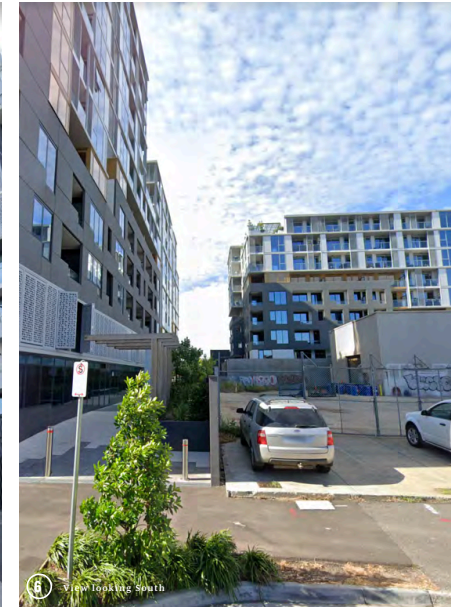
81-95 BURNLEY ST & 26-34 DOONSIDE ST RICHMOND

GURNER™

DEVELOPMENT PLAN

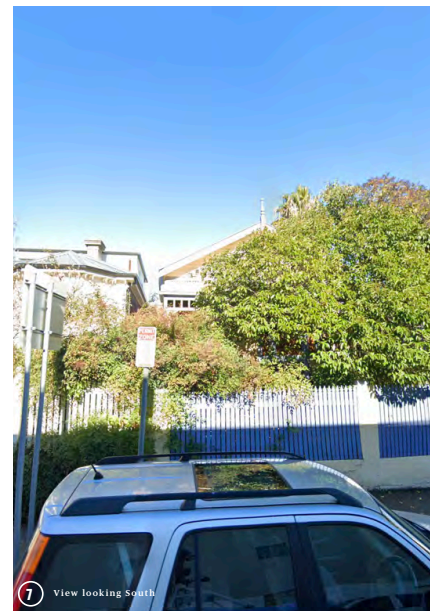


5 View looking North East from corner of Doonside St & David St.

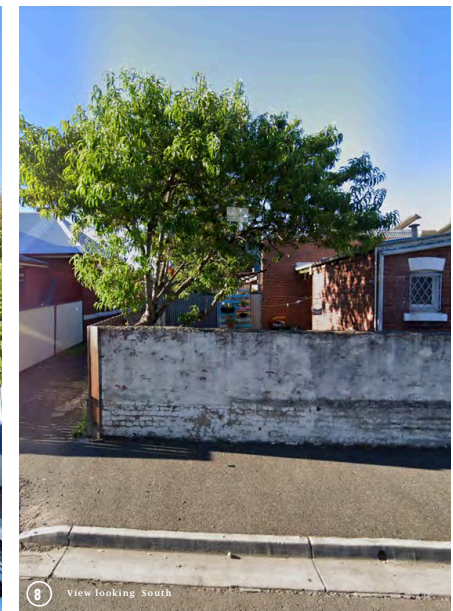


6 View looking South

23



7 View looking South



8 View looking South

81-95 BURNLEY ST & 26-34 DOONSIDE ST RICHMOND

GURNER™

DEVELOPMENT PLAN

2.6 VIEWS AROUND SITE



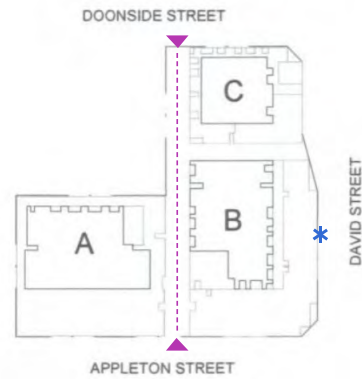
2.7 INTERFACE WITH THE EMBASSY

26 The Embassy apartment building at 36-44 Doonside Street is an L-shaped building that wraps around the sites eastern and southern-eastern boundary. The development comprises:

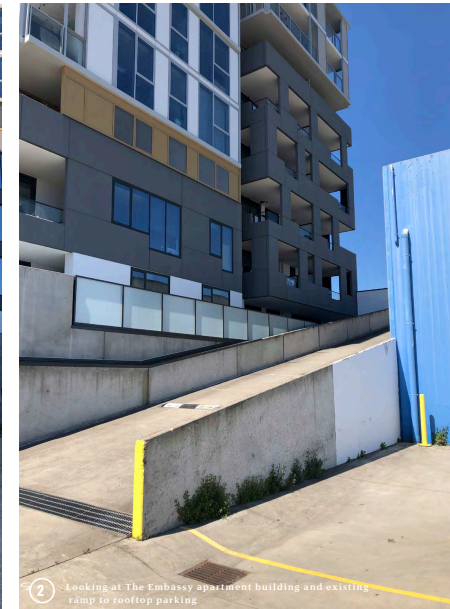
- Three buildings, nominated as Building A, B and C.
- The buildings are 9, 10 and 13 storeys in height respectively
- 289 dwellings
- 335 car spaces accessed via Appleton Street and David Street
- 414 square metres of commercial floor area

More specifically, towards Appleton Street, the development adopts a two storey built form with rooftop terraces, with the tower component setback, to Doonside Street the development adopts a 9 storey street wall.

At ground floor, the development includes a pedestrian laneway adjacent the north-eastern common boundary of the site and car parking facilities in the south-eastern common boundary. Above ground, where walls are not sited on the common boundary with the subject site, a 3 metre setback is provided. No upper level windows or balconies of the Embassy development are screened where orientated towards the subject site.



▼ Pedestrian Walkways - Entry
* Vehicle - Entry



2.8 VICTORIA GARDENS

28 The Victoria Gardens Shopping Centre represents a significant development parcel and landmark within the immediate, and broader, context.

Victoria Gardens includes a lettable floor area of approximately 35,000 square metres, 2,000 car spaces and includes anchor tenants such as Ikea, Coles, Kmart and Hoyts Cinema amongst 80 speciality retailers.

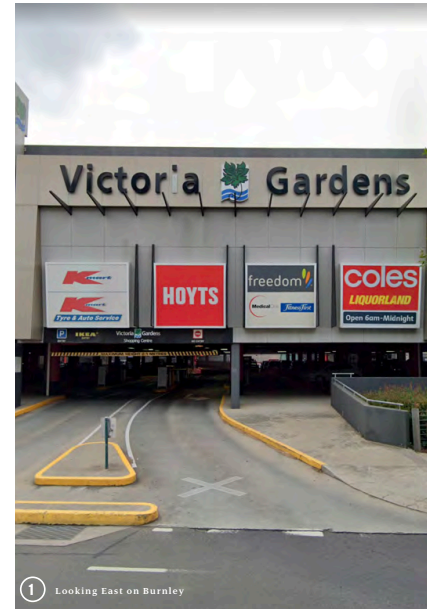
The parcel of land associated with Victoria Gardens stretches from the corner of Victoria Street and Burnley Street (north-west) to the corner of Doonside Street and David Street (south-west).

The site is located within the Comprehensive Development Zone (CDZ), which includes a height control that ranges from 31 – 55 metres. More specifically, the interface with the subject site is marked as a 'sensitive use buffer'. The sensitive use buffer has a depth of approximately 36 metres (as measured from the Doonside Street frontage), whereby no "sensitive use" (residential use, child care centre, pre-school, primary school, or public open space) is permissible.

As a consequence, the Victoria Gardens Shopping Centre "turns its back" on the subject site, with loading facilities to the Coles Supermarket located further northward along David Street. Loading to

the supermarket enters Doonside Street from Burnley Street, and then turns up David Street to enter the site. Loading occurs in the order of 1-2 times a day.

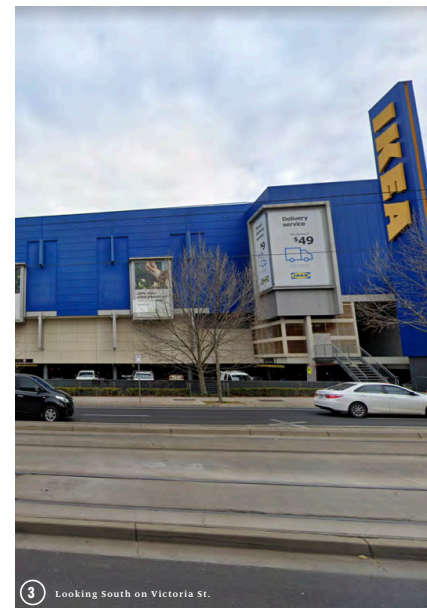
Through discussions with Victoria Gardens representatives, it is understood that they are looking to develop the currently unused land for a mixed use development, which would include approximately 700-800 dwellings, with ground floor retail and podium commercial offices. The retail and commercial uses would form an extension to the existing shopping centre. Access to the site for residential uses would be via Doonside Street, while retail and commercial uses would be via the existing car parking facilities.



1 Looking East on Burnley



2 Looking East on corner of Burnley St. & Victoria St.



3 Looking South on Victoria St.



4 Looking North on Doonside St.

3.0 CONCEPT PLANS AND BUILT FORM GUIDELINES

30

3.1 Proposed Masterplan

3.2 Key Heritage Fabric

3.3 Ground Floor Plane

3.4 Park Lane

3.5 Harry's Lane

3.6 Doonside Park

3.7 Building Setbacks

3.8 Massing

3.9 Heights

3.10 Shadow Diagrams

3.11 Building Finishes and Materials

3.12 Development Summary

31

3.1 PROPOSED MASTERPLAN

32 EVERY PART OF THE PLANNING PROCESS TO DATE HAS BEEN ABOUT CREATING SOMETHING SPECIAL ON THE SITE. OUR BUSINESS LIVES HERE AND WE ARE TOTALLY INVESTED IN THE VISION. IT'S SO IMPORTANT TO US.

THAT MEANS BEING PART OF SOMETHING THAT NOT ONLY THE BUSINESS CAN BE PROUD OF, BUT THE COMMUNITY, AS WELL AS FUTURE RESIDENTS AND OTHER LOCAL BUSINESSES.

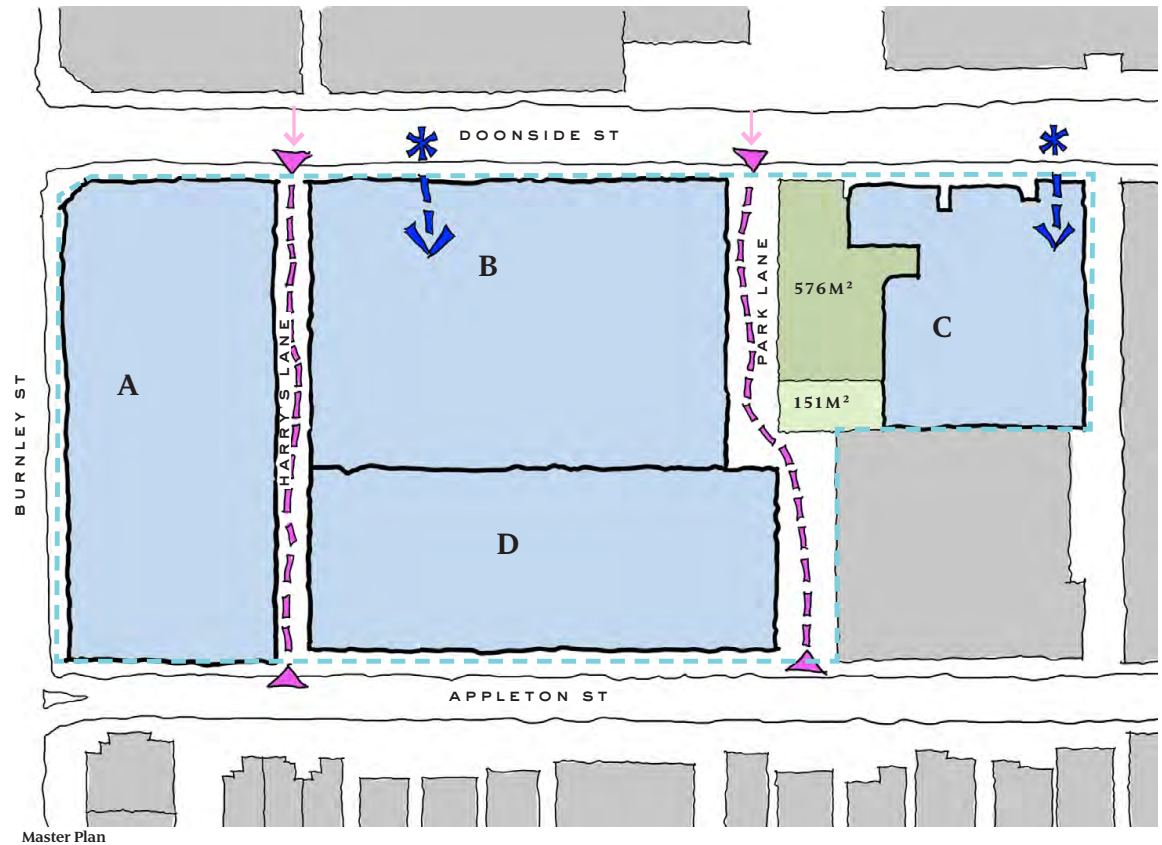
WE BELIEVE THIS WILL BE DELIVERED BY WAY OF THE PARK, THE LANEWAY, THE RETAINED HERITAGE, JOBS AND THE AFFORDABLE HOUSING.



RICK JAMIESON
OWNER
HARRY THE HIRER

Ground Plane - Lane-Ways + Active Frontages

- Minimum 576 sqm of public open space
- Additional 151 sqm of landscaping
- Lane-Ways
- Pedestrian Walkways - Entry
- Car Park Access
- Title Boundary
- Vehicle Access for Emergency Vehicles, Maintenance and Limited Access to HTH Showrooms (Harry's Lane Only)



3.2 KEY HERITAGE FABRIC

34 **81-95 Burnley Street (HO375)**

The Russell Manufacturing Company Pty Ltd (later Repco) building at 81-95 Burnley Street, Richmond is significant to the extent of the pre-1945 fabric. Built in stages for the Russell Manufacturing Company Pty Ltd, the brick (overpainted) building has a strong Moderne styling, with horizontal banding on the main elevations.

Post-1945 alterations and additions to the building are not significant.

26 Doonside Street (HO252)

The building, built c.1939 as an office and laboratories for the Russell Manufacturing Co., which later became Repco at 26 Doonside Street, Richmond is significant. It is a two storey Moderne style bichromatic brick building. It is approximately square in plan, with a curved corner at the northwest.

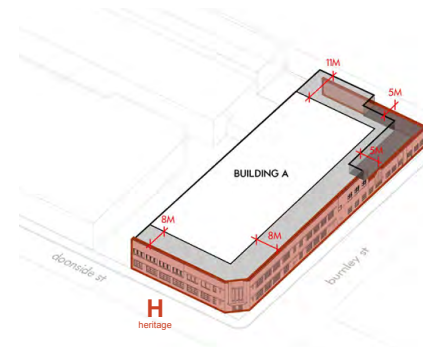
Proposal

The Development Plan proposes the retention and restoration of the former Repco factory facade and the office building. The restoration of the heritage buildings assists in enshrining the heritage significance of the subject site and surroundings, and allows for the buildings to be ameliorated into a bona-fide mixed use development. The improvement of the existing heritage fabric into a new build assists in providing a sense of connection to place and history.

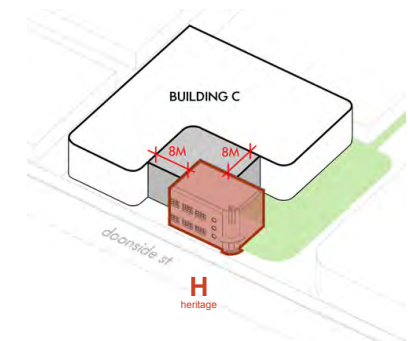
The scale of demolition and restorative works to the heritage buildings, plus the proposed new built form contemplated by the Development Plan have been resolved in conjunction with the project heritage consultant to ensure that the significance of the heritage and its surroundings is not unreasonably compromised.

Given the existing (and previous) commercial functions that have occurred within each building, and their two story form, each building is able to continue to accommodate commercial activity, which ensures limited modification to existing floor levels and fenestration patterns.

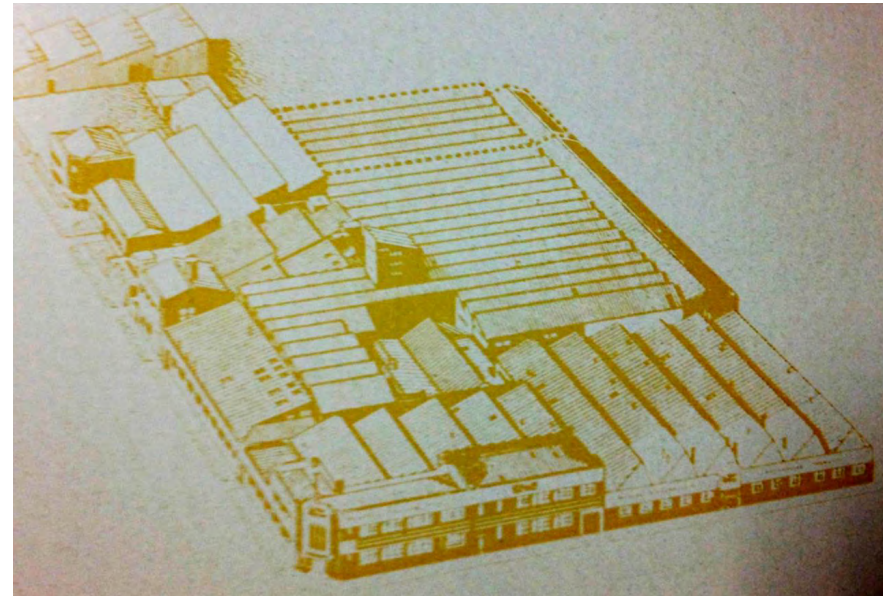
Surrounding the heritage building, pedestrian laneways, varied street wall heights and minimum setbacks behind the heritage façade are adopted (generally in accordance with Figure 1 of DPO15). This ensures that a three dimensional form of the retained heritage fabric is achieved from various vantage points within and surrounding the site.



81-95 Burnley Street (HO375)



26 Doonside Street (HO252)



A c1962 illustration of the Repco/Russell factory

3.3 GROUND FLOOR PLANE

36 Pedestrian Laneways:

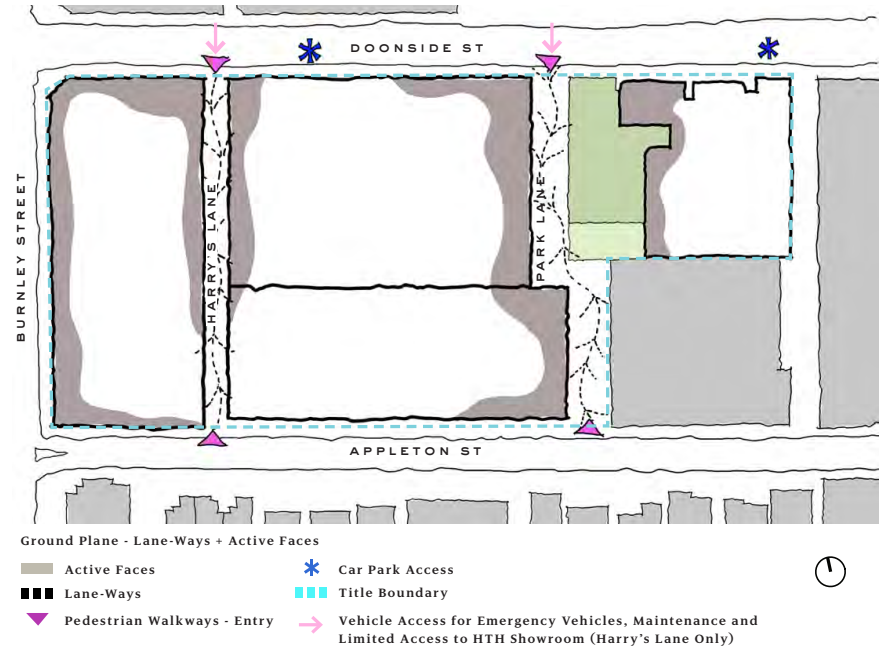
Fundamental to the Development Plan are the laneways and public spaces that integrate the development into the surrounding neighbourhood. As such, the flow of the ground floor plane is designed to create distinctive entries in and out of the site enabling connectivity with the surrounding pedestrian network and orientation within the site.

The form of the ground floor plane, combined with each building having an individual design, assists in creating a sense of identity and the direction of energy points into the laneway.

As a result, a publicly accessible laneway network of approximately 1400 square metres is proposed, comprising:

- Park Lane - A north-south through connection with a minimum width of 9.0 metres from Doonside Street to Appleton Street.
- Harrys Lane - A north-south laneway accessed via Doonside Street and Appleton St from the rear of the existing heritage factory building (HO252) that connects the Building A podium with that of Building B and D, with a minimum width of 6m.
- High quality urban design and CPTED principles through a mix of built form uses, landscaping, access to sunlight, shelter, lighting, public seating and bicycle parking.
- Is universally accessible for persons of limited mobility.

- A pedestrian focused environment that will be accessible by emergency services, maintenance vehicles and limited access to the Harry the Hirer showroom.



3.4 PARK LANE

38 The Development Plan proposes Park Lane to be sited adjacent Doonside Park and the Embassy Apartment Building. This represents a departure from the Indicative Framework Plan within DPO15, which seeks the proposal include an 8-11 metre built form adjacent the Embassy Apartment Building, to the south of the public open space.

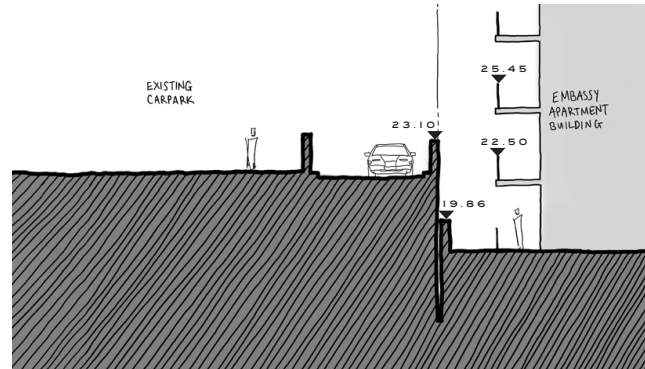
The proposed variation is considered appropriate for the following reasons:

- Protects the existing amenity of the Embassy Apartment Building through mitigating overlooking, overshadowing and visual bulk impacts.
- Maximises solar access to Park Lane via reducing the built form that flanks the laneway.
- Enables the Laneway to be highly activated within the site through the provision of habitable room windows and commercial frontages.
- The potential to include retail to provide continuous active frontages to assist with CPTED and passive surveillance.
- Given the Embassy apartment building does not include any screening from habitable room windows or balconies that are oriented towards the site, existing

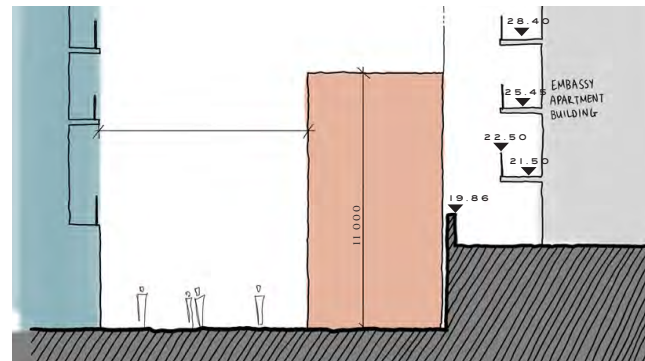
residents of this building will benefit from having an outlook to open space and will assist in providing surveillance over the laneway.

- Removes a built form that would have had shallow depth, compromised daylight access and uncertain economic viability.
- The straightforward geometry of open spaces allow for good visibility, clear sightlines to Victoria Gardens shopping centre and passive surveillance (CPTED).

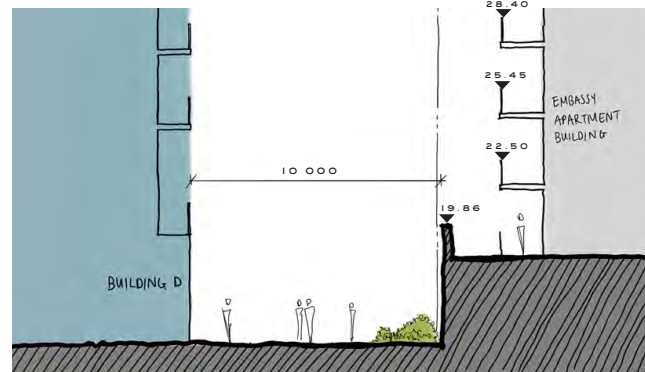
Park Lane is flanked by the 576 square metre public open space and 151 square metres landscaped area (Doonside Park). As a consequence, where the pedestrian lane is sited adjacent the public open space, a ground level separation between building B and C of 27 metres will be achieved.



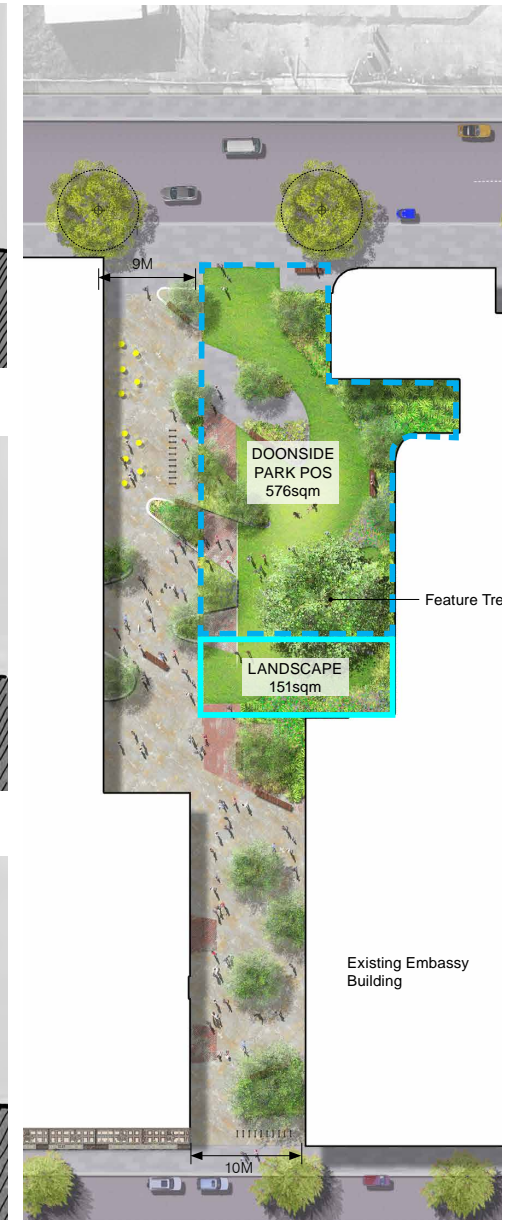
SECTION A - EXISTING CONDITIONS



SECTION A - DPO15



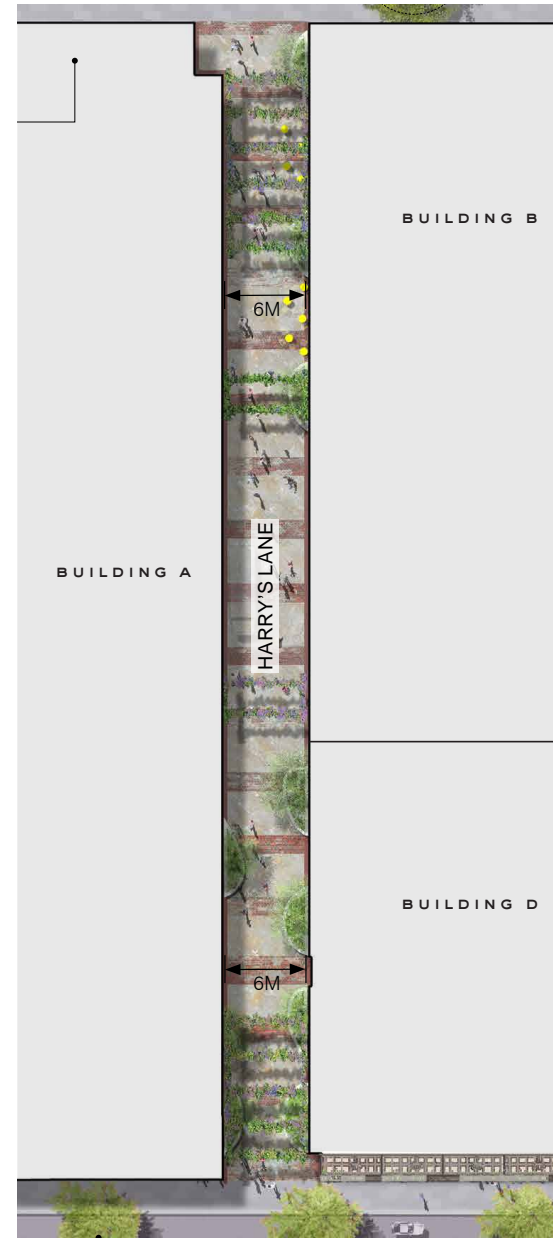
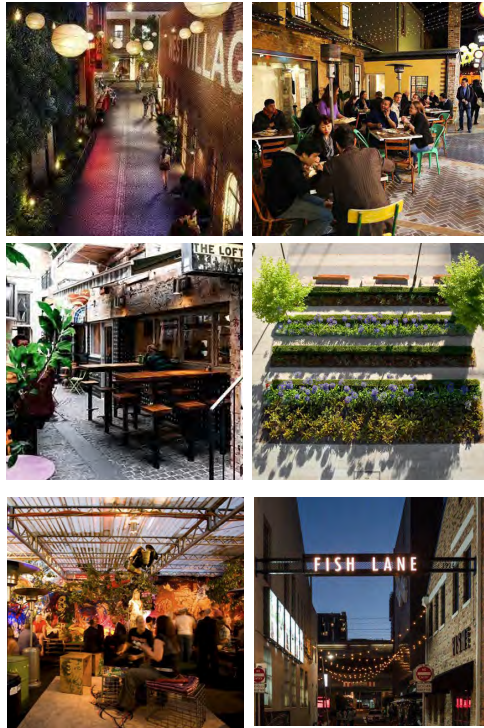
SECTION A - PROPOSED DEVELOPMENT PLAN



3.5 HARRY'S LANE

40 The north-south laneway assists in drawing pedestrians into the site and breaking up the mass and form of the development. The laneway is hallmarked by decorative paving, landscaping features and catenary lighting which will support a variety of commercial tenancies which will operate internally to the site.

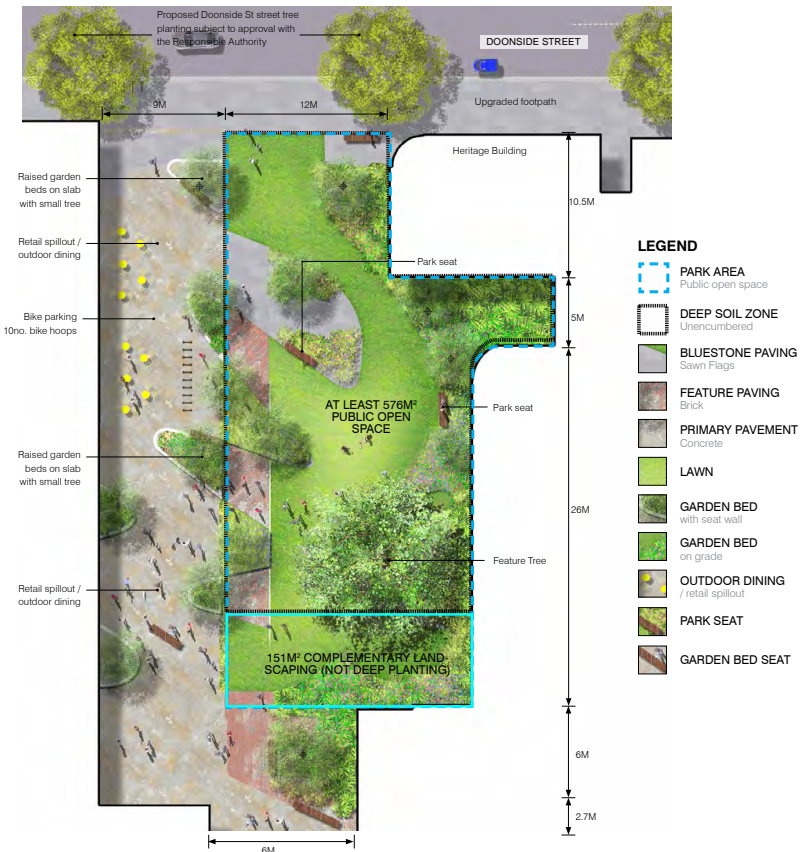
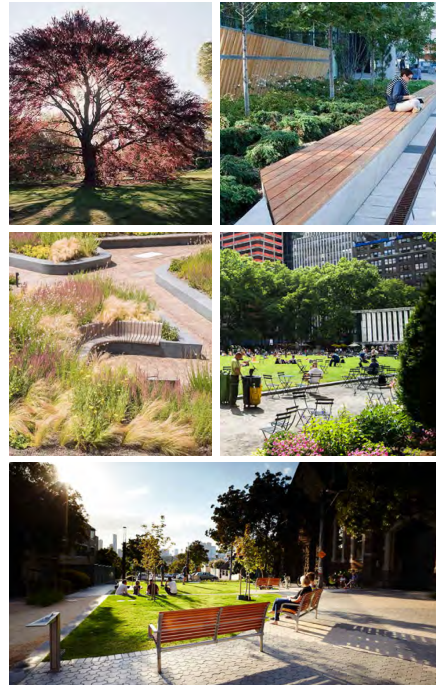
The laneway permeating the site enables a built form separation between Buildings A, B and D, creating an intimate environment that is continuously activated by commercial uses at ground level and residential above.



3.6 DOONSIDE PARK

42 The culmination of the eastern laneway is the ability to be able to meet and engage with Doonside Park.

Doonside Park, at a minimum of 576 sqm with a provided additional 151 sqm in area, will receive good solar access due to its northern orientation and its abuttal with the Doonside Street road reserve to its north and Park Lane to its west. Doonside Park will include provisions for deep soil planting, public lighting, decorative paving and integrated seating and will benefit from its relationship with commercial tenancies at the lower levels and residential above of surrounding buildings thereby ensuring passive surveillance and engagement with the park is maximised. The mix of uses in the precinct will ensure this area will remain activated throughout the day.



43

3.7 BUILDING SETBACKS

Building A:

Building A is sited above the former factory building on the corner of Burnley Street, Doonside Street and Appleton Street.

To Doonside Street and Burnley Street, the building adopts a minimum street setback of eight metres in accordance with the Indicative Framework Plan.

To Appleton Street, the new podium form is only partially setback from the Appleton Street frontage, and not the entire breadth of the frontage as sought by DPO15. The impact of the proposed form is mitigated by the five metre indent that wraps around the corner of Appleton Street and Burnley Street, which ensures that the single storey heritage form remains the preeminent form on this corner location.

Above the podium, Building A adopts an 11 metre street setback, below the 13 metres sought by the Indicative Framework Plan. The two metre variation in the upper level setbacks represents a minor departure from the Indicative Framework Plan and does not unreasonably compromise the heritage place.

Both variations to the built form surrounding Building A have been supported by the project heritage advisor.

Building B:

Building B is sited centrally to the site with a frontage to Doonside Street.

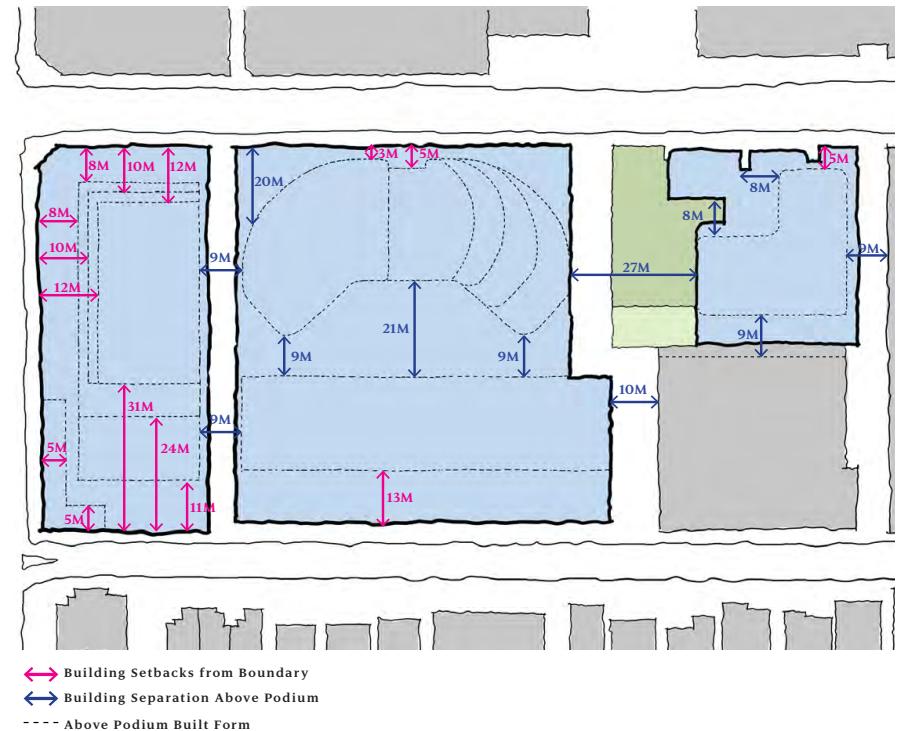
Building B proposes a continuous street wall to Doonside Street. Above the street wall, the building incorporates a curved form which results in street setbacks of 3-5 metres centrally, increasing to 20 metres as the building curves away from Doonside Street. The setbacks are generally in accordance with the Indicative Framework Plan, while the curved form allows for a visually interesting building and increased solar penetration into the site.

Building C:

Building C adopts a minimum 8 metre setback around the existing heritage building which assists in maintaining the three-dimensional form of heritage fabric. To Doonside Street, the tower elements adopts a 5 metre street setback, while to its side and rear - it adopts a minimum 9 metre setback to the Embassy Apartment Buildings in accordance with the Indicative Framework Plan.

Building D:

Building D is broken down into two modules, with individual townhouses fronting Appleton Street and an apartment building to its rear, setback 13 metres from Appleton Street in accordance with the Indicative Framework Plan.



3.8 MASSING

46 With setbacks, heights, distances between buildings and open spaces all designed to maximise the potential of the site in accordance with the City of Yarra Planning Scheme Development Plan Overlay, these factors influence the massing outcomes of the proposed buildings. The form and mass of the buildings also relate to aspects of human scale, heritage and architectural quality.

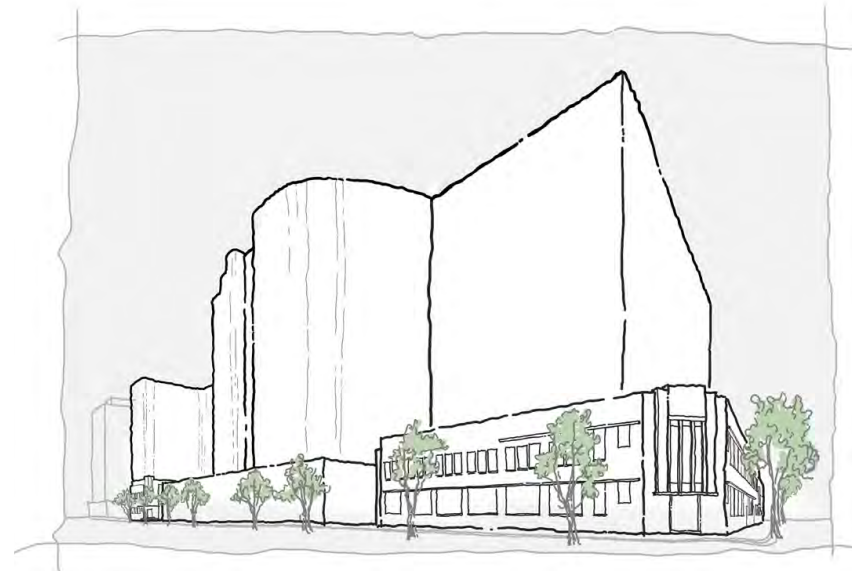
The varied massing views of buildings A, B, C and D address key vantage points when approaching the precinct from Burnley Street, walking down Doonside and Appleton streets, as well as through the newly designed laneways. These internal laneways within the site offer an opportunity to create an activated ground plane. Sightlines from across the road will be sympathetic to the street edge, transitioning the built form from the boundary to within the centre of the site.

Vehicle access and traffic movement are positioned along Doonside Street at points that minimise impacts on streetscapes, shared spaces and pedestrian footpaths.

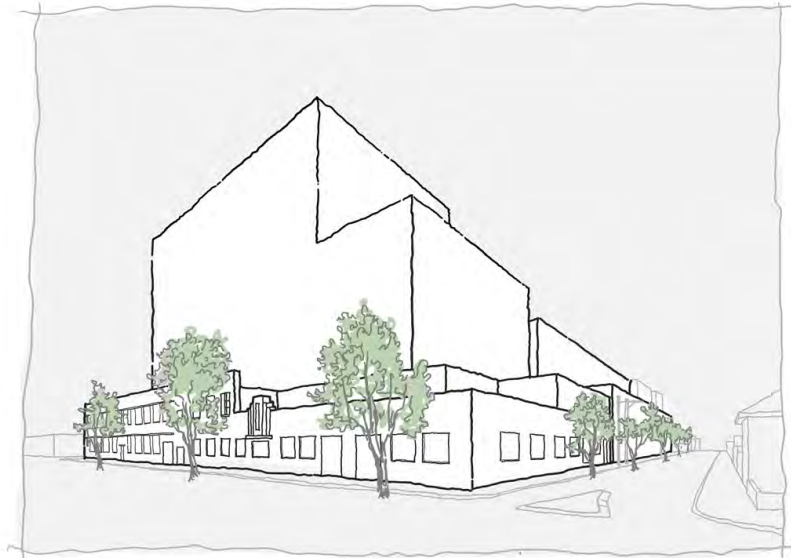
Multiple podium levels create a new level of human scale with the rest of the built form. When experiencing this precinct, visual interest is created through the holistic approach to massing and height that is fitting of its surrounding context.

Building B acts as the pillar that connects all other buildings in the precinct. Despite it being the largest mass among the proposed buildings, its height is less prominent when experienced from the main thoroughfare via Burnley Street. Further, the gradual stepping down of the building mass towards Doonside Park reduces This is in part due to the lower scale of the townhouses along Appleton Street.

The form and mass of the buildings are respectful of the industrial heritage of the site and its surrounds to the north and east, as well as to the residential heritage to the south. Materiality and finishes like steel and brick have been considered to further enrich and emphasise the architectural quality of the existing heritage buildings within the site.



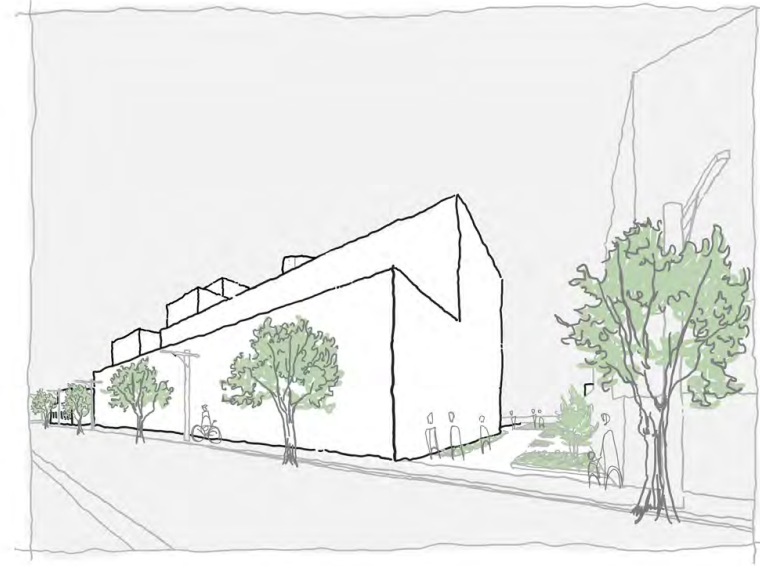
VIEW A: LOOKING DOWN DOONSIDE STREET FROM BURNLEY STREET



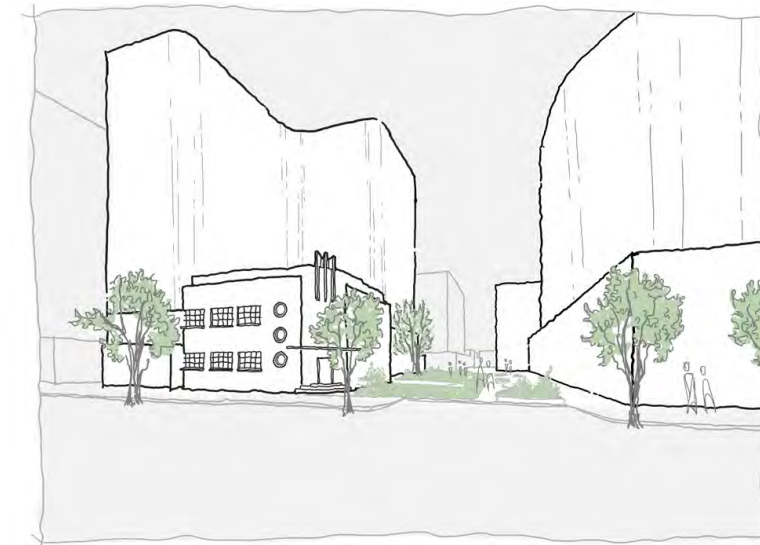
VIEW B: LOOKING DOWN APPLETON STREET LOOKING FROM BURNLEY STREET

3.8 MASSING

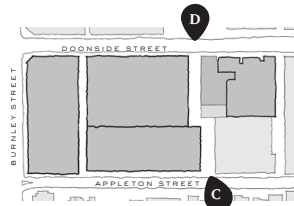
48 These key views with the massing of the buildings consider sightlines from across the road and is sympathetic to the street edge with transitioning the built form from the boundary to within the centre of the site. Materiality and finishes have also been considered to further enrich and emphasise the existing heritage buildings within the site.



VIEW C: LOOKING INTO PARK LANE FROM APPLETON STREET

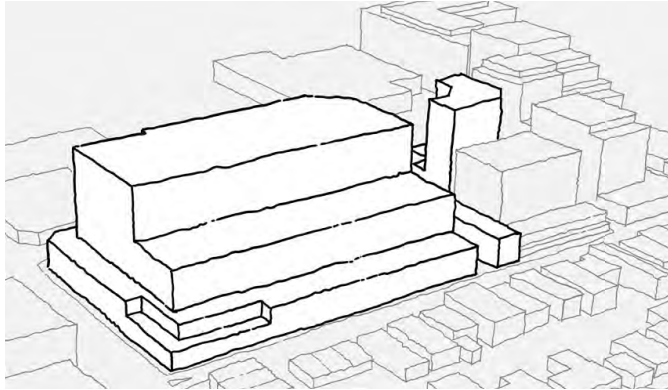


VIEW D: LOOKING DOWN PARK LANE FROM DOONSIDE STREET

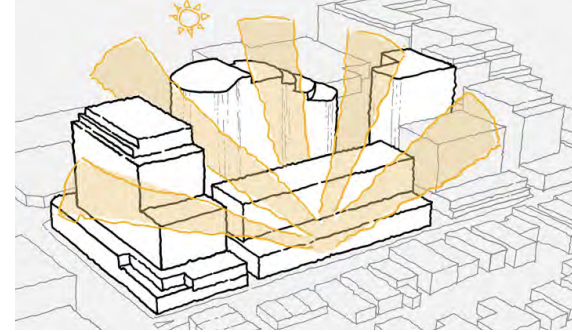


3.9 BUILDING HEIGHTS

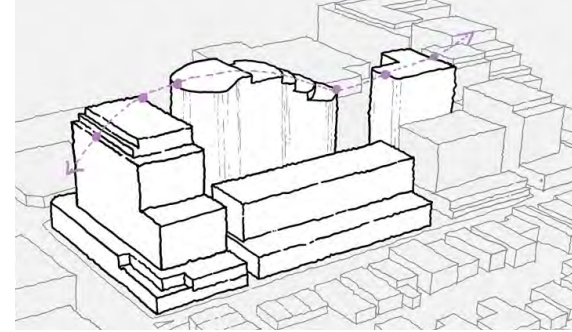
DPO HEIGHTS & ENVELOPE



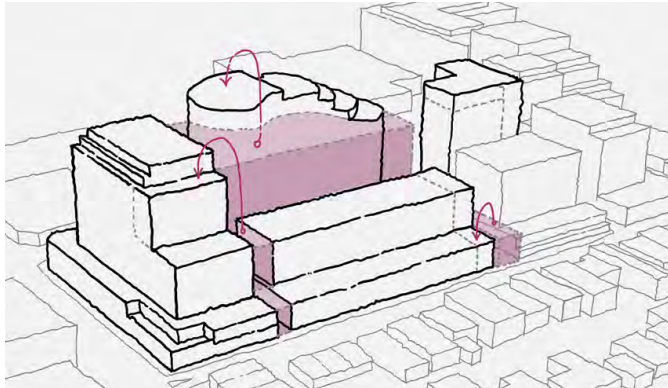
DESIGNED TO OPTIMIZE SOLAR ACCESS



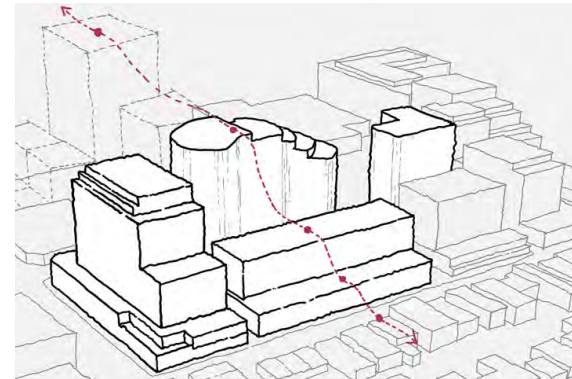
VARIED SKYLINE ALONG DOONSIDE



REFINEMENT OF DPO ENVELOPE TO MAXIMISE
INTERNAL AND EXTERNAL AMENITY



TRANSITION IN HEIGHTS IN
RESPONSE TO FUTURE CONTEXT



3.9 BUILDING HEIGHTS

⁵² The maximum building heights of the four buildings is as follows:

- Building A - 49.6 metres
- Building B - 55.9 metres
- Building C - 41.9 metres
- Building D - 25.4 metres

The varying heights across the buildings are designed and spaced to result in a visually interesting and coherent precinct. With each building displaying its own unique design language, together they form a collection of built forms that speak to each other's design expression, as well as tie into Richmond's rich industrial past and varied skyline.

At a maximum 49.6 metres, Building A is seen as the development hero building and is the first building to be experienced when traveling along Burnley Street. Its relationship to the existing heritage wall plays an integral role in the proposed built form, along with its setback from Burnley Street and the stepping and height transition from Appleton Street.

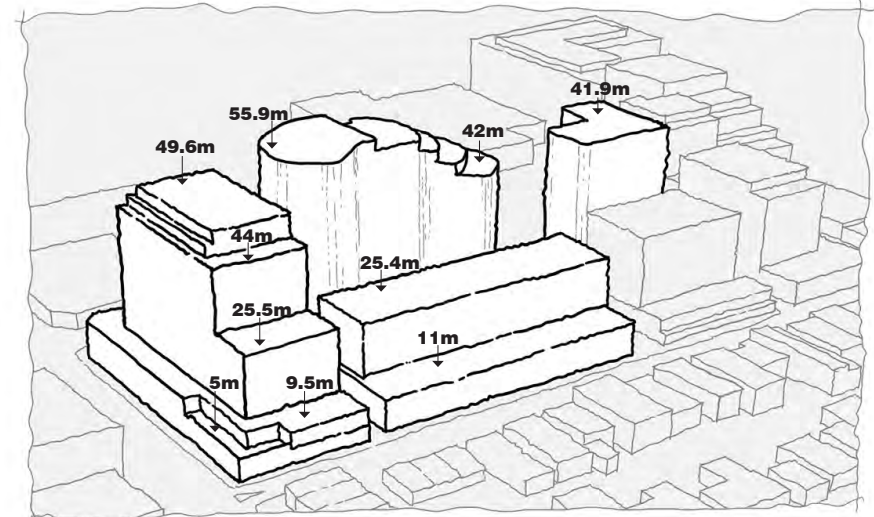
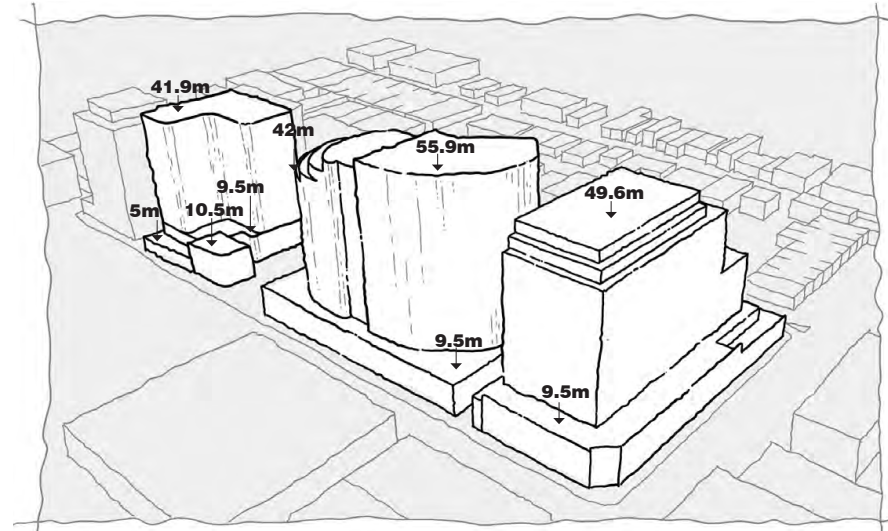
Adjacent to Building A is the curvilinear Building B, standing as the tallest building within the precinct. The targeted approach to the massing of Building B opposite a car park and a "sensitive use buffer" zone ensures that the external amenity impacts of the building are easier to manage. Equally,

the curved form of Building B enables a volume and mass to be extruded that maintains a high quality internal amenity outcome in respect to daylight, solar access and wind. The massing and volume of Building B steps down as it approaches Building C to a height of 42m. This breaks down the physical bulk and height of the building, while creating a varied and visually interesting silhouette along the skyline of Doonside St.

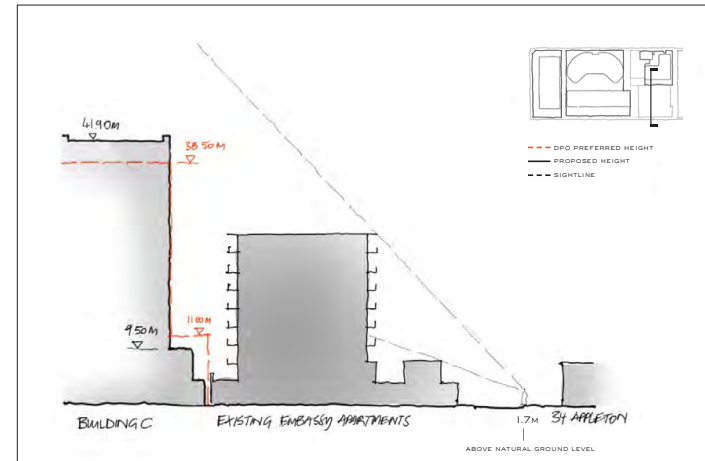
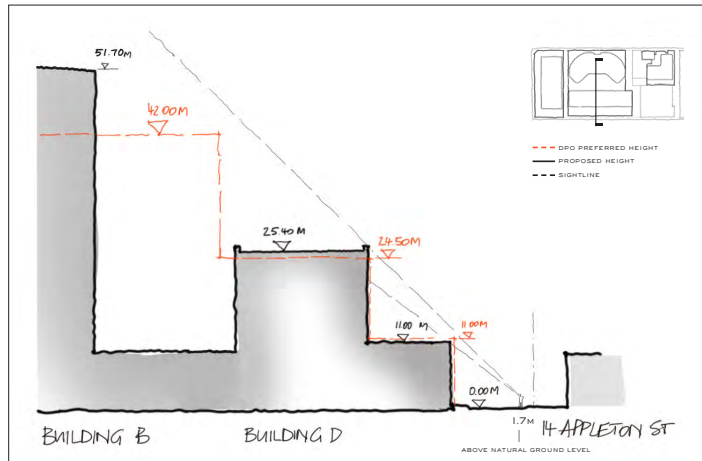
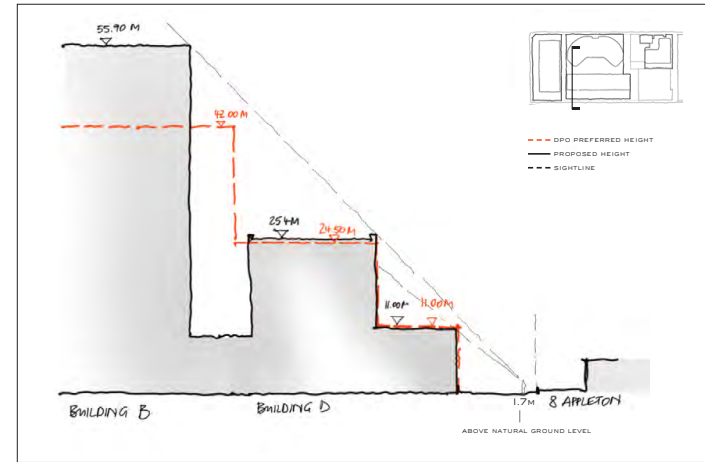
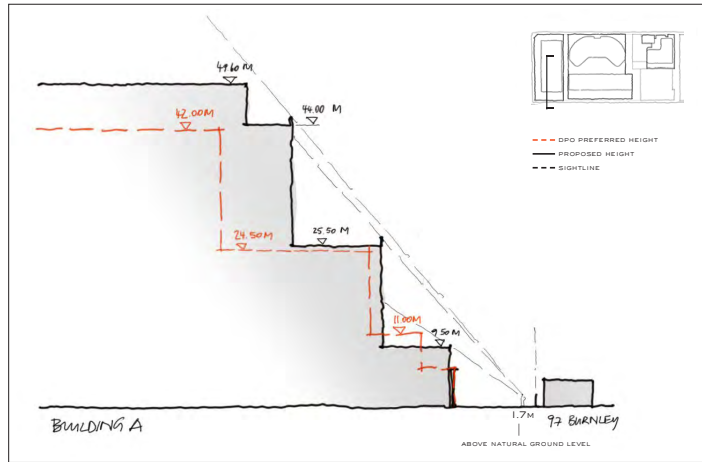
Further ahead, the height and form of Building C is complimentary to the neighbouring Embassy Apartments (approximately 39 metres) and visually engages with the existing heritage building in the foreground.

The transition in height across the site is also a response to the residential buildings along Appleton Street. Building D, is broken down into two distinct elements, being the townhouses fronting Appleton Street will display varying facade treatments reflective of the existing worker's cottages with a maximum height of 11 metres.

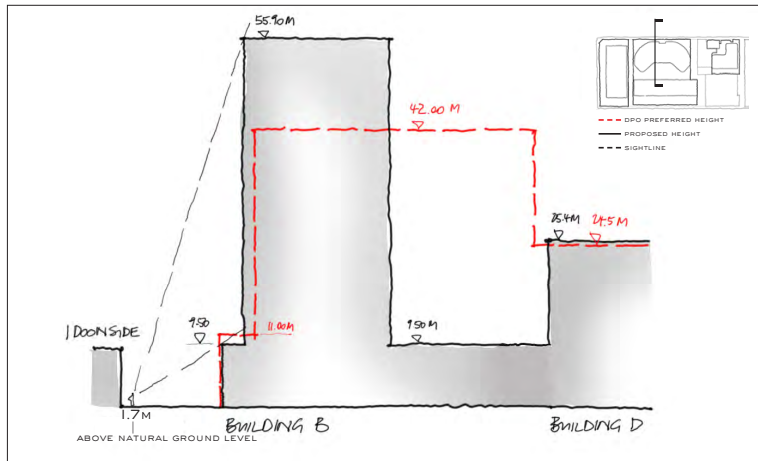
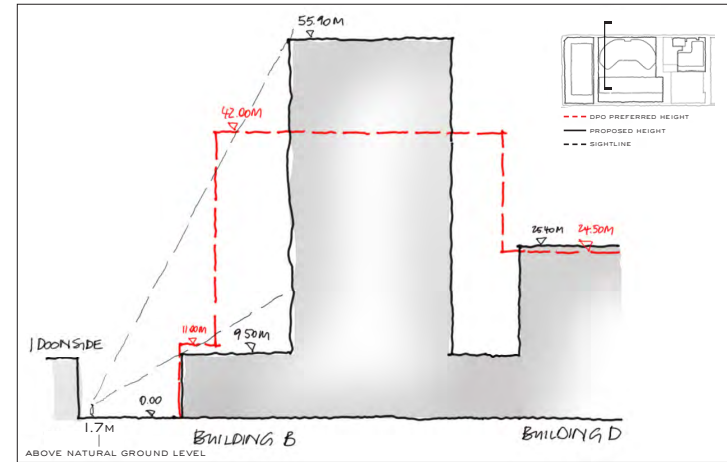
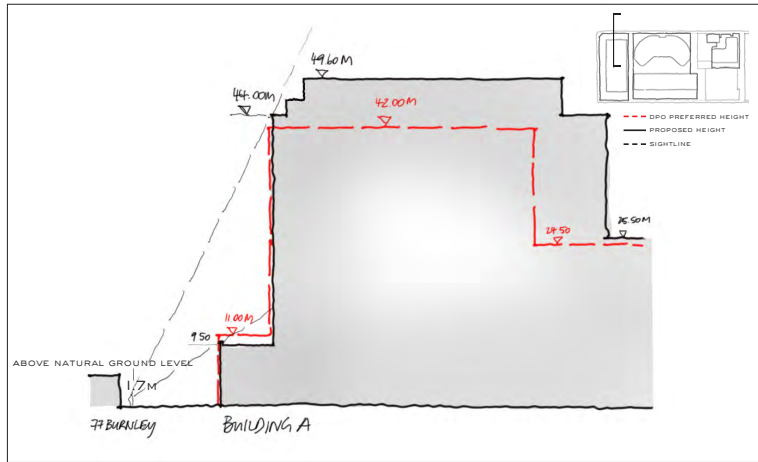
As a backdrop to the townhouses, an additional 25.4 metre apartment building is designed to continue the tiered relationship with the existing workers cottages from a north-south cross-section. This addresses the transition of height from the proposed tower to the townhouses and drop to the fine grain to offset any potential overshadowing impacts.



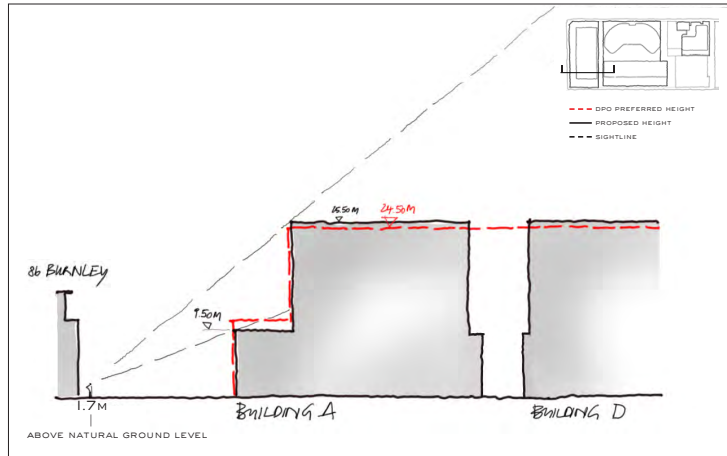
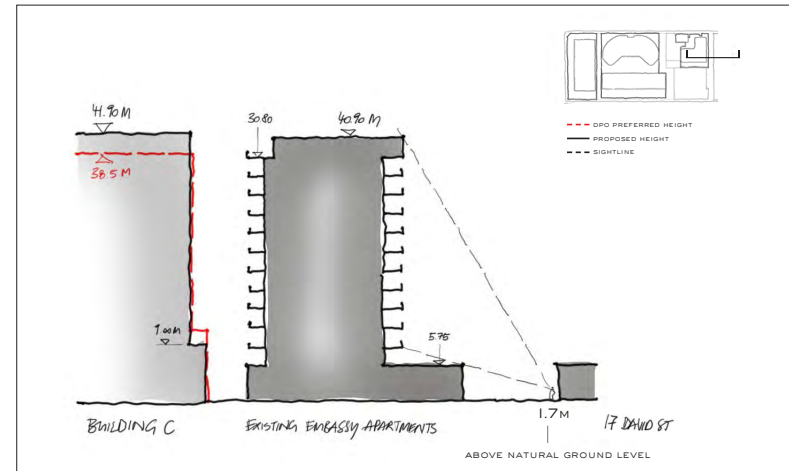
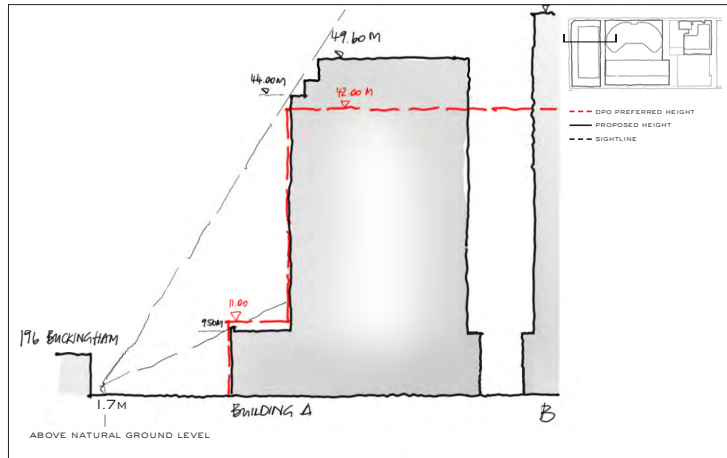
3.9 BUILDING HEIGHTS



3.9 BUILDING HEIGHTS



3.9 BUILDING HEIGHTS



3.9 HEIGHTS

60 Panel Report Discussion

The Planning Panel hearing was held between May-June 2020. During the hearing, Salta Properties (Victoria Gardens) submitted that it was appropriate for the Panel to support taller building heights than what was exhibited for the subject site. It was submitted by Salta that taller heights would suitably represent the site's potential as a significant redevelopment site within the Activity Centre Context.

At the time of the Panel hearing, the redevelopment status of Victoria Gardens was unknown. This was a key consideration of the Panel in determination of the appropriateness of building heights. The Panel noted:

- "An important policy direction for this precinct is to facilitate a transition from the scope of the taller, more robust building forms in and around the Victoria gardens Shopping Centre to the more conventional residential areas beyond. The Panel considers that the emerging context in the vicinity of the subject site (which includes may recent approval that are consistent with this) should be given substantive weight in assessing preferred maximum heights for the amendment".
- "Examples of higher developments in precincts distance from the subject site while still within the City of Yarra are outcomes of differing local contexts, development site conditions

and planning scheme provisions. As such, these are not considered to carry sufficient weight to support a greater maximum height than that in the exhibited Amendment".

In the intervening period since the release of the Panel report in July 2020, through consultation with Salta Properties, a redevelopment of Victoria Gardens to include additional commercial offerings and approximately 700-800 dwellings is being contemplated. The scale of the any subsequent buildings is unknown, however it represents a change to the emerging context that informed the Panel's position in relation to building heights and will enable a transition from Victoria Street (north) to Appleton Street. Subsequently, the panel report affirms the discretionary nature of the building controls and outlines four key criteria that must be satisfied to exceed the preferred building heights, being:

- High standard of design
 - On-site impacts
 - Off-site impacts
 - Precinct Built form outcomes
- A response to each of the criteria is outlined below:
- Criteria 1: High standard of design**
- Retention and restoration of the key heritage fabric.
 - A mid-block laneway and open space which will help facilitate future connections and gateways into any renewal of Victoria Gardens.
 - Four new integrated and distinctive buildings that respond to the

- different interfaces of the site.
- Articulated buildings through setbacks and materiality.
- A varied skyline along Doonside Street that responds to the Burnley Street interface (west) and the Embassy Apartment Building (east).
- A transition in built form Victoria Gardens (north) to conventional residential areas to the south (Appleton Street).

Criteria 2: On-site impacts:

- Enhanced access to public open space and provision of approximately 1,400 square metres of publicly accessible pedestrian laneways.
- Additional height and density increases passive surveillance in the area
- Employment generating uses in excess of 12,000 square metres, 3,000 square metres more than what is sought.
- Environmentally sustainable design aspirations above the statutory requirements which includes a target for a net zero carbon development.
- A clear visual connection between the north-south pedestrian link and the park when viewed from Doonside Street and Appleton Street.
- Ample sunlight to the north-south pedestrian link and public open space.
- An expanded pedestrian network and improved access to retail services.
- Building separation that exceeds a 9 metre separation for the most part,

which has been informed by detailed daylight analysis and ensures no internal overlooking.

Criteria 3: Off-site impacts:

- Street wall heights that generally satisfy the interface requirements.
- A form and massing that is generally consistent with the preferred building heights when undertaking sight line analysis from key vantage points surrounding the site. More specifically:
- Building A - The visibility of the building is generally consistent with the preferred building heights when viewed from the opposite footpaths on Doonside Street, Burnley Street and Appleton Street.
- Building B - The visibility of the building is generally consistent with preferred building heights and setbacks, and due to the curved form of the building, the visibility will be less in some instances when compared to the preferred building heights and setbacks.
- Building C - Will not have any visibility from the opposite footpaths along David Street or Doonside Street due to the built form of the Embassy Apartment Building.
- Building D - Is generally consistent with the Indicative Framework Plan when viewed from the opposite side of Appleton Street.
- Overshadowing that complies with the requirements expressed within DPO15, which specifically includes no overshadowing on the western

side of Burnley Street from 11am and no overshadowing to the residential properties of Appleton Street between 10am - 2pm.

- A form and massing that does not unreasonably overlook any adjoining secluded private open space areas and habitable room windows.
- Improved visual outlook and solar access to habitable room windows / secluded private open space areas from the Embassy Apartment Building compared to the preferred built form outcomes proposed to the east of the north-south pedestrian link (as outlined within the Indicative Framework Plan).

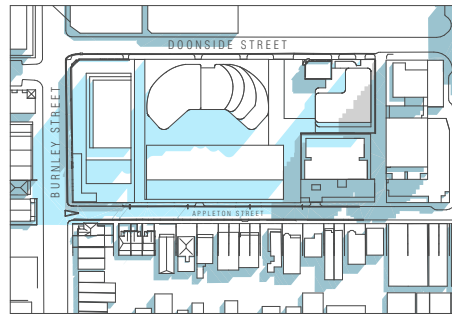
61 Precinct Built form outcomes (Response to Development Plan Overlay, Schedule 15)

- Setbacks around the two retained heritage buildings to maintain their three dimensional form.
- The siting of the maximum building heights at its least sensitive interface and a transition of heights down from north to south.
- Separation between buildings which is generally greater than nine metres which allows for a visually interesting skyline and streetscape.
- A form and massing that is generally consistent with the preferred building heights when undertaking sight line analysis from key vantage points surrounding the site.
- Ample sunlight to the north-south pedestrian link and public open space.
- No overshadowing of residential properties on the south side of Appleton Street between 10am and 2pm and no overshadowing of the footpath on the western side of Burnley Street from 11am.
- The ability to manage off-site amenity impacts through the siting of the form to minimise the impact of adjoining properties by way of daylight access, outlook, overlooking and shadowing.
- A material palette that is respectful of the heritage fabric on-site, as well as to the residential heritage precinct along Appleton Street.

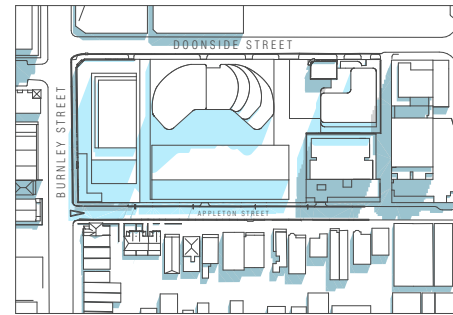
3.10 SHADOW DIAGRAMS

62 The built form contemplated within the Development Plan has been designed to satisfy the overshadowing considerations outlined within DPO15, more specifically:

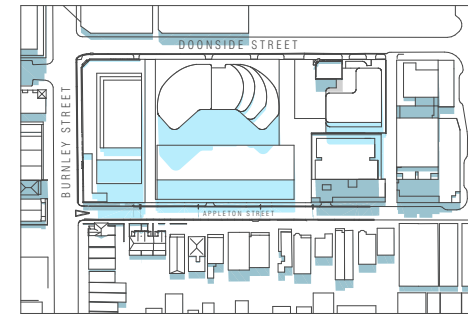
- No overshadowing of private properties on the southern side of Appleton Street beyond that caused by a building of 11m when measured between the hours of 10:00am and 2:00pm at the September equinox.
- No overshadowing of the footpath on the western side of Burnley Street from 11am at the September equinox.
- Appropriate access to sunlight within the proposed park between the hours of 10am and 2pm at the September equinox to provide a reasonable standard of amenity and usability as a principally passive open space.



22 SEPT - 10 AM



22 SEPT - 11 AM

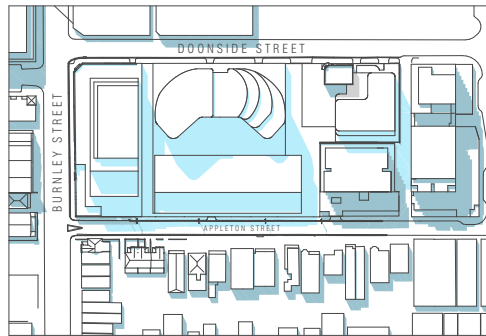


22 SEPT - 12 PM

■ EXISTING SHADOWS
■ ADDITIONAL PROPOSED SHADOWS

3.10 SHADOW DIAGRAMS

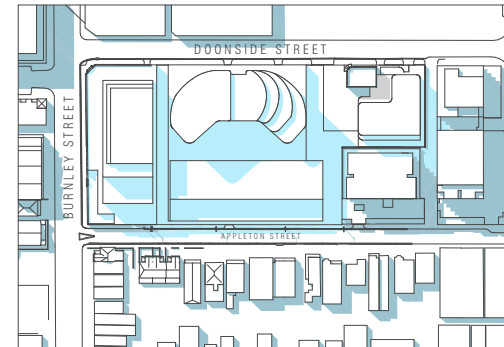
64



22 SEPT - 01 PM

- EXISTING SHADOWS
- ADDITIONAL PROPOSED SHADOWS

65

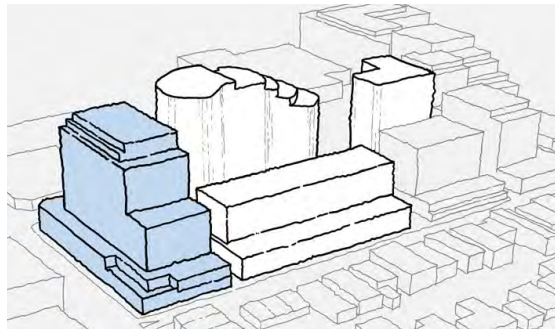


22 SEPT - 02 PM

3.11 BUILDING FINISHES AND MATERIALS

Building A

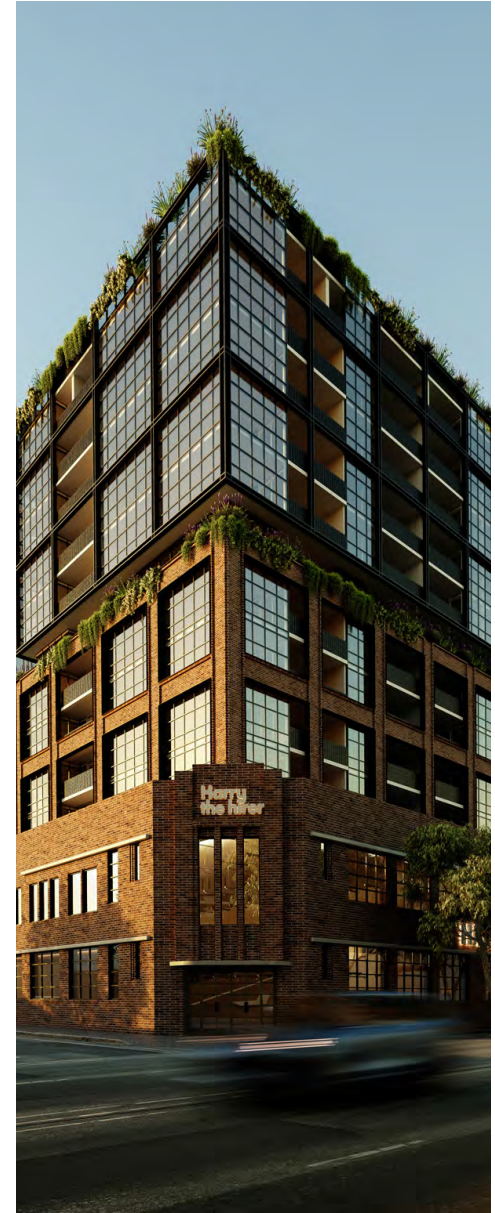
The driving force behind the architectural language of this building stems from the retainment of the heritage brick wall on the ground plane. The proposed building, located above the podium is set back from the existing brick wall and transitions from a brick frame facade on the lower floors to a paired back steel framed facade with the upper floors capturing sweeping city views to the west. The materiality acknowledges Richmond's industrial legacy by celebrating the presence of brick, creating a sense of familiarity through place and context.



INSPIRATION



INSPIRATION

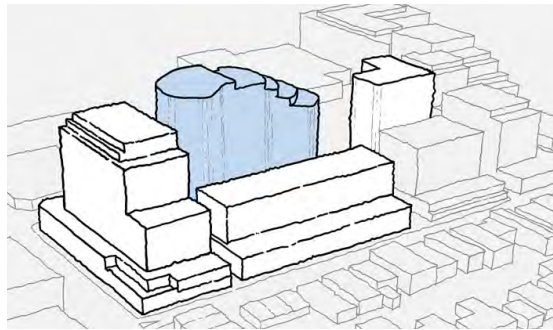


ARTIST IMPRESSION

3.11 BUILDING FINISHES AND MATERIALS

Building B

Acting as an anchor to the precinct, Building B is positioned with an expansive north-facing aspect which benefits the apartments across the length of the facade. The ground plane podium ties in with the industrial materiality and continues the ground plane expression from Building A. With the curvilinear floorplates above, the design intent is to present a 'light' expression which celebrates the sculptural possibilities across the site. Landscaped vertical trellises across the facade further enrich the precinct's connection to its natural environment.



INSPIRATION



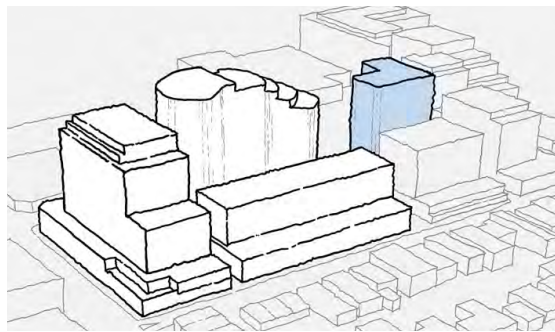
INSPIRATION



* ARTIST IMPRESSION

3.11 BUILDING FINISHES AND MATERIALS

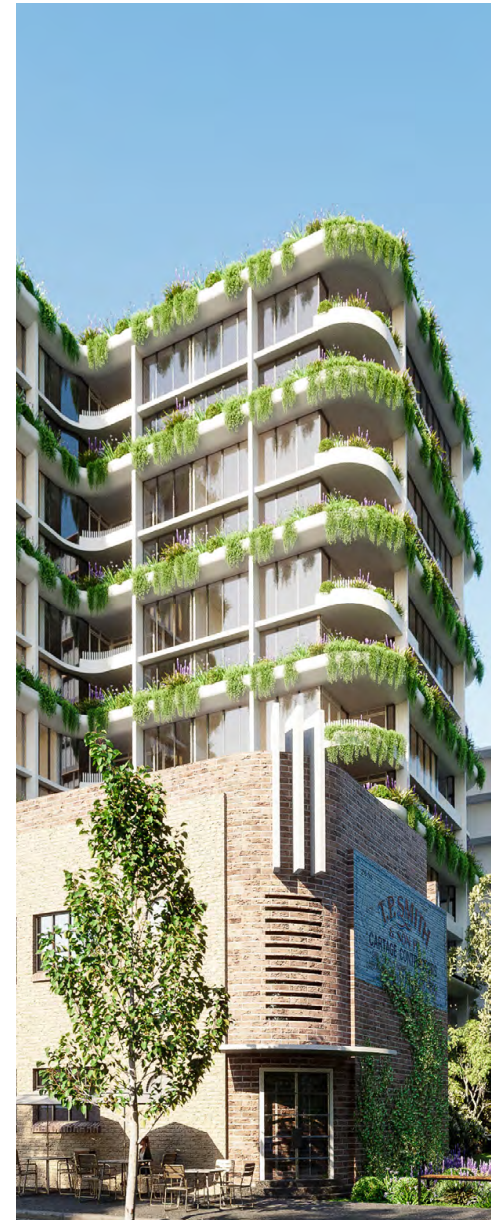
70 Building C
When progressing along Doonside St, Building C, presents itself with its masonry form and curved edges, creating a dialogue to the existing curvilinear Repco building in the foreground. When approaching this building from the internal laneways, the park presents itself and will be a hub of activity for the residents and surrounding community. The injection of landscaped planter boxes across the balconies of Building C enhances the connection to the park as well as softens the robust form.



INSPIRATION



INSPIRATION

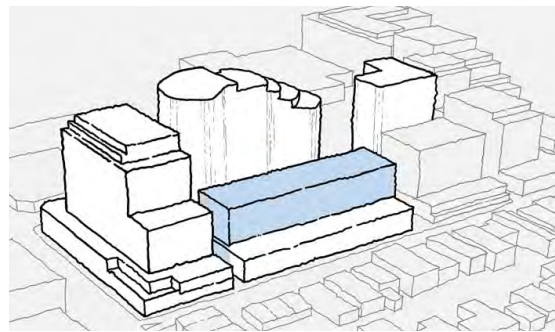


* ARTIST IMPRESSION

3.11 BUILDING FINISHES AND MATERIALS

72 Building D (Apartments)

Building D is located to the south and is the backdrop to the townhouses located across Appleton Street. Its orthogonal form and simplicity takes cues from the grid like facade of Building A and creates a coherent language between the two buildings when experienced from the southern end of the precinct.



INSPIRATION



INSPIRATION

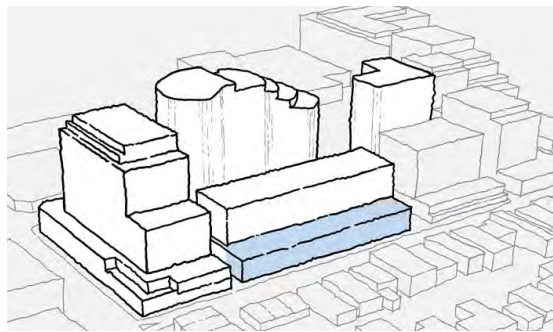


* ARTIST IMPRESSION

3.11 BUILDING FINISHES AND MATERIALS

74 Building D (Townhouses)

There will be a row of 3-level townhouses located on the south side of the development on Appleton Street. Emphasis is placed on expressing a textured and engaging street front to reflect the sense of scale and fine grain street character of the worker's cottages opposite on Appleton Street. A sense of history and place is present through the use of brick, masonry and metal, which visually ties in with Building A's existing podium. This reinforces the relationship of individuality and unity through a consistency of materials combined with subtle modulations of form and expression across the site.



INSPIRATION



INSPIRATION



INSPIRATION



INSPIRATION

3.12 DEVELOPMENT SUMMARY

Building	Residential Dwellings	Commercial Floor Area (sqm)
Building A	120 - 135	4,500 - 5,500
Building B	275 - 330	4,000 - 5,000
Building C	65 - 80	1,500 - 2,000
Building D	80 - 100	2,000 - 3,500
Total	545 - 645	12,000 - 16,000



4.0 OPEN SPACE AND LANDSCAPE

78

4.1 Site Analysis

4.2 Landscape Concept

4.3 Public Benefit

79

4.1 SITE ANALYSIS

80 Doonside Street

Aside from the recent street tree planting outside the development on the corner of David Street, Doonside Street does not have any street trees.

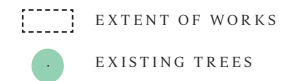
A medium sized Gum is located just within the property boundary to the west to the vehicle entry to the site and sits within the footprint of the proposed building. Insignificant small trees and shrubs such as Fig and Pittosporum are located in a garden bend along the wall of heritage building at 26 Doonside St.

Burnley Street

Medium-sized Platanus orientalis trees are planted in the roadway of Burnley Street breaking up the parallel parking. While trees on the site side of the street appear, for the most part well formed, trees on the opposite side of the road sit under power lines and have been heavily pruned.

Appleton Street

Gleditsia triacanthos are located in the roadway, on the development side of Appleton St. These trees are well formed and are better suited to being located under the power lines with only minor pruning to the top.



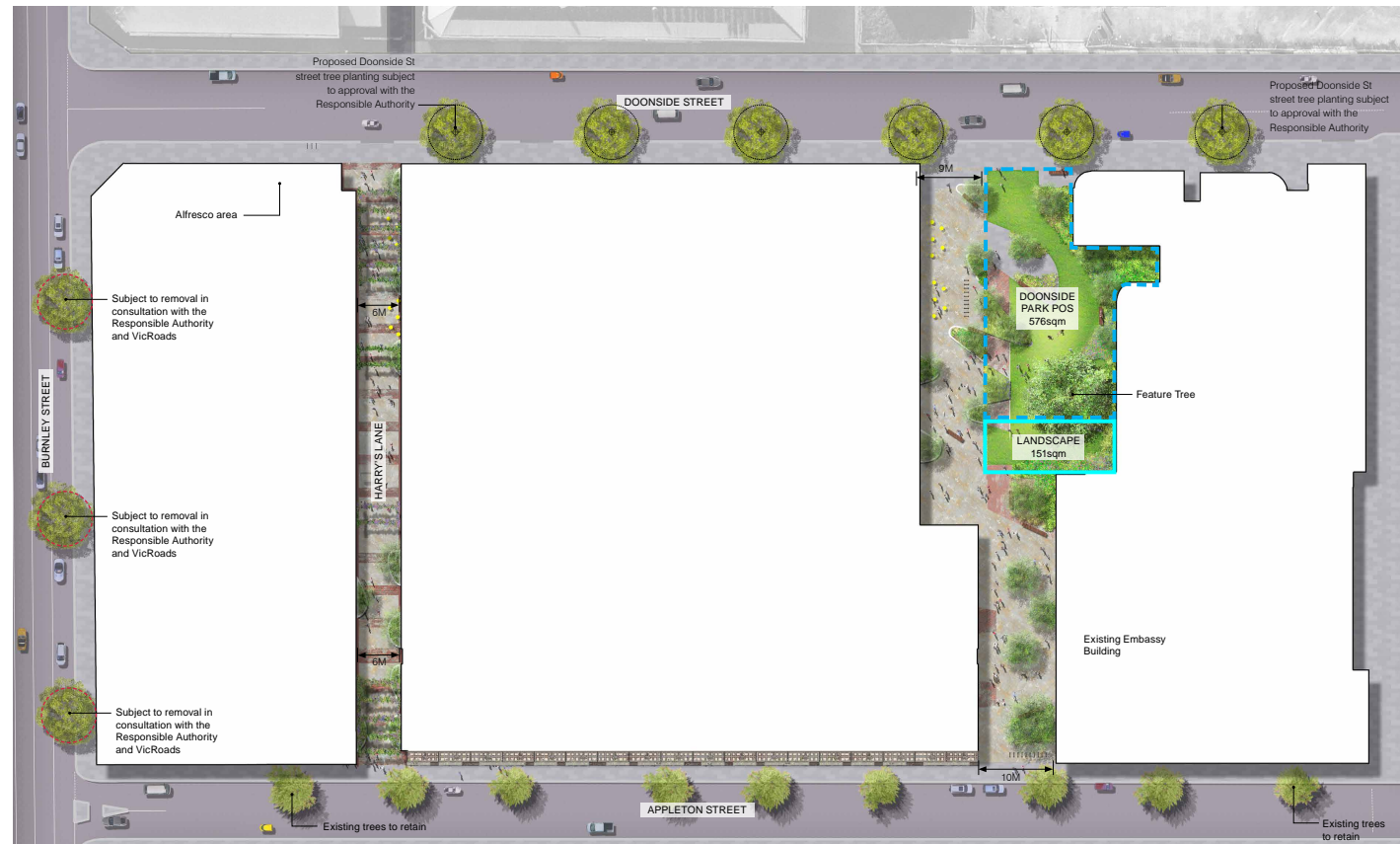
4.2 LANDSCAPE CONCEPT

Public Realm Upgrades

The development will contribute to the public realm with upgrades to Doonside, Appleton and Burnley Street interfaces through garden bed and tree planting, by upgrading footpaths and additional public seating, bike hoops and bins.

Doonside Park and Harry's Lane will be publicly accessible day and night. Seating, lighting, bike parking and bins located throughout the precinct, adding to public amenity.

Within the development, pavement and lane-ways materials will consist of areas of stone paving and concrete, complimented with salvaged brick from demolition.



4.2 LANDSCAPE CONCEPT

84 Doonside Park

The development sets to provide a high-quality pocket park for its' residents, visitors and the broader community. The public open space of 576sqm and the adjacent complementary landscaping of 151sqm will engage with the full width of the lane which is designed to read as part of the park, including the southern extent of the laneway.

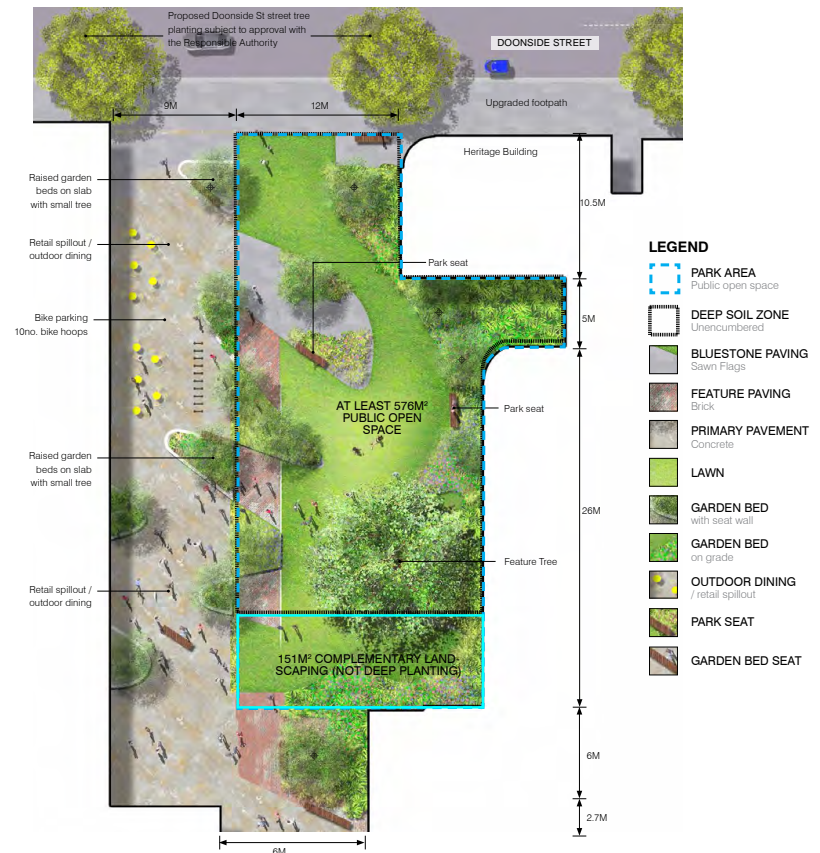
The parks 12m Doonside Street frontage sits along side a 9m metre wide pedestrian laneway connecting from Doonside to Appleton Street. The eastern side of 9m wide shared pedestrian and cycling path demarcates the edge of the Doonside Park public open space.

The western side of the park lane has an active retail edge, providing all day activation and passive surveillance of the park space.

The key feature of the park is a specimen tree amongst a rich assortment of garden bed planting. This tree will provide verticality and canopy cover to the public park. The majority of the park consists of a deep soil profile unencumbered. The complementary landscape provided contains shallow soil and features raised garden beds to allow the area of lawn and garden bed situated over the carpark aisle below, where deep soil is not possible, to gain a minimum of 600mm depth of soil.

Garden beds to the west of the pedestrian

path will be raised planter built upon the structural slab. Both the public open space and lane side of the park will provide public seating.



4.2 LANDSCAPE CONCEPT

86 Landscape Management

WSUD & Irrigation

Street trees added as part of upgrades to Doonside Street will receive passive irrigation from the road stormwater run-off.

Where garden beds meet flush with the adjacent pavement, stormwater run-off will be directed into the garden as passive irrigation. Raised planters will be drip irrigated from stormwater tanks and programmed to allow for cycles of 'wet and dry' that allows beds to dry out on a regular cycle but without causing plant losses

Hardscape within the laneways will direct stormwater into holding tanks to be used as irrigation for garden beds and lawn areas.

Drought tolerant, primarily Australian native plant species are chosen for the precinct.

Maintenance

As a public open space managed by the City of Yarra, Doonside Park will consist of primarily council standard materials (such as bluestone paving, lawn and garden beds) and furniture and fixtures (such as seating, light poles and bike hoops). The garden bed and lawn design will require standard management practises such as mowing, weed removal, mulching and seasonal pruning. The delivery of the park will be resolved in consultation with council.

The areas of the precinct outside of park will be actively maintained by the development. Maintenance items will include, the weeding and re-mulching and fertilizing of garden beds, replacing dead plants and pruning. Other maintenance items will include the cleaning and repairing of paved surfaces, garden beds and furniture.

Site Remediation

All existing site soil will be removed from site. Clean, quality topsoil will be imported for use in the garden beds and lawn areas.

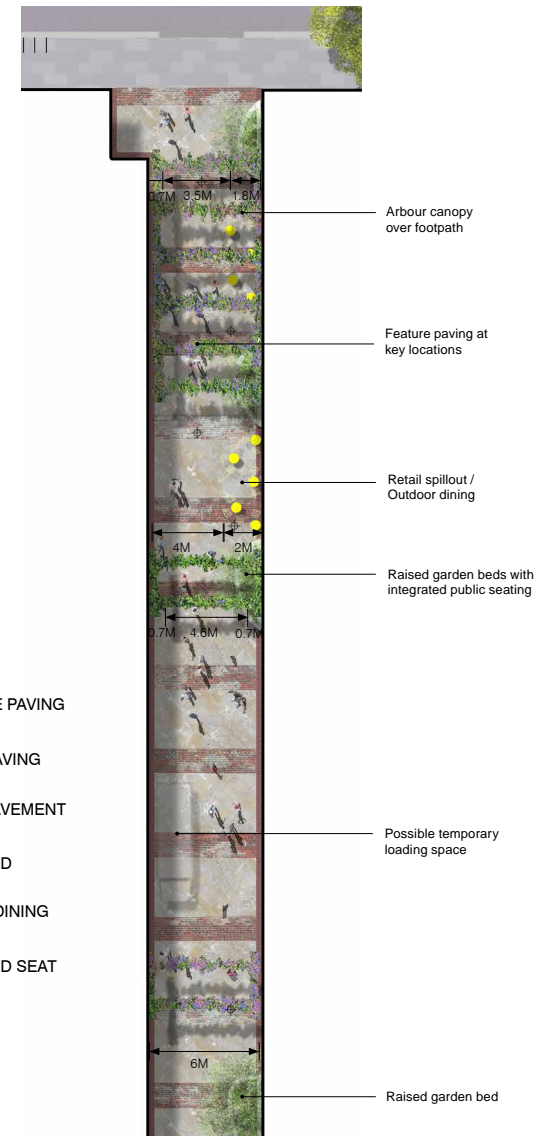
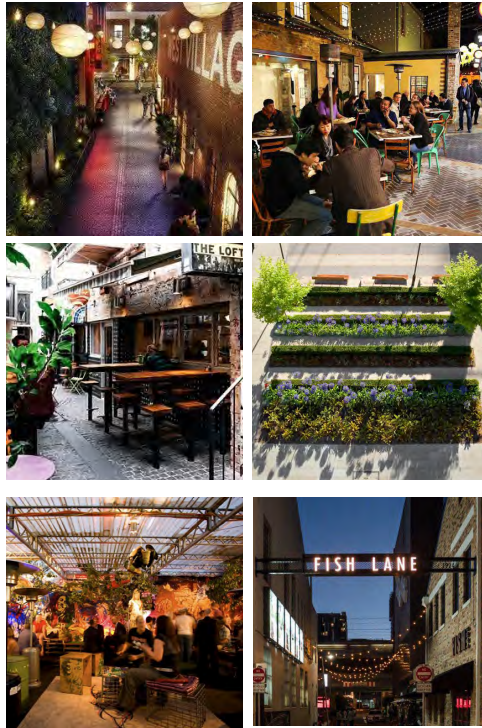


4.2 LANDSCAPE CONCEPT








Active Laneways

Harry's Lane represents the gateway to the precinct. The 6m wide lane connects through to Appleton Street, and is lined with raised garden beds and public seating area.

A proposed overhead arbour system would add vertical greening to the laneway, and give a sense of intimacy and privacy from the towers above.



LEGEND

-  ARBOUR
-  BLUESTONE PAVING
Sawn Flags
-  FEATURE PAVING
Brick
-  PRIMARY PAVEMENT
Concrete
-  GARDEN BED
with seat wall
-  OUTDOOR DINING
/ retail spillout
-  GARDEN BED SEAT

4.3 PUBLIC BENEFIT

90 External Amenity

- No overshadowing of the properties on the southern side of Appleton Street between 10:00am and 2:00pm at the September equinox.
- No overshadowing of the footpath on the western side of Burnley Street from 11:00am at the September equinox.
- A built form separation adjacent the Embassy Apartment building greater than what DPO15 contemplates.
- Built form separation within the site to allow for visual permeability and a built form that is responsive to its site context that transitions to sensitive interfaces.
- The prioritisation of pedestrian connectivity, with approximately 1,200 square metres of publicly accessible laneways proposed.
- Coordination of the siting and design of the north-south pedestrian links with future pedestrian laneways on adjoining properties.
- Pedestrian links that are functional, well designed and incorporated CPTED principles.
- High quality architectural design which includes contemporary architectural detailing, active frontages, varied street walls and adaptive reuse and restoration of existing heritage buildings.

- Public realm improvements around the perimeter of the site, including new landscaping opportunities, street furniture and reinstatement of redundant vehicle crossovers.
- A built form and mass that does not result in any unsafe wind environments.
- Connectivity to the wider shopping centre precinct and future expansion.
- Employment generating activities of approximately 12,000 square metres, significantly greater than the minimum 9,000 square metres sought by DPO15.
- Vehicle access limited to Doonside Street.
- Increased public amenities and activated commercial/retail space adjacent to the north-south pedestrian walkway in lieu of built form against the neighboring embassy apartments.

Internal Amenity

- Provisions for 576 square metres (4.5% total land area) public open space, and 151 square metres of complementary landscaping connected to the south of the public open space for public use.
- Access to amenities and places of employment within the site, for future residents.
- Solar access to the public open space greater than what DPO15 contemplates.

- Deep soil planting opportunities within the public open space.
- A publicly accessible north-south link that receives adequate solar access between 10am and 2pm at the equinox that includes passive recreational areas.
- Best practice ESD initiatives, which includes a high level of daylight access to future residents and a net zero carbon development target.



5.0 HOUSING DIVERSITY

92

5.1 Housing Diversity and Adaptability Assessment

93

5.1 HOUSING DIVERSITY AND ADAPTABILITY ASSESSMENT

94 Summary of Key Conclusions & Recommendations

Summary of Proposed Housing and Population Outcomes In summary, the proposed development will:

- Generate between 545 to 645 apartments;
- Indicatively, 30% of all dwellings will be 1 bedroom apartments, 60% will be 2 bedroom and 10% will be 3 bedroom dwellings; and
- Based on 0.9 persons per bedroom, the subject site will generate a resident population of between approximately 880 to 1,045.
- Represent 4.3% to 5.0% of all dwellings in North Richmond by 2041;
- Represent 12.7% to 15.4% of all new dwellings to be delivered in North Richmond by 2041; and
- Represent 3.6% to 4.2% of the total population of North Richmond by 2041.

It is anticipated that the proposed development will broadly reflect the current profile of household types of people living in high density developments across the City of Yarra which currently consists of:

- A high proportion of lone person households (38%);
- Couple families with no children (30%);
- Group households (10%);
- One parent families (10%); and
- Couple families with children (9%).

Key Housing Diversity Outcomes

When compared to Richmond North and the City of Yarra, the proposed development will deliver:

- A much higher proportion of high-density apartments (100%) than Richmond North (57%) or the City of Yarra (37%);
- Subject to the outcome of discussions with prospective Housing Associations / Providers, a similar proportion of social housing as the City of Yarra (10%), but lower than the North Richmond (20%);
- A much higher proportion of 1 bedroom dwellings (30%) compared to North Richmond (21%) and the City of Yarra (18%);
- A much higher proportion of 2 bedroom dwellings (60%) compared to North Richmond (40%) and the City of Yarra (20%); and
- A much lower proportion of 3 bedroom dwellings (10%) compared to Richmond North (23%) and the City of Yarra (40%).

Social and Affordable Housing Outcomes

Overall Outcomes: Given the anticipated dwelling yield ranging from 545 to 645 dwellings, the proposed development will likely generate a requirement for 55 to 65 affordable homes.

Social Housing: Based on case studies presented in Section 3.11 of the main report, there are potentially a wide range of models and

strategies for achieving the affordable housing requirement for the proposed development. Whilst there may be many potential models of provision the broad types can be summarised as:

- Purchase land and / or dwellings (the Registered Housing Association may purchase land / or dwellings directly from its own funds or via equity partners, or via an application for some form of Government funding program - e.g. Federal Government NRAS program. External funding applications may not be successful and also take some time to be evaluated. Any arrangements between the Registered Housing Association and the developer are likely to be subject to the outcome of these processes.);
- Head lease agreements;
- Management of dwellings; and
- Rent-to-buy.
- However, the developers of the subject site have indicated they have commenced discussions with a number of Registered Housing Associations (refer to Appendix 3.9 of the main report) with a view to incorporating a component of social housing within the proposed development. The proposed development represents a significant contribution toward social and affordable housing outcomes in the local area including increasing the level of supply, and creating higher quality, better configured homes which better able to respond to

changing demographic needs.

Although there are a potentially a wide range of priority population target groups for the proposed social housing initiative, much of the detail about who to prioritise will need to be further discussed with the prospective Registered Housing Association / Provider partner. However, based on the analysis presented in the report the following rental demographic groups should be prioritised:

- Very low to low income lone person households;
- Very low to low income couples with no dependents; and
- Very low to low income families (with one or two parents) and dependent children.

Proposed Affordable Housing Model

The proponent intends to pursue its affordable housing obligations (i.e. 10% of all new dwellings).

The broad process the proponent will undertake to pursue this option will consist of the following steps:

- The proponent will interview a range of interested Registered Housing Associations to partner with.
- Select one preferred partner.
- Confirm the number and type of apartments required and what the likely target population target groups for these dwellings will be.
- Determine where and how the social housing dwellings are to be located within the development.
- A broad model of provision will then need to be negotiated and confirmed between the developer and the

Registered Housing Association.

95

6.0 TRANSPORT WORKS

96

6.1 Transport Works

97

6.1 TRANSPORT WORKS

98 An assessment/commentary in relation to each of the items required to be addressed within the Traffic Works Assessment listed at the Schedule to the Development Plan Overlay is provided in the table below. Reference is made to the Traffix Group Traffic Works Assessment Report (Ref G30102R-01D dated December 2021) for detailed information relating to each response.

<i>Item</i>	<i>Response</i>
An existing conditions assessment, including existing and approved vehicle and loading access arrangements associated with the Victoria Gardens Shopping Centre with capacity to interact with traffic from the development.	Utilising traffic surveys and information provided by the Shopping Centre and neighbouring developments, we have undertaken an assessment of the existing road network operating conditions. The network operates currently under 'excellent' conditions and provides for a variety of access for multiple modes.
Details of any development staging.	The Development Plan contemplates a 4 Stage development, starting at the Burnley Street frontage (with the existing heritage building and Harry the Hirer Restricted retail use) and some residential and commercial uses above. The staging progresses to the east.
Consultation with the owner of the Victoria Gardens Shopping Centre	There has been consultation with the owner of Victoria Gardens SC to discuss both existing access requirements as well as future development proposals on their site. These discussions are ongoing.
A site layout plan showing convenient and safe primary vehicle access, including: Primary vehicle access to and from Doonside Street; any vehicle access to Appleton Street to be a secondary access point; no direct vehicle access to or from the site via Burnley Street.	The Development Plan includes a site layout plan with convenient and primary vehicle access to/from Doonside Street via two locations. All vehicle access is via Doonside Street and there is no vehicular access to Appleton Street or Burnley Street
Details regarding the layout, cross section and function of any internal street or laneway network.	All internal laneways will be pedestrian only and provide for appropriate landscaping and open space contributions.
On site car parking and bicycle parking provisions and allocations.	<p>The Development Plan contemplates a car parking dispensation complemented by a generous bicycle parking provision, with varying rates for residential, retail and commercial uses as identified below.</p> <p>Car Parking Car parking is intended to be allocated generally as:</p> <ul style="list-style-type: none"> • 2 car share spaces. • Approximately 220-270 car spaces for the commercial uses, as a mixture of staff and visitor provisions (this equates to an average rate of 1.5 spaces per 100 square metres). • The remaining circa 550-560 car spaces allocate for residents on demand (an average rate of 0.85-1.0 cars per dwelling). <p>Bike Parking Bike parking is intended to be allocated generally as:</p> <ul style="list-style-type: none"> • Staff parking will be provided at a typical rate of 1 space per 100 square metres • Resident parking will be provided at a minimum rate of 1 space per dwellings, provided within separate secure areas (approximately 545-645 spaces expected to be provided). • Parking for visitors will primarily be provided at ground level (but can be within basement), and will achieve minimum rates of 1 space per 10 dwellings, plus 1 space per 500 square metres of commercial floor area (at least 84 visitor spaces are expected)

6.1 TRANSPORT WORKS

<i>Item</i>	<i>Response</i>
Expected traffic volumes and impact on the existing road network, including but not necessarily limited to Doonside Street, Appleton Street and Burnley Street. This assessment is to include details of any assumptions relied upon.	A traffic assessment including allowances for the subject site, nearby development approvals and the potential future development of the Victoria Gardens site has been undertaken. It identifies that signalisation of the intersection of Burnley Street/Doonside Street/Buckingham Street is triggered by the final Stage of the Development Plan and/or any further development in the area not already approved. No mitigating works are identified for other intersections, as all access is via Doonside Street.
The Transport Works Assessment must include consideration of any development stages and approved/current development applications within the immediate area surrounding the site.	The traffic impact assessment considers surrounding approved and current development as currently understood to be proposed.
The assessment is to: identify mitigating works required for each development stage in the development plan	Signals at the intersection of Burnley Street/Doonside Street/Buckingham Street are identified as being required at Stage 4 of the development.
Assess whether a two way or a four way signalised intersection between Burnley Street/Doonside Street/Buckingham Street is required and the trigger for providing the signalised intersection to the satisfaction of VicRoads	Due to the close spacing of the intersections, any signalisation of Doonside Street would require either incorporation of Buckingham Street into the signals, or implementation of physical controls to make movements to/from Buckingham Street left-in/left-out – or even full closure of the eastern end of the road. Our office has prepared a Concept Plan showing potential signalisation of the two intersections to form a 4-way intersection. This will deliver improved and appropriate pedestrian, cycle and vehicular movements and controls as well as appropriate capacity. Discussions with Council/DoT are ongoing.
Identify a new intersection layout and operation, if required, approved by VicRoads in consultation with the Responsible Authority.	
Details of any works or treatments proposed to Doonside Street or Appleton Street or the nearby road network.	The footpath along Doonside Street at the site frontage will be reconstructed. A streetscape improvement concept is being discuss with the owners of Victoria Gardens to address additional improvements. There is no access proposed to Appleton Street, and therefore limited improvements or modifications are necessary.

<i>Item</i>	<i>Response</i>
Determine the likely increases to pedestrian and bicycle movements generated by the site and the likely distribution of those movements. Demonstrate how the subject site will prioritise those movements and provide convenient connections to existing infrastructure.	The Development Plan considers significant increases in pedestrian and cyclist movements by promoting these modes with generous bicycle parking provisions, limited car parking supply, and provision of pedestrian and cyclist only zones within the Development Plan areas.
Measures to reduce conflict and improve pedestrian and bicycle amenity (if applicable).	All ground-level laneways will be pedestrian and cyclist only and physically restricted to prevent vehicle access.
Indicative loading arrangements, with loading to be undertaken on site and conflict between the loading bay(s) and car parking areas and non- motorised transport to be minimised.	All loading is proposed on-site with dedicated ramps and zones within the car park for users. A separate access ramp is also provided for cars to improve management of vehicle conflicts.
Estimate the type and number of loading/unloading activities associated with the development and provide information on appropriate loading/unloading facilities to service the various uses proposed.	In the order of 28 loading and waste movements are expected to be generated by the development as a whole per day, including vans and trucks. All loading access will be via 8.8 metre Medium Rigid Vehicles or smaller and will be provided with dedicated on-site loading zones.
Access to the site by trucks is to be via Doonside Street.	All vehicle access to the site is via Doonside Street.
Details regarding on-site waste collection, with waste vehicles accessing the site from Doonside Street	Waste collection will be managed by private contractor and collected on-site with separate collections for different uses. A Waste Management Plan will be prepared that contemplates collection of 4 waste streams for each use as required by the Sustainability Victoria Guidelines.

7.0 ENVIRONMENTALLY SUSTAINABLE DESIGN

7.1 SUSTAINABILITY COMMITMENTS

102 7.1 Sustainability Commitments

ENVIRONMENTALLY SUSTAINABLE DESIGN

103

An environmentally sustainable design assessment must be prepared that sets out how future development may achieve:

Water sensitive urban design objectives and requirements pursuant to the Yarra Planning Scheme; and

The WSUD objectives will use either the STORM tool or MUSIC assessment to demonstrate Best Practice pollutant removal targets are met in line with planning scheme clause 22.16-2 and 53.18-5. A combination of rainwater tanks, raingardens, proprietary devices and other treatment options will be explored when proposing a compliant stormwater solution.

Environmentally sustainable design objectives and requirements pursuant to the Yarra Planning Scheme

An SMP report is to be prepared in accordance with planning scheme clause 22.17-2. Objectives relating to energy, water, IEQ, stormwater, transport, waste and urban ecology will be addressed. Improvements on minimum energy efficiency requirements for dwellings is likely to form a central focus of the SMP assessment.

A BESS or Greenstar assessment is to be included to support the SMP report and ESD initiatives.

ESD Aspirations for the site include:

- Target of a net zero carbon development
- To exceed the 80% minimum daylight requirement for internal amenity to dwellings
- No natural gas connections to dwellings
- Align with an embedded energy network provider to procure 100% greenpower or equivalent renewable energy for the development

8.0 DRAINAGE

104

8.1 Stormwater, Drainage and Flood Analysis

105

9.0 COMPREHENSIVE HERITAGE ANALYSIS

9.1 HERITAGE ASSESSMENT

108 9.1 Heritage Assessment

109

The Heritage consultant assessed that the Development Plan has been prepared with careful regard for character and setting of the heritage buildings on the subject site. Impacts on adjacent heritage overlay places have also been taken into consideration.

The industrial history of the subject site is celebrated through the retention of significant heritage fabric and also in the indicative palette of building materials and architectural treatments throughout. The key objectives of the Development Plan Overlay are met in terms of respecting the scale and form of the heritage buildings and establishing a firm basis for managing the significance of the site and its relationship with its surroundings.

In addition to having been prepared in general accordance with the relevant DPO, the Development Plan follows precedent established by other completed and approved developments the City of Yarra involving industrial heritage places in respect to the extent of retention of heritage fabric and the height and upper level setbacks of new built form.

10.0 NOISE IMPACTS

10.1 NOISE ASSESSMENT

110 10.1 Noise Assessment

Requirement:

Development that includes residential or other sensitive uses must be designed and constructed to include noise design and noise attenuation measures that achieve the noise levels that are calculated by applying the method in Schedule B of State Environment Protection Policy No. N-1 'Control of Noise from Commerce, Industry and Trade (SEPP N-1). (or the equivalent environment reference standard to be introduced under the Environment Protection Amendment Act 2018).

Approach:

New Environment Protection Regulations (EP Regulations) in Victoria started to take effect on 1 July 2021. The EP Regulations include the VIC EPA, Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues, Publication 1826.4, dated 1 July 2021 (EPA Noise Protocol) as the new reference document which sets the required approach to determine noise limits and assess noise emissions. The EPA Noise Protocol has replaced SEPP N-1 and SEPP-N2.

The acoustic town planning report to accompany any subsequent permit application will include a summary of the EPA Noise Protocol requirements including the determination of noise limits for the project based on assumed background noise levels in the area.

The report will also suggest noise control measures to be developed further as design progresses.

We have assumed that there is potential for music noise to be generated by the proposed retail area on the Ground Level of Tower A. Once specific details and operational conditions are defined for this space a detailed assessment may be required. Noise limits may also have to be revised based on actual measured background noise levels.

Requirement:

For the purpose of assessing whether the above noise standards are met, the noise measurement point shall be located inside a habitable room of a noise sensitive residential use with windows and doors closed.

Approach:

Based on the EPA Noise Protocol, the measurement point should be outdoors, but there may be situations where it may have to be measured indoors.

11.0 DEVELOPMENT STAGING

112

11.1 Development Staging Plan

113

11.1 DEVELOPMENT STAGING PLAN

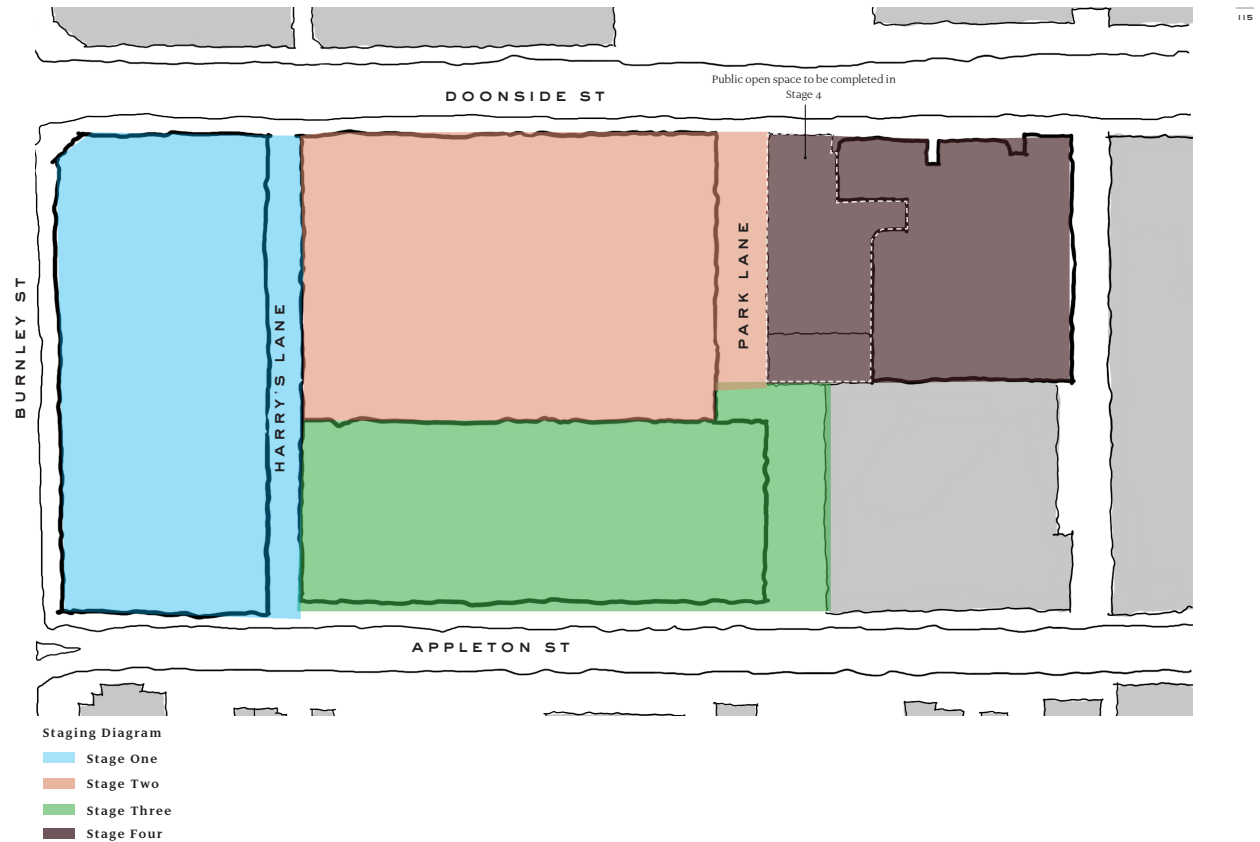
114 The project is proposed to be delivered as one stage, however should the need arise the project has been designed to be staged.

There are four proposed stages that are clearly separated by the internal laneway network.

Critical to the successful staging of the project the following elements have been considered:

- The location of the main vehicle entry to the basement will be included in stage one.
- The location of loading areas and waste collection will be included in stage one.
- The extent of basement will be determined by the required level of carparking provision to service the relevant stages.
- Temporary structures will be used to hoard off the sections of basement that will not be constructed until the appropriate time.
- All incoming services including the electrical substation will be included in the first stage.
- All subsequent stages will be able to plug into the initial service connections.
- Provision of the southern portion of Park Lane in stage three
- Completion of the new public open space park in stage four

If the project is required to be staged then interim measures will be put in place to ensure the activation of the constructed laneway network and associated retail frontage.



1
[





LANDSCAPE REPORT

81-95 BURNLEY STREET
& 26-34 DOONSIDE STREET

T.C.L

V8_14 FEBRUARY 2023

SITE ANALYSIS

LOCATION

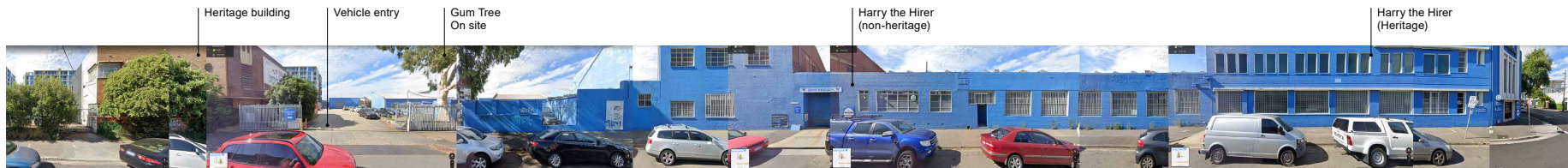


N

SITE ANALYSIS
SITE



SITE ANALYSIS DOONSIDE STREET



Doonside Street - Southern side (view of site)



Doonside Street - Northern side (view from site)

SITE ANALYSIS BURNLEY STREET



Burnley Street - Eastern side (View of site)



Burnley Street - Western side (View from site)

SITE ANALYSIS

APPLETON STREET



Appleton Street - Northern side (Site)



Appleton Street - Southern side

SITE ANALYSIS

EXISTING VEGETATION

Doonside Street

Aside from the recent street tree planting outside the development on the corner of David Street, Doonside Street does not have any street trees.

A medium sized Gum is located just within the property boundary to the west to the vehicle entry to the site and sits within the footprint of the proposed building.

Insignificant small trees and shrubs such as Fig and Pittosporum are located in a garden bend along the wall of heritage building at 26 Doonside St.

Burnley Street



Medium-sized *Platanus orientalis* trees are planted in the roadway of Burnley Street breaking up the parallel parking. While trees on the site side of the street appear, for the most part well formed, trees on the opposite side of the road sit under power lines and have been heavily pruned.

Appleton Street

Gleditsia triacanthos are located in the roadway, on the development side of Appleton St. These trees are well formed and are better suited to being located under the power lines with only minor pruning to the top of their crowns.



LEGEND

-  Extent of Works
-  Existing Trees



LANDSCAPE CONCEPT PLAN



Scale 1:500 Size A3

LANDSCAPE CONCEPT PLAN

Public Realm Upgrades

The development will contribute to the public realm with upgrades to Doonside, Appleton and Burnley Street interfaces through garden bed and tree planting, by upgrading footpaths and additional public seating, bike hoops and bins.

Doonside Park, Harry's Lane and the eastern link to Appleton Street will be publically accessible day and night. Seating, lighting, public bike parking (20 hoops) and bins are located throughout the precinct, adding to public amenity.

Within the development, pavement and lane way materials will consist of areas of stone paving and concrete, complemented with salvaged brick from demolition.

Doonside Park

The development sets to provide a high-quality pocket park for its' residents, visitors and the broader community. While the public open space is 576m² of park unencumbered and gifted to Council, an additional 151m² is provided as complementary landscaping. The full width of the lane is designed to read as part of the park, including the southern extent of the laneway.

The parks 12m Doonside Street frontage sits along side a 9m metre wide pedestrian laneway connecting from Doonside to Appleton Street. The eastern side of 9m wide shared pedestrian and cycling path demarcates the edge of the Doonside Park public open space.

The western side of the park lane has an active retail edge, providing all day activation and passive surveillance of the park space.

The key feature of the park is a specimen tree amongst a rich assortment of garden bed planting. This tree will provide verticality and canopy cover to the public park. The majority of the park consists of a deep soil profile unencumbered. The specimen tree will be further elevated on a gentle mound. The complementary landscape provided contains shallow soil and features raised garden beds to allow the area of lawn and garden bed situated over the carpark aisle below, where deep soil is not possible, to gain a minimum of 600mm depth of soil.

Garden beds to the west of the pedestrian path will be raised planter built upon the structural slab.

Both the public open space and lane side of the park will provide public seating.

Active Laneways

Harry's Lane represents the gateway to the precinct. The 6m wide lane connects through to Appleton Street, and is lined with raised garden beds and public seating area.

A proposed overhead arbour system would add vertical greening to the laneway, and give a sense of intimacy and privacy from the towers above.

Landscape Management

WSUD & Irrigation

Street trees added as part of upgrades to Doonside Street will receive passive irrigation from the road stormwater run-off. Subject to resolution with council.

Where garden beds meet flush with the adjacent pavement, stormwater run-off will be directed into the garden as passive irrigation. Raised planters will be drip irrigated from stormwater tanks and programmed to allow for cycles of 'wet and dry' that allows beds to dry out on a regular cycle but without causing plant losses

Hardscape within the laneways will direct stormwater into holding tanks to be used as irrigation for garden beds and lawn areas.

Drought tolerant, primarily Australian native plant species are chosen for the precinct.

Maintenance

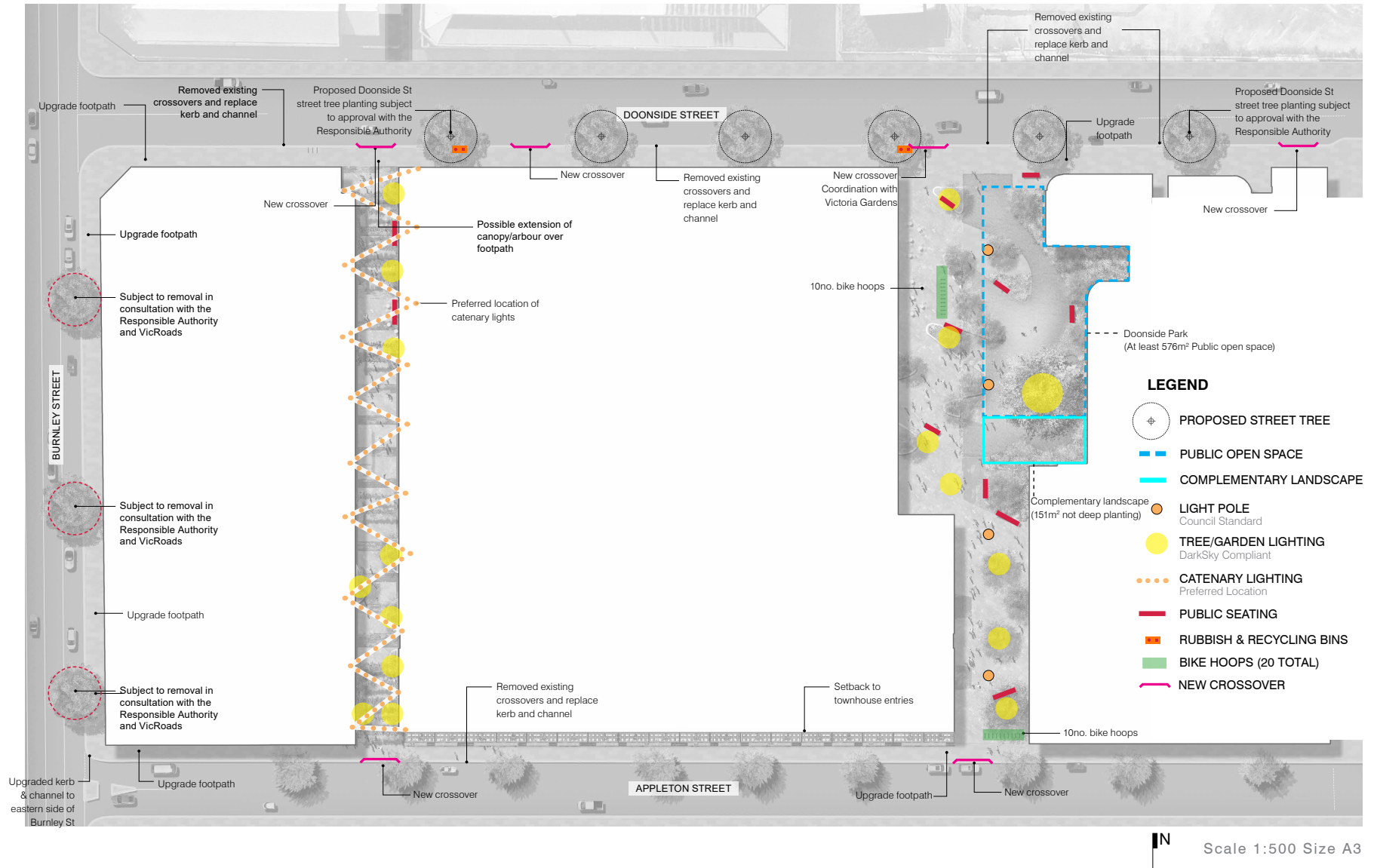
As a public open space managed by the City of Yarra, Doonside Park will consist of primarily council standard materials (such as bluestone paving, lawn and garden beds) and furniture and fixtures (such as seating, light poles and bike hoops) . The garden bed and lawn design will require standard management practises such as mowing, weed removal, mulching and seasonal pruning. I get the delivery of the park will be resolved in consultation with council.

The areas of the precinct outside of park will be actively maintained by the development. Maintenance items will include, the weeding and re-mulching and fertilizing of garden beds, replacing dead plants and pruning. Other maintenance items will include the cleaning and repairing of paved surfaces, garden beds and furniture.

Site Remediation

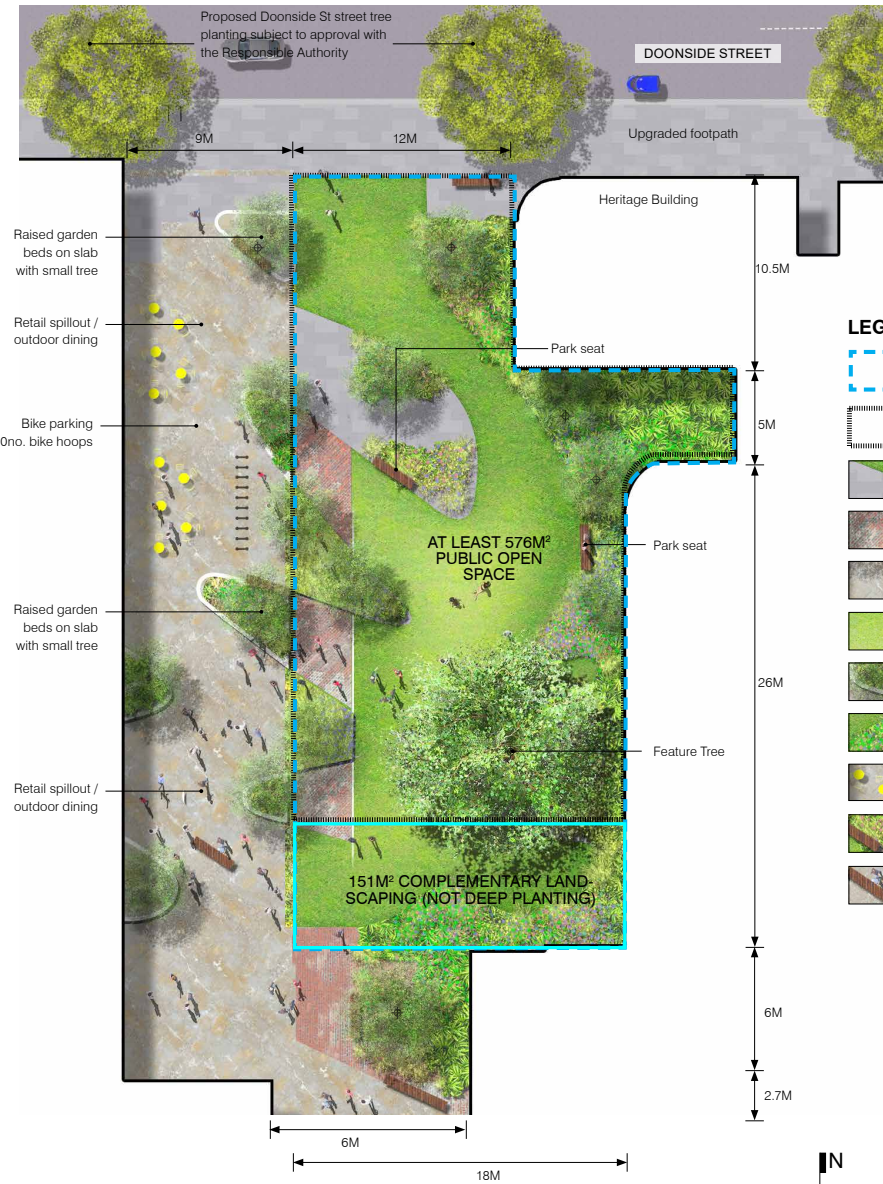
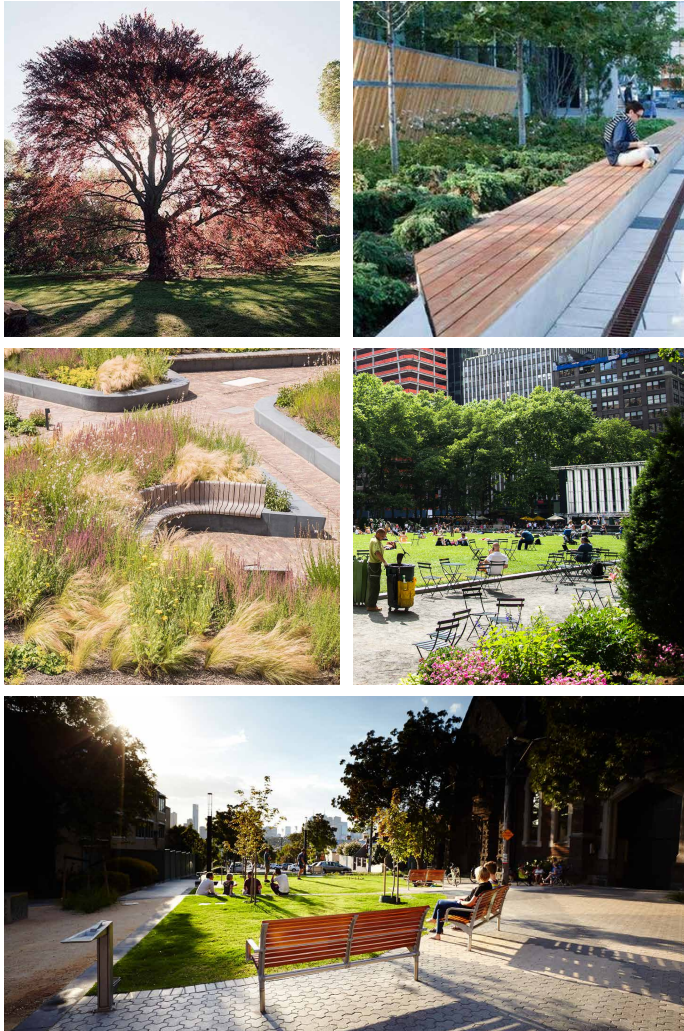
All existing site soil will be removed from site. Clean, quality topsoil will be imported for use in the garden beds and lawn areas.

PUBLIC REALM PLAN



LANDSCAPE PLAN

DOONSIDE PARK



LANDSCAPE CONCEPT SECTION

SECTION A - DOONSIDE PARK



Scale 1:75 Size A3

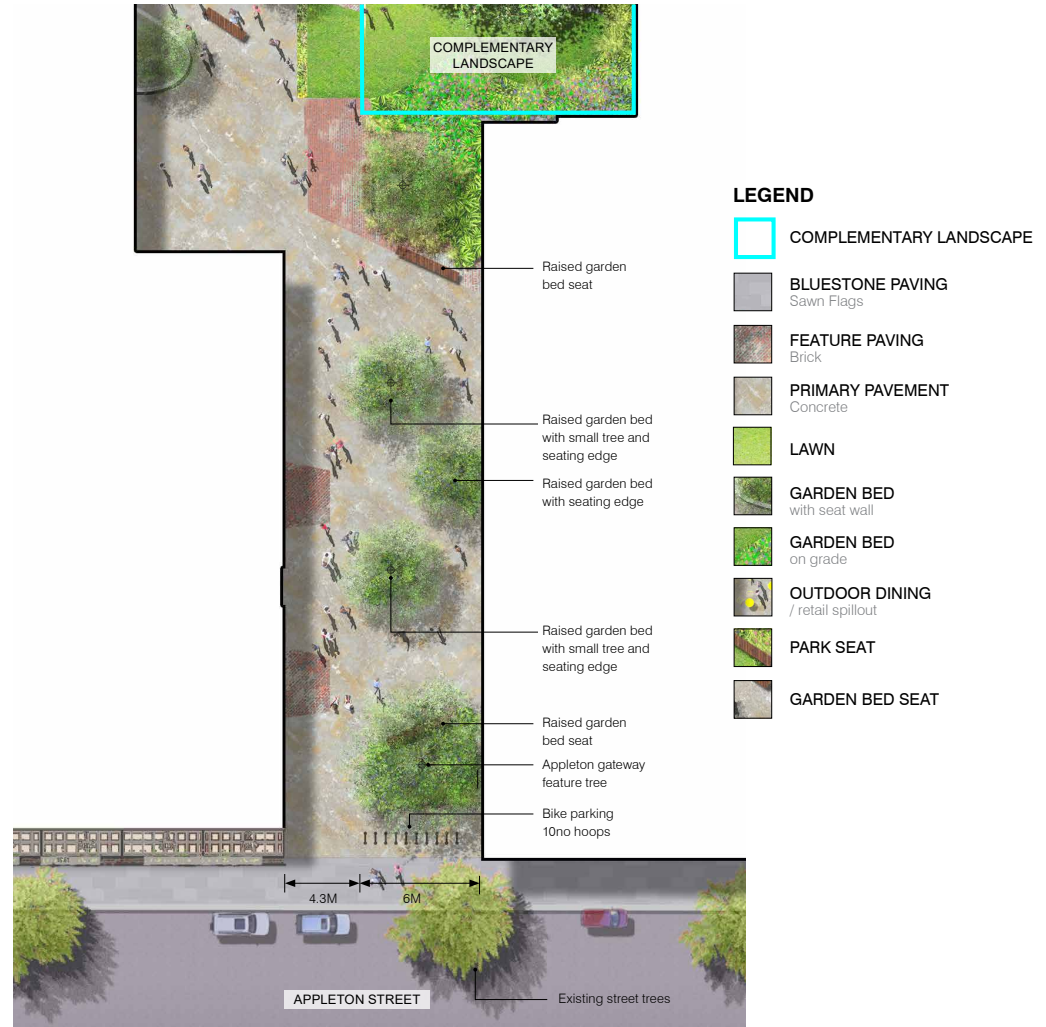
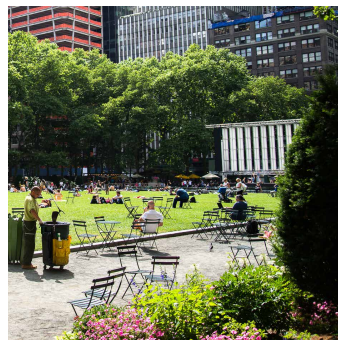
LANDSCAPE PLAN

DOONSIDE EASTERN LANE CONNECTION

A generous laneway connection will be provided from Doonside Park through to Appleton Street.

The laneway will include raised garden beds and tree planting, edged in seating. The paving materials reflect the rest of the precinct, with feature reclaimed brick paving interspersed into the concrete paving.

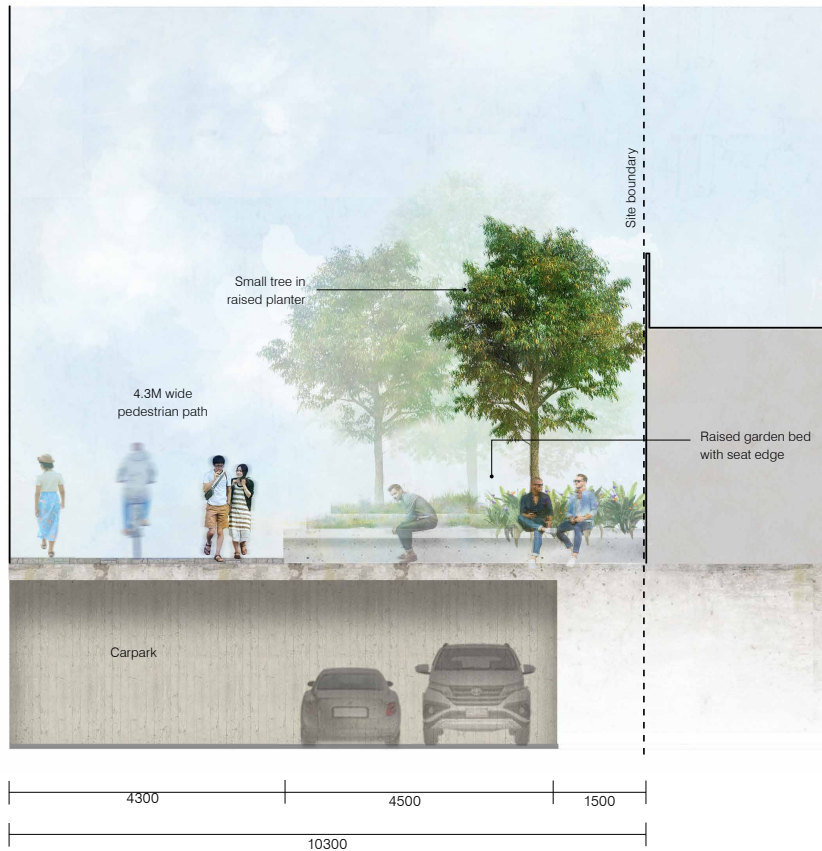
The laneway will be well lit at night, to ensure safe passage between the park and Appleton Street



Scale 1:250 Size A3

LANDSCAPE CONCEPT SECTION

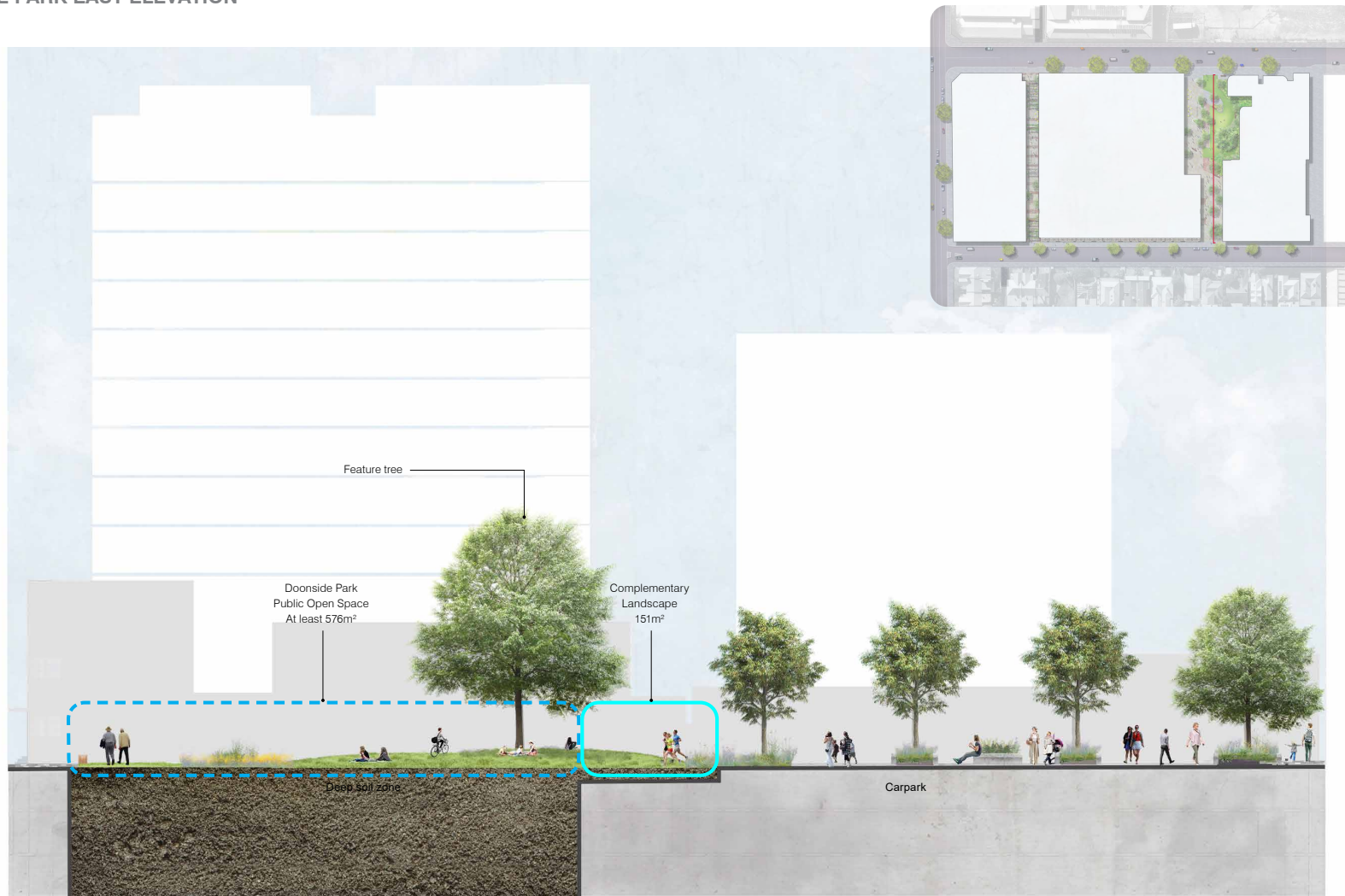
SECTION A - DOONSIDE PARK LANE



Scale 1:75 Size A3

LANDSCAPE CONCEPT ELEVATION

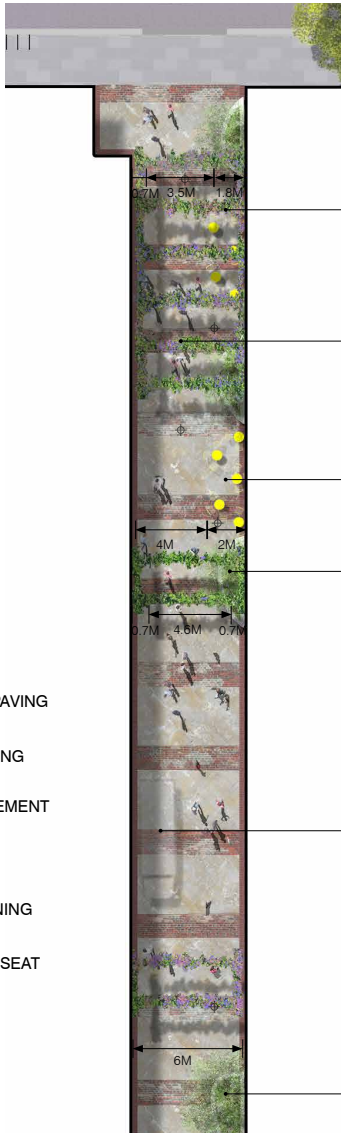
DOONSIDE PARK EAST ELEVATION



Scale 1:250 Size A3

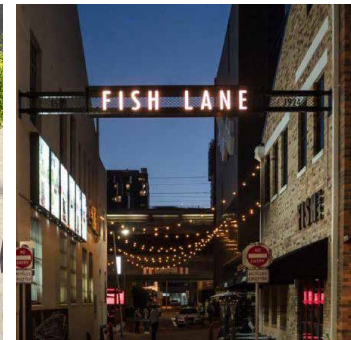
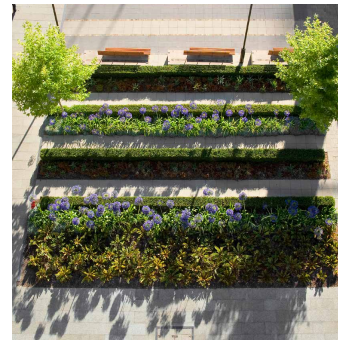
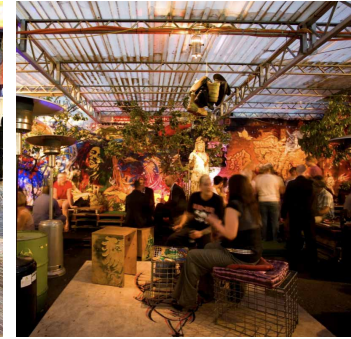
LANDSCAPE CONCEPT

HARRY'S LANE



LEGEND

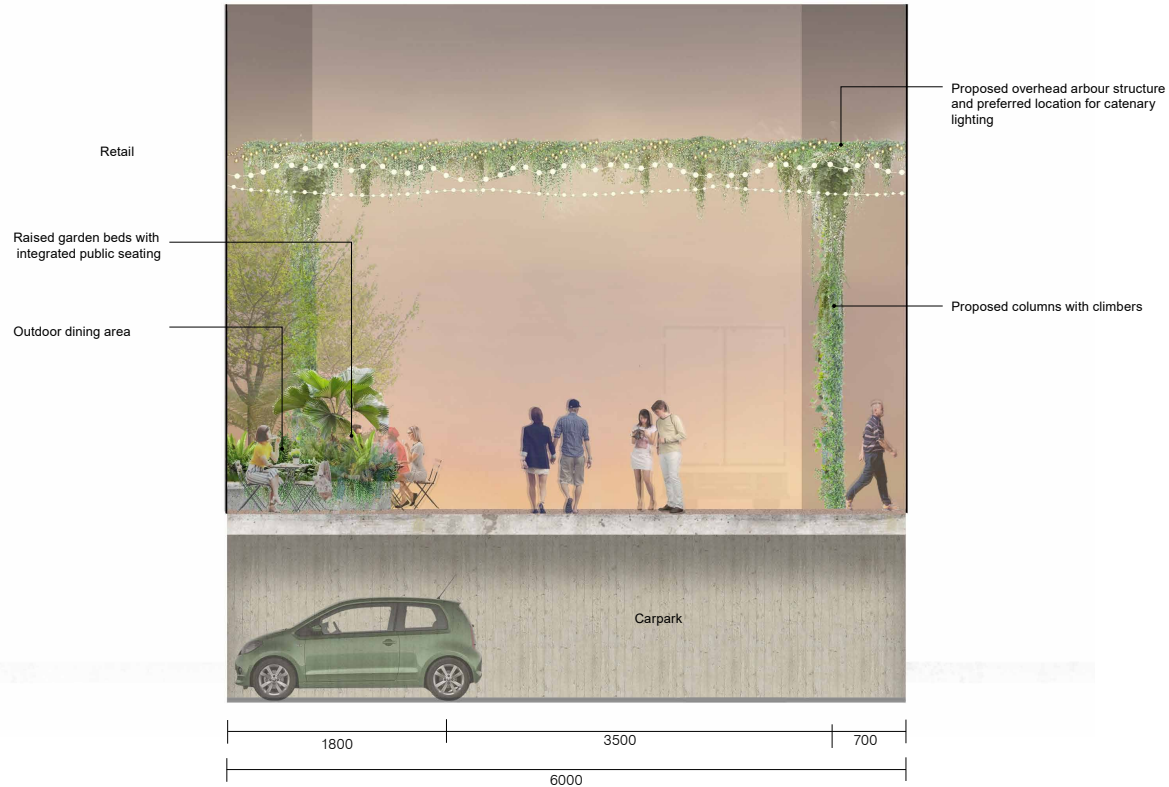
-  **ARBOUR**
-  **BLUESTONE PAVING**
Sawn Flags
-  **FEATURE PAVING**
Brick
-  **PRIMARY PAVEMENT**
Concrete
-  **GARDEN BED**
with seat wall
-  **OUTDOOR DINING**
/ retail spillout
-  **GARDEN BED SEAT**



Scale 1:250 Size A3

LANDSCAPE CONCEPT SECTION

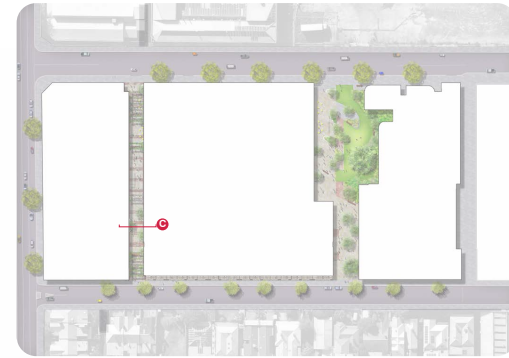
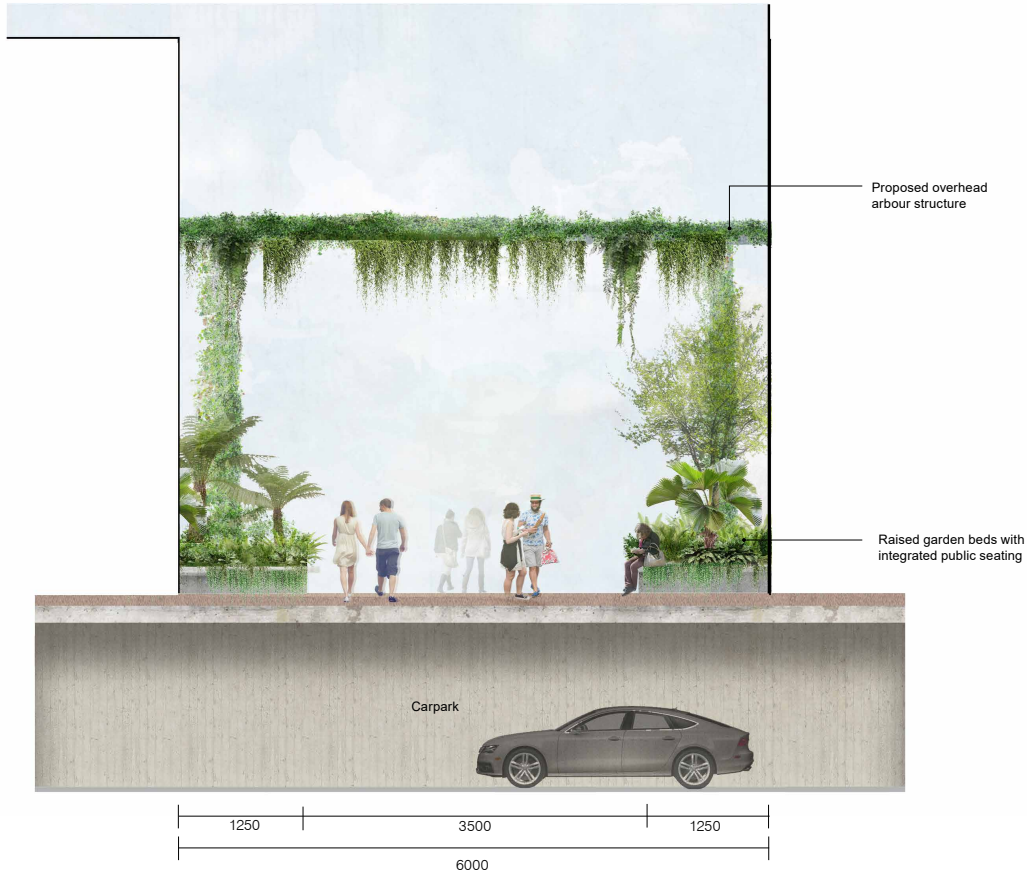
SECTION B - HARRY'S LANE



Scale 1:75 Size A3

LANDSCAPE CONCEPT SECTION

SECTION C - HARRY'S LANE



Scale 1:75 Size A3

T.C.L

Traffix Group

Traffic Works Assessment

Proposed Development Plan

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

Prepared for
Gurner

February 2023

G30102R-01I

Level 28, 459 Collins St
Melbourne Victoria 3000

T: 03 9822 2888
admin@traffixgroup.com.au

Traffix Group Pty Ltd
ABN: 32 100 481 570

traffixgroup.com.au

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

Document Control

Our Reference: G30102R-011

Issue No.	Type	Date	Prepared By	Approved By
G	RFI 2022	02/03/22	J. Cossins	C. Morello
I	RFI 2023	20/02/23	J. Cossins	C. Morello

COPYRIGHT: The ideas and material contained in this document are the property of Traffix Group (Traffix Group Pty Ltd – ABN 32 100 481 570). Use or copying of this document in whole or in part without the written permission of Traffix Group constitutes an infringement of copyright.

LIMITATION: This report has been prepared on behalf of and for the exclusive use of Traffix Group's client and is subject to and issued in connection with the provisions of the agreement between Traffix Group and its client. Traffix Group accepts no liability or responsibility whatsoever for or in respect of any use of or reliance upon this report by any third party.

Table of Contents

1.	Introduction	1
2.	Existing Conditions	3
2.1.	<i>Subject Site</i>	3
2.1.1.	Location.....	3
2.1.2.	Site Conditions & Access.....	3
2.1.3.	Zoning and Surrounding Uses.....	3
2.2.	<i>Existing Road Network & Access</i>	6
2.2.1.	Existing Road Network.....	6
2.2.2.	Victoria Gardens Shopping Centre Access Needs.....	7
2.3.	<i>Road Safety Review</i>	10
2.4.	<i>Existing Parking Conditions</i>	10
2.5.	<i>Alternative Transport Modes</i>	11
2.5.1.	Walking.....	11
2.5.2.	Public Transport.....	12
2.5.3.	Bikes.....	14
2.5.4.	Car Share.....	15
3.	Development Plan	16
3.1.	<i>The Development</i>	16
3.2.	<i>Access</i>	17
3.2.1.	Pedestrian Access.....	17
3.2.2.	Cyclist Access.....	18
3.2.3.	Vehicle Access.....	18
3.3.	<i>Parking</i>	19
3.3.1.	Bicycle Parking & End of Trip Facilities.....	19
3.3.2.	Car Parking.....	20
3.3.3.	Motorcycle Parking.....	20
3.3.4.	Parking Summary.....	20
3.4.	<i>Loading & Waste Collection</i>	21
4.	Car Parking Considerations	22
4.1.	<i>Statutory Requirements – Clause 52.06</i>	22
4.2.	<i>Car Parking Demand Assessment</i>	23
4.2.1.	Sustainable Modes of Transport.....	23
4.2.2.	Anticipated Parking Demand.....	24
5.	Traffic & Access Considerations	28
5.1.	<i>General</i>	28
5.2.	<i>Existing 'Base Case' Analysis</i>	28
5.2.1.	Traffic Surveys.....	28
5.2.2.	Additional Approved Development & Growth.....	30

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

5.2.3.	"Base Case" Intersection Volumes.....	31
5.2.4.	Base Case Intersection Operation.....	32
5.3.	<i>Proposed Development Traffic Generation & Impact</i>	33
5.3.1.	Trip Generation Rates.....	33
5.3.2.	Traffic Distribution & Volumes.....	39
5.3.3.	Traffic Impact & Intersection Analysis.....	42
5.3.4.	Warrants for the Signalised Intersection & Staging.....	43
5.3.5.	Consideration of Potential Future Development.....	43
5.3.6.	Signalised Intersection Analysis.....	45
5.3.7.	General.....	45
5.3.8.	Future Traffic Volumes.....	45
5.3.9.	Analysis of Intersection Operation.....	46
5.3.10.	Recommendations.....	48
5.4.	<i>Summary of Conclusions</i>	49
6.	Bicycle Considerations	50
7.	Loading Considerations	51
7.1.	<i>General Requirements</i>	51
7.2.	<i>Proposed Primary Loading Provisions</i>	51
7.3.	<i>Expected Regular Loading Volumes</i>	51
7.4.	<i>Temporary and Event Loading</i>	51
8.	Design Considerations	53
8.1.	<i>Site Access Locations</i>	53
8.2.	<i>Internal Laneway Cross-Sections</i>	53
9.	Schedule to the Development Plan Overlay	54
10.	Conclusions	57

List of Figures

Figure 1:	Subject Site – Burnley Street/Doonside Street corner	4
Figure 2:	Locality Plan	4
Figure 3:	Land use zoning map	5
Figure 4:	Existing Traffic Conditions	8
Figure 5:	Burnley Street – view north	8
Figure 6:	Burnley Street – view south	8
Figure 7:	Doonside Street – view east from Burnley Street	9
Figure 8:	Doonside Street – view west from David Street	9
Figure 9:	Appleton Street – view east from Burnley Street	9
Figure 10:	Appleton Street – view west	9
Figure 11:	Buckingham Street – view west from Burnley Street	9
Figure 12:	David Street – view south from Doonside Street	9

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

Figure 13: Road Safety Review Area	10
Figure 14: Parking Inventory Area	11
Figure 15: 20 minute Walking Catchment (Courtesy of WalkScore)	12
Figure 16: Public Transport Services Map	12
Figure 17: 20 minute Public Transport Catchment (Courtesy of WalkScore)	13
Figure 18: Principal Public Transport Network Area	13
Figure 19: Principal Bicycle Network Excerpt - Yarra	14
Figure 20: 20 minute Cycling Catchment (Courtesy of WalkScore)	14
Figure 21: Proximate Car Share Pods	15
Figure 22: Development Plan Site Layout	16
Figure 23: Development Plan Access Strategy showing Access Points for Each Mode	19
Figure 24: Existing Traffic Volumes – 21 st November 2019	28
Figure 25: Existing Traffic Volumes – 13 th May 2021	29
Figure 26: Existing Peak Hour Pedestrian & Bicycle Movements	29
Figure 27: 171 Buckingham Street Traffic Generation	31
Figure 28: Existing “Base Case” Traffic Volumes – 21 st November 2019 + 171 Buckingham	31
Figure 29: 2016 ABS Journey to Work Data for Travel Modes	33
Figure 30: Development Plan Likely Traffic Generation – Additional Peak Hour Movements at Burnley/Doonside	41
Figure 31: Post Development Traffic Volumes at Burnley Street/Doonside Street	41
Figure 32: Projected Victoria Gardens Traffic Volumes	44
Figure 33: Post Development Traffic Volumes - Burnley Street/Doonside Street/Buckingham Street	45
Figure 34: Option 1 - SIDRA DOS AM Peak	46
Figure 35: Option 1 - SIDRA DOS PM Peak	46
Figure 36: Option 2 - SIDRA DOS AM Peak	47
Figure 37: Option 2 - SIDRA DOS PM Peak	47
Figure 38: Option 3 - SIDRA DOS AM Peak	47
Figure 39: Option 3 - SIDRA DOS PM Peak	47
Figure 40: Fully Controlled Signals - SIDRA DOS AM Peak	48
Figure 41: Fully Controlled Signals - SIDRA DOS PM Peak	48
Figure 42: Temporary Loading Arrangement	52
Figure 44: Cross-sections of Eastern North-South Laneway	53

List of Tables

Table 1: Contemplated Development Yields and Staging	17
Table 2: Proposed Parking Provisions	20
Table 3: Statutory Car Parking Requirements (Clause 52.06)	22
Table 4: Journey to Work Data (based on place of employment) - 2016 Census	25
Table 5: Percentage of Peak Demand by Period of Day/Week	26
Table 6: Likely Parking Demands by Period of Day/Week	27
Table 7: “Base Case” Intersection Analysis – Burnley Street & Doonside Street Modelled as a T-Intersection with Bikes	33
Table 8: Projected Percentage Mode Share for Residential Trips	34

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

Table 9: Residential Trip Generation per Mode in a Peak Hour	35
Table 10: Commercial ABS Data - Richmond SA2 Mode Split	36
Table 11: Office Travel Mode Splits	36
Table 12: Customer Travel Mode Split	37
Table 13: Estimated Traffic Generation	38
Table 14: Inbound & Outbound Traffic Splits	40
Table 15: Expected Traffic Distributions - Burnley Street/Doonside Street/Buckingham Street	40
Table 16: Base Case vs Proposed Development SIDRA Analysis – Unsignalised Intersection	42
Table 17: Statutory Bicycle Parking Requirements	50
Table 18: Responses to Schedule to the Development Plan Overlay	54

List of Appendices

Appendix A Intersection Concept Layout Plan

Appendix B SIDRA Analysis Summaries

1. Introduction

Traffix Group has been engaged by Gurner to undertake a Traffic Works Assessment for the Proposed Development Plan at 81-95 Burnley Street & 26-34 Doonside Street, Richmond.

In 2020, the Yarra Planning Scheme was amended (Amendment C122) to incorporate a Schedule to the Development Plan Overlay for the site.

Schedule 15 to Clause 43.04 requires that Development Plan be prepared to guide the future development of the site for the purposes of a Mixed Use Development, including commercial and residential uses.

A Traffic Works Assessment is required to accompany the Development Plan Application and must include:

- *An existing conditions assessment, including existing and approved vehicle and loading access arrangements associated with the Victoria Gardens Shopping Centre with capacity to interact with traffic from the development.*
- *Details of any development staging.*
- *Consultation with the owner of the Victoria Gardens Shopping Centre*
- *A site layout plan showing convenient and safe primary vehicle access, including:*
 - *primary vehicle access to and from Doonside Street;*
 - *any vehicle access to Appleton Street to be a secondary access point;*
 - *no direct vehicle access to or from the site via Burnley Street.*
- *Details regarding the layout, cross section and function of any internal street or laneway network.*
- *On site car parking and bicycle parking provisions and allocations.*
- *Expected traffic volumes and impact on the existing road network, including but not necessarily limited to Doonside Street, Appleton Street and Burnley Street. This assessment is to include details of any assumptions relied upon.*
- *The Transport Works Assessment must include consideration of any development stages and approved/current development applications within the immediate area surrounding the site.*
- *The assessment is to:*
 - *identify mitigating works required for each development stage in the development plan*
 - *assess whether a two way or a four way signalised intersection between Burnley Street/Doonside Street/Buckingham Street is required and the trigger for providing the signalised intersection to the satisfaction of VicRoads*
 - *identify a new intersection layout and operation, if required, approved by VicRoads in consultation with the Responsible Authority.*

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

- *Details of any works or treatments proposed to Doonside Street or Appleton Street or the nearby road network.*
- *Determine the likely increases to pedestrian and bicycle movements generated by the site and the likely distribution of those movements. Demonstrate how the subject site will prioritise those movements and provide convenient connections to existing infrastructure.*
- *Measures to reduce conflict and improve pedestrian and bicycle amenity (if applicable).*
- *Indicative loading arrangements, with loading to be undertaken on site and conflict between the loading bay(s) and car parking areas and non-motorised transport to be minimised.*
- *Estimate the type and number of loading/unloading activities associated with the development and provide information on appropriate loading/unloading facilities to service the various uses proposed.*
- *Access to the site by trucks is to be via Doonside Street.*
- *Details regarding on-site waste collection, with waste vehicles accessing the site from Doonside Street*

This report has been prepared to incorporate all requirements of the Schedule to the Development Plan Overlay.

This report is based on the Development Plan (DP) report dated February 2023.

In the course of preparing this report we inspected the subject site, reviewed the background documentation for the Planning Scheme Amendment and rely upon some of the data and information provided particularly within the Ratio and Traffix Group Traffic Reports prepared by the Land Owner and Council respectively.

Components of this report also respond to Council RFI and Internal Referral commentary from previous versions of the DP / Traffic Works Assessment.

2. Existing Conditions

2.1. Subject Site

2.1.1. Location

The subject site is 81-95 Burnley Street, Richmond and is also known as 'Harry the Hirer'. The development site is located on the east side of Burnley Street, between Doonside Street and Appleton Street, in Richmond.

A photograph of the site and a locality plan are provided at Figure 1 and Figure 2, respectively.

2.1.2. Site Conditions & Access

The site is approximately 1.3 hectares in size and has extensive frontages to Burnley Street (80m), Doonside Street (170m) and Appleton Street (130m).

The site is tenanted by 'Harry the Hirer', a party and marquee hire company. Information provided by the proponent indicates that the business historically operated with 115 staff and was open between 8am-5:30pm weekdays and 9am-12pm Saturdays¹.

The site has primary vehicle access to Doonside Street (six crossovers provided). However, there are historical crossovers to Burnley Street (one) and Appleton Street (one) which appear to be disused. The site a level of on-site car parking for the existing use.

We understand that the primary loading access for the site takes place from Doonside Street, with vehicles manoeuvring on-site and loading/unloading.

There is an existing permit for the Harry the Hirer use that also permits through access to Appleton Street for loading vehicles associated with the current use/development.

2.1.3. Zoning and Surrounding Uses

The site is zoned Mixed Use Zone under the Yarra Planning Scheme as presented in Figure 3. It is also located within the Victoria Street East Precinct of the Richmond UDF.

Nearby land uses in the immediate vicinity are a mixture of industrial and residential uses. Victoria Gardens Shopping Centre is located to the north of the site, with the Shopping Centre land holdings extending to the northern side of Doonside Street.

Development in the area has resulted in increased housing density and increased commercial use on former industrial lots.

¹ As stated in the Ratio Traffic Report, dated December, 2018

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond



Figure 1: Subject Site – Burnley Street/Doonside Street corner

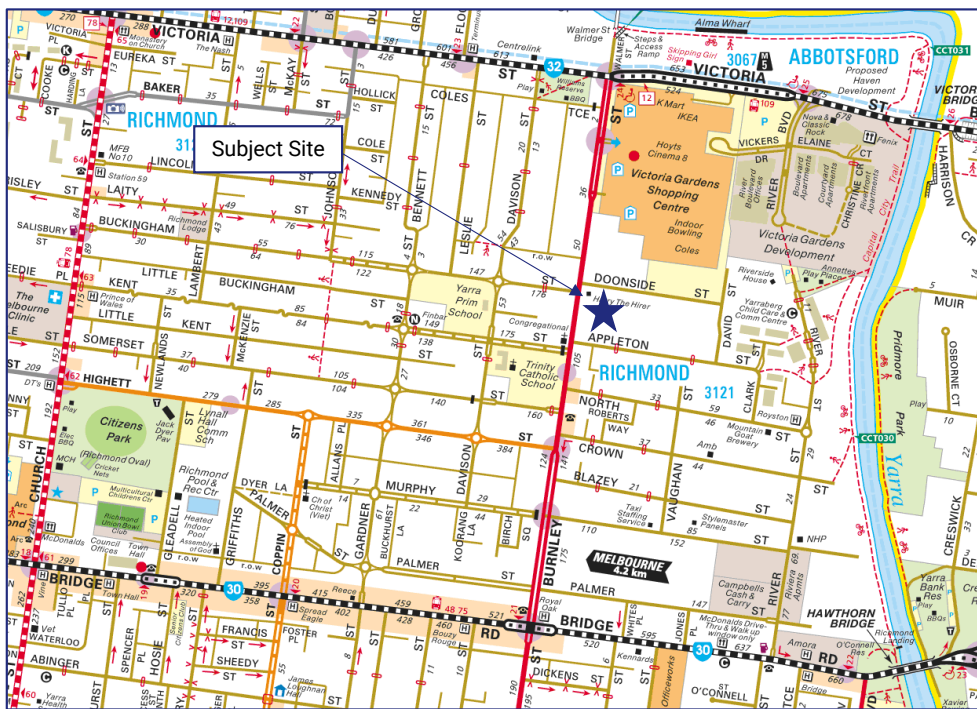


Figure 2: Locality Plan

Reproduced with Permission of Melway Publishing Pty Ltd

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

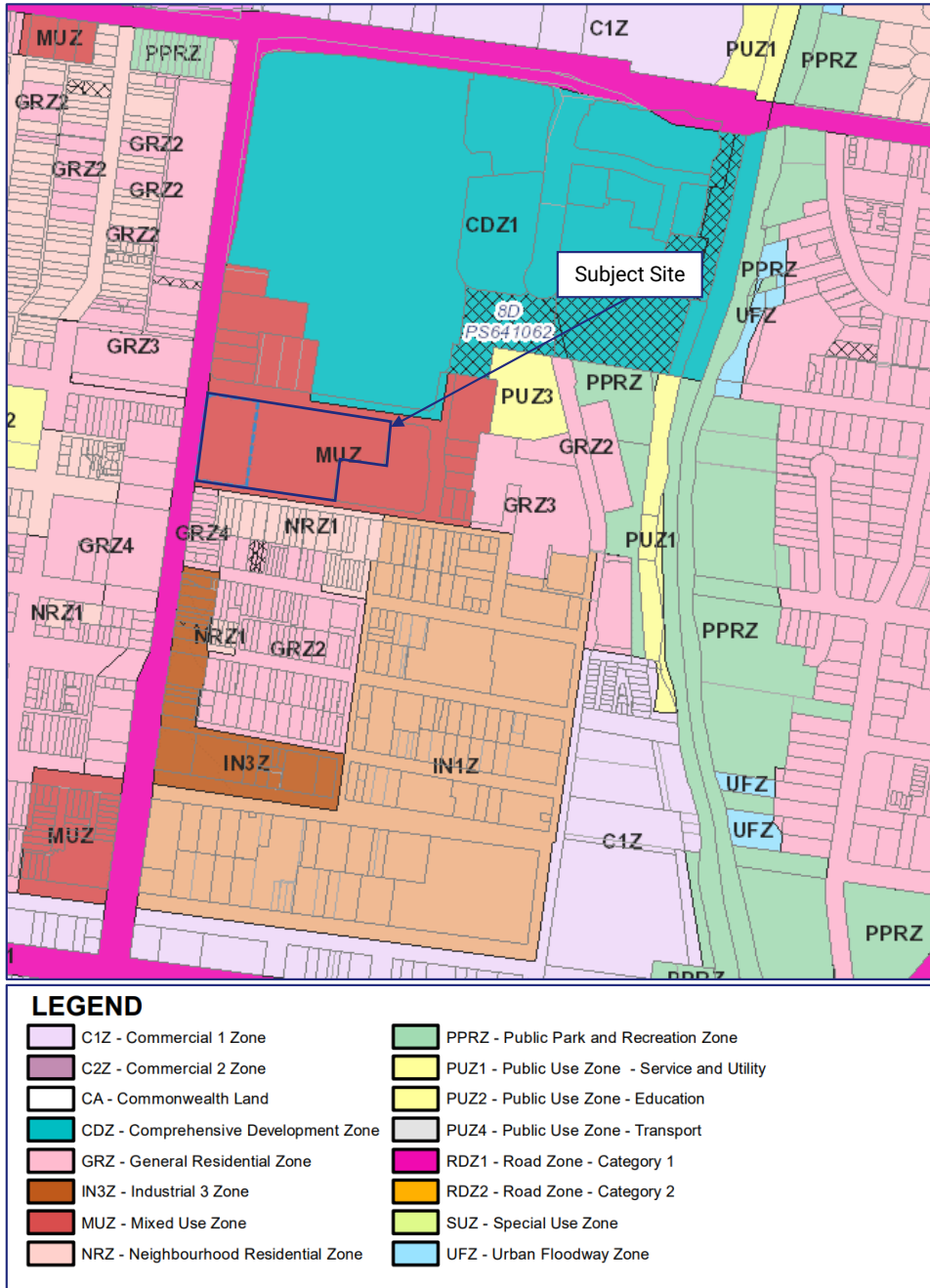


Figure 3: Land use zoning map

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

2.2. Existing Road Network & Access

2.2.1. Existing Road Network

Burnley Street is a State Arterial Road and Road Zone Category 1 aligned in a north south direction.

In the vicinity of the site, Burnley Street provides a traffic lane and shared bicycle/parking lane in each direction.

A 60km/h speed limit applies to Burnley Street, with a 40km/h school zone applying to the south of the site.

Doonside Street is a Local Road aligned in an east-west direction between Burnley Street and David Street. Doonside Street has a pavement width of approximately 10 metres adjacent to the subject site², which provides for a traffic lane in each direction and parking on both sides of the road.

A 'Stop' sign facing Doonside Street controls its intersection with Burnley Street.

A 40km/h area speed limit applies to Doonside Street.

Doonside Street provides access to the rear of the Victoria Gardens shopping centre site and this includes limited access for a semi trailer servicing the Coles dock.

Appleton Street is a Local Road aligned in an east-west direction between Burnley Street and Clarke Street.

Appleton Street has a pavement width of approximately 8 metres, which provides for kerbside parking on both sides of the road and a single traffic lane for two-way traffic.

The intersection of Appleton Street and Burnley Street is controlled by a 'Stop' sign facing Appleton Street and only left-in/left-out traffic movements are permitted.

A 40km/h area speed limit applies to Appleton Street.

Buckingham Street is a Local Road aligned in an east-west direction between Burnley Street and Church Street.

Buckingham Street provides for a traffic lane in each direction and parking on both sides of the road.

The intersection of Buckingham Street and Burnley Street is controlled by a 'Give-Way' sign facing Buckingham Street. Right turns into Buckingham Street are prohibited between 7-9am (7 days) and left turns into Buckingham Street are prohibited between 7:30-9am Mon-Fri. A 40km/h area speed limit applies to Buckingham Street.

Figure 4 illustrates the existing road network and the turn bans that apply to various local roads within close proximity to the site.

Doonside Street is the only local street on the east side of Burnley Street (between Victoria Street and Highett Street) where right turns are permitted into and out of Burnley Street.

² Its carriageway width narrows to approximately 8m at its eastern end (to widen the footpath) around 44 Doonside Street.

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

Accordingly, the intersection of Burnley Street/Doonside Street has an important function of distributing traffic to/from the north from properties on the east side of Burnley Street.

2.2.2. Victoria Gardens Shopping Centre Access Needs

We have had discussions with the owners of the Victoria Gardens Shopping Centre land, and their traffic engineers to discuss access requirements for the existing and future land that abuts Doonside Street.

We are advised that:

- There is no public access to car parking currently utilising Doonside Street for retail parking
- There is access for some commercial buildings associated with the Shopping Centre and/or land owners, but this is primarily office and is generally limited to cars and some waste collection vehicles
- There is a Coles loading dock for the Centre that is accessed from Doonside Street and is serviced by a 19.0 metre semi trailer. It enters and exits via Doonside Street to/from Burnley Street, and then turns up David Street to enter the site. This deliver occurs in the order of 1-2 times a day.
- There is some additional loading activity that takes place from Doonside Street, but it is limited to 8.8 metre service vehicles.
- A future development proposed at the south-eastern corner of the Shopping Centre site is proposed with residential and staff vehicle access from David Street, there will be some modifications to existing loading, but the Coles dock will continue to be required to be serviced from Doonside Street. That is, 19.0 metre semi access will continue to be required.

Figure 4 illustrates the local road network and key traffic management measures around the subject site, including access to the Victoria Gardens Shopping Centre.

Notably, many local roads have turn restrictions at Burnley Street.

Photographs depicting the surrounding road network are presented in Figure 5 to Figure 12.

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street, Richmond



Source: Nearmap

Figure 4: Existing Traffic Conditions



Figure 5: Burnley Street – view north

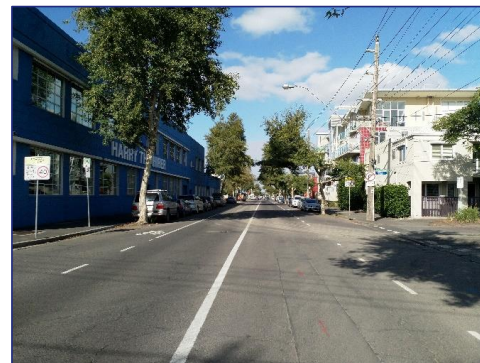


Figure 6: Burnley Street – view south

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond



Figure 7: Doonside Street – view east from Burnley Street



Figure 8: Doonside Street – view west from David Street



Figure 9: Appleton Street – view east from Burnley Street



Figure 10: Appleton Street – view west



Figure 11: Buckingham Street – view west from Burnley Street



Figure 12: David Street – view south from Doonside Street

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

2.3. Road Safety Review

A review of road casualty crash statistics for the past 5 years of available data (1st January, 2014 to 31st December, 2018). The review area is shown in the figure below.

There have been no casualty crashes within the review area within the review period. Accordingly, there is no apparent road safety issues in the vicinity of the subject site based on a review of current road accident statistics.

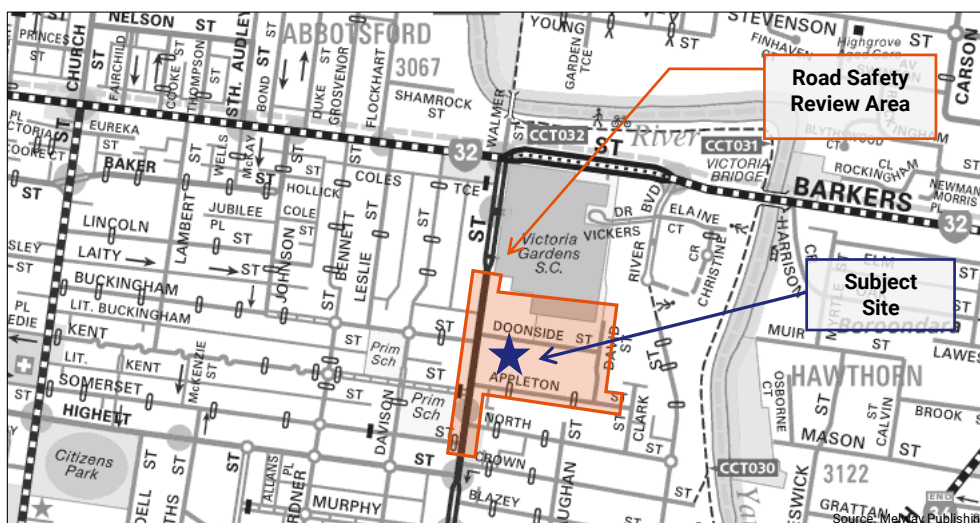


Figure 13: Road Safety Review Area

2.4. Existing Parking Conditions

Traffix Group completed an inventory of on-street parking for an area of up to 200m around the subject site. The inventory was collected at 11 am on Monday 27th April, 2020.

The purpose of the survey was to assess the supply and management of the on-street car parking in the vicinity of the site. It was not to assess the demand for car parking (which would have been unrepresentative given Covid19 restrictions which applied at the time of inspection).

A map of the inventory area is provided below.

There are 302 on-street car spaces within the identified area. Of these spaces, 130 are long term (8P) or unrestricted car spaces. The remainder are a combination of short-term restrictions and Permit Zones.

There are 48 car spaces along the subject site's frontages to Burnley Street, Appleton Street and Doonside Street, all of which are unrestricted.

Whilst parking is generally unrestricted, it is likely that as this precinct further evolves, Council will place short term restrictions, with future residential and commercial development occupants ineligible for on-street parking permits.

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street, Richmond

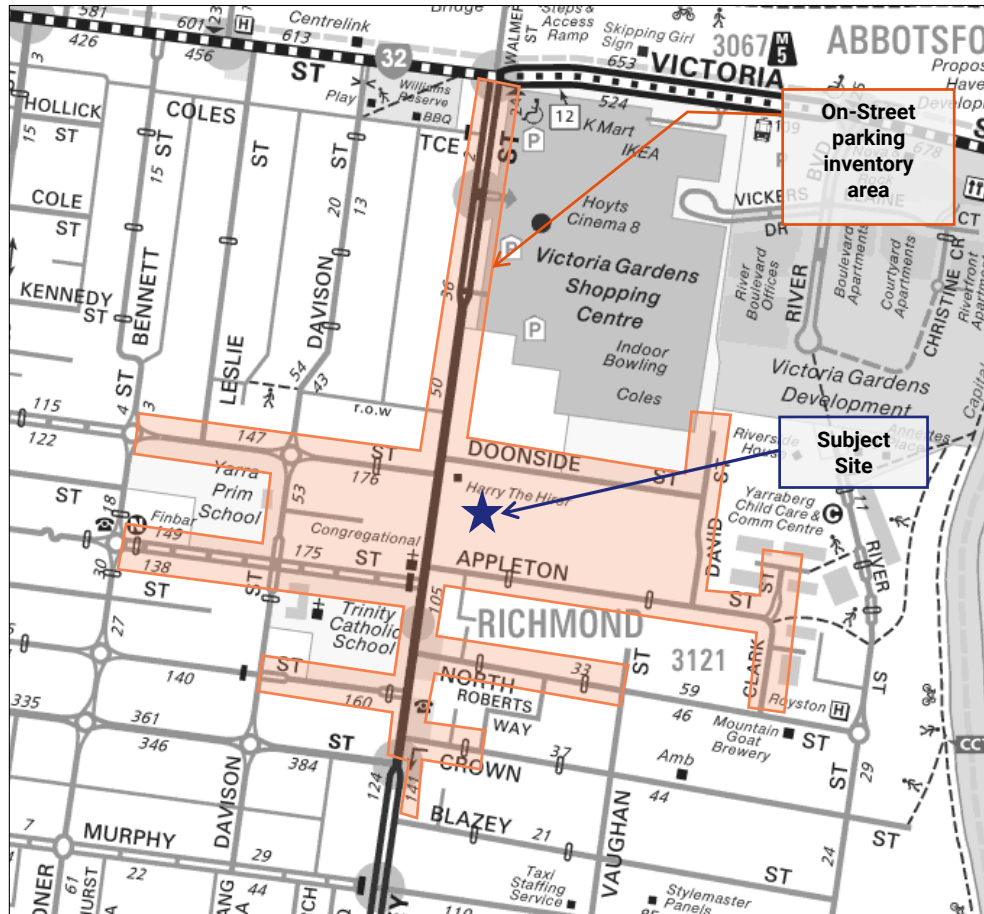


Figure 14: Parking Inventory Area

2.5. Alternative Transport Modes

2.5.1. Walking

The site is highly walkable. Walkscore³ rates the site as scoring 92 out of 100 and classifies this location as a 'walker's paradise, daily errands do not require a car'.

The diagrams at Figure 15 shows the 20 minute catchments for walking from the subject site.

³ <https://www.walkscore.com/score/81-burnley-st-richmond-vic-australia>

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street, Richmond



Figure 15: 20 minute Walking Catchment (Courtesy of WalkScore)

2.5.2. Public Transport

The site is well served by public transport services.

Tram Routes 12 and 109 are accessible via Victoria Street, approximately 350m north of the site, and Tram Routes 48 and 75 are accessible on Bridge Road, approximately 500m south of the site,

The available public transport services within an appropriate walking distance of the site are presented in Figure 16.

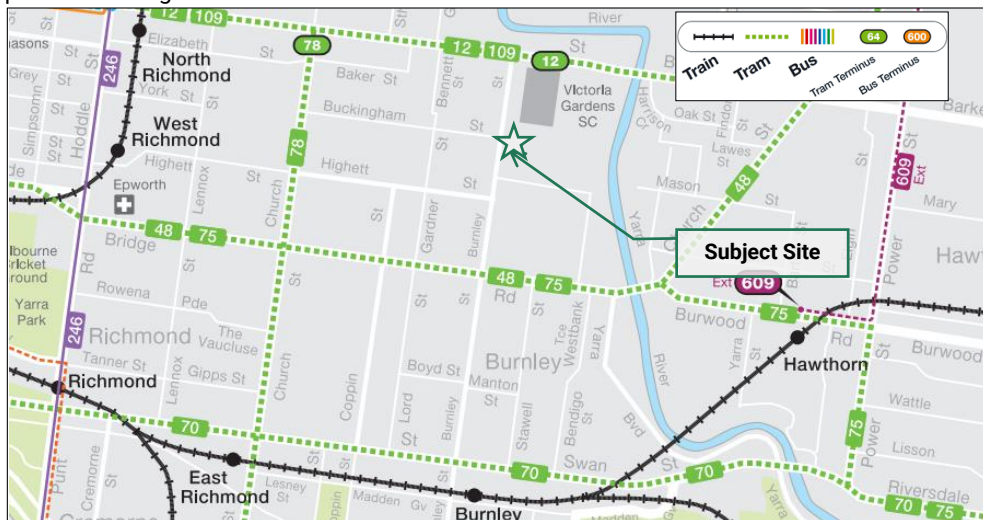


Figure 16: Public Transport Services Map

Source: www.ptv.vic.gov.au

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street, Richmond

The site is located within the Principal Public Transport Network (PPTN) area as presented in Figure 18. The diagram Figure 17 shows the 20 minute catchments for public transport from the subject site.



Figure 17: 20 minute Public Transport Catchment (Courtesy of WalkScore)

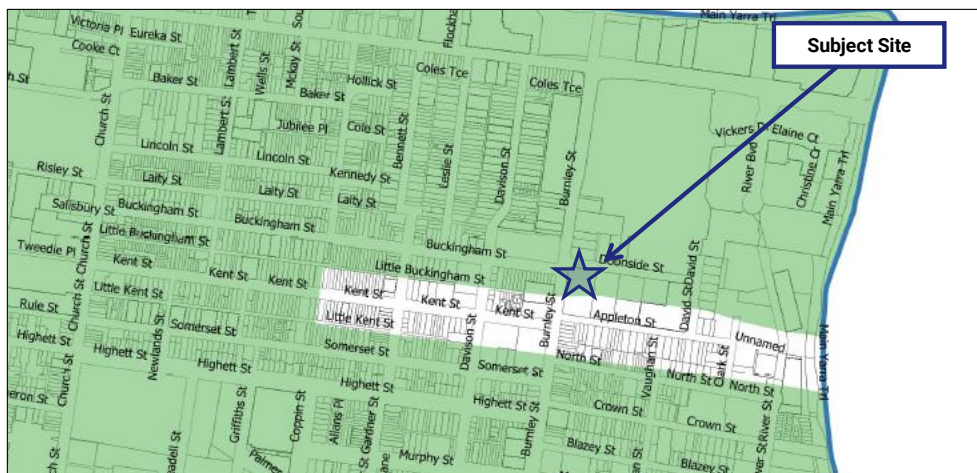


Figure 18: Principal Public Transport Network Area

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

2.5.3. Bikes

The site enjoys a high level of access to bicycle infrastructure including formal and informal bicycle routes on many roads surrounding the site.

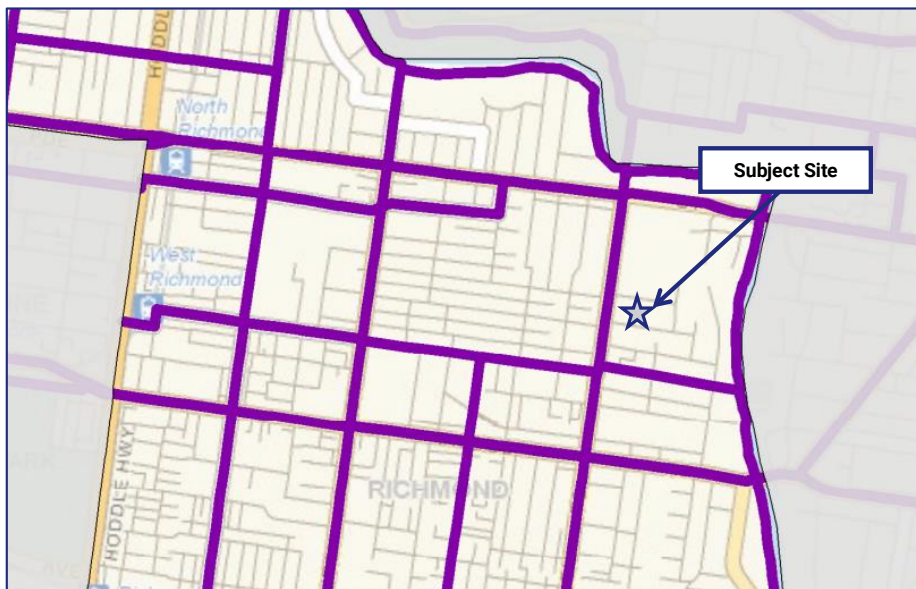


Figure 19: Principal Bicycle Network Excerpt - Yarra

The diagram at Figure 20 shows the 20 minute catchments for cycling from the subject site.

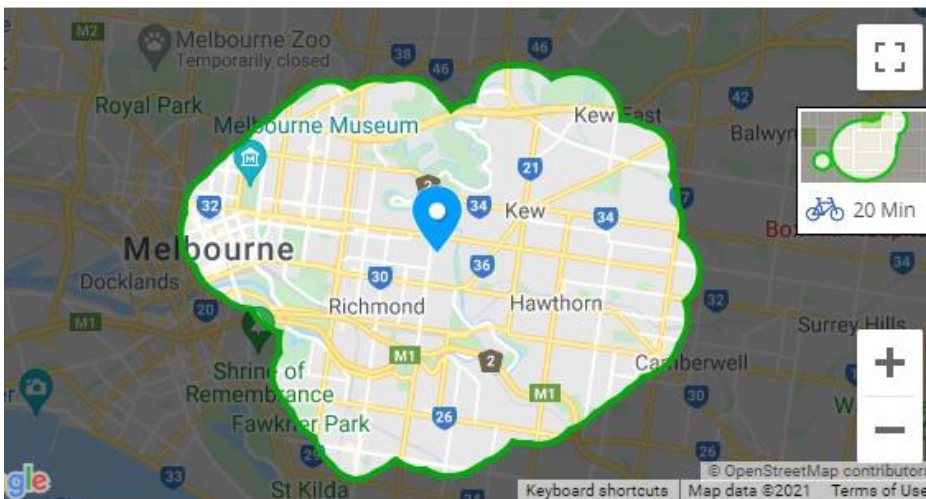


Figure 20: 20 minute Cycling Catchment (Courtesy of WalkScore)

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street, Richmond

2.5.4. Car Share

There are multiple car share vehicles within close proximity to the site. The nearest pods are located on Burnley Street, between Doonside Street and Victoria Street (2 pods).

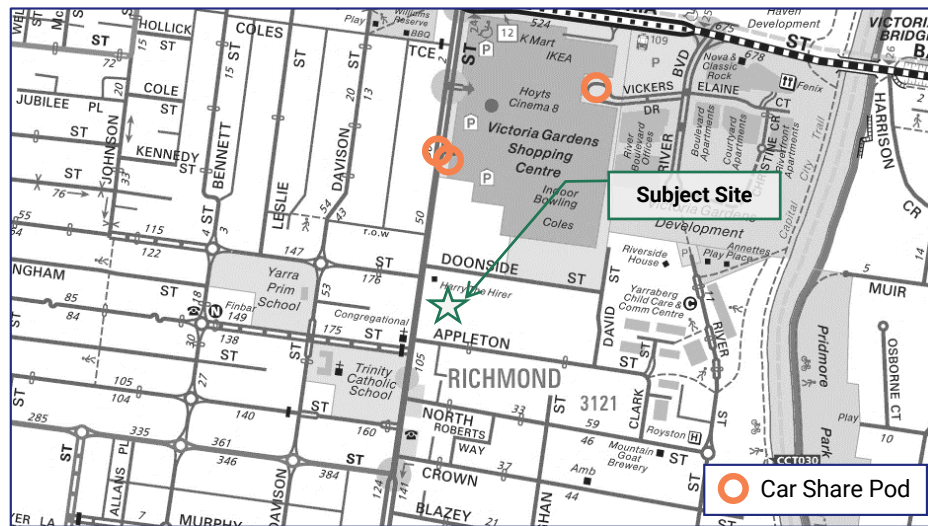


Figure 21: Proximate Car Share Pods

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

3. Development Plan

3.1. The Development

The application proposes to develop the site for the purposes of a mixed use development comprising residential and commercial uses generally in accordance with the Development Plan requirements under Schedule 15 to the Development Plan Overlay.

An excerpt of the proposed Development Plan is provided at Figure 22.

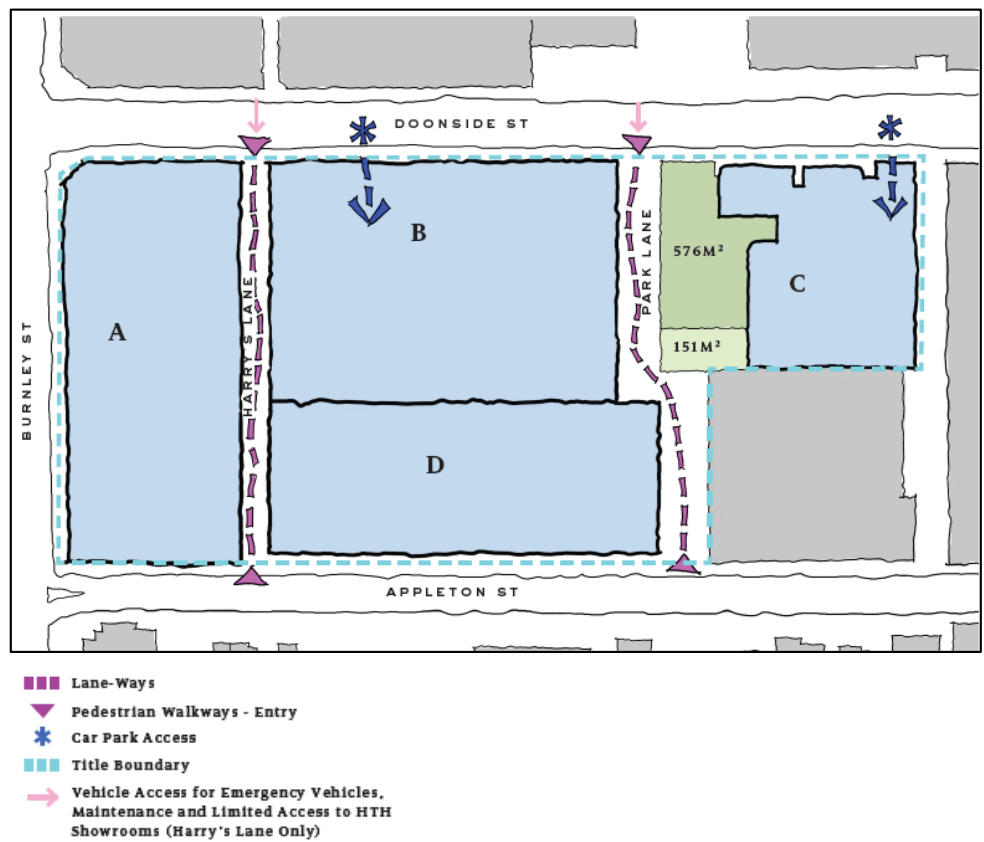


Figure 22: Development Plan Site Layout

The existing Harry the Hirer use is to remain on-site with the western portion of the new development.

The contemplated development schedule (and staging) is provided in Table 1.

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

Table 1: Contemplated Development Yields and Staging

Stage/Building	Land Use	Dwellings	Commercial Floor Area
Stage 1 / Building A	Commercial ⁴ & Residential	120-135 no.	4,500-5,500 m ²
Stage 2 / Building B	Commercial & Residential	275-330 no.	4,000-5,000 m ²
Stage 3 / Building D	Commercial & Residential	85-100 no.	2,000-3,500 m ²
Stage 4 / Building C	Commercial & Residential	65-80 no.	1,500 - 2,000m ²
Total		545-645 no.	12,000-16,000 m²

In relation to potential uses, we understand that the ultimate development is likely to include a mixture of uses such as:

- The retention and continued operation of the Harry the Hirer (restricted retail) use.
- Shop & Food and Drink uses, including a small grocer and/or providore/deli convenience.
- A gymnasium.
- Office space.

Residential apartments will include a mix of 1, 2 and 3 bedroom apartments with a townhouse product expected to front Appleton Street.

3.2. Access

3.2.1. Pedestrian Access

The Development Plan includes a series of laneways and internal pedestrian active spaces at ground level. This includes two a north-south linkages between Doonside Street and Appleton Street, with the one at the east at 9 metres width as dictated by the Schedule to the Development Plan Overlay.

The Harry the Hirer tenancy will take primary pedestrian access from the existing location, which is at the corner of Doonside Street and Burnley Street. It will have secondary pedestrian access from Appleton Street and the new internal lane and also internal access from car parking.

Building A will be provided with primary pedestrian access from the western laneway that operates within the site.

Building B and C will be provided with lobby access from Doonside Street and potential secondary access to the internal laneways.

Building D will have access opportunities from the western and eastern laneways.

Townhouses are proposed fronting Appleton Street, which will have direct pedestrian access

⁴ Commercial in Stage 1/Building A includes existing and proposed Harry the Hirer Floor Areas

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

to the footpath along Appleton Street. They will also be provided with rear access to/from the Tower D core for access between parking and the dwellings.

Access to the ground floor retail tenancies will be provided from abutments to the adjacent streets, laneways and/or the new public park.

Access to the Level 1 Commercial Tenancies will be via their respective Building lobbies.

Further discussion of the Laneway Arrangements is provided later within this report.

3.2.2. Cyclist Access

Burnley Street provides on-street bicycle lanes and will be the key linkage for residents, staff and visitors to access the site via bicycle, supported by Doonside Street, Appleton Street and the other surrounding road connections.

The internal site laneways will be designed to accommodate ride-up trips and will provide for visitor parking at-grade.

Bicycle parking for residents and staff will be provided within secure areas either at ground, basement or podium (or a mix). Where on a level other than ground, they will be accessible via passenger lifts (including some with dedicated bike shuttle lifts).

Softer ramping is proposed on the western vehicle ramp from ground level which will allow for some confident cyclists to ride up and down the ramps between levels.

3.2.3. Vehicle Access

All vehicle access is proposed from Doonside Street. There is no vehicular access to Burnley Street or Appleton Street.

Two separate access points are proposed to Doonside.

The western access will provide access to loading and car parking, which could be as a mixture of ground, basement and/or podium parking.

The eastern access will be a car parking ramp only providing access to basement.

Temporary vehicle access is proposed to Harry's Lane from Doonside Street during events.

The laneways will also permit emergency vehicle and maintenance access.

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

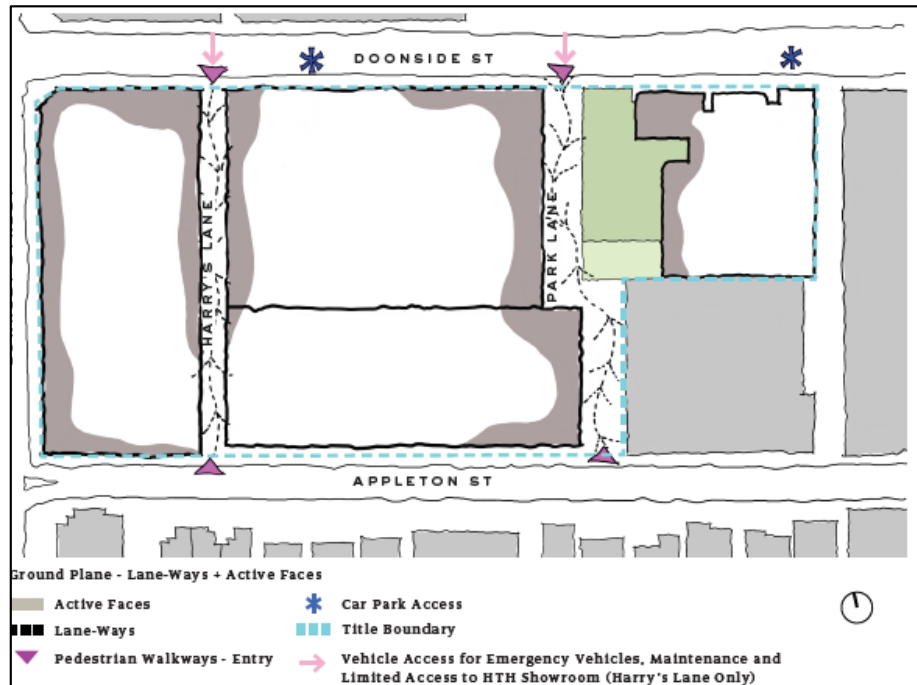


Figure 23: Development Plan Access Strategy showing Access Points for Each Mode

3.3. Parking

3.3.1. Bicycle Parking & End of Trip Facilities

The proposal will include a generous offering of bicycle parking and targets the following provisions/allocations:

- Staff parking provided at a typical rate of 1 space per 100 square metres (approximately 120-160 staff parking spaces)
- Resident parking at a minimum rate of 1 space per dwelling, provided within separate secure areas (approximately 545-645 spaces expected to be provided).
- Parking for visitors will primarily be provided at ground level, and will achieve minimum rates of 1 space per 10 dwellings, plus 1 space per 500 square metres of commercial floor area (at least 84 visitor spaces are expected)

End of Trip facilities are proposed on-site for staff and will achieve a minimum rate of 1 shower/changeroom per 10 bikes. They will be conveniently located to encourage use by staff for all buildings.

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

3.3.2. Car Parking

The proposal intends to provide in the order of 775-825 car parking spaces on-site. Car parking will be provided on-site within a potential mixture of basement, ground floor and/or podium parking areas. Parking above ground will be sleeved with other uses as much as practical to prevent parking being visible from the street.

A target of 10% of car spaces provided as Electric Car Charging spaces is proposed. There will be a mix of residential, office and visitor charging spaces.

A minimum of 2 car share spaces are proposed on-site from Day 1, to be managed by the Owners Corp (including potentially leased out to a Commercial Operator as required).

In the ultimate arrangement, car parking is intended to be allocated generally as:

- 2 car share spaces.
- Approximately 220-270 car spaces for the commercial uses, as a mixture of staff and visitor provisions (this equates to an average rate of 1.5 spaces per 100 square metres).
- The remaining circa 550-560 car spaces allocate for residents on demand (an average rate of 0.85-1.0 cars per dwelling).

Internal car parking areas will include spaces for short term pick-up/drop-off and valet arrangements which could include functions for site valet and/or taxi/uber.

3.3.3. Motorcycle Parking

The application proposes in the order of 15-20 motorcycle parking spaces at a general rate of 1 space per 50 car spaces within the car parking areas.

3.3.4. Parking Summary

A summary of the parking provisions is provided in Table 2.

Table 2: Proposed Parking Provisions

Use		Proposed
Bike Parking	Resident	545-645 spaces
	Staff	120-160 spaces
	Visitor	>84 spaces
Motorcycle Parking		15-20 spaces
Car Parking	Car Share	2 spaces
	Commercial Uses	240-270 spaces
	Residents	550-560 spaces
	Total	775-825 spaces (including approx. 80 electric charging)

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

3.4. Loading & Waste Collection

Primary loading will take place on-site within dedicated loading areas.

The Harry the Hirer Use will have a dedicated dock to cater for Hire Bump-ins/outs and will accommodate three 8.8 metre Medium Rigid Vehicles (MRVs).

The residential and other commercial uses will utilise shared on-site loading areas accommodating a mix of 8.8 metre long MRVs or smaller vans, couriers and rigid vehicles.

A temporary loading area is also proposed within the north-south section of Harry Lane. The temporary loading area will be used for display vehicles, boats and other larger products and will accommodate vehicles up to an 8.8 metre long MRV.

Further discussion on access and loading is provided in Section 7 of this report.

4. Car Parking Considerations

4.1. Statutory Requirements – Clause 52.06

The car parking requirements for the proposed development are outlined under Clause 52.06 of the Yarra Planning Scheme. The purpose of Clause 52.06 is:

- To ensure that car parking is provided in accordance with the Municipal Planning Strategy and the Planning Policy Framework.
- To ensure the provision of an appropriate number of car parking spaces having regard to the demand likely to be generated, the activities on the land and the nature of the locality.
- To support sustainable transport alternatives to the motor car.
- To promote the efficient use of car parking spaces through the consolidation of car parking facilities.
- To ensure that car parking does not adversely affect the amenity of the locality.
- To ensure that the design and location of car parking is of a high standard, creates a safe environment for users and enables easy and efficient use.

Clause 52.06-5 states that:

“Column B rates apply to a site if any part of the land is identified as being within the Principal Public Transport Network Area as shown on the Principal Public Transport Network Area Maps”

The subject site falls within the PPTN area map and therefore Column B rates apply.

The current Development Plan contemplates a range of uses and range of floor areas. This could include food and drink, a grocer, shop, gymnasium, office uses, restricted retail and other similar uses.

Applicable rates under Clause 52.06 are provided at Table 3.

Table 3: Statutory Car Parking Requirements (Clause 52.06)

Use	Statutory Requirement
Residential Dwellings	1 car space to each 2-bed dwelling for residents
	2 car spaces to each 3-bed dwelling for residents
	No visitor parking requirement
Restricted Retail (Harry the Hirer)	2.5 spaces to each 100 square metres
Shop / Food and Drink	3.5 spaces to each 100 square metres
Office	3 spaces to each 100 square metres
Gymnasium	Parking to the Satisfaction of the RA

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

The Development Plan seeks a reduction in the statutory parking requirements under Clause 52.06 as the average parking rates for residential use are likely to fall below 1 space per dwelling and the average parking rates for the commercial uses fall below 2 spaces per 100 square metres.

Clause 52.06-7 of the Planning Scheme allows a permit to be granted to vary the statutory car parking.

Planning Practice Note (June, 2015) specifies that the provisions draw a distinction between the assessment of likely demand for parking spaces, and whether it is appropriate to allow the supply of fewer spaces. These are two separate considerations, one technical while the other is more strategic. Different factors are taken into account in each consideration.

An assessment of the appropriateness of reducing the car parking provision below the statutory requirement is set out as follows.

Particular reference is made to the discussions from the Panel Report and Expert Evidence provided at the Planning Scheme Amendment, as well as assumptions for the likely uses on the site.

4.2. Car Parking Demand Assessment

The Scheme requires the assessment of car parking demand likely to be generated by the proposed use to have regard for listed factors, as appropriate, including:

- *The likelihood of multi-purpose trips within the locality which are likely to be combined with a trip to the land in connection with the proposed use*
- *The variation of car parking demand likely to be generated by the proposed use over time*
- *The short-stay and long-stay car parking demand likely to be generated by the proposed use.*
- *The availability of public transport in the locality of the land.*
- *The convenience of pedestrian and cyclist access to the land.*
- *The provision of bicycle parking and end of trip facilities for cyclists in the locality of the land.*
- *The anticipated car ownership rates of likely or proposed visitors or occupants (residents or employees) of the land.*
- *Any empirical assessment or case study.*

An assessment of the projected car parking demand for the proposed development, accounting for these factors follows.

4.2.1. Sustainable Modes of Transport

The site is very well accessed by multiple sustainable transport modes which reduces the need for owning and using a car to access the site.

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

A generous provision of bicycle and end of trip facilities, motorcycle parking, electric car charging, on-site car share and the preparation of a Green Travel Plan will actively encourage and support access to the site by alternative modes.

This will not only support those uses which are provided with reduced parking, but also encourage those uses that are provided with parking not to utilise a car unless it is necessary (rather than just perceived to be convenient).

4.2.2. Anticipated Parking Demand

Residential

A review of ABS car ownership data for Richmond suggests the following average car ownership rates for all apartment types:

- 0.75 cars per one-bedroom dwelling
- 0.98 cars per two-bedroom dwelling
- 1.13 cars per three-bedroom dwelling

These rates (and lower) were presented at the Panel and it was generally accepted that reduced residential parking provisions could be supported.

The proposal is likely to allocate parking for residents generally at rates of:

- 0.7-0.9 cars per one-bedroom dwelling
- 1 car per two-bedroom dwelling
- 1.5-2.0 cars per three-bedroom dwelling

In general, these rates are reduced from those listed within the Planning Scheme but comparable with the average car ownership rates in the area. These provisions are considered an acceptable balance between meeting market demands for dwellings, and encouraging strategically lower parking provisions for long term users.

We are satisfied that the allocation of in the order of 550 car spaces for residents is acceptable under the following key decision guidelines of Clause 52.06-7:

- It is in line with Council's sustainable transport policies and objectives.
- The site has good access to public transport.
- The site is well served by local amenities and services, particularly via Victoria Gardens.
- It reduces the traffic impacts of the proposal and supports sustainable transport modes.
- Residents will not have access to parking permits and those without on-site car parking will not be able to maintain a car on-street given the prevailing parking restrictions.

Importantly, parking allocations for the residential component could vary, and be further reduced from the above rates, or include some increases to the parking allocations and can be considered as part of individual permit applications as appropriate.

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

Office

A review of ABS 'journey to work' data for the 2016 Census identifies that employees in the Richmond SA2 statistical area are more likely to use alternate transport modes to travel to work in comparison to the Greater Melbourne average (which is 64%).

This data, split between purely office workers and then all employment uses, is summarised in Table 4.

Table 4: Journey to Work Data (based on place of employment) - 2016 Census

% Mode of Travel for 'journey to work' trips	Work within Richmond SA2 Area (Office Uses Only)	Work within Richmond SA2 Area (All Employment Uses)
Car as driver	46%	50%
Public Transport	30%	25%
Walking	6%	6%
Cycling	4%	3%
Other Mode of Travel ^(Note 1)	14%	16%

Note 1: Includes car as passenger, motorcycle, taxi, and other modes and people who did not travel to work, or state method of travel.

The proposed development has excellent accessibility to public transport and bicycle infrastructure. Further, on-street parking in the surrounding area is predominantly short-term in nature specifically during business hours, and there is limited free-of-charge long-term parking available within the surrounding area.

The general approach across the municipality of City of Yarra and inner City Municipalities is to apply a target rate of 1 space per 100 square metres for staff parking. There are many examples of Yarra City Council approving significant office developments throughout Richmond, Cremorne and Collingwood with car parking at levels at, or less than, this rate.

This rate is consistent with that presented at the Panel, which was not contested.

Shop & Restricted Retail

The Development Plan includes a mixture of retail uses and typologies, including different sizes and locations.

In general, the smaller shop tenancies are likely to operate as service retail, providing convenient access to food and drink, retail and other essential services for neighbouring properties. In this case, the proposed development will include over 14,000 square metres of commercial floor area and in excess of 500 new dwellings and is therefore likely to draw a fair proportion of its trade from these new uses.

These smaller tenancies would generate typically only staff demands, at a rate of 1 space per 100 square metres.

It is likely that there will be a larger shop/grocer tenancy as well as the Harry the Hirer (restricted retail) tenancy that may generate some visitor car parking demands as these are more destination based by car.

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

There will still be a significant proportion of walk-up trade for these uses, and therefore for the purposes of this assessment we expect a rate of 2.5 spaces per 100 square metres would be appropriate.

Retail peak demands typically occur of lunchtime/afternoon on a weekend.

Gymnasium

The NSW RTA Guide to Traffic Generating Developments suggests parking provisions for gymnasiums of 3.0 spaces per 100 square metres for a gym located within a central business district.

Case study data held by Traffix supports this generation, however, it is expected this will be a conservative rate as a significant proportion of the patronage of the gymnasium is likely to come from the residential and commercial uses within the proposal.

Accordingly, a target rate of 2 spaces per 100 square metres is suggested for a gymnasium use.

Gym patronage typically peaks of an early morning and late afternoon / early evening, with higher patronage expected at the start of the week, diminishing toward the weekend.

Projected Demands and Variations in Demand

The Development Plan includes a range of yields for commercial uses, and does not distinguish between the different types of uses.

We have sought some advice from the Applicant to contemplate likely demands for the site, and they have advised that of the overall commercial floor area, it is likely that the upper limit of commercial yields would be split approximately as:

- Circa 5,000 m² for Harry the Hirer (Restricted Retail).
- Circa 4,000 m² of shop/food and drink use, including a larger grocer tenancy of around 2,000 m².
- Circa 5,000 m² of office use.
- Circa 1,000 m² of gymnasium use.

Each of the commercial uses will have a varying peak. To establish the expected peak site demand, and identify potential for sharing of parking on the site, we have prepared the tables at Table 5 and Table 6.

Table 5: Percentage of Peak Demand by Period of Day/Week

Use	Weekday			Weekend		
	Morning	Lunch	Afternoon	Morning	Lunch	Afternoon
Office	100%	100%	100%	0%	0%	0%
Retail	50%	50%	50%	100%	100%	100%
Gym	100%	25%	100%	75%	75%	50%

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

Table 6: Likely Parking Demands by Period of Day/Week

Use	Absolute Peak Demand	Weekday			Weekend		
		Morning	Lunch	Afternoon	Morning	Lunch	Afternoon
Office Staff	50	50	50	50	0	0	0
Small Retail Staff	20	20	20	20	20	20	20
Harry the Hirer and Grocer	175	87	87	87	175	175	175
Gym	20	20	5	20	15	15	10
Total		177	162	177	210	210	205

The tables above identify that the peak demands across the site are likely to be experienced on a weekend, when there may be a demand for up to 210 vehicles. The provision of 240-270 spaces on-site will cater for these demands.

We are of the view that this is acceptable having particular regard to the discussions at the Panel, Council’s Strategic Policies in relation to reducing traffic congestion by suppressing car parking demands, but still provides for a suitable parking outcome.

It is likely that in the event that the lower end of the range of development yields are achieved on-site, then parking would be commensurately reduced to reflect the likely demands.

This model relies on a shared use of the office parking for visitors and customers and a Car Parking Management Plan and suitable access management and controls should be in place to ensure that the variations in demands are appropriately managed.

5. Traffic & Access Considerations

5.1. General

As part of this assessment, we will consider a number of scenarios and key questions to respond to the requirements of the Development Plan Overlay.

These are summarised as follows:

- Existing 'Base Case' Analysis**, including identifying suitable a 'base case' for the existing network volumes (inclusive of approved and constructed development) and subsequent SIDRA analysis of the intersection of Burnley Street/Doonside Street and Burnley Street/Buckingham Street
- Proposed Development Traffic Generation & Impact**, including identifying the projected trip generation of the site (inclusive of all modes) and establishing future intersection volumes to identify the need for intersection upgrades and at what stage.
- Allowing for Additional Surrounding Development**, including identifying what impact there will be on the intersection and network operations as a result of the additional development contemplated on the Victoria Gardens Site.

The following is provided.

5.2. Existing 'Base Case' Analysis

5.2.1. Traffic Surveys

Reference is made to existing traffic surveys at the intersection of Burnley Street, Doonside Street and Buckingham Street undertaken in November 2019, and provided in the Ratio Traffic Evidence at Panel.

The peak hour summaries for 8:15-9:15am and 5-6pm are shown in Figure 11.

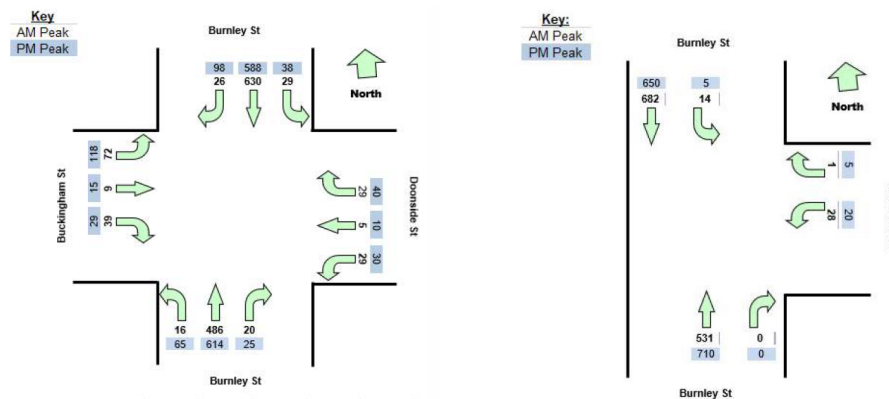


Figure 24: Existing Traffic Volumes – 21st November 2019

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street, Richmond

Supplementary data has also been sourced for Thursday 13th May 2021 and is provided in Figure 25 for the AM and PM peak hours.

Figure 26 provides a summary of the peak hour pedestrian crossing movements at the intersection.

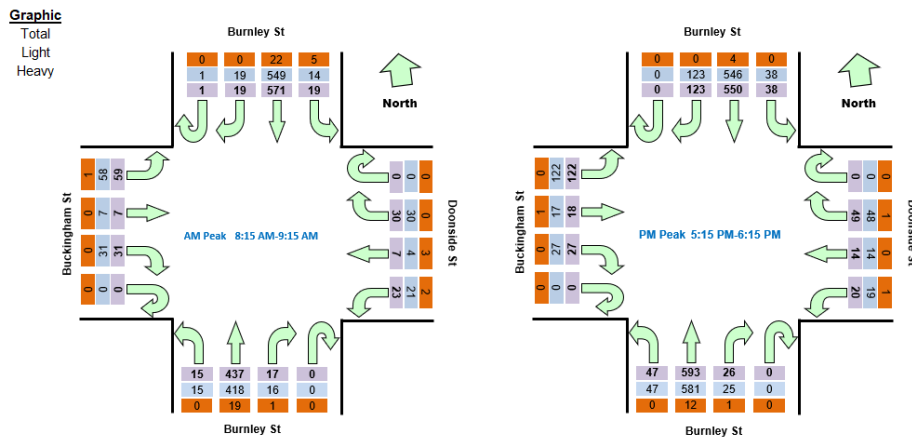


Figure 25: Existing Traffic Volumes – 13th May 2021

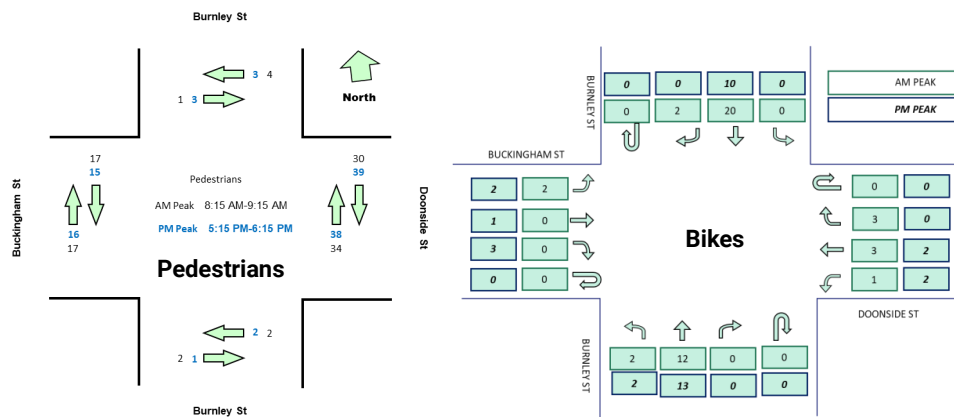


Figure 26: Existing Peak Hour Pedestrian & Bicycle Movements

A review of the traffic volume data from 2021 compared with the 2019 data identifies that peak hour volumes through the intersection are marginally lower in 2021. This may be due to changes in traffic conditions as a result of lingering COVID restrictions during May 2021 and changes in working from home.

For the purposes of this analysis, we will adopt the 2019 volumes as a base line.

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

5.2.2. Additional Approved Development & Growth

With the exception of the site at the north-west corner of the Burnley Street/Doonside Street/Buckingham Street intersection (171 Buckingham Street), both survey data sets include already approved development within the precinct that has been constructed and is understood to be occupied.

Given the location of the site, and the general trends of traffic in the area, we do not expect there to be significant external traffic growth to through volumes on Burnley Street past the subject site.

Any growth to Burnley Street and Buckingham Street traffic will effectively be as a result of the subject development and neighbouring redevelopments, and will be contemplated in the traffic projections for each of those development scenarios.

171 Buckingham Street

The site at 171 Buckingham Street is currently under construction and therefore the traffic generation of this site were not included in the 2019 or 2021 surveys. It is understood that there have been a number of amendments and changes to the scheme. However, based on the most recent traffic report prepared by Ratio, we understand that the contemplates a total of 176 apartments and three townhouses as part of the development.

The original planning application for the site adopted a traffic generation rate of 0.3 vehicle movements per dwelling during the peak hour. Application of this rate to the 179 total dwellings, results in a traffic generation of 54 vehicle movements during the peak hours.

However more recent data for residential development in this area suggests a vehicular trip generation rate is more likely to be 0.2 movements per dwelling per hour. We have therefore assumed that this site would generate in the order of 36 peak hour movements.

To be consistent with the town planning application the following traffic distributions adopted as part of the application have been applied to the site at 171 Buckingham Street.

- 40% of traffic generated to the north, including:
 - 30% via Burnley Street
 - 10% via the local road network.
- 40% of traffic generated to the south, including:
 - 30% via Burnley Street
 - 10% via the local road network.
- 20% of traffic to the west towards Church Street.

Application of the preceding assumptions results in the traffic volumes illustrated at Figure 27 being generated to the intersection of Burnley Street/Doonside Street/Buckingham Street.

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street, Richmond

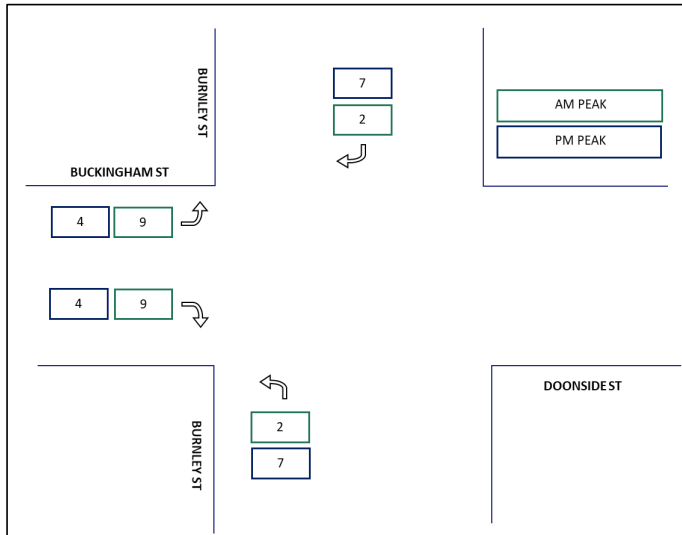


Figure 27: 171 Buckingham Street Traffic Generation

5.2.3. "Base Case" Intersection Volumes

Adopting the above volumes, and applying these to the recorded volumes from November 2019, we will adopt the volumes at Figure 28 as the existing "Base Case".

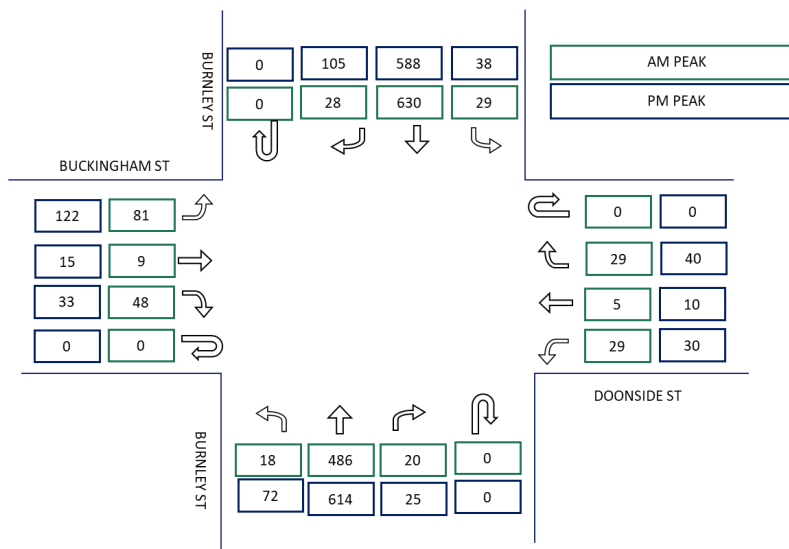


Figure 28: Existing "Base Case" Traffic Volumes – 21st November 2019 + 171 Buckingham

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

5.2.4. Base Case Intersection Operation

In order to understand the existing operation of the existing intersection at Burnley Street/Doonside Street, SIDRA Analysis was undertaken for the AM and PM peak hours.

The intersection as been modelled as a 'T-intersection' which reflects how the intersection currently operates.

To calibrate the model, we have reviewed gap and headway surveys and video footage of the May 2021 surveys to understand potential impacts of the close spacing of the intersection of Burnley Street/Buckingham Drive.

We have also included a nominal 50 north-south bicycle movements on Burnley Street to allow for potentially higher than recorded and/or growth to cycle volumes in future normal periods.

SIDRA is a computer program originally developed by the Australian Road Research Board, which can be used to analyse the operation of intersections. SIDRA provides information about the capacity of an intersection in terms of a range of parameters, as described below:

Degree of Saturation (D.O.S.) is the ratio of the volume of traffic observed making a particular movement compared to the maximum capacity for that movement. Various values of degree of saturation and their rating are shown below.

Level of Service		Intersection Degree of Saturation	
		Unsignalised Intersection	Signalised Intersection
A	Excellent	≤ 0.60	≤ 0.60
B	Very Good	0.60 – 0.70	0.60 – 0.70
C	Good	0.70 – 0.80	0.70 – 0.90
D	Acceptable	0.80 – 0.90	0.90 – 0.95
E	Poor	0.90 – 1.00	0.95 – 1.00
F	Very Poor	≥ 1.0	≥ 1.0

The **95th Percentile Queue** represents the maximum queue length, in metres, that can be expected in 95% of observed queue lengths in the peak hour.

Average Delay (seconds) is the average delay time that can be expected for all vehicles making a particular movement in the peak hour.

The results of the existing analysis are summarised in Table 7 identifying that the intersection operates under 'excellent' conditions with most movements at the intersection having relatively manageable delays and queues.

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

Table 7: "Base Case" Intersection Analysis – Burnley Street & Doonside Street Modelled as a T-Intersection with Bikes

Approach	Movement	AM Peak			PM Peak		
		DoS	Average Delay (s)	95% Queue (m)	DoS	Average Delay (s)	95% Queue (m)
Burnley Street (S)	T	0.36	1	7	0.47	1	11
	R	0.36	12	7	0.47	14	11
Doonside Street (E)	L	0.07	14	2	0.08	14	3
	R	0.18	30	5	0.36	47	10
Burnley Street (N)	L	0.02	6	0	0.02	6	0
	T	0.37	0	0	0.38	0	0

5.3. Proposed Development Traffic Generation & Impact

5.3.1. Trip Generation Rates

Site Characteristics & Mode Choice

ABS Journey to Work data for the Richmond SA2 area for residents and employees is provided in Figure 29. It demonstrates that there is already an existing strong preference for mode choices other than personal car.

These statistics are supported by how accessible the site is by active transport modes, including walking, cycling and public transport.

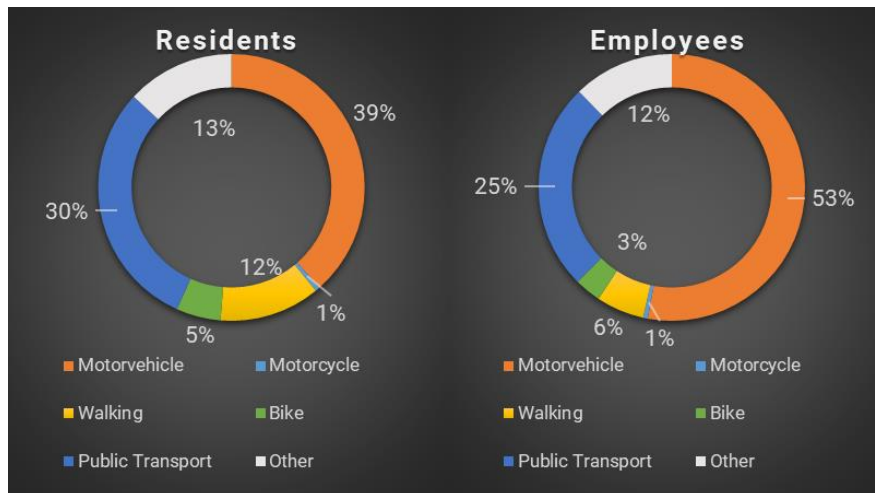


Figure 29: 2016 ABS Journey to Work Data for Travel Modes

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

Existing Harry the Hirer Use

For the purposes of this analysis, we will presume that there will be no additional traffic generation to the site associated with the Harry the Hirer use, that hasn't already been recorded by the existing traffic, pedestrian and cycle surveys.

Proposed Residential Component

To establish trip generation for the proposal, we refer to VISTA data summarised in the Ratio Consultants report which provides trip generation rates for residential development (all modes) and the percentage for each mode.

It is typical to adopt a trip rate of 2.9 trips per person per day on average in the Inner Melbourne area. ABS Data indicates an average of 2.1 people per household in City of Yarra.

Application of these rates to the circa 600 future dwellings equate to some 3,654 trips per day by all modes.

Whilst ABS data provides an indication of likely travel modes, it is a snapshot in time, and there is an expectation that active transport modes will continue to take up a share of the peak hour trips for the proposal.

Accordingly, we have applied target/potential trip shares as follows, which considers the likely parking allocations for the future residents.

Table 8: Projected Percentage Mode Share for Residential Trips

Travel Mode	Residents	Adopted	Net Change
Motor Vehicle ⁵	38.5%	27.5%	-11.0%
Motorcycle	0.5%	1.0%	0.5%
Walking	12.2%	15.0%	2.8%
Bike	5.4%	9.0%	3.6%
Public Transport	30.2%	33.0%	2.8%
Other	13.1%	14.5%	1.4%

Application of these mode splits to the overall projected trip generation, and adopting a 10% proportion occurring in the peak hours in the peak hours.

⁵ Includes car as driver, car as passenger, truck, taxi

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

Table 9: Residential Trip Generation per Mode in a Peak Hour

Travel Mode	Movements
Motor Vehicle ⁶	100
Motorcycle	4
Walking	55
Bike	33
Public Transport	121
Other	53
Total	365

Based on the preceding the residential component of the development is expected to generate up to 100 vehicle movements during the peak hours. Allowing for the circa 600 residential dwellings proposed as part of the application, this equates to a traffic generation rate of 0.17 vehicle movements per dwelling (irrespective of parking provisions) during the peak hours.

When allowing for the residential parking provision of 550 spaces, this equates to a traffic generation rate of 0.18 movements per dwelling with a car space in the peak hours.

To determine the appropriateness of the preceding traffic volumes survey data for residential developments in the vicinity of the site, including 69 Palmer Street and 69-73 River Street in Richmond, have been sourced. The data highlights daily traffic generation rates of 1.8 and 2.13 movements per dwelling for the Palmer Street and River Street developments, respectively.

Allowing for 10% of the daily traffic to be generated during the peak hours, this equates to 0.18 and 0.213 movements per dwelling, respectively.

Supplementary case studies from existing residential development in Trenerry Crescent, Abbotsford suggests similar levels of traffic generation per dwelling with a car space, but for development with arguably lesser accessibility to surrounding amenity.

Given the range of development expected on the site, we are comfortable that the adopted trip generation rates are appropriate.

Proposed Commercial Component (Excluding Harry the Hirer Site)

Consistent with the residential component of the site, the travel modes for employees within the Richmond SA2 has been sourced.

A summary of the traffic mode splits for commercial uses is provided at Table 10.

We note that whilst these rates are for employees, and not customers, they do give some level of indication as to the transport choices that visitors might make to get to a site.

⁶ Includes car as driver, car as passenger, truck, taxi

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

Table 10: Commercial ABS Data - Richmond SA2 Mode Split

Travel Mode	Employees
Motor Vehicle ⁷	52.9%
Motorcycle	0.5%
Walking	5.8%
Bike	3.2%
Public Transport	25.2%
Other	12.2%

An assessment of the expected traffic mode splits is provided as follows.

Office Use

An occupancy rate of 1 employee per 10 square metres is expected for office uses. Application of this rate to the circa 5,000 square metres of office floor area equates to a total of 500 employees for the office use. We note that this floor area is at the upper end of the likely range.

Vehicle trip generation is usually related to parking provisions, whereby 50% of parking generates movements inbound in the morning and outbound in the afternoon. An estimated rate of 1 parking space per 100 square metres will be adopted for this assessment.

On the basis of restricted parking supply, the mode split associated with motor vehicles will significantly decrease when compared to the broader Richmond SA2 and alternative transport modes eg. walking, cycling and public transport will increase.

Based on the preceding, the following modal split has been adopted for the office component of the site.

Table 11: Office Travel Mode Splits

Travel Mode	Staff	Adopted	Net Change
Motor Vehicle ⁸	52.9%	10.0%	-42.9%
Motorcycle	0.5%	1.0%	+0.5%
Walking	5.8%	20.0%	+14.2%
Bike	3.2%	23.0%	+19.8%
Public Transport	25.2%	32.0%	+6.8%
Other	12.2%	14.0%	+1.8%

⁷ Includes car as driver, car as passenger, truck, taxi

⁸ Includes car as driver, car as passenger, truck, taxi

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

Gym & Other Retail

We will presume a maximum occupancy of 1 person per 10 square metres for the gymnasium and other retail uses, inclusive of 20% staff and 80% customers, during the peak hours.

Application of this rate to the proposed circa 5,000 square metres of additional retail and gym floor area (excludes existing Harry the Hirer) equates to a peak of 100 staff and 400 customers/patrons. We note that this floor area is at the upper end of the likely range.

For the purpose of this assessment, staff are expected to have a similar travel profile to office staff.

However it is expected that customers will generate a higher reliance on motor vehicles than the staff due to shorter term trips, the timing of the trips and them often including transport of goods. That said, there is still a limited number of on-site parking spaces, which will still encourage active transport modes, rather than private vehicle use.

In the morning commuter peak hour, we will presume a trip generation of 25% of the overall patronage, whilst in the afternoon peak we will presume 100% trip generation in the peak hour.

As such the mode splits illustrated within Table 12 have been adopted for the customers of the retail uses.

Table 12: Customer Travel Mode Split

Travel Mode	ABS Data	Adopted	Net Change
Motor Vehicle 9	52.9%	40.0%	-12.9%
Motorcycle	0.5%	0.5%	No Change
Walking	5.8%	10.0%	+4.2%
Bike	3.2%	10.0%	+6.8%
Public Transport	25.2%	27.3%	+2.1%
Other	12.2%	12.2%	No Change

Estimated Traffic Generation

Based on the preceding mode splits an assessment of the approximate travel demands generated by each mode is provided at Table 13 below.

We note that the traffic generation of the commercial floor areas contemplates yields at the upper end of the likely range. That is, if yields are lower then overall traffic generation is likely to be lower.

⁹ Includes car as driver, car as passenger, truck, taxi

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

Table 13: Estimated Traffic Generation

Use	Transport Mode	Mode Split	Peak Hour Trips	
			AM Peak	PM Peak
Residential				
Residents	Motor Vehicle	27.5%	100	100
	Motorcycle	1.0%	4	4
	Walking	15.0%	55	55
	Bike	9.0%	33	33
	Public Transport	33.0%	121	121
	Other	14.5%	53	53
Office				
Staff	Motor Vehicle	10.0%	25	25
	Motorcycle	1.0%	3	3
	Walking	20.0%	50	50
	Bike	23.0%	58	58
	Public Transport	32.0%	80	80
	Other	14.0%	35	35
Retail Use				
Staff	Motor Vehicle	10.0%	10	10
	Motorcycle	1.0%	1	1
	Walking	20.0%	20	20
	Bike	23.0%	23	23
	Public Transport	32.0%	32	32
	Other	14.0%	14	14
Customers	Motor Vehicle	40.0%	40	160
	Motorcycle	0.5%	1	2

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

Use	Transport Mode	Mode Split	Peak Hour Trips	
			AM Peak	PM Peak
	Walking	10.0%	10	40
	Bike	10.0%	10	40
	Public Transport	27.3%	27	109
	Other	12.2%	12	49
Total				
All	Motor Vehicle		175	295
	Motorcycle		9	10
	Walking		135	165
	Bike		124	154
	Public Transport		260	342
	Other		114	151
Total			815	1115
NOTES:				
Office 50% of peak persons arrive during peak hours / Retail 25% of peak customers arrive or depart during AM peak hour / 100% of peak persons arrive or depart during PM peak hour				

Based on the preceding the proposal could be expected to generate a total of 815 movements during the AM peak hour, inclusive of 175 movements by private vehicle, 9 motorcycle trips, 135 pedestrian trips, 124 bicycle trips, 260 public transport trips and 114 other trips.

During the PM peak hour, the proposal could be expected to generate a total of 1,115 trips, inclusive of 295 vehicle movements by private vehicle, 10 motorcycle trips, 165 pedestrian trips, 154 bicycle trips, 342 public transport trips and 151 other trips.

5.3.2. Traffic Distribution & Volumes

The application proposes all access to the site to occur from Doonside Street on the site's northern boundary and therefore it is expected that a majority of traffic generated by the site will utilise the new signalised intersection at Burnley Street and Doonside Street.

Consistent with the Planning Scheme amendment reports, it is expected that a small proportion of traffic generated by the proposal will utilise River Street to the east to travel south and link to Bridge Road.

Based on the preceding we expect that 80% of traffic generated by the proposal will utilise the new signalised intersection with the remaining 20% travelling to the south to/from River Street.

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

To assess the inbound and outbound movements for the site the splits provided at Table 14 have been adopted for the proposal.

Table 14: Inbound & Outbound Traffic Splits

Direction	Residential		Commercial	
	Inbound	Outbound	Inbound	Outbound
AM Peak	20%	80%	90%	10%
PM Peak	60%	40%	10%	90%

Of the traffic accessing the site via the new signalised intersection the existing traffic distributions at this intersection have been adopted, consistent with the Ratio Report prepared for the Planning Scheme Amendments.

The distributions summarised at Table 15 have been adopted for the new signalised intersection.

Table 15: Expected Traffic Distributions - Burnley Street/Doonside Street/Buckingham Street

Direction	AM Peak		PM Peak	
	Inbound	Outbound	Inbound	Outbound
Burnley Street (N)	50%	50%	50%	50%
Buckingham Street (W)	40%	40%	40%	40%
Burnley Street (S)	10%	10%	10%	10%
Total	100%	100%	100%	100%

Based on the preceding traffic generation rates and distributions, the traffic volumes illustrated at Figure 30 are expected as part of this proposal.

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street, Richmond

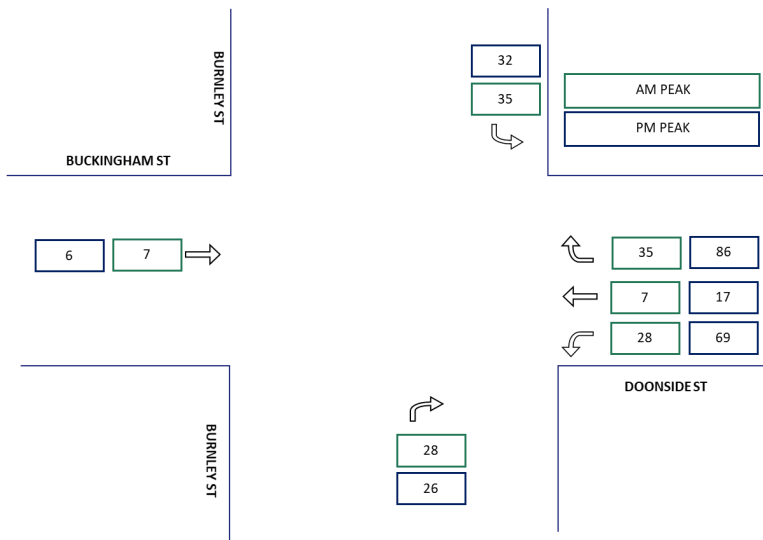


Figure 30: Development Plan Likely Traffic Generation – Additional Peak Hour Movements at Burnley/Doonside

Superimposing these volumes onto the existing “Base Case” provides the Post Development Traffic Volumes at Figure 31.

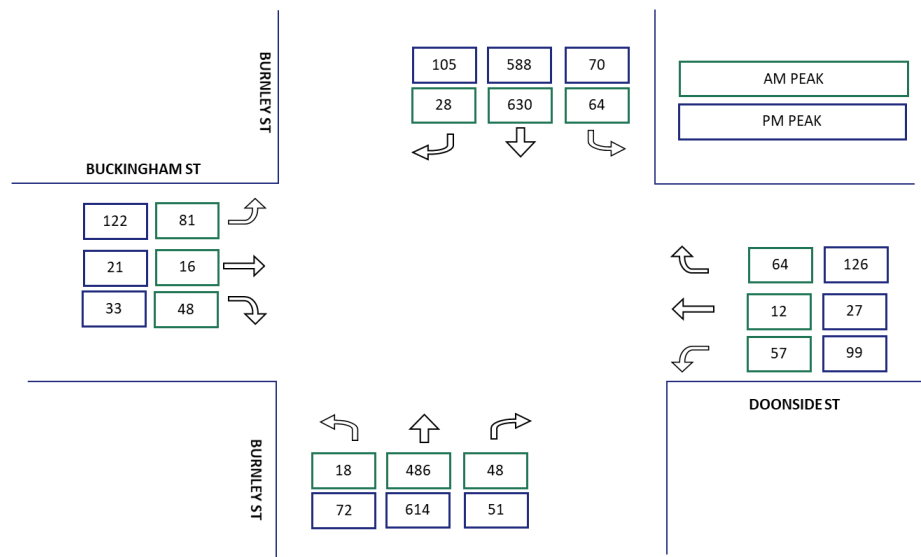


Figure 31: Post Development Traffic Volumes at Burnley Street/Doonside Street

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

5.3.3. Traffic Impact & Intersection Analysis

To assess the post development operation of the intersection of Burnley Street/Doonside Street a SIDRA model of the post development traffic volumes has been undertaken for the existing unsignalised T-intersection.

The SIDRA analysis identifies that the intersection of Burnley Street/Doonside Street is expected to operate under 'excellent' conditions during the AM peak hour and 'good' conditions during the PM peak hour.

A summary of the post development SIDRA results is provided at Table 16.

Table 16: Base Case vs Proposed Development SIDRA Analysis – Unsignalised Intersection

	Approach	Movement	Base Case			Proposed		
			DoS	Average Delay (s)	95% Queue (m)	DoS	Average Delay (s)	95% Queue (m)
AM Peak	Burnley Street (S)	T	0.37	1	7	0.46	3	22
		R	0.37	13	7	0.46	13	22
	Doonside Street (E)	L	0.07	14	2	0.13	14	4
		R	0.17	29	4	0.42	38	12
	Burnley Street (N)	L	0.02	6	0	0.04	6	0
		T	0.37	0	0	0.37	0	0
PM Peak	Burnley Street (S)	T	0.48	2	12	0.58	4	34
		R	0.48	17	12	0.58	16	34
	Doonside Street (E)	L	0.09	15	3	0.25	15	8
		R	0.36	47	9	1.18	258	139
	Burnley Street (N)	L	0.02	6	0	0.04	6	0
		T	0.39	0	0	0.39	0	0

Based on the preceding, the proposed majority of movements through the intersection of Burnley Street/Doonside Street will operate within capacity, with the exception of the right turn exit from Doonside Street in the PM peak hour.

In the AM peak hour, the intersection operates well within capacity and there is no trigger to provide any significant mitigating works at the intersection.

However, in the PM peak hour, the additional demands to vehicles exiting Doonside Street identifies that there will be capacity constraints for the right turn movement which operates over capacity.

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

It is important to acknowledge that the traffic network is fluid. That is, where there is constraints on capacity, drivers will choose another route to access to depart a site. However, whilst the left turn exit will still operate well within capacity, and this could assist in dissipating the demands, there will continue to be right turn demands and resultant lengthy delays to vehicles exiting Doonside.

5.3.4. Warrants for the Signalised Intersection & Staging

It is acknowledged that traffic signals can deliver significant improvements to road safety, particularly for pedestrians and cyclists in inner urban areas where future volumes of all modes are expected to increase.

The SIDRA analysis identifies that the intersection is reaching capacity primarily due to the right turn egress in the PM peak hour.

On balance, it is considered that there will be benefit to the immediate development and road network to signalise the intersection at the completion of the Development Plan.

This will also support the potential for any further development to the east that might further put strain on the intersection capacity and safety.

In relation to staging of the site, and triggers for the signals, the proposal is contemplated in 4 stages with varying levels of commercial and residential development.

A sensitivity analysis has been undertaken to analyse the development staging and identify at what point the signals at the intersection would be required. This analysis has identified that the development yields proposed by Stages 1, 2 and 3 could effectively be accommodated by the existing intersection whilst maintaining a Degree of Saturation of 0.9.

The levels of development tested (using the same trip generation rates identified in the preceding sections) are:

- The existing Harry the Hirer restricted retail use; plus
- Approximately 500 dwellings; plus
- Approximately 4,000 square metres of commercial/office; plus
- Approximately 3,000 square metres of shop/retail.

That is, essentially Stage 4 would trigger the need to deliver the signals from an intersection capacity perspective.

5.3.5. Consideration of Potential Future Development

We are advised that the south-east corner of the Victoria Gardens site (located at the intersection of Doonside Street and David Street) is proposed to be developed for the purposes of a mixed use development, including a substantial residential offering.

Following a meeting with the landowner and their traffic consultant, we understand that the proposed development is expected to include in the order of 700-800 residential dwellings and ground floor retail and podium commercial offerings. Access for the residential uses will be to Doonside Street whilst retail and commercial uses are understood to be an extension of

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

the existing Shopping Centre uses, with vehicular access and parking from the existing centre side.

We are advised that a car parking provision of around 0.5 spaces per apartment is targeted.

For the purposes of this assessment, we will assume 800 dwellings will generate traffic consistent with the subject site and will ignore any potential impacts due to the commercial uses.

Adopting a rate of 0.20 vehicle movements per dwelling with a car space, equates to a peak hour traffic generation of some 80 vehicle movements in a peak hour.

It should be noted that this is conservatively low (very) when compared with the traffic generation rates adopted for this Development Plan and is based on a significant residential parking reduction. Should parking be provided at higher than 0.5 spaces per apartment (or a total of 400 parking spaces) then traffic generated by that site would be substantially higher and the following analysis would need to be revised and reviewed.

On the basis of adopting significantly reduced parking rates (as advised), the expected traffic distributions at the intersection of Burnley Street/Doonside Street/Buckingham Street are illustrated at Figure 32.

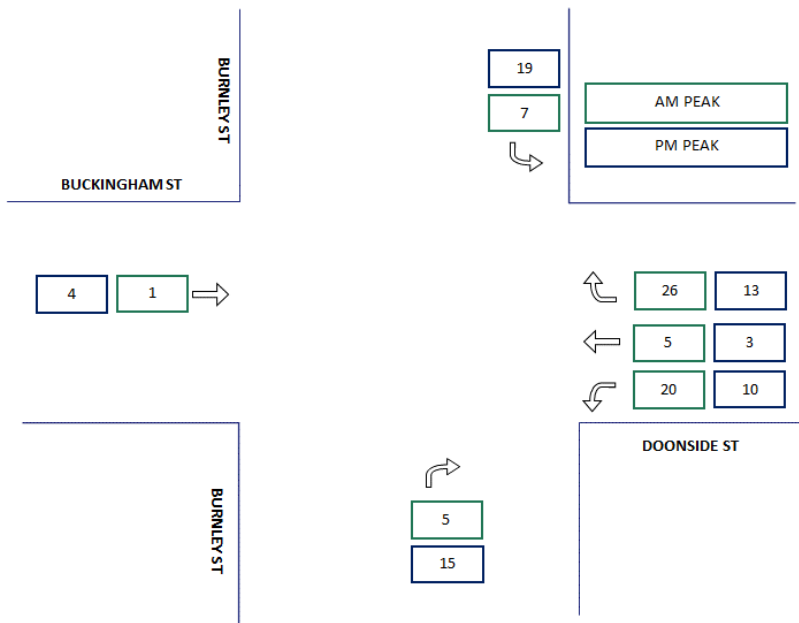


Figure 32: Projected Victoria Gardens Traffic Volumes

Notably, the level of traffic generated by the proposed Victoria Gardens development would be of a similar order (if not more) than that contemplated by the Stage 4 development yields. If higher parking rates are targeted, there would also be more traffic generated by the site.

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street, Richmond

On this basis, and depending on the timing of the subject development and the Victoria Gardens development, the need to signalise the intersection could be triggered should that development occur prior to the completion of this application.

5.3.6. Signalised Intersection Analysis

5.3.7. General

The Schedule to the Development Plan Overlay requires consideration of what form the signalised intersection should take and requires an assessment as to "whether a two way or a four way signalised intersection between Burnley Street/Doonside Street/Buckingham Street is required".

Due to the close spacing of the intersections, any signalisation of Doonside Street would require either incorporation of Buckingham Street into the signals, or implementation of physical controls to make movements to/from Buckingham Street left-in/left-out – or even full closure of the eastern end of the road.

Our office has prepared a Concept Plan showing potential signalisation of the two intersections to form a 4-way intersection. This will deliver improved and appropriate pedestrian, cycle and vehicular movements and controls.

The concept plan is provided at Appendix A.

5.3.8. Future Traffic Volumes

To test the suitability of the proposed signalised intersection, we have identified 'future' traffic volumes for the combined intersection of Burnley Street/Doonside Street/Buckingham Street.

The traffic generation provided within the preceding sections of the report has been superimposed onto the existing traffic volumes surveyed at the intersection as shown in Figure 33.

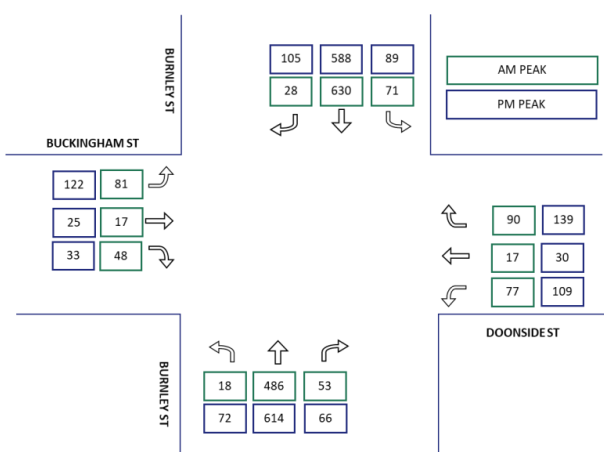


Figure 33: Post Development Traffic Volumes - Burnley Street/Doonside Street/Buckingham Street

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

5.3.9. Analysis of Intersection Operation

Due to the offsets of the Doonside and Buckingham Street legs of the intersection, there is a need to split phase the side roads and/or investigate turn bans and alternative phasing arrangements to address overlapping turns and movements.

An analysis of different phasing options is provided as follows.

Option 1 – Fully Directional Intersection Control

Option 1 proposes the new signalised intersection to operate with fully controlled movements on all approaches to the intersection (including the right turns on Burnley Street).

A SIDRA analysis of a fully controlled intersection has been undertaken based on the volumes provided in the preceding section. The results of the SIDRA analysis show that the intersection operates under ‘Good’ conditions during both the AM and PM peak hours.

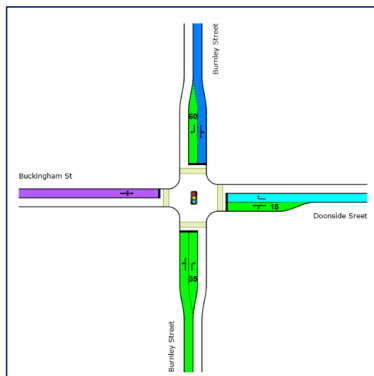


Figure 34: Option 1 - SIDRA DOS AM Peak

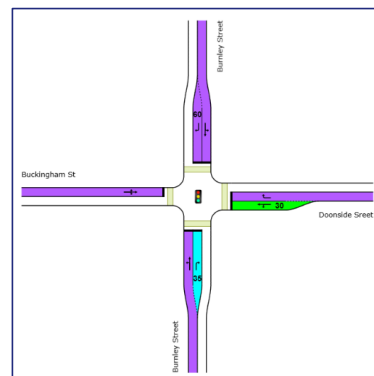
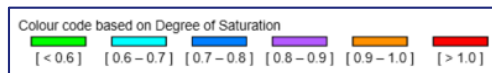


Figure 35: Option 1 - SIDRA DOS PM Peak



Option 2 – Continuation of Right Turn Ban

Under the existing conditions of the intersection a right turn ban applies for the northern approach of Burnley Street between 7am and 9am. Option 2 proposes to maintain this turn ban during the AM peak hour.

A SIDRA analysis of a right turn ban from the north during the AM peak hour has been undertaken based on the volumes provided in the preceding section. The results of the SIDRA analysis show that the intersection operates under ‘Good’ and ‘Acceptable’ conditions during the AM and PM peak hours, respectively.

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street, Richmond

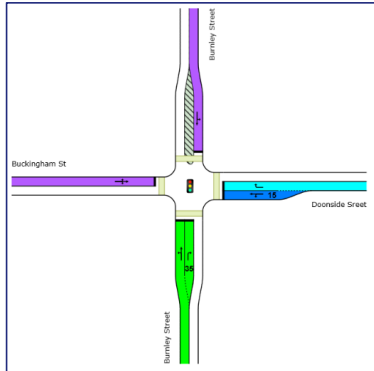


Figure 36: Option 2 - SIDRA DOS AM Peak

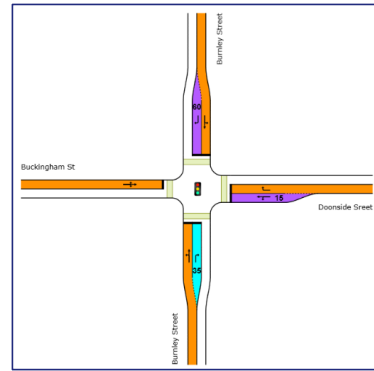
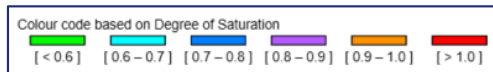


Figure 37: Option 2 - SIDRA DOS PM Peak



Option 3 – Filtered Right Turns from the South

Option 3 proposes a similar arrangement to Option 1, but also includes an allowance for filtered right turns for the south approach of Burnley Street to consider potentially increased capacity on this leg.

A SIDRA analysis of a filtered right turn from the south has been undertaken based on the volumes provided in the preceding section. The results of the SIDRA analysis show that the intersection operates under ‘Good’ conditions during the AM hour. During the PM peak hour, the analysis shows that the intersection operated under ‘poor’ conditions.

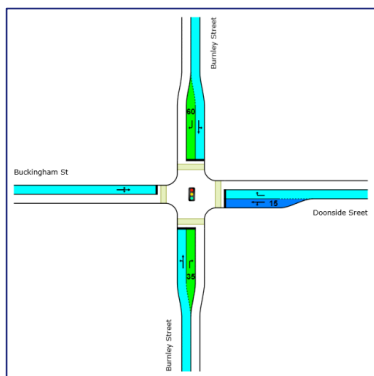


Figure 38: Option 3 - SIDRA DOS AM Peak

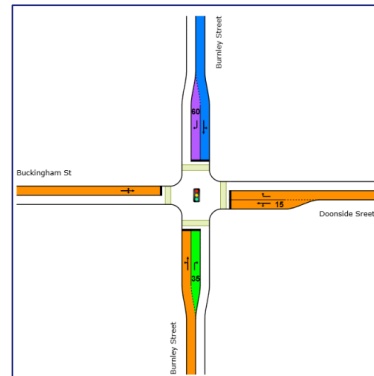
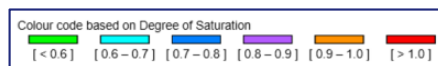


Figure 39: Option 3 - SIDRA DOS PM Peak



Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

Option 4 – Filtered Right Turns from the North

Option 4 proposes a similar arrangement to Option 1, but also includes an allowance for filtered right turns for the south approach of Burnley Street to consider potentially increased capacity on this leg.

A SIDRA analysis of a filtered right turn from the north has been undertaken based on the volumes provided in the preceding section. The results of the SIDRA analysis show that the intersection operates under ‘Good’ conditions during the AM hour. During the PM peak hour, the analysis shows that the intersection operated under ‘acceptable’ conditions.

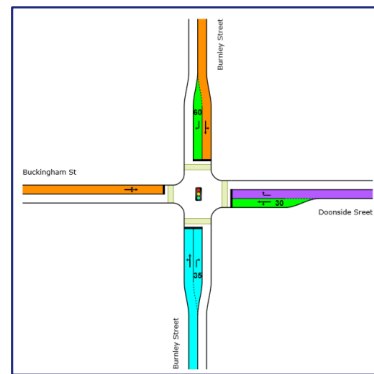
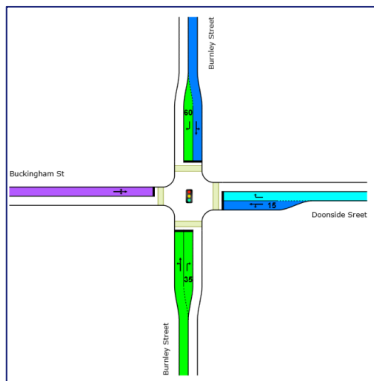
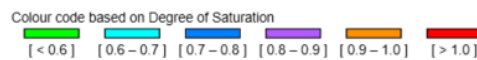


Figure 40: Fully Controlled Signals - SIDRA DOS AM Peak Figure 41: Fully Controlled Signals - SIDRA DOS PM Peak



5.3.10. Recommendations

Based on the preceding it can be seen that each of the signal phasing arrangements operate under comparable arrangements with filtered right turns during the PM peak hour resulting in the poorest signal operation.

As such a fully controlled signal arrangement could be adopted, resulting improved accessibility to both Doonside Street and Buckingham Street, safer operating conditions through the intersection and also providing for the best performance of the signalised intersection.

The detailed results of the intersection analysis arrangements are provided at Appendix B.

The ultimate intersection layout will require discussions and approval with Council and DoT.

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

5.4. Summary of Conclusions

Based on the preceding, it is identified that:

- Signals are required at full completion of the Development Plan to not only address vehicular capacity, but provide a desirable pedestrian, cyclist and road safety response to access within the precinct.
- From a road network capacity perspective, Stages 1, 2 and 3 could be delivered without the signalised intersection.
- Signals would be required at the completion of Stage 4 of the Development Plan, or if the land to the north-east is developed before the Development Plan is completed.
- A Concept Plan for a 4-way intersection layout has been prepared and multiple operating arrangements analysed to determine the best operating conditions of the intersection.

Ultimately, the design, funding and timing of the delivery of the signals will be to the satisfaction of Council and Department of Transport, but should consider whether contributions are required by the future development of the neighbouring land.

6. Bicycle Considerations

Clause 52.34 of the Planning Scheme specifies the bicycle parking requirement for new developments.

The relevant rates under Clause 52.34 are summarised in Table 17.

Table 17: Statutory Bicycle Parking Requirements

Use	Statutory Requirement
Dwellings	1 space per 5 dwellings for residents 1 space per 10 dwellings for visitors
Shop (inc. Restricted Retail)	1 space per 600 m ² for staff 1 space per 500 m ² for customers
Office	1 space per 300 m ² for staff 1 space per 1,000 m ² for visitors
Gymnasium (assumed 10 staff)	1 space per 4 employees for staff 1 space to each 200 m ² for visitors
End of Trip Facilities	1 shower/changeroom for the first 5 bicycle spaces and 1 space for each 10 bicycle spaces thereafter.

The Development Plan contemplates the following bicycle parking provisions/allocations:

- Staff parking will be provided at a typical rate of 1 space per 100 square metres (approximately 140-180 staff parking spaces)
- Resident parking will be provided at a minimum rate of 1 space per dwellings, provided within separate secure areas (approximately 545-645 spaces expected to be provided).
- Parking for visitors will primarily be provided at ground level (but can be within other levels) and will achieve minimum rates of 1 space per 10 dwellings, plus 1 space per 500 square metres of commercial floor area.

End of Trip facilities are proposed on-site for staff and will achieve a minimum rate of 1 shower/changeroom per 10 bikes. They will be conveniently located to encourage use by staff for all buildings.

These rates far exceed the minimum statutory requirements under Clause 52.34 and will appropriately foster sustainable transport behaviours and mode choices.

7. Loading Considerations

7.1. General Requirements

Clause 65.01 of the Planning Scheme states that the responsible authority must consider a number of matters as appropriate including:

- *The adequacy of loading and unloading facilities and any associated amenity, traffic flow and road safety impacts.*

7.2. Proposed Primary Loading Provisions

Primary loading will take place on-site via dedicated loading areas.

The Harry the Hirer Use will have a dedicated dock to cater for Hire Bump-ins/outs and will accommodate three 8.8 metre Medium Rigid Vehicles (MRVs).

The residential and other commercial uses will utilise shared loading areas. The primary loading area will accommodate an 8.8 metre MRV vehicle. Other loading spaces are likely to be provided for smaller vans and utes.

7.3. Expected Regular Loading Volumes

Based on the expected uses and information provided by the applicant, the following loading movements are contemplated per day:

- An average of 3-4 residential load ins/outs per day
- An average of 20 retail/shop deliveries per day
- In the order of 1-5 delivery movements per day on average – depending on the day and time of year.
- In the order of 2 waste collections per day for the site as a whole (a mixture of residential and retail).

In total, this equates to an average or around 28 delivery movements per day (inclusive of trucks, vans, utes and cars).

7.4. Temporary and Event Loading

A temporary loading area for display vehicles and event equipment is proposed at ground floor, within the north-south section of Harry's Lane.

Access to the loading area will be provided via a crossover to Doonside Street for vehicles up to an 8.8 metre MRV. Vehicles will reverse into Harry's Lane from Doonside Street and then exit the site in a forward direction.

A diagram illustrating the proposed arrangements is provided at Figure 42.

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street, Richmond

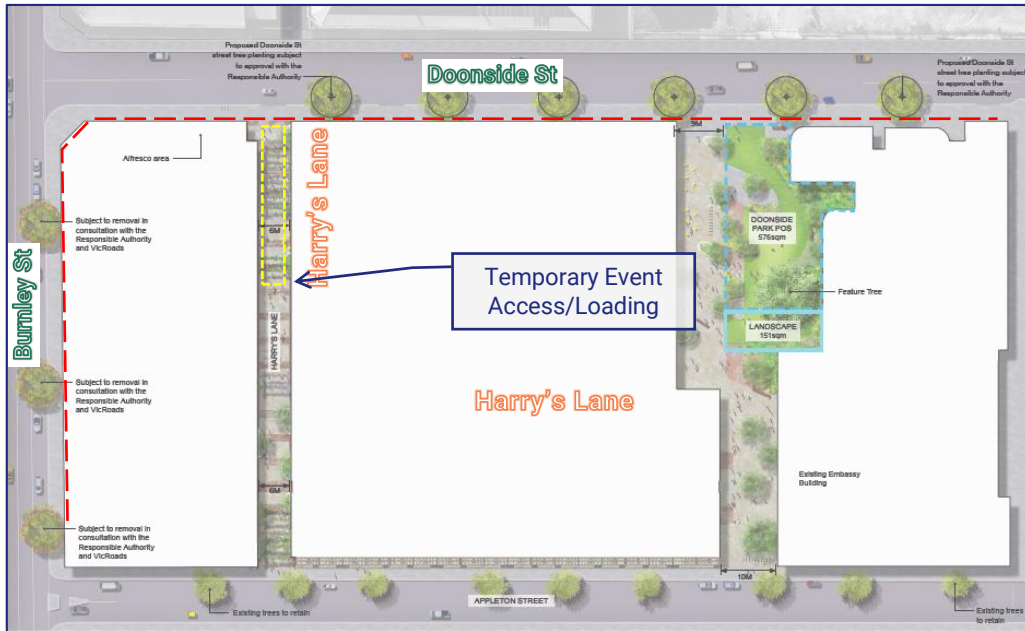


Figure 42: Temporary Loading Arrangement

Access to Harry's Lane will be controlled through traffic management. A Loading Management Plan could be provided as a Condition of Permit to ensure safe and convenient access is provided.

Bollards will be provided outside of loading periods to restrict vehicle accessibility into Harry's Lane.

Based on the preceding, we are satisfied that appropriate loading and waste provisions can be accommodated in accordance with the objectives of the Planning Scheme.

Loading activities associated with the temporary loading dock are expected to be infrequent and will not be a daily movement. As such the traffic associated with this component of the loading will be indiscernible to other motorists.

8. Design Considerations

8.1. Site Access Locations

The Development contemplates 2 key vehicular access locations to on-site parking and loading.

They are considered to be appropriately located to provide suitable separation from existing and future intersections to ensure that vehicle access will not disrupt the pedestrian, cyclist or vehicular operations on the network on Doonside Street.

There is no vehicular access proposed to Appleton Street.

The accesses will be designed to appropriately cater for 2 way passing, and will appropriately address footpaths and manage pedestrian and vehicle conflicts.

All loading access is via Doonside Street.

The proposed internal laneways will be designs for primary pedestrian and cyclist access. The eastern laneway will not permit vehicular access.

8.2. Internal Laneway Cross-Sections

The internal laneways are contemplated to be predominantly pedestrianised with only the northern portion of Harry's Lane providing a temporary loading area. Vehicular access to the remaining laneways will be restricted to intermittent maintenance and/or emergency vehicle access.

Laneways will primarily be provided as pedestrian and cyclist laneways that provide direct access and active frontages to the ground floor uses and lobbies.

A cross-section for the eastern laneway is provided in Figure 43.

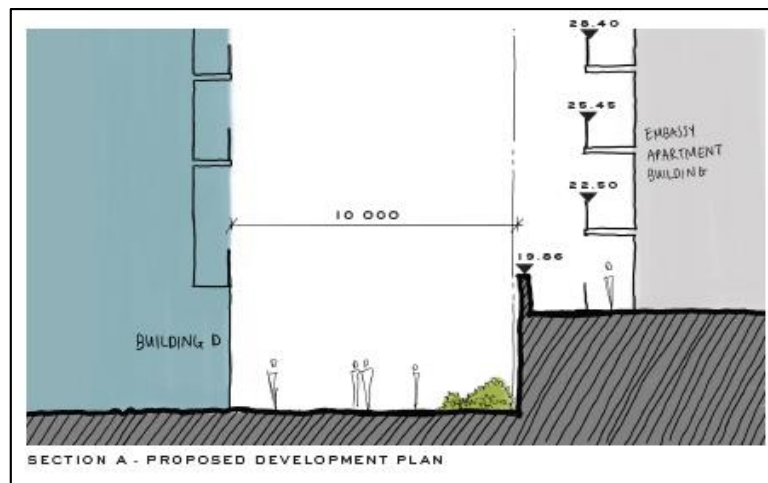


Figure 43: Cross-sections of Eastern North-South Laneway

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

9. Schedule to the Development Plan Overlay

An assessment/commentary in relation to each of the items required to be addressed within the Traffic Works Assessment listed at the Schedule to the Development Plan Overlay is provided in the table below.

Table 18: Responses to Schedule to the Development Plan Overlay

Item	Response
<i>An existing conditions assessment, including existing and approved vehicle and loading access arrangements associated with the Victoria Gardens Shopping Centre with capacity to interact with traffic from the development.</i>	The existing conditions assessment is provided at Section 2
<i>Details of any development staging.</i>	Development Staging is addressed at Section 3.1
<i>Consultation with the owner of the Victoria Gardens Shopping Centre</i>	There has consultation with the owner of Victoria Gardens SC, with commentary provided at Sections 2.2.2 and 5.3.5.
<i>A site layout plan showing convenient and safe primary vehicle access, including:</i>	This plan is addressed by the Development Plan, with further detail provided at Section 3.2
<i>primary vehicle access to and from Doonside Street;</i>	All vehicle access to via Doonside Street.
<i>any vehicle access to Appleton Street to be a secondary access point;</i>	There is no vehicular access to Appleton Street
<i>no direct vehicle access to or from the site via Burnley Street.</i>	There is no vehicular access via Burnley Street
<i>Details regarding the layout, cross section and function of any internal street or laneway network.</i>	All internal laneways will be predominantly pedestrian only, with the exception of the north-south section of Harry' Lane which will provide for a temporary loading area. This is detailed in 8.2.

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

<i>On site car parking and bicycle parking provisions and allocations.</i>	Parking allocations are provided in Section 3.3 and assessed in Section 4 (Car Parking) and Section 6 (Bike Parking).
<i>Expected traffic volumes and impact on the existing road network, including but not necessarily limited to Doonside Street, Appleton Street and Burnley Street. This assessment is to include details of any assumptions relied upon.</i>	The traffic impact assessment is detailed in Section 5.
<i>The Transport Works Assessment must include consideration of any development stages and approved/current development applications within the immediate area surrounding the site.</i>	The traffic impact assessment is detailed in Section 5 and considers surrounding approved development.
<i>The assessment is to:</i>	
<i>identify mitigating works required for each development stage in the development plan</i>	Signals at the intersection of Burnley Street/Doonside Street/Buckingham Street are identified as being required at Stage 4 of the development.
<i>assess whether a two way or a four way signalised intersection between Burnley Street/Doonside Street/Buckingham Street is required and the trigger for providing the signalised intersection to the satisfaction of VicRoads</i>	The traffic impact assessment is detailed in Section 5 and addresses the signalisation, which is expected to be best delivered by a 4-way intersection. Discussions with DoT and Council at in progress.
<i>identify a new intersection layout and operation, if required, approved by VicRoads in consultation with the Responsible Authority.</i>	
<i>Details of any works or treatments proposed to Doonside Street or Appleton Street or the nearby road network.</i>	The footpath along Doonside Street at the site frontage will be reconstructed. A streetscape improvement concept is being discuss with the owners of Victoria Gardens to address additional improvements. There is no access proposed to Appleton Street, and therefore limited improvements or modifications are necessary.

Traffic Works Assessment

81-95 Burnley Street & 26-34 Doonside Street,
Richmond

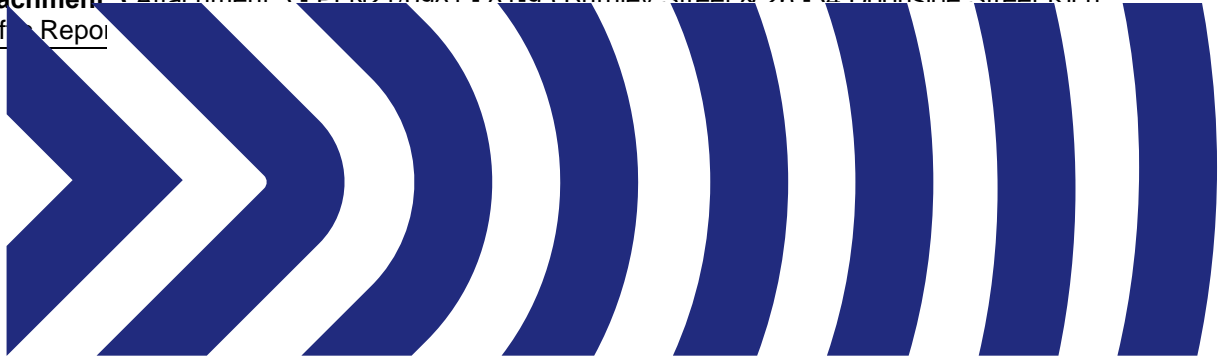
<i>Determine the likely increases to pedestrian and bicycle movements generated by the site and the likely distribution of those movements. Demonstrate how the subject site will prioritise those movements and provide convenient connections to existing infrastructure.</i>	Pedestrian and cyclist accessibility is detailed within Section 3.2 and trip generation is estimated at Section 5.3.1.
<i>Measures to reduce conflict and improve pedestrian and bicycle amenity (if applicable).</i>	This is addressed in the Development Plan and at Section 3.2.
<i>Indicative loading arrangements, with loading to be undertaken on site and conflict between the loading bay(s) and car parking areas and non-motorised transport to be minimised.</i>	Loading and access is detailed at 3.4 and assessed at Section 7.
<i>Estimate the type and number of loading/unloading activities associated with the development and provide information on appropriate loading/unloading facilities to service the various uses proposed.</i>	Loading and access is detailed at 3.4 and assessed at Section 7.
<i>Access to the site by trucks is to be via Doonside Street.</i>	All vehicle access to the site is via Doonside Street.
<i>Details regarding on-site waste collection, with waste vehicles accessing the site from Doonside Street</i>	Loading and access is detailed at 3.4 and assessed at Section 7.

10. Conclusions

Having undertaken a detailed traffic engineering assessment of the proposed development plan at 81-95 Burnley Street & 26-34 Doonside Street, Richmond, we are of the opinion that:

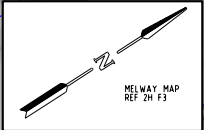
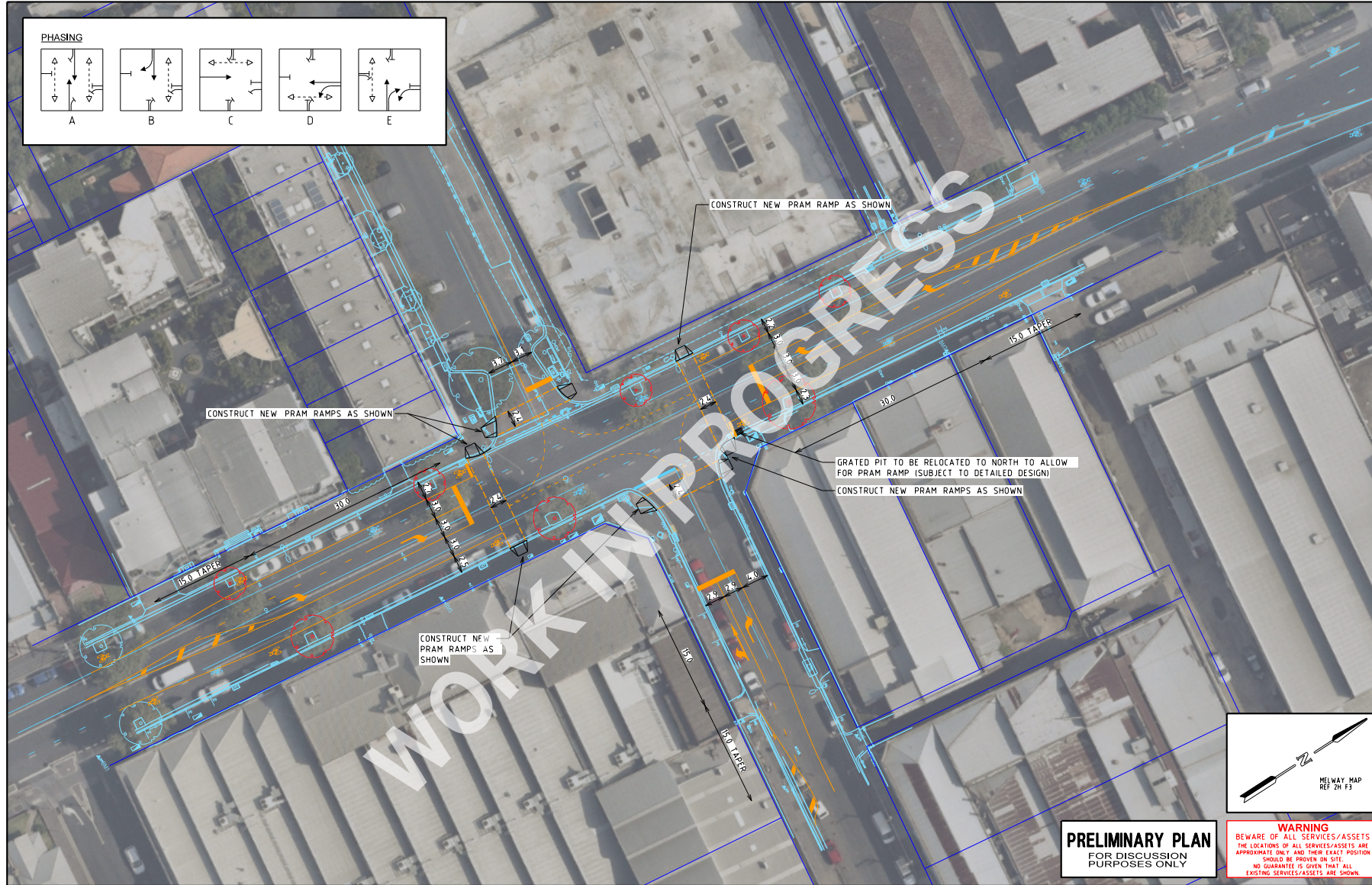
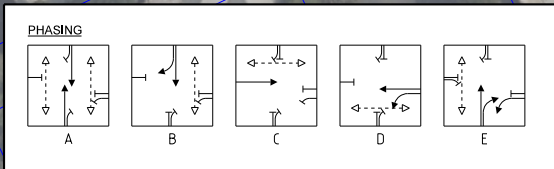
- a. the proposed development plan contemplates a dispensation of parking under Clause 52.06 as provisions of parking are expected to be lower than the minimum statutory rates;
- b. the required reduction in parking under Clause 52.06-6 is supported on the following grounds:
 - i) It is in line with Council's sustainable transport policies and objectives.
 - ii) The site has good access to public transport and local amenities and services, particularly via Victoria Gardens.
 - iii) It reduces the traffic impacts of the proposal and supports sustainable transport modes.
 - iv) Residents will not have access to parking permits and those without on-site car parking will not be able to maintain a car on-street given the prevailing parking restrictions.
 - v) for those staff who do not have an on-site parking space and do not wish to park on-street or within other publicly available (but priced) car parking, they have the opportunity to make a mode shift to more sustainable transport to access the site.
- c. The traffic works assessment has identified that:
 - i) Signals are required at full completion of the Development Plan to not only address vehicular capacity, but provide a desirable pedestrian, cyclist and road safety response to access within the precinct.
 - ii) From a road network capacity perspective, Stages 1, 2 and 3 could be delivered without the signalised intersection.
 - iii) Signals would be required at the completion of Stage 4 of the Development Plan, or if the land to the north-east is developed before the Development Plan is completed.
 - iv) A Concept Plan for a 4-way intersection layout has been prepared and multiple operating arrangements analysed to determine the best operating conditions of the intersection.
- d. bicycle parking rates are identified and proposed in excess of the requirements set out at Clause 52.34 of the Planning Scheme,
- e. On-site loading areas can be designed to meet the objectives of Clause 65.01 of the Planning Scheme and access is in accordance with the requirements of the Schedule to the Development Plan Overlay

Ultimately, there are no traffic engineering reasons why the Development Plan should not be approved, subject to appropriate conditions relating to the outcomes identified above.



Appendix A

Intersection Concept Layout Plan



PRELIMINARY PLAN
FOR DISCUSSION
PURPOSES ONLY

WARNING
BEWARE OF ALL SERVICES/ASSETS
THE LOCATIONS OF ALL SERVICES/ASSETS ARE
APPROXIMATE ONLY AND THEIR EXACT POSITION
SHOULD BE PROVEN ON SITE.
NO GUARANTEE IS GIVEN THAT ALL
EXISTING SERVICES/ASSETS ARE SHOWN.

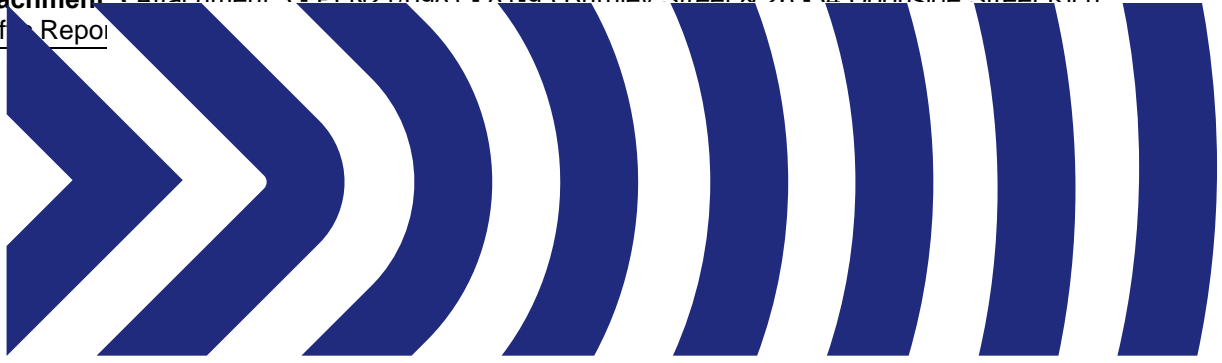
ISSUE	ISSUE DESCRIPTION	ISSUE DATE
A	FUNCTIONAL LAYOUT PLAN - INITIAL ISSUE	30 SEP 2021

GENERAL NOTES
1. BASE INFORMATION FROM FEATURE SURVEY (BURNLEY ST DOONSIDE ST RICHMOND DWG) / AERIAL PHOTOGRAPH (SOURCE NEARMAP SEP 2021)
2. ALL DIMENSIONS ARE TO FACE OF KERB & CHANNEL
3. MAIN ROAD - BURNLEY STREET (SPEED ZONE 50km/h)
4. LOCAL ROADS - DOONSIDE STREET AND BURNINGHAM STREET (SPEED ZONE 40km/h)
5. ALL PROPOSED FOOTPATHS AND PRAM CROSSINGS ARE TO BE CONSTRUCTED WITH TACTILE GROUND SURFACE INDICATORS TO ODA COMPLIANCE GUIDELINES REFER TO AS 1218-2009
TREE TO BE REMOVED

DESIGNED
S O'KEEFE 30 SEP 2021
CHECKED/APPROVED
W de WAARD 30 SEP 2021
FILE NAME
G26856-01-00.dgn

Traffix Group
Level 28, 459 Collins Street
Melbourne, Victoria 3000
+61 3 9822 2888
www.traffixgroup.com.au

BURNLEY STREET RICHMOND YARRA CITY COUNCIL FUNCTIONAL LAYOUT PLAN	
SCALE: 0 25 50 75 100 1:500 (A3)	SHEET No. DWG No. G26856-01-01



Appendix B

SIDRA Analysis Summaries

MOVEMENT SUMMARY

Site: 101 [Burnley/Doonside - AM (Site Folder: FULLY CONTROLLED)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist] m				
South: Burnley Street														
1	L2	18	2.0	19	2.0	0.599	19.1	LOS B	13.3	97.1	0.56	0.51	0.56	47.8
2	T1	486	5.0	512	5.0	0.599	13.6	LOS B	13.3	97.1	0.56	0.51	0.56	48.9
3	R2	53	2.0	56	2.0	*0.508	58.5	LOS E	2.8	20.3	1.00	0.75	1.01	30.1
Approach		557	4.6	586	4.6	0.599	18.0	LOS B	13.3	97.1	0.60	0.53	0.60	46.1
East: Doonside Sreet														
4	L2	77	2.0	81	2.0	0.406	47.0	LOS D	4.4	31.5	0.93	0.77	0.93	33.6
5	T1	17	2.0	18	2.0	0.406	41.4	LOS D	4.4	31.5	0.93	0.77	0.93	34.2
6	R2	90	2.0	95	2.0	*0.696	56.7	LOS E	4.8	34.2	1.00	0.84	1.16	30.5
Approach		184	2.0	194	2.0	0.696	51.2	LOS D	4.8	34.2	0.97	0.80	1.04	32.1
North: Burnley Street														
7	L2	71	2.0	75	2.0	0.790	22.8	LOS C	25.1	182.6	0.74	0.70	0.75	45.4
8	T1	630	5.0	663	5.0	*0.790	17.2	LOS B	25.1	182.6	0.74	0.70	0.75	46.4
9	R2	28	2.0	29	2.0	0.268	57.2	LOS E	1.5	10.5	0.99	0.72	0.99	30.2
Approach		729	4.6	767	4.6	0.790	19.3	LOS B	25.1	182.6	0.75	0.70	0.76	45.4
West: Buckingham St														
10	L2	81	2.0	85	2.0	0.835	60.8	LOS E	8.3	59.2	1.00	0.95	1.33	29.7
11	T1	17	2.0	18	2.0	*0.835	55.3	LOS E	8.3	59.2	1.00	0.95	1.33	30.2
12	R2	48	2.0	51	2.0	0.835	60.8	LOS E	8.3	59.2	1.00	0.95	1.33	29.7
Approach		146	2.0	154	2.0	0.835	60.2	LOS E	8.3	59.2	1.00	0.95	1.33	29.8
All Vehicles		1616	4.1	1701	4.1	0.835	26.2	LOS C	25.1	182.6	0.74	0.67	0.79	41.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped]	[Dist] m					
South: Burnley Street												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
East: Doonside Sreet												
P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
North: Burnley Street												

Attachment 3 Attachment 3 - PLN21/0981 - 81-95 Burnley Street & 26 -34 Doonside Street Richmond - Final Traffic Report

P3 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
West: Buckingham St											
P4 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	204.7	208.6	1.02
All Pedestrians	200	211	44.3	LOS E	0.1	0.1	0.94	0.94	206.6	211.1	1.02

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com
Organisation: TRAFFIX GROUP PTY LTD | Licence: NETWORK / Enterprise | Processed: Thursday, 2 December 2021 5:10:03 PM
Project: \\tfsrv02\Group\Synergy\Projects\GRP3\GRP30102\07-Analysis\SIDRA\G30102-01-20211202.sip9

PHASING SUMMARY

Site: 101 [Burnley/Doonside - AM (Site Folder: FULLY CONTROLLED)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog

Phase Times determined by the program

Phase Sequence: Variable Phasing

Reference Phase: Phase A

Input Phase Sequence: A, B, C, D, E

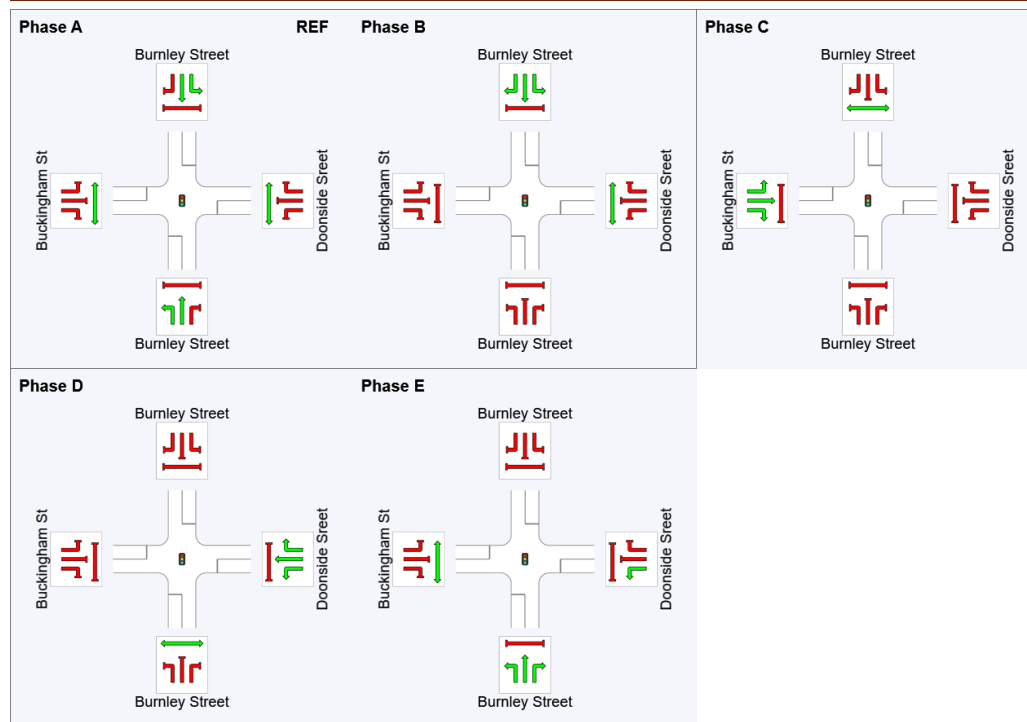
Output Phase Sequence: A, B, C, D, E

Phase Timing Summary

Phase	A	B	C	D	E
Phase Change Time (sec)	0	45	57	73	88
Green Time (sec)	39	6	10	9	6
Phase Time (sec)	45	12	16	15	12
Phase Split	45%	12%	16%	15%	12%













See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase

Attachment 3 Attachment 3 - PLN21/0981 - 81-95 Burnley Street & 26 -34 Doonside Street Richmond - Final Traffic Report

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com
Organisation: TRAFFIX GROUP PTY LTD | Licence: NETWORK / Enterprise | Processed: Thursday, 2 December 2021 5:10:03 PM
Project: \\afxsvr02\Group\Synergy\Projects\GRP3\GRP30102\07-Analysis\SIDRA\G30102-01-20211202.sip9

MOVEMENT SUMMARY

Site: 101 [Burnley/Doonside - PM (Site Folder: FULLY CONTROLLED)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist] m				
South: Burnley Street														
1	L2	72	2.0	76	2.0	0.862	31.0	LOS C	29.9	217.9	0.81	0.82	0.91	41.2
2	T1	614	5.0	646	5.0	* 0.862	25.4	LOS C	29.9	217.9	0.81	0.82	0.91	42.0
3	R2	66	2.0	69	2.0	0.632	59.6	LOS E	3.6	25.8	1.00	0.80	1.11	29.8
Approach		752	4.4	792	4.4	0.862	28.9	LOS C	29.9	217.9	0.82	0.81	0.92	40.5
East: Doonside Sreet														
4	L2	109	2.0	115	2.0	0.547	49.4	LOS D	6.8	48.7	0.97	0.80	0.97	33.0
5	T1	30	2.0	32	2.0	0.547	43.8	LOS D	6.8	48.7	0.97	0.80	0.97	33.5
6	R2	139	2.0	146	2.0	* 0.888	65.6	LOS E	8.3	59.1	1.00	0.98	1.48	28.4
Approach		278	2.0	293	2.0	0.888	56.9	LOS E	8.3	59.1	0.99	0.89	1.23	30.6
North: Burnley Street														
7	L2	89	2.0	94	2.0	0.853	29.2	LOS C	28.1	204.2	0.77	0.78	0.86	41.9
8	T1	588	5.0	619	5.0	0.853	23.7	LOS C	28.1	204.2	0.77	0.78	0.86	42.8
9	R2	105	2.0	111	2.0	* 0.862	64.7	LOS E	6.2	43.8	1.00	0.94	1.46	28.5
Approach		782	4.3	823	4.3	0.862	29.8	LOS C	28.1	204.2	0.80	0.80	0.94	40.0
West: Buckingham St														
10	L2	122	2.0	128	2.0	0.856	61.0	LOS E	10.4	73.9	1.00	0.97	1.34	29.7
11	T1	25	2.0	26	2.0	* 0.856	55.4	LOS E	10.4	73.9	1.00	0.97	1.34	30.2
12	R2	33	2.0	35	2.0	0.856	60.9	LOS E	10.4	73.9	1.00	0.97	1.34	29.7
Approach		180	2.0	189	2.0	0.856	60.2	LOS E	10.4	73.9	1.00	0.97	1.34	29.8
All Vehicles		1992	3.8	2097	3.8	0.888	36.0	LOS D	29.9	217.9	0.86	0.84	1.01	37.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped]	[Dist] m					
South: Burnley Street												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
East: Doonside Sreet												
P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
North: Burnley Street												

Attachment 3 Attachment 3 - PLN21/0981 - 81-95 Burnley Street & 26 -34 Doonside Street Richmond - Final Traffic Report

P3 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
West: Buckingham St											
P4 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	204.7	208.6	1.02
All Pedestrians	200	211	44.3	LOS E	0.1	0.1	0.94	0.94	206.6	211.1	1.02

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
 Pedestrian movement LOS values are based on average delay per pedestrian movement.
 Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com
 Organisation: TRAFFIX GROUP PTY LTD | Licence: NETWORK / Enterprise | Processed: Monday, 6 December 2021 4:19:53 PM
 Project: \\tfsrv02\Group\Synergy\Projects\GRP3\GRP30102\07-Analysis\SIDRA\G30102-01-20211202.sip9

PHASING SUMMARY

Site: 101 [Burnley/Doonside - PM (Site Folder: FULLY CONTROLLED)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog

Phase Times determined by the program

Phase Sequence: Variable Phasing

Reference Phase: Phase A

Input Phase Sequence: A, B, C, D, E

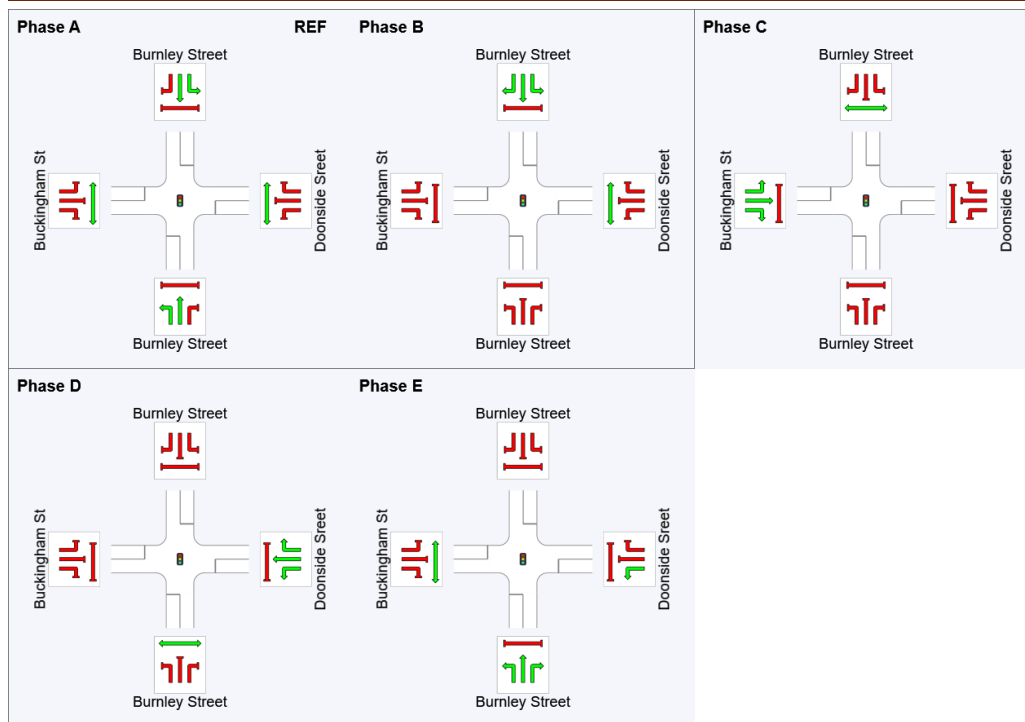
Output Phase Sequence: A, B, C, D, E

Phase Timing Summary

Phase	A	B	C	D	E
Phase Change Time (sec)	0	42	55	73	88
Green Time (sec)	36	7	12	9	6
Phase Time (sec)	42	13	18	15	12
Phase Split	42%	13%	18%	15%	12%













See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase

Attachment 3 Attachment 3 - PLN21/0981 - 81-95 Burnley Street & 26 -34 Doonside Street Richmond - Final Traffic Report

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com
Organisation: TRAFFIX GROUP PTY LTD | Licence: NETWORK / Enterprise | Processed: Monday, 6 December 2021 4:19:53 PM
Project: \\afxsvr02\Group\Synergy\Projects\GRP3\GRP30102\07-Analysis\SIDRA\G30102-01-20211202.sip9

MOVEMENT SUMMARY

Site: 101 [Burnley/Doonside - AM (Site Folder: AM TURN BAN)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
South: Burnley Street														
1	L2	18	2.0	19	2.0	0.446	10.8	LOS B	6.8	49.4	0.29	0.27	0.29	53.6
2	T1	486	5.0	512	5.0	0.446	5.2	LOS A	6.8	49.4	0.29	0.27	0.29	55.1
3	R2	53	2.0	56	2.0	*0.508	58.5	LOS E	2.8	20.3	1.00	0.75	1.01	30.1
Approach		557	4.6	586	4.6	0.508	10.5	LOS B	6.8	49.4	0.35	0.32	0.35	51.0
East: Doonside Sreet														
4	L2	77	2.0	81	2.0	0.717	57.1	LOS E	5.0	35.9	1.00	0.85	1.18	30.8
5	T1	17	2.0	18	2.0	*0.717	51.5	LOS D	5.0	35.9	1.00	0.85	1.18	31.2
6	R2	90	2.0	95	2.0	0.678	56.3	LOS E	4.8	34.1	1.00	0.82	1.14	30.5
Approach		184	2.0	194	2.0	0.717	56.2	LOS E	5.0	35.9	1.00	0.84	1.16	30.7
North: Burnley Street														
7	L2	71	2.0	75	2.0	0.832	27.5	LOS C	30.7	223.6	0.83	0.80	0.88	42.9
8	T1	658	5.0	693	5.0	*0.832	21.9	LOS C	30.7	223.6	0.83	0.80	0.88	43.8
Approach		729	4.7	767	4.7	0.832	22.4	LOS C	30.7	223.6	0.83	0.80	0.88	43.7
West: Buckingham St														
10	L2	81	2.0	85	2.0	0.835	60.8	LOS E	8.3	59.2	1.00	0.95	1.33	29.7
11	T1	17	2.0	18	2.0	*0.835	55.3	LOS E	8.3	59.2	1.00	0.95	1.33	30.2
12	R2	48	2.0	51	2.0	0.835	60.8	LOS E	8.3	59.2	1.00	0.95	1.33	29.7
Approach		146	2.0	154	2.0	0.835	60.2	LOS E	8.3	59.2	1.00	0.95	1.33	29.8
All Vehicles		1616	4.1	1701	4.1	0.835	25.6	LOS C	30.7	223.6	0.70	0.65	0.77	42.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped]	[Dist m]					
South: Burnley Street												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
East: Doonside Sreet												
P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
North: Burnley Street												
P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02

Attachment 3 Attachment 3 - PLN21/0981 - 81-95 Burnley Street & 26 -34 Doonside Street Richmond - Final Traffic Report

West: Buckingham St												
P4 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	204.7	208.6	1.02	
All Pedestrians	200	211	44.3	LOS E	0.1	0.1	0.94	0.94	206.6	211.1	1.02	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com

Organisation: TRAFFIX GROUP PTY LTD | Licence: NETWORK / Enterprise | Processed: Thursday, 2 December 2021 5:10:09 PM

Project: \\tfsrv02\Group\Synergy\Projects\GRP3\GRP30102\07-Analysis\SIDRA\G30102-01-20211202.sip9

PHASING SUMMARY

Site: 101 [Burnley/Doonside - AM (Site Folder: AM TURN BAN)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog

Phase Times determined by the program

Phase Sequence: Variable Phasing

Reference Phase: Phase A

Input Phase Sequence: A, C, D, E

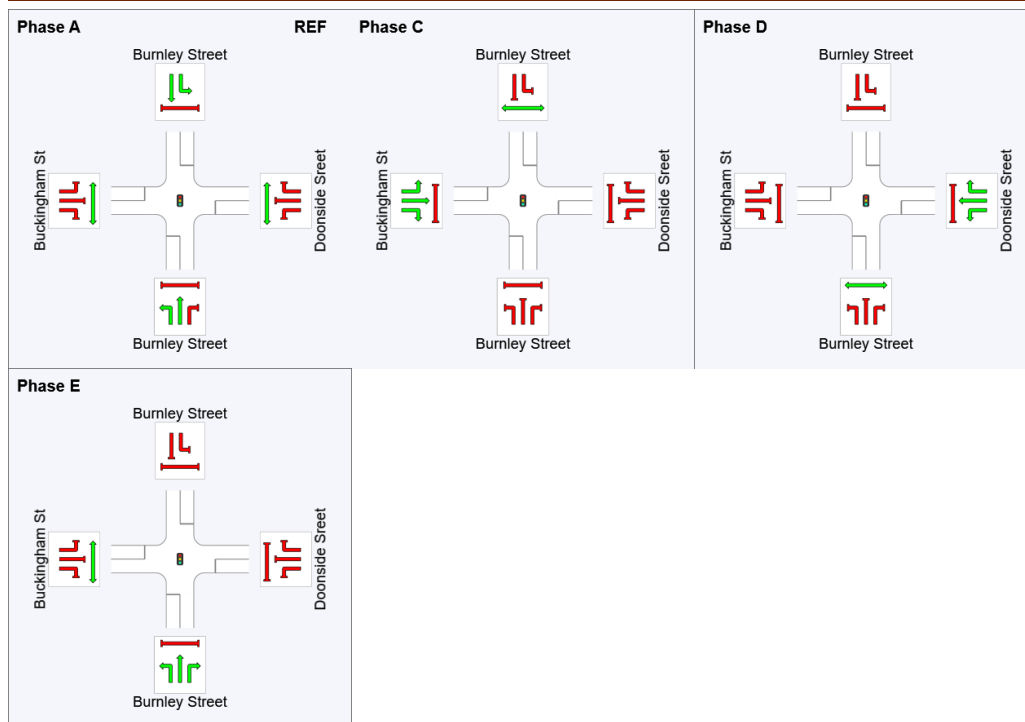
Output Phase Sequence: A, C, D, E

Phase Timing Summary

Phase	A	C	D	E
Phase Change Time (sec)	0	57	73	88
Green Time (sec)	49	10	9	6
Phase Time (sec)	55	16	15	14
Phase Split	55%	16%	15%	14%













See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase

Attachment 3 Attachment 3 - PLN21/0981 - 81-95 Burnley Street & 26 -34 Doonside Street Richmond - Final Traffic Report

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com
Organisation: TRAFFIX GROUP PTY LTD | Licence: NETWORK / Enterprise | Processed: Thursday, 2 December 2021 5:10:09 PM
Project: \\afxsvr02\Group\Synergy\Projects\GRP3\GRP30102\07-Analysis\SIDRA\G30102-01-20211202.sip9

MOVEMENT SUMMARY

Site: 101 [Burnley/Doonside - PM (Site Folder: AM TURN BAN)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
South: Burnley Street														
1	L2	72	2.0	76	2.0	0.918	42.8	LOS D	36.8	268.0	0.89	0.97	1.10	36.3
2	T1	614	5.0	646	5.0	*0.918	37.2	LOS D	36.8	268.0	0.89	0.97	1.10	37.0
3	R2	66	2.0	69	2.0	0.632	59.6	LOS E	3.6	25.8	1.00	0.80	1.11	29.8
Approach		752	4.4	792	4.4	0.918	39.7	LOS D	36.8	268.0	0.90	0.96	1.10	36.2
East: Doonside Sreet														
4	L2	109	2.0	115	2.0	0.899	65.3	LOS E	8.2	58.7	0.99	1.03	1.54	28.8
5	T1	30	2.0	32	2.0	0.899	59.7	LOS E	8.2	58.7	0.99	1.03	1.54	29.2
6	R2	139	2.0	146	2.0	*0.903	65.9	LOS E	8.3	59.1	0.99	1.01	1.56	28.3
Approach		278	2.0	293	2.0	0.903	65.0	LOS E	8.3	59.1	0.99	1.02	1.55	28.6
North: Burnley Street														
7	L2	89	2.0	94	2.0	0.905	39.5	LOS D	34.2	248.9	0.86	0.92	1.04	37.5
8	T1	588	5.0	619	5.0	0.905	33.9	LOS C	34.2	248.9	0.86	0.92	1.04	38.2
9	R2	105	2.0	111	2.0	*0.862	64.7	LOS E	6.2	43.8	1.00	0.94	1.46	28.5
Approach		782	4.3	823	4.3	0.905	38.7	LOS D	34.2	248.9	0.88	0.92	1.10	36.5
West: Buckingham St														
10	L2	122	2.0	128	2.0	0.934	71.8	LOS E	11.5	81.9	1.00	1.09	1.59	27.3
11	T1	25	2.0	26	2.0	*0.934	66.3	LOS E	11.5	81.9	1.00	1.09	1.59	27.7
12	R2	33	2.0	35	2.0	0.934	71.8	LOS E	11.5	81.9	1.00	1.09	1.59	27.3
Approach		180	2.0	189	2.0	0.934	71.0	LOS E	11.5	81.9	1.00	1.09	1.59	27.4
All Vehicles		1992	3.8	2097	3.8	0.934	45.7	LOS D	36.8	268.0	0.91	0.97	1.21	34.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped]	[Dist m]					
South: Burnley Street												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
East: Doonside Sreet												
P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
North: Burnley Street												
P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02

Attachment 3 Attachment 3 - PLN21/0981 - 81-95 Burnley Street & 26 -34 Doonside Street Richmond - Final Traffic Report

West: Buckingham St												
P4 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	204.7	208.6	1.02	
All Pedestrians	200	211	44.3	LOS E	0.1	0.1	0.94	0.94	206.6	211.1	1.02	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com
Organisation: TRAFFIX GROUP PTY LTD | Licence: NETWORK / Enterprise | Processed: Thursday, 2 December 2021 5:10:12 PM
Project: \\tfxsrv02\Group\Synergy\Projects\GRP3\GRP30102\07-Analysis\SIDRA\G30102-01-20211202.sip9

PHASING SUMMARY

Site: 101 [Burnley/Doonside - PM (Site Folder: AM TURN BAN)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog

Phase Times determined by the program

Phase Sequence: Variable Phasing

Reference Phase: Phase A

Input Phase Sequence: A, B, C, D, E

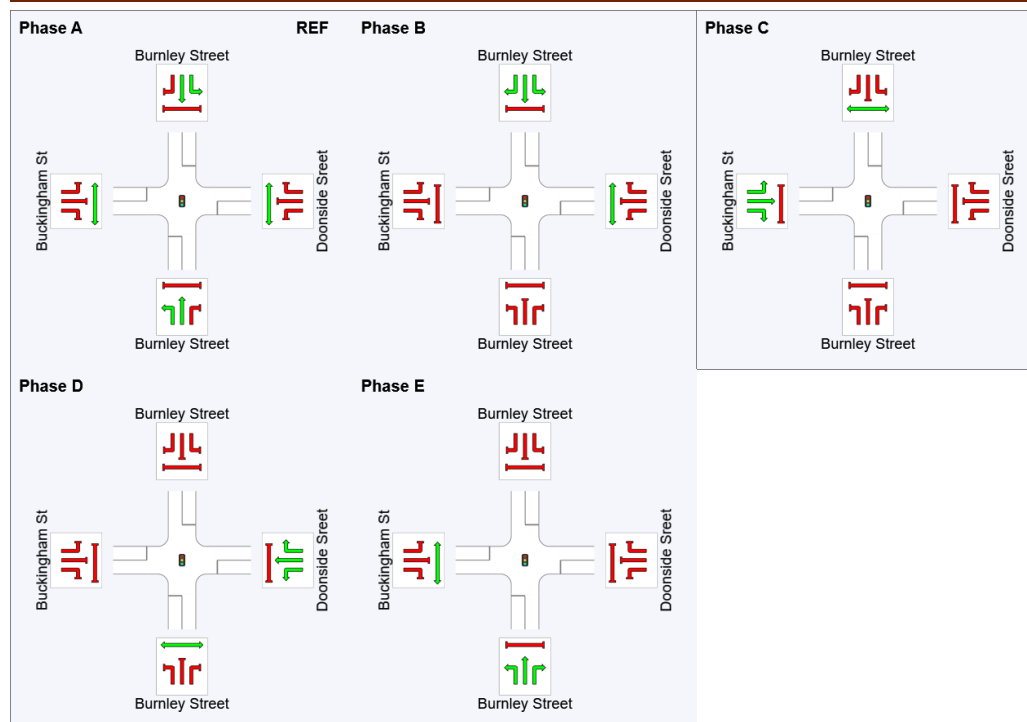
Output Phase Sequence: A, B, C, D, E

Phase Timing Summary

Phase	A	B	C	D	E
Phase Change Time (sec)	0	39	52	69	88
Green Time (sec)	33	7	11	13	6
Phase Time (sec)	39	13	17	19	12
Phase Split	39%	13%	17%	19%	12%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.













Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase

Attachment 3 Attachment 3 - PLN21/0981 - 81-95 Burnley Street & 26 -34 Doonside Street Richmond - Final Traffic Report

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com
Organisation: TRAFFIX GROUP PTY LTD | Licence: NETWORK / Enterprise | Processed: Thursday, 2 December 2021 5:10:12 PM
Project: \\tfxsrv02\Group\Synergy\Projects\GRP3\GRP30102\07-Analysis\SIDRA\G30102-01-20211202.sip9

MOVEMENT SUMMARY

Site: 101 [Burnley/Doonside - AM (Site Folder: FILTERED FROM THE SOUTH)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist] m				
South: Burnley Street														
1	L2	18	2.0	19	2.0	0.678	20.8	LOS C	14.4	105.1	0.60	0.54	0.60	46.7
2	T1	486	5.0	512	5.0	*0.678	15.3	LOS B	14.4	105.1	0.60	0.54	0.60	47.8
3	R2	53	2.0	56	2.0	0.239	32.9	LOS C	2.1	14.7	0.76	0.75	0.76	38.1
Approach		557	4.6	586	4.6	0.678	17.1	LOS B	14.4	105.1	0.62	0.56	0.62	46.6
East: Doonside Sreet														
4	L2	77	2.0	81	2.0	0.717	57.1	LOS E	5.0	35.9	1.00	0.85	1.18	30.8
5	T1	17	2.0	18	2.0	*0.717	51.5	LOS D	5.0	35.9	1.00	0.85	1.18	31.2
6	R2	90	2.0	95	2.0	0.678	56.4	LOS E	4.8	34.1	1.00	0.83	1.14	30.6
Approach		184	2.0	194	2.0	0.717	56.3	LOS E	5.0	35.9	1.00	0.84	1.16	30.7
North: Burnley Street														
7	L2	71	2.0	75	2.0	0.661	13.5	LOS B	14.8	108.0	0.45	0.44	0.45	51.3
8	T1	630	5.0	663	5.0	0.661	7.9	LOS A	14.8	108.0	0.45	0.44	0.45	52.6
9	R2	28	2.0	29	2.0	*0.268	57.2	LOS E	1.5	10.5	0.99	0.72	0.99	30.2
Approach		729	4.6	767	4.6	0.661	10.4	LOS B	14.8	108.0	0.47	0.45	0.47	51.1
West: Buckingham St														
10	L2	81	2.0	85	2.0	0.695	54.3	LOS D	7.7	54.7	1.00	0.85	1.10	31.4
11	T1	17	2.0	18	2.0	*0.695	48.7	LOS D	7.7	54.7	1.00	0.85	1.10	31.9
12	R2	48	2.0	51	2.0	0.695	54.2	LOS D	7.7	54.7	1.00	0.85	1.10	31.3
Approach		146	2.0	154	2.0	0.695	53.6	LOS D	7.7	54.7	1.00	0.85	1.10	31.4
All Vehicles		1616	4.1	1701	4.1	0.717	21.8	LOS C	14.8	108.0	0.63	0.57	0.66	43.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped]	[Dist] m					
South: Burnley Street												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
East: Doonside Sreet												
P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
North: Burnley Street												

Attachment 3 Attachment 3 - PLN21/0981 - 81-95 Burnley Street & 26 -34 Doonside Street Richmond - Final Traffic Report

P3 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
West: Buckingham St											
P4 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	204.7	208.6	1.02
All Pedestrians	200	211	44.3	LOS E	0.1	0.1	0.94	0.94	206.6	211.1	1.02

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com
Organisation: TRAFFIX GROUP PTY LTD | Licence: NETWORK / Enterprise | Processed: Thursday, 2 December 2021 5:10:14 PM
Project: \\tfsrv02\Group\Synergy\Projects\GRP3\GRP30102\07-Analysis\SIDRA\G30102-01-20211202.sip9

PHASING SUMMARY

Site: 101 [Burnley/Doonside - AM (Site Folder: FILTERED FROM THE SOUTH)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog

Phase Times determined by the program

Phase Sequence: Variable Phasing

Reference Phase: Phase A

Input Phase Sequence: A, B, C, D

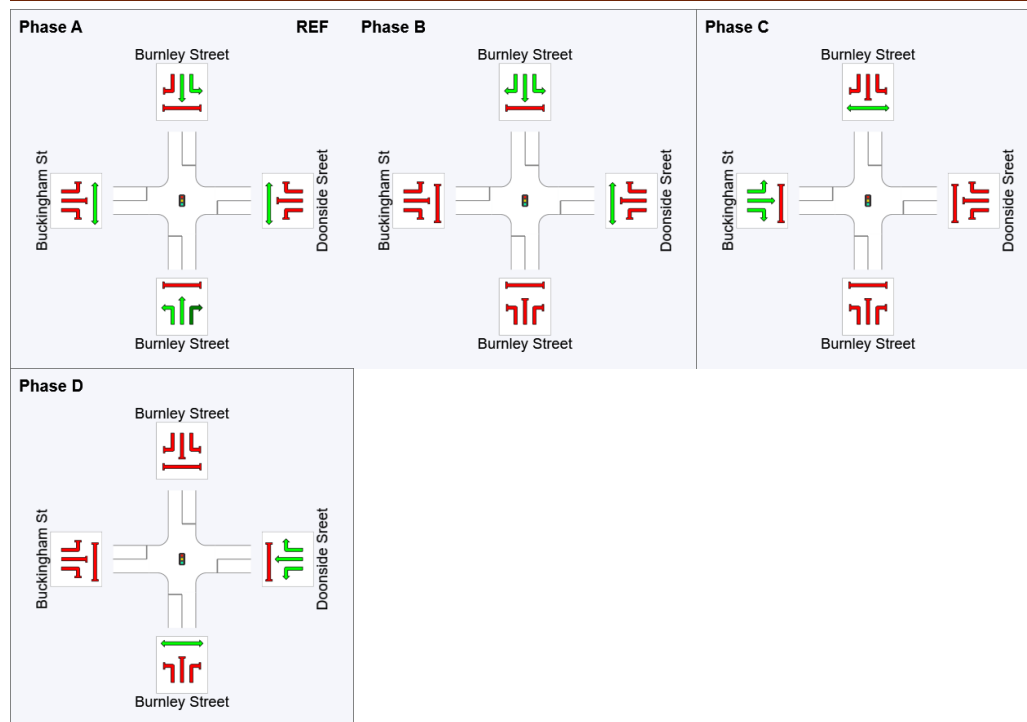
Output Phase Sequence: A, B, C, D

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	55	67	85
Green Time (sec)	49	6	12	9
Phase Time (sec)	55	12	18	15
Phase Split	55%	12%	18%	15%













See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase

Attachment 3 Attachment 3 - PLN21/0981 - 81-95 Burnley Street & 26 -34 Doonside Street Richmond - Final Traffic Report

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com
Organisation: TRAFFIX GROUP PTY LTD | Licence: NETWORK / Enterprise | Processed: Thursday, 2 December 2021 5:10:14 PM
Project: \\afxsvr02\Group\Synergy\Projects\GRP3\GRP30102\07-Analysis\SIDRA\G30102-01-20211202.sip9

MOVEMENT SUMMARY

Site: 101 [Burnley/Doonside - PM (Site Folder: FILTERED FROM THE SOUTH)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist] m				
South: Burnley Street														
1	L2	72	2.0	76	2.0	0.979	63.5	LOS E	44.1	321.2	0.86	1.12	1.30	30.1
2	T1	614	5.0	646	5.0	*0.979	58.0	LOS E	44.1	321.2	0.86	1.12	1.30	30.6
3	R2	66	2.0	69	2.0	0.302	36.6	LOS D	2.8	19.6	0.82	0.77	0.82	36.7
Approach		752	4.4	792	4.4	0.979	56.6	LOS E	44.1	321.2	0.86	1.09	1.26	31.0
East: Doonside Sreet														
4	L2	109	2.0	115	2.0	0.979	87.0	LOS F	9.8	69.5	1.00	1.16	1.87	24.6
5	T1	30	2.0	32	2.0	0.979	81.4	LOS F	9.8	69.5	1.00	1.16	1.87	24.9
6	R2	139	2.0	146	2.0	*0.982	88.7	LOS F	9.9	70.3	1.00	1.14	1.89	24.1
Approach		278	2.0	293	2.0	0.982	87.2	LOS F	9.9	70.3	1.00	1.15	1.88	24.4
North: Burnley Street														
7	L2	89	2.0	94	2.0	0.714	15.0	LOS B	15.9	115.6	0.50	0.49	0.50	50.1
8	T1	588	5.0	619	5.0	0.714	9.4	LOS A	15.9	115.6	0.50	0.49	0.50	51.4
9	R2	105	2.0	111	2.0	*0.862	64.7	LOS E	6.2	43.8	1.00	0.94	1.46	28.5
Approach		782	4.3	823	4.3	0.862	17.5	LOS B	15.9	115.6	0.57	0.55	0.63	46.3
West: Buckingham St														
10	L2	122	2.0	128	2.0	0.934	71.8	LOS E	11.5	81.9	1.00	1.09	1.59	27.3
11	T1	25	2.0	26	2.0	*0.934	66.3	LOS E	11.5	81.9	1.00	1.09	1.59	27.7
12	R2	33	2.0	35	2.0	0.934	71.8	LOS E	11.5	81.9	1.00	1.09	1.59	27.3
Approach		180	2.0	189	2.0	0.934	71.0	LOS E	11.5	81.9	1.00	1.09	1.59	27.4
All Vehicles		1992	3.8	2097	3.8	0.982	46.8	LOS D	44.1	321.2	0.78	0.89	1.13	33.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped]	[Dist] m					
South: Burnley Street												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
East: Doonside Sreet												
P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
North: Burnley Street												

Attachment 3 Attachment 3 - PLN21/0981 - 81-95 Burnley Street & 26 -34 Doonside Street Richmond - Final Traffic Report

P3 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
West: Buckingham St											
P4 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	204.7	208.6	1.02
All Pedestrians	200	211	44.3	LOS E	0.1	0.1	0.94	0.94	206.6	211.1	1.02

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
 Pedestrian movement LOS values are based on average delay per pedestrian movement.
 Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com
 Organisation: TRAFFIX GROUP PTY LTD | Licence: NETWORK / Enterprise | Processed: Thursday, 2 December 2021 5:23:39 PM
 Project: \\tfsrv02\Group\Synergy\Projects\GRP3\GRP30102\07-Analysis\SIDRA\G30102-01-20211202.sip9

PHASING SUMMARY

Site: 101 [Burnley/Doonside - PM (Site Folder: FILTERED FROM THE SOUTH)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog

Phase Times determined by the program

Phase Sequence: Variable Phasing

Reference Phase: Phase A

Input Phase Sequence: A, B, C, D

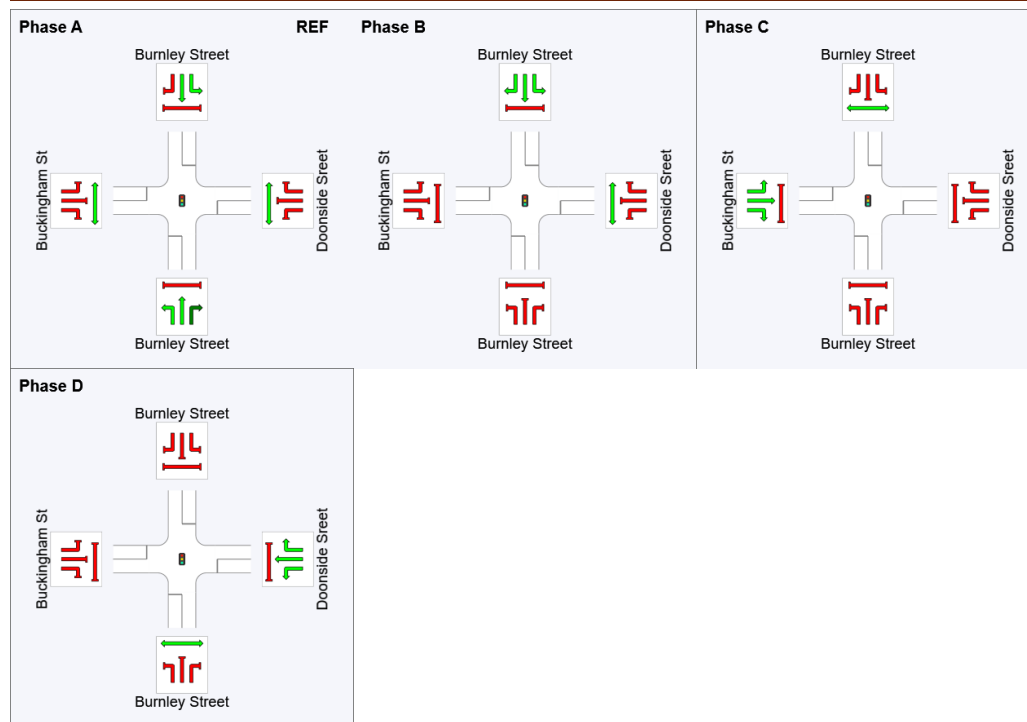
Output Phase Sequence: A, B, C, D

Phase Timing Summary













Phase	A	B	C	D
Phase Change Time (sec)	0	52	65	82
Green Time (sec)	46	7	11	12
Phase Time (sec)	52	13	17	18
Phase Split	52%	13%	17%	18%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com
Organisation: TRAFFIX GROUP PTY LTD | Licence: NETWORK / Enterprise | Processed: Thursday, 2 December 2021 5:23:39 PM
Project: \\fxsrv02\Group\Synergy\Projects\GRP3\GRP30102\07-Analysis\SIDRA\G30102-01-20211202.sip9

MOVEMENT SUMMARY

Site: 101 [Burnley/Doonside - AM (Site Folder: FILTERED FROM THE NORTH)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist] m				
South: Burnley Street														
1	L2	18	2.0	19	2.0	0.446	10.8	LOS B	6.8	49.4	0.29	0.27	0.29	53.6
2	T1	486	5.0	512	5.0	0.446	5.2	LOS A	6.8	49.4	0.29	0.27	0.29	55.1
3	R2	53	2.0	56	2.0	*0.508	58.5	LOS E	2.8	20.3	1.00	0.75	1.01	30.1
Approach		557	4.6	586	4.6	0.508	10.5	LOS B	6.8	49.4	0.35	0.32	0.35	51.0
East: Doonside Sreet														
4	L2	77	2.0	81	2.0	0.717	57.1	LOS E	5.0	35.9	1.00	0.85	1.18	30.8
5	T1	17	2.0	18	2.0	*0.717	51.5	LOS D	5.0	35.9	1.00	0.85	1.18	31.2
6	R2	90	2.0	95	2.0	0.678	56.4	LOS E	4.8	34.1	1.00	0.83	1.14	30.6
Approach		184	2.0	194	2.0	0.717	56.3	LOS E	5.0	35.9	1.00	0.84	1.16	30.7
North: Burnley Street														
7	L2	71	2.0	75	2.0	0.798	23.2	LOS C	25.3	184.5	0.74	0.70	0.76	45.1
8	T1	630	5.0	663	5.0	*0.798	17.6	LOS B	25.3	184.5	0.74	0.70	0.76	46.2
9	R2	28	2.0	29	2.0	0.068	18.9	LOS B	0.7	5.2	0.53	0.69	0.53	44.3
Approach		729	4.6	767	4.6	0.798	18.2	LOS B	25.3	184.5	0.73	0.70	0.75	46.0
West: Buckingham St														
10	L2	81	2.0	85	2.0	0.835	60.8	LOS E	8.3	59.2	1.00	0.95	1.33	29.7
11	T1	17	2.0	18	2.0	*0.835	55.3	LOS E	8.3	59.2	1.00	0.95	1.33	30.2
12	R2	48	2.0	51	2.0	0.835	60.8	LOS E	8.3	59.2	1.00	0.95	1.33	29.7
Approach		146	2.0	154	2.0	0.835	60.2	LOS E	8.3	59.2	1.00	0.95	1.33	29.8
All Vehicles		1616	4.1	1701	4.1	0.835	23.7	LOS C	25.3	184.5	0.66	0.61	0.71	42.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped]	[Dist] m					
South: Burnley Street												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
East: Doonside Sreet												
P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
North: Burnley Street												

Attachment 3 Attachment 3 - PLN21/0981 - 81-95 Burnley Street & 26 -34 Doonside Street Richmond - Final Traffic Report

P3 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
West: Buckingham St											
P4 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	204.7	208.6	1.02
All Pedestrians	200	211	44.3	LOS E	0.1	0.1	0.94	0.94	206.6	211.1	1.02

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
 Pedestrian movement LOS values are based on average delay per pedestrian movement.
 Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com
 Organisation: TRAFFIX GROUP PTY LTD | Licence: NETWORK / Enterprise | Processed: Thursday, 2 December 2021 5:10:20 PM
 Project: \\tfsrv02\Group\Synergy\Projects\GRP3\GRP30102\07-Analysis\SIDRA\G30102-01-20211202.sip9

PHASING SUMMARY

Site: 101 [Burnley/Doonside - AM (Site Folder: FILTERED FROM THE NORTH)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog

Phase Times determined by the program

Phase Sequence: Variable Phasing

Reference Phase: Phase A

Input Phase Sequence: A, C, D, E

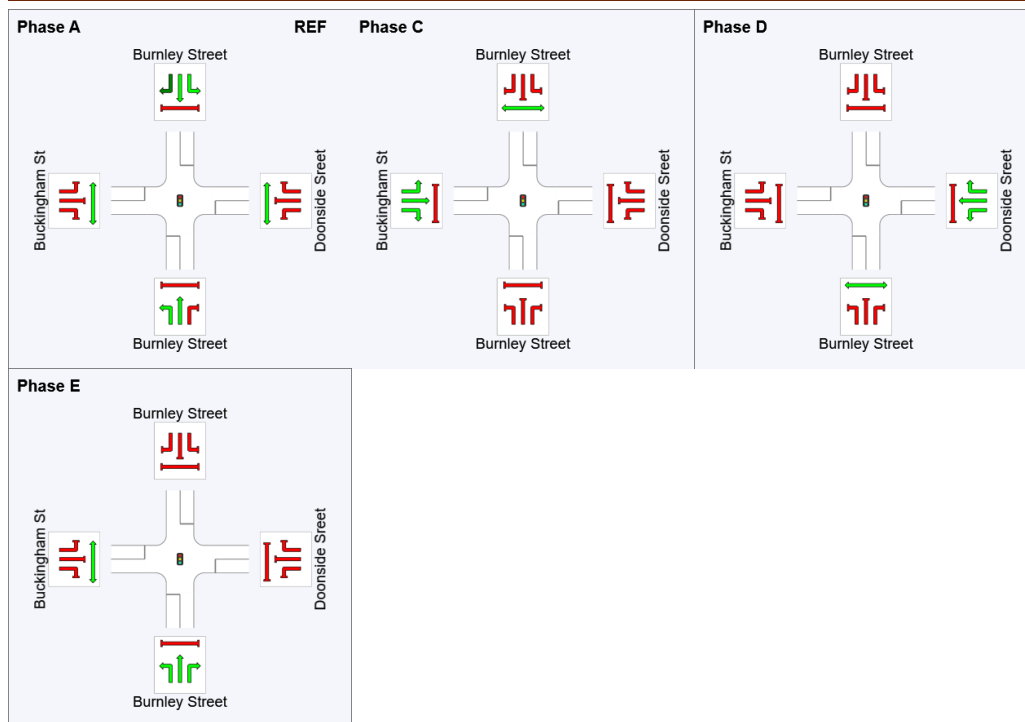
Output Phase Sequence: A, C, D, E

Phase Timing Summary

Phase	A	C	D	E
Phase Change Time (sec)	0	57	73	88
Green Time (sec)	51	10	9	6
Phase Time (sec)	57	16	15	12
Phase Split	57%	16%	15%	12%













See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase

Attachment 3 Attachment 3 - PLN21/0981 - 81-95 Burnley Street & 26 -34 Doonside Street Richmond - Final Traffic Report

 Normal Movement	 Permitted/Opposed
 Slip/Bypass-Lane Movement	 Opposed Slip/Bypass-Lane
 Stopped Movement	 Turn On Red
 Other Movement Class (MC) Running	 Undetected Movement
 Mixed Running & Stopped MCs	 Continuous Movement
 Other Movement Class (MC) Stopped	 Phase Transition Applied

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com
Organisation: TRAFFIX GROUP PTY LTD | Licence: NETWORK / Enterprise | Processed: Thursday, 2 December 2021 5:10:20 PM
Project: \\tfxsrv02\Group\Synergy\Projects\GRP3\GRP30102\07-Analysis\SIDRA\G30102-01-20211202.sip9

MOVEMENT SUMMARY

Site: 101 [Burnley/Doonside - PM (Site Folder: FILTERED FROM THE NORTH)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist] m				
South: Burnley Street														
1	L2	72	2.0	76	2.0	0.670	12.7	LOS B	13.3	97.0	0.41	0.41	0.41	51.8
2	T1	614	5.0	646	5.0	0.670	7.2	LOS A	13.3	97.0	0.41	0.41	0.41	53.2
3	R2	66	2.0	69	2.0	*0.632	59.6	LOS E	3.6	25.8	1.00	0.80	1.11	29.8
Approach		752	4.4	792	4.4	0.670	12.3	LOS B	13.3	97.0	0.47	0.45	0.48	49.7
East: Doonside Sreet														
4	L2	109	2.0	115	2.0	0.547	49.4	LOS D	6.8	48.7	0.97	0.80	0.97	33.0
5	T1	30	2.0	32	2.0	0.547	43.8	LOS D	6.8	48.7	0.97	0.80	0.97	33.5
6	R2	139	2.0	146	2.0	*0.888	65.6	LOS E	8.3	59.1	1.00	0.98	1.48	28.4
Approach		278	2.0	293	2.0	0.888	56.9	LOS E	8.3	59.1	0.99	0.89	1.23	30.6
North: Burnley Street														
7	L2	89	2.0	94	2.0	0.939	45.1	LOS D	34.8	253.0	0.75	0.91	1.03	35.4
8	T1	588	5.0	619	5.0	*0.939	39.6	LOS D	34.8	253.0	0.75	0.91	1.03	36.1
9	R2	105	2.0	111	2.0	0.349	23.5	LOS C	3.5	24.8	0.66	0.76	0.66	42.0
Approach		782	4.3	823	4.3	0.939	38.0	LOS D	34.8	253.0	0.74	0.89	0.98	36.7
West: Buckingham St														
10	L2	122	2.0	128	2.0	0.934	71.8	LOS E	11.5	81.9	1.00	1.09	1.59	27.3
11	T1	25	2.0	26	2.0	*0.934	66.3	LOS E	11.5	81.9	1.00	1.09	1.59	27.7
12	R2	33	2.0	35	2.0	0.934	71.8	LOS E	11.5	81.9	1.00	1.09	1.59	27.3
Approach		180	2.0	189	2.0	0.934	71.0	LOS E	11.5	81.9	1.00	1.09	1.59	27.4
All Vehicles		1992	3.8	2097	3.8	0.939	33.9	LOS C	34.8	253.0	0.69	0.74	0.88	38.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped]	[Dist] m					
South: Burnley Street												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
East: Doonside Sreet												
P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
North: Burnley Street												

Attachment 3 Attachment 3 - PLN21/0981 - 81-95 Burnley Street & 26 -34 Doonside Street Richmond - Final Traffic Report

P3 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
West: Buckingham St											
P4 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	204.7	208.6	1.02
All Pedestrians	200	211	44.3	LOS E	0.1	0.1	0.94	0.94	206.6	211.1	1.02

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
 Pedestrian movement LOS values are based on average delay per pedestrian movement.
 Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com
 Organisation: TRAFFIX GROUP PTY LTD | Licence: NETWORK / Enterprise | Processed: Thursday, 2 December 2021 5:10:22 PM
 Project: \\tfsrv02\Group\Synergy\Projects\GRP3\GRP30102\07-Analysis\SIDRA\G30102-01-20211202.sip9

PHASING SUMMARY

Site: 101 [Burnley/Doonside - PM (Site Folder: FILTERED FROM THE NORTH)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog

Phase Times determined by the program

Phase Sequence: Variable Phasing

Reference Phase: Phase A

Input Phase Sequence: A, C, D, E

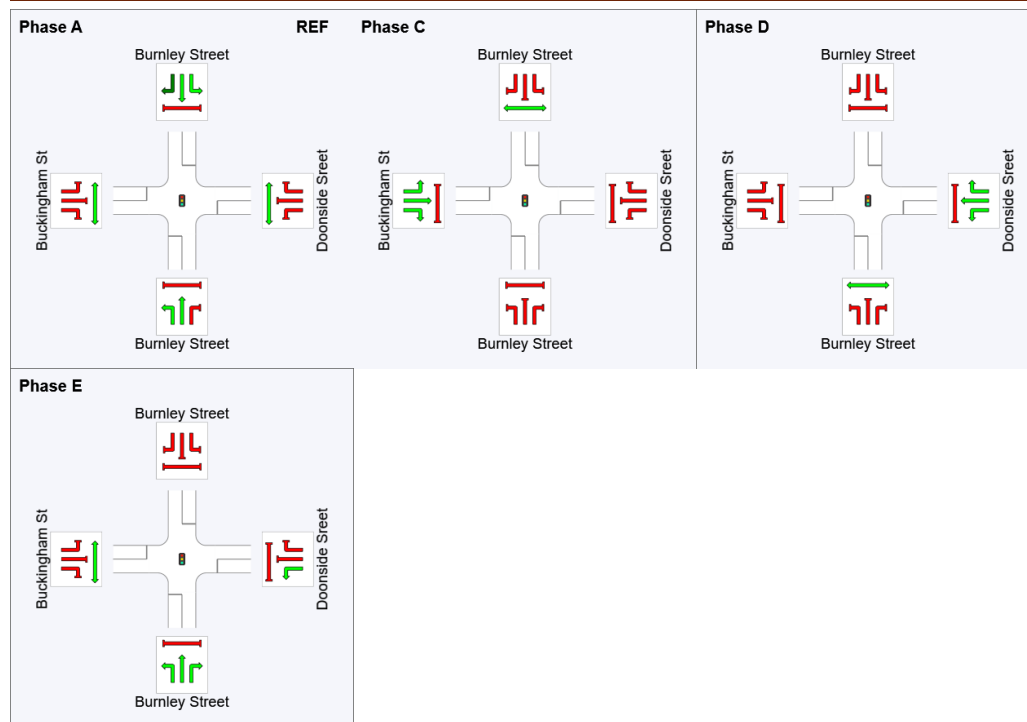
Output Phase Sequence: A, C, D, E

Phase Timing Summary













Phase	A	C	D	E
Phase Change Time (sec)	0	56	73	88
Green Time (sec)	50	11	9	6
Phase Time (sec)	56	17	15	12
Phase Split	56%	17%	15%	12%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com
Organisation: TRAFFIX GROUP PTY LTD | Licence: NETWORK / Enterprise | Processed: Thursday, 2 December 2021 5:10:22 PM
Project: \\afxsvr02\Group\Synergy\Projects\GRP3\GRP30102\07-Analysis\SIDRA\G30102-01-20211202.sip9



PEDESTRIAN WIND ENVIRONMENT STUDY

81-95 BURNLEY STREET & 26-34 DOONSDIE STREET,
RICHMOND

WG433-04F02(REV3)- WE REPORT

JULY 13, 2023

Prepared for:

Burnley Street Developments by Gurner

168 Williams Road, Prahran VIC 3181

30 YEARS OF EXCELLENCE
IN
WIND ENGINEERING

Windtech Consultants | windtechconsult.com | reception@windtechglobal.com

DOCUMENT CONTROL

Date	Revision History	Issued Revision	Prepared By (initials)	Instructed By (initials)	Reviewed & Authorised by (initials)
May 3, 2023	Initial.	0	SLE	SLE	TR
May 4, 2023	Minor amendments	1	SLE	SLE	TR
July 10, 2023	Updated with the tested mitigation strategy	2	TH	SLE	TH/TR
July 13, 2023	Updated to incorporate further comments	2	TH	SLE	TH/TR

The work presented in this document was carried out in accordance with the Windtech Consultants Quality Assurance System, which is based on International Standard ISO 9001.

This document is issued subject to review and authorisation by the Team Leader noted by the initials printed in the last column above. If no initials appear, this document shall be considered as preliminary or draft only and no reliance shall be placed upon it other than for information to be verified later.

This document is prepared for our Client's particular requirements which are based on a specific brief with limitations as agreed to with the Client. It is not intended for and should not be relied upon by a third party and no responsibility is undertaken to any third party without prior consent provided by Windtech Consultants. The information herein should not be reproduced, presented or reviewed except in full. Prior to passing on to a third party, the Client is to fully inform the third party of the specific brief and limitations associated with the commission.

EXECUTIVE SUMMARY

This report presents the results of a detailed investigation into the wind environment impact of the masterplan of the 81-95 Burnley Street development, located in Richmond, Victoria. Testing was performed at Windtech's boundary layer wind tunnel facility. The wind tunnel has a 3.0m wide working section and a fetch length of 14m, and measurements were taken from 16 wind directions at 22.5 degree increments. Testing was carried out using a 1:300 scale model of the development massing. The effects of nearby buildings and land topography have been accounted for through the use of a proximity model which represents an area with a radius of 375m.

Peak gust and mean wind speeds were determined at selected critical outdoor trafficable locations within and around the subject development site. Wind velocity coefficients representing the local wind speeds are derived from the wind tunnel and are combined with a statistical model of the regional wind climate (which accounts for the directional strength and frequency of occurrence of the prevailing regional winds) to provide the equivalent full-scale wind speeds at the site. The wind speed measurements are compared with criteria for pedestrian comfort and safety, based on Gust-Equivalent Mean (GEM) and annual maximum gust winds, respectively.

The model was tested in the wind tunnel without the effect of any forms of wind ameliorating devices such as screens, balustrades, etc., which are not already shown in the architectural drawings. The effect of vegetation was also excluded from the testing. The existing site conditions were also tested, for comparison.

The results of the study indicate that wind conditions for many trafficable outdoor locations within and around the development will be suitable for their intended uses. Some areas will experience strong winds which will exceed the relevant criteria for safety and/or the existing site conditions. Additional wind tunnel testing was conducted with the inclusion of treatments for these areas. The results of the additional testing indicated the following treatment scheme was effective in wind mitigation and the outdoor trafficable areas within and around the development site will meet the safety limit criterion and/or better than the existing site conditions:

Doonside Park:

- Inclusion of 1-1.5m high raised garden beds along the public open space.
- Strategic inclusion of impermeable screens atop of the raised garden beds, with an overall height of 2.5m from the local ground level.
- Inclusion of a 2.5m high porous screen along the perimeter edge of the proposed paving at the centre of the public open space. The porosity of the screen is to be a maximum of 30%.
- The proposed bench adjacent to the heritage building is to have a 1.5m high impermeable backrest.

Building A:

- Inclusion of impermeable awnings along the northern and western façade of the podium.
- Inclusion of a Level 1 porous canopy along the eastern façade of the podium (between Buildings A and B) with a maximum porosity of 30%.

- Inclusion of fixed openings within the existing ground level windows/door systems at the north-western corner.
- An extension of the proposed north-western lobby entrance further along the southern boundary.
- Inclusion of 1.5m high impermeable balustrades on the Level 2 podium. The impermeable balustrade is to be offset 1.5m away from the podium edge along the northern and western boundaries.
- Inclusion of a north-western corner 4m x 4m wide balcony on all levels of the tower. A full-height porous screen is also to be included along the western perimeter edge of the balconies with a maximum porosity of 30%.

Building B:

- Inclusion of Level 2 impermeable awnings along the northern façade of the podium.
- Inclusion of a Level 2 porous canopy along the eastern façade of the podium with a maximum porosity of 30%.

Building C:

- Inclusion of 3m high impermeable screens along the north-western perimeter edge of the Level 2 podium rooftop.
- Inclusion of a porous canopy atop of the abovementioned 3m high impermeable screen. The porosity of the canopy is to be a maximum of 30%.
- Inclusion of 3m high porous screen along most of the eastern edge of the Level 2 podium rooftop.
- Inclusion of a north-eastern corner 3m x 3m wide balcony on all levels of the tower. A full-height porous screen is also to be included along the eastern perimeter edge of the balconies with a maximum porosity of 30%.

It should be noted that many of these issues are due to funnelling, downwash and corner acceleration effects of the northerly winds and will likely be improved or resolved with the inclusion of the Victoria Gardens development across Doonside Street to the north.

CONTENTS

1	Introduction	1
2	Wind Tunnel Model	2
3	Boundary Layer Wind Profiles at the Site	8
4	Regional Wind Model	11
5	Pedestrian Wind Comfort and Safety	13
	5.1 Measured Wind Speeds	13
	5.2 Wind Speed Criteria Used for This Study	13
	5.3 Layout of Study Points	14
6	Results and Discussion	16
7	References	29

Appendix A Published Environmental Criteria

Appendix B Data Acquisition

Appendix C Directional Plots of Wind Tunnel Results

Appendix D Velocity and Turbulence Intensity Profiles

Appendix E IN-Principle Wind mitigation Strategies to address Wind Comfort Criteria

1 INTRODUCTION

A wind tunnel study has been undertaken to determine wind speeds at selected critical outdoor trafficable areas within and around the subject development. The test procedures followed for this wind tunnel study were based on the guidelines set out in the Australasian Wind Engineering Society Quality Assurance Manual (AWES-QAM-1-2019), ASCE 7-16 (Chapter C31), and CTBUH (2013).

A scale model of the development massing was prepared, including the surrounding buildings and land topography. Testing was performed at Windtech's boundary layer wind tunnel facility. The wind tunnel has a 3.0m wide working section and a fetch length of 14m, and measurements were taken from 16 wind directions at 22.5 degree increments. The wind tunnel was configured to the appropriate boundary layer wind profile for each wind direction. Wind speeds were measured using either Dantec hot-wire probe anemometers or pressure-based wind speed sensors, positioned to monitor wind conditions at critical outdoor trafficable areas of the development.

The massing model was tested in the wind tunnel without the effect of any forms of wind ameliorating devices such as screens, balustrades, etc., which are not already shown in the architectural drawings. The effect of vegetation was also excluded from the testing. The wind speeds measured during testing were combined with a statistical model of the regional wind climate to provide the equivalent full-scale wind speeds at the site. The measured wind speeds were compared against appropriate criteria for pedestrian comfort and safety, and in-principle treatments have been recommended for any area which was exposed to strong winds. These treatments could be in the form of retaining vegetation that is already proposed for the site, or including additional vegetation, screens, awnings, etc. Note however that, in accordance with the AWES Guidelines (2014), only architectural elements or modifications are used to treat winds which represent an exceedance of the existing wind conditions and exceed the safety limit.

2 WIND TUNNEL MODEL

Wind tunnel testing was carried out using a 1:300 scale model of the development massing and surroundings. The massing study model was constructed using a Computer Aided Manufacturing (CAM) process to ensure that a high level of detail and accuracy is achieved. The effect of nearby buildings and land topography has been accounted for through the use of a proximity model, which represents a radius of 375m from the development site. Photographs of the wind tunnel model are presented in Figures 1. A plan of the proximity model is provided in Figure 2.

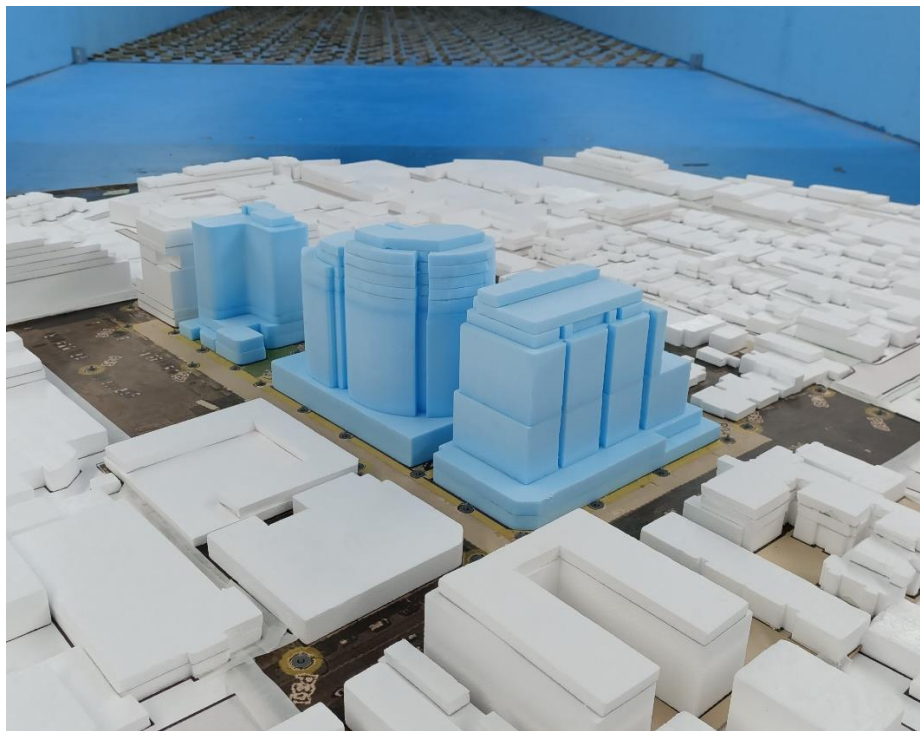


Figure 1a: Photograph of the Wind Tunnel Model (Proposed Site Conditions, view from the north-west)



Figure 1b: Photograph of the Wind Tunnel Model (Proposed Site Conditions, view from the north)



Figure 1c: Photograph of the Wind Tunnel Model (Proposed Site Conditions, view from the east)



Figure 1d: Photograph of the Wind Tunnel Model (Proposed Site Conditions, view from the south)



Figure 1e: Photograph of the Wind Tunnel Model (Proposed Site Conditions, view from the west)

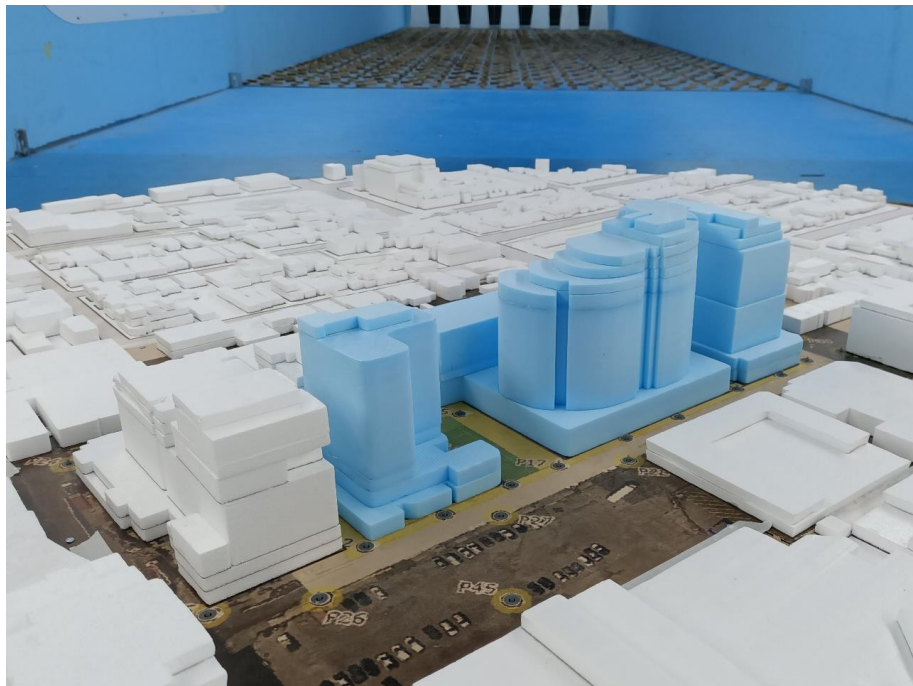


Figure 1f: Photograph of the Wind Tunnel Model (Proposed Site Conditions, close-up view from the north-east)



Figure 1g: Photograph of the Wind Tunnel Model (Existing Site Conditions, close-up view from the north-east)

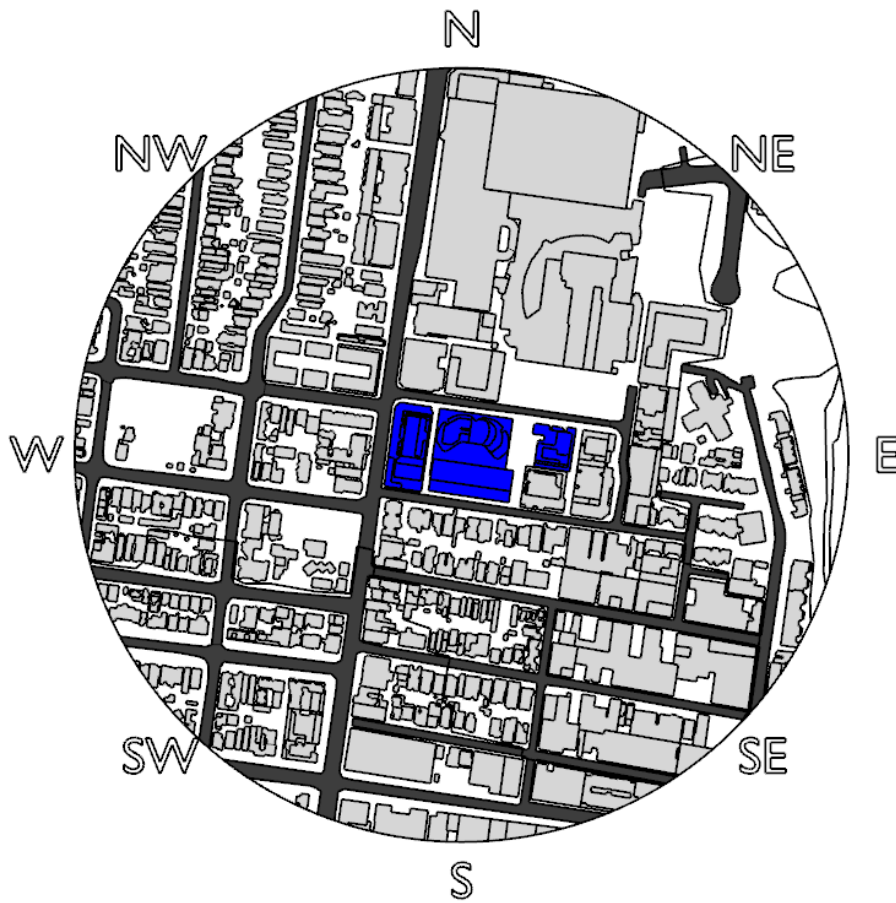


Figure 2a: Proximity Model Plan (Proposed Site Conditions)

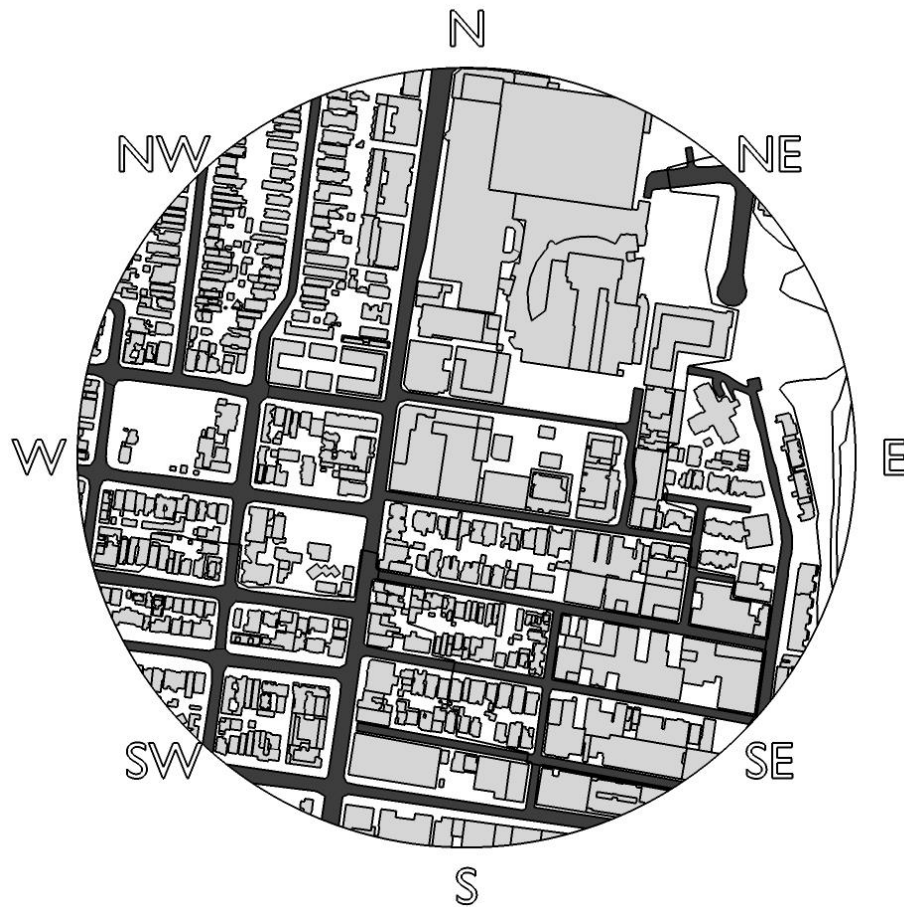


Figure 2b: Proximity Model Plan (Existing Site Conditions)

3 BOUNDARY LAYER WIND PROFILES AT THE SITE

The roughness of the surface of the earth has the effect of slowing down the wind near the ground. This effect is observed up to the boundary layer height, which can range between 500m to 3km above the earth's surface depending on the roughness of the surface (ie: oceans, open farmland, etc). Within this range the prevailing wind forms a boundary layer wind profile.

Various wind codes and standards and other publications classify various types of boundary layer wind flows depending on the surface roughness z_0 . Descriptions of typical boundary layer wind profiles, based on D.M. Deaves and R.I. Harris (1978), are summarised as follows:

- Flat terrain ($0.002\text{m} < z_0 < 0.003\text{m}$). Examples include inland water bodies such as lakes, dams, rivers, etc, and the open ocean.
- Semi-open terrain ($0.006\text{m} < z_0 < 0.01\text{m}$). Examples include flat deserts and plains.
- Open terrain ($0.02\text{m} < z_0 < 0.03\text{m}$). Examples include grassy fields, semi-flat plains, and open farmland (without buildings or trees).
- Semi-suburban/semi-forest terrain ($0.06\text{m} < z_0 < 0.1\text{m}$). Examples include farmland with scattered trees and buildings and very low-density suburban areas.
- Suburban/forest terrain ($0.2\text{m} < z_0 < 0.3\text{m}$). Examples include suburban areas of towns and areas with dense vegetation such as forests, bushland, etc.
- Semi-urban terrain ($0.6\text{m} < z_0 < 1.0\text{m}$). Examples include centres of small cities, industrial parks, etc.
- Urban terrain ($2.0\text{m} < z_0 < 3.0\text{m}$). Examples include centres of large cities with many high-rise towers, and also areas with many closely-spaced mid-rise buildings.

The boundary layer wind profile does not change instantly due to changes in the terrain roughness. It can take many kilometres (at least 100km) of a constant surface roughness for the boundary layer wind profile to achieve a state of equilibrium. Hence an analysis of the effect of changes in the upwind terrain roughness is necessary to determine an accurate boundary layer wind profile at the development site location.

The proximity model accounts for the effect of the near field topographic effects as well as the influence of the local built forms. To account for further afield effects, an assessment of the upwind terrain roughness has been undertaken based on the method given in AS/NZS1170.2:2021, using a fetch ranging from 20 to 60 times the study reference height (as per the recommendation by AS/NZS1170.2:2021). An aerial image showing the surrounding terrain is presented in Figure 3 for a range of 1.8 km from the edge of the proximity model used for the wind tunnel study. The resulting mean and gust terrain and height multipliers at the site location are presented in Table 1, referenced to the study reference height (which is approximately half the height of the subject development since typically we are most interested in the wind effects at the ground plane). Details of the boundary layer wind profiles at the site are combined with the regional wind model (see Section 4) to determine the site wind speeds.

Table 1: Approaching Boundary Layer Wind Profile Analysis Summary (at the study reference height)

Wind Sector (degrees)	Terrain and Height Multiplier			Turbulence Intensity I_v	Equivalent Terrain Category (AS/NZS1170.2:2011 naming convention)
	$k_{tr,T=1hr}$ (hourly)	$k_{tr,T=10min}$ (10min)	$k_{tr,T=3s}$ (3sec)		
0	0.64	0.68	1.05	0.213	2.8
30	0.64	0.67	1.05	0.216	2.9
60	0.61	0.65	1.03	0.225	3.0
90	0.61	0.65	1.03	0.225	3.0
120	0.61	0.65	1.03	0.225	3.0
150	0.67	0.71	1.07	0.200	2.7
180	0.63	0.66	1.04	0.220	2.9
210	0.59	0.63	1.01	0.238	3.1
240	0.61	0.65	1.03	0.225	3.0
270	0.58	0.62	1.00	0.246	3.2
300	0.59	0.63	1.01	0.242	3.1
330	0.64	0.68	1.05	0.214	2.9

NOTE: These terrain and height multipliers are to be applied to a basic regional wind speed averaged over 3-seconds. Divide these values by 1.10 for a basic wind speed averaged over 0.2-seconds, 0.69 for a basic wind speed averaged over 10-minutes, or 0.66 for a basic wind speed averaged over 1-hour.

For each of the 16 wind directions tested in this study, the approaching boundary layer wind profiles modelled in the wind tunnel closely matched the profiles listed in Table 1. Plots of the boundary layer wind profiles used for the wind tunnel testing are presented in Appendix D of this report.

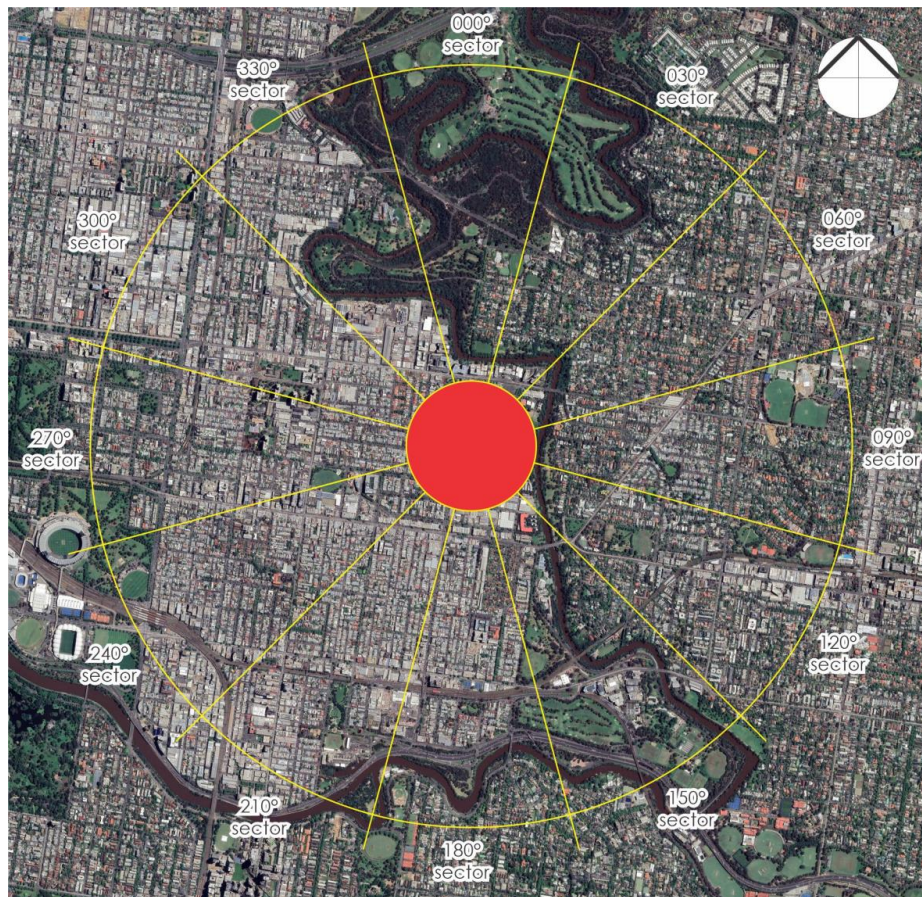


Figure 3: Aerial Image of the Surrounding Terrain (radius of 1.8 km from the edge of the proximity model)

4 REGIONAL WIND MODEL

The regional wind model used in this study was determined from an analysis of measured directional mean wind speeds obtained at the meteorological recording station located at the Melbourne Airport. Data was collected from 1970 to 2009 and corrected so that it represents winds over standard open terrain at a height of 10m above ground for each wind direction. From this analysis, directional probabilities of exceedance and directional wind speeds for the region are determined. The directional wind speeds are summarised in Table 2. The directional wind speeds and corresponding directional frequencies of occurrence are presented in Figure 4.

The northerly winds are by far the most frequent wind for the Melbourne region and the strongest. The southerly winds occur most frequently during the warmer months of the year. The far less frequent westerly winds are usually a cold wind since these occur during the spring and winter months and hence can be a cause for discomfort for outdoor areas. The northerly and southerly winds occur most frequently during the warmer months of the year for the Melbourne region, and hence are usually welcomed within outdoor areas.

The recurrence intervals examined in this study are for exceedances of 5% (per 90 degree sector) of the pedestrian comfort criteria using Gust-Equivalent Mean (GEM) wind speeds, and annual maximum wind speeds (per 22.5 degree sector) for the pedestrian safety criterion. Note that the 5% probability wind speeds presented in Table 2 are only used for the directional plot presented in Figure 4 and are not used for the integration of the probabilities.

Table 2: Regional Directional Wind Speeds (hourly means, at 10m height in standard open terrain) (m/s)

Wind Direction	20% Exceedance	Annual Maximum
N	10.1	15.7
NNE	0.5	11.4
NE	0.5	6.9
ENE	0.5	4.8
E	0.5	5.2
ESE	0.5	6.1
SE	0.5	8.8
SSE	0.5	9.3
S	7.0	11.4
SSW	2.9	10.5
SW	3.1	11.4
WSW	4.1	12.6
W	5.2	12.6
WNW	0.5	10.2
NW	0.5	9.7
NNW	2.3	11.4

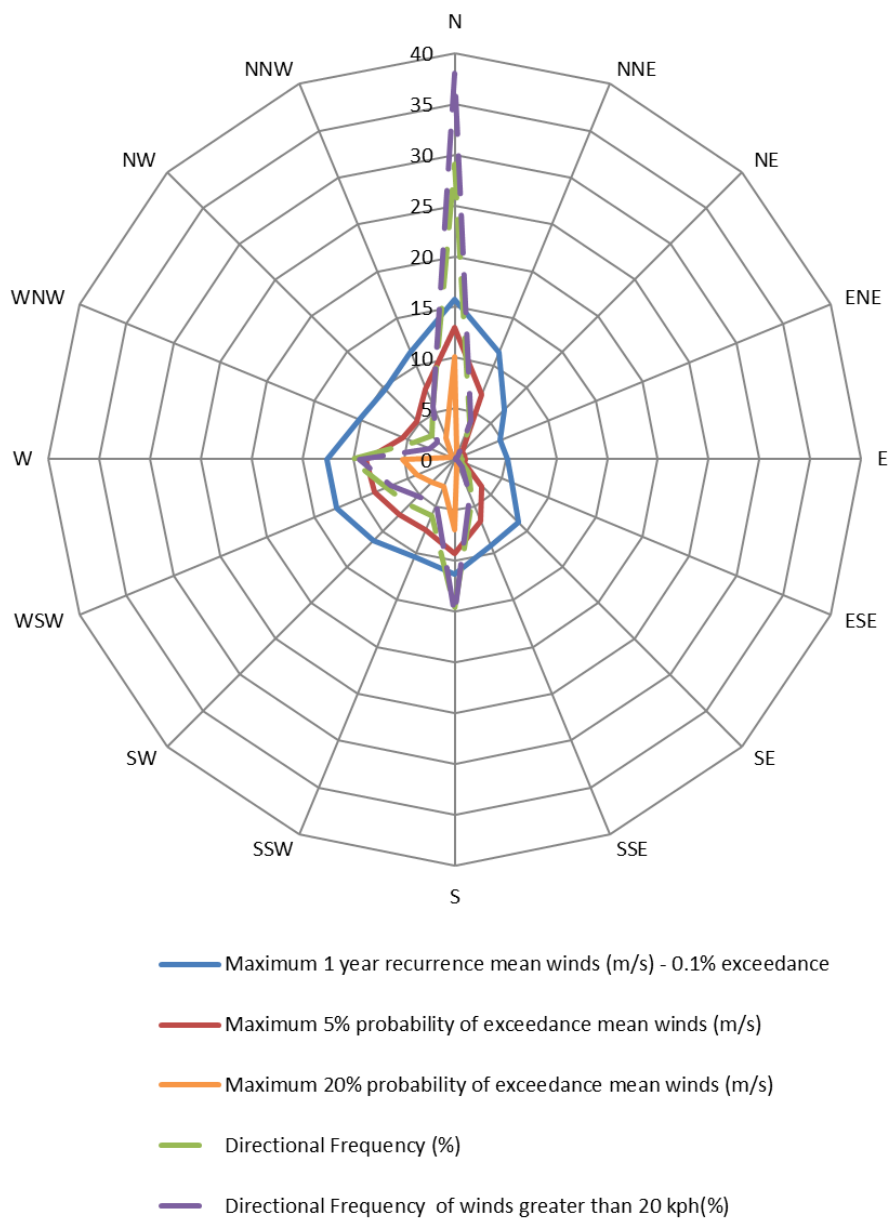


Figure 4: Annual and 5% Exceedance Hourly Mean Wind Speeds, and Frequencies of Occurrence, for the Melbourne Region (at 10m height in standard open terrain)

5 PEDESTRIAN WIND COMFORT AND SAFETY

The acceptability of wind conditions for an area is determined by comparing the measured wind speeds against an appropriate criteria. This section outlines how the measured wind speeds were obtained, the criteria considered for the development, as well as the critical trafficable areas that were assessed and their corresponding criteria designation.

5.1 Measured Wind Speeds

Wind speeds were measured using either Dantec hot-wire probe anemometers or pressure-based wind speed sensors, positioned to monitor wind conditions at critical outdoor trafficable areas of the development. The reference mean free-stream wind speed measured in the wind tunnel, which is at a full-scale height of 200m and measured 3m upstream of the study model.

Measurements were acquired for 16 wind directions at 22.5 degree increments using a sample rate of 1,024Hz. The full methodology of determining the wind speed measurements at the site from either the Dantec Hot-wire probe anemometers or pressure-based wind speed sensors is provided in Appendix B. Based on the results of the analysis of the boundary layer wind profiles at the site (see Section 3), and incorporating the regional wind model (see Section 4), the data sampling length of the wind tunnel test for each wind direction corresponds to a full-scale sample length ranging between 30 minutes and 1 hour. Research by A.W. Rofail and K.C.S. Kwok (1991) has shown that, in addition to the mean and standard deviation of the wind being stable for sample lengths of 15 minutes or more (full-scale), the peak value determined using the upcrossing method is stable for sample lengths of 30 minutes or more.

5.2 Wind Speed Criteria Used for This Study

For this study the measured wind conditions of the selected critical outdoor trafficable areas are compared against two sets of criteria; one for pedestrian safety, and one for pedestrian comfort. The safety criterion is applied to the annual maximum gust winds, and the comfort criteria is applied to Gust Equivalent Mean (GEM) winds. In accordance with ASCE (2003), the GEM wind speed is defined as follows:

$$GEM = \max\left(\bar{V}, \frac{\hat{V}}{1.85}\right) \quad (5.1)$$

where:

\bar{V} is the mean wind speed.

\hat{V} is the 3-second gust wind speed.

The measured wind conditions for the various critical outdoor trafficable areas around the subject development are compared against the Melbourne Planning Scheme Amendment C270 (2016). This requires both the safety limit criteria and wind comfort criteria to be achieved for the various outdoor public areas. The safety criteria states that the 3-second gust wind speed must not exceed 20m/s for more than 0.1% of the time from any given wind direction.

Furthermore, the criteria for wind comfort must not also exceed more than 20% of the time (probability of exceedance) from all directions combined, measured across all hours of the year. The different comfort are presented in Table 3. These criteria are equivalent to the Davenport (1972) criteria. Research by A.W. Rofail (2007) has shown that the Davenport (1972) criteria, used in conjunction with a GEM wind speed, has proven over time and through field observations to be the most reliable indicator of pedestrian comfort. A more detailed comparison of published criteria has been provided in Appendix A.

The criteria considered in this study are summarised in Tables 3 and 4 for pedestrian comfort and safety, respectively. The results of the wind tunnel study are presented in the form of directional plots attached in Appendix C of this report. For each study point there is a plot of the GEM wind speeds using the comfort criteria, and a plot for the annual maximum gust wind speeds using the safety criterion.

Table 3: Comfort Criteria (from Melbourne Planning Scheme Amendment C270, 2016)

Classification	Description	Maximum 20% Exceedance GEM Wind Speed (m/s)
Sitting	Long duration stationary activities such as in outdoor restaurants and theatres, etc.	5.0
Standing	Short duration stationary activities (generally less than 1 hour), including window shopping, waiting areas, etc.	4.0
Walking	For pedestrian thoroughfares, private swimming pools, most communal areas, private balconies and terraces, etc.	3.0

Table 4: Safety Criterion (from W.H. Melbourne, 1978)

Classification	Description	Annual Maximum Gust Wind Speed (m/s)
Safety	Safety criterion applies to all trafficable areas.	20

5.3 Layout of Study Points

For this study a total of 45 study points along the pedestrian footpaths and other trafficable areas within and around the masterplan development were selected for analysis in the wind tunnel. The locations of the various study points tested for this study, as well as the target wind speed criteria for the various outdoor trafficable areas of the development, are presented in Figures 5 in the form of marked-up plans. It should be noted that only the most critical outdoor locations of the development have been selected for analysis.



Figure 5: Study Point Locations and Target Wind Speed Criteria – Ground Floor Plan

6 RESULTS AND DISCUSSION

The results of the wind tunnel study are presented in the form of directional plots in Appendix C for all study points locations, summarised in Tables 5 and 6, and shown on marked-up plans in Figure 6. The wind speed criteria that the wind conditions should achieve are also listed in Tables 5 and 6 for each study point location, as well as in Figures 5.

The results of the study indicate that wind conditions for many trafficable outdoor locations within and around the development will be suitable for their intended uses. Some areas will experience strong winds which will exceed the safety criteria or the existing site conditions. Additional wind tunnel testing was conducted with the inclusion of the treatment scheme detailed below and indicated in Figures 7. The results of the additional testing indicated the treatment scheme was effective in wind mitigation and the outdoor trafficable areas within and around the development site will meet the safety limit criterion, or are equivalent/better than the existing site conditions. Of the various study points tested, the results show that the wind conditions at locations 25, 26 and 43 already exceed the safety limit. The results of the study indicate the proposed development does not exacerbate the existing strong wind conditions at these three study points which are predominantly exposed to direct wind effects travelling over the adjacent open carpark from the prevailing northerly direction. It should be noted the strong wind conditions at these locations are likely to be improved or resolved with the inclusion of the Victoria Gardens development across Doonside Street to the north.

It should be noted that the treatment scheme is indicative for the current design of the development and verifies that wind conditions within the critical outdoor trafficable locations within and around can achieve the safety limit or are equivalent/better than to the existing site conditions. As the design is developed for the planning permit application, further modelling will be undertaken to optimise the scale and extent of the required treatments to suit the detailed design.

The tested treatments that have been demonstrated to meet the safety limit or existing site conditions are detailed as follows:

Doonside Park:

- Inclusion of 1-1.5m high raised garden beds along the public open space.
- Strategic inclusion of impermeable screens atop of the raised garden beds, with an overall height of 2.5m from the local ground level.
- Inclusion of a 2.5m high porous screen along the perimeter edge of the proposed paving at the centre of the public open space. The porosity of the screen is to be a maximum of 30%.
- The proposed bench adjacent to the heritage building is to have a 1.5m high impermeable backrest.

Building A:

- Inclusion of impermeable awnings along the northern and western façade of the podium.
- Inclusion of a Level 1 porous canopy along the eastern façade of the podium (between Buildings A and B) with a maximum porosity of 30%.

- Inclusion of fixed openings within the existing ground level windows/door systems at the north-western corner.
- An extension of the proposed north-western lobby entrance further along the southern boundary.
- Inclusion of 1.5m high impermeable balustrades on the Level 2 podium. The impermeable balustrade is to be offset 1.5m away from the podium edge along the northern and western boundaries.
- Inclusion of a north-western corner 4m x 4m wide balcony on all levels of the tower. A full-height porous screen is also to be included along the western perimeter edge of the balconies with a maximum porosity of 30%.

Building B:

- Inclusion of Level 2 impermeable awnings along the northern façade of the podium.
- Inclusion of a Level 2 porous canopy along the eastern façade of the podium with a maximum porosity of 30%.

Building C:

- Inclusion of 3m high impermeable screens along the north-western perimeter edge of the Level 2 podium rooftop.
- Inclusion of a porous canopy atop of the abovementioned 3m high impermeable screen. The porosity of the canopy is to be a maximum of 30%.
- Inclusion of 3m high porous screen along most of the eastern edge of the Level 2 podium rooftop.
- Inclusion of a north-eastern corner 3m x 3m wide balcony on all levels of the tower. A full-height porous screen is also to be included along the eastern perimeter edge of the balconies with a maximum porosity of 30%.

It should be noted that many of these issues are due to funnelling, downwash and corner acceleration effects of the northerly winds and will likely be significantly improved or resolved with the inclusion of the Victoria Gardens development across Doonside Street to the north.

A further investigation was undertaken with the wind speed measurements for the critical outdoor trafficable locations compared against the applicable criteria for pedestrian comfort. The results of the study indicate that wind conditions for many trafficable outdoor locations within and around the development will be suitable for their intended uses. Some areas will experience strong winds which will exceed the relevant criteria for wind comfort. Suggested in-principle treatments are described in Appendix E.

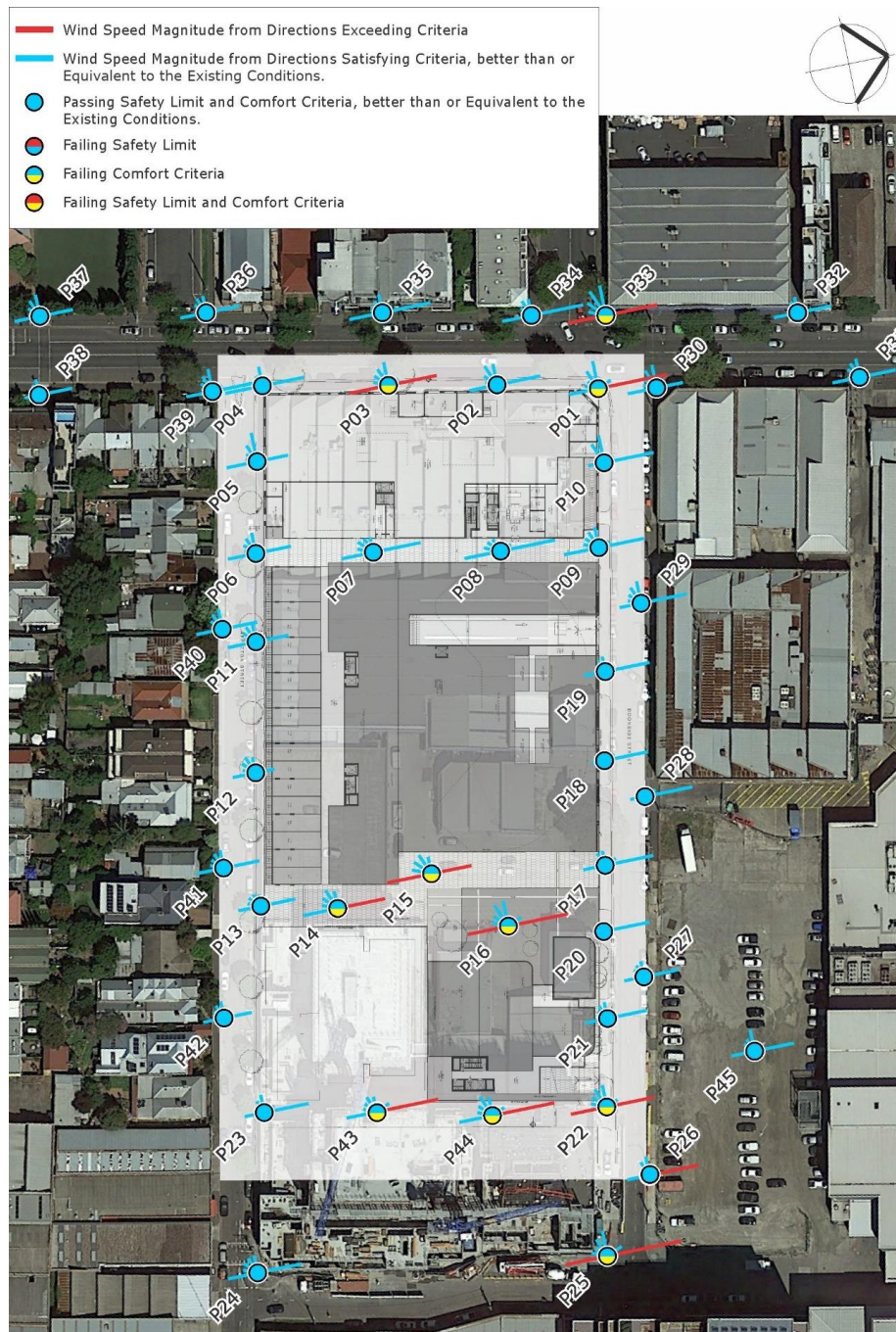


Figure 6: Wind Tunnel Results – Ground Floor Plan
(results shown with the inclusion of the treatment scheme)

Table 5: Wind Tunnel Results Summary – Annual Gust vs Safety Limit

Study Point	Annual Gust			Final Result	Description of Treatment
	Criterion (m/s)	Results (m/s)	Grade		
P01	20	20	Pass	Pass	Refer to Figures 7a to 7e.
Existing		19	Pass		
P02	20	18	Pass	Pass	Refer to Figures 7a to 7e.
Existing		14	Pass		
P03	20	20	Pass	Pass	Refer to Figures 7a to 7e.
Existing		14	Pass		
P04	20	17	Pass	Pass	Refer to Figures 7a to 7e.
Existing		14	Pass		
P05	20	18	Pass	Pass	
Existing		15	Pass		
P06	20	20	Pass	Pass	
Existing		13	Pass		
P07	20	16	Pass	Pass	Refer to Figures 7a to 7e.
P08	20	20	Pass	Pass	Refer to Figures 7a to 7e.
P09	20	17	Pass	Pass	Refer to Figures 7a to 7e.
Existing		15	Pass		
P10	20	20	Pass	Pass	Refer to Figures 7a to 7e.
Existing		18	Pass		
P11	20	14	Pass	Pass	
Existing		13	Pass		
P12	20	15	Pass	Pass	
Existing		17	Pass		
P13	20	20	Pass	Pass	
Existing		15	Pass		
P14	20	20	Pass	Pass	Refer to Figures 7a to 7e.
P15	20	17	Pass	Pass	Refer to Figures 7a to 7e.
Existing		20	Pass		
P16	20	20	Pass	Pass	Refer to Figures 7a to 7e.
Existing		20	Pass		
P17	20	20	Pass	Pass	Refer to Figures 7a to 7e.
Existing		19	Pass		
P18	20	20	Pass	Pass	
Existing		16	Pass		
P19	20	19	Pass	Pass	
Existing		18	Pass		
P20	20	19	Pass	Pass	Refer to Figures 7a to 7e.
Existing		20	Pass		
P21	20	17	Pass		

Attachment 4 Attachment 4 - PLN21/0981 - 81-95 Burnley Street & 26-34 Doonside Street, Richmond - Wind Tunnel testing

Study Point	Annual Gust			Final Result	Description of Treatment
	Criterion (m/s)	Results (m/s)	Grade		
Existing		19	Pass	Pass	
P22	20	19	Pass		Refer to Figures 7a to 7e.
Existing		24	Fail	Pass	
P23	20	20	Pass		
Existing		21	Fail	Pass	
P24	20	18	Pass		
Existing		18	Pass	Pass	
P25	20	26	Fail		Refer to Figures 7a to 7e..
Existing		26	Fail	Pass	
P26	20	21	Fail		Better than or equivalent to Existing Conditions.
Existing		23	Fail	Pass	
P27	20	15	Pass		
Existing		17	Pass	Pass	
P28	20	20	Pass		Refer to Figures 7a to 7e.
Existing		21	Fail	Pass	
P29	20	19	Pass		Refer to Figures 7a to 7e.
Existing		15	Pass	Pass	
P30	20	20	Pass		
Existing		15	Pass	Pass	
P31	20	15	Pass		
Existing		16	Pass	Pass	
P32	20	14	Pass		
Existing		17	Pass	Pass	
P33	20	19	Pass		Refer to Figures 7a to 7e.
Existing		18	Pass	Pass	
P34	20	20	Pass		
Existing		13	Pass	Pass	
P35	20	20	Pass		Refer to Figures 7a to 7e.
Existing		13	Pass	Pass	
P36	20	15	Pass		
Existing		15	Pass	Pass	
P37	20	13	Pass		
Existing		13	Pass	Pass	
P38	20	17	Pass		
Existing		20	Pass	Pass	
P39	20	16	Pass		Refer to Figures 7a to 7e.
Existing		14	Pass	Pass	
P40	20	15	Pass		
Existing		15	Pass	Pass	

Study Point	Annual Gust			Final Result	Description of Treatment
	Criterion (m/s)	Results (m/s)	Grade		
P41	20	16	Pass	Pass	
Existing		15	Pass		
P42	20	12	Pass	Pass	
Existing		13	Pass		
P43	20	23	Fail	Pass	Better than or equivalent to Existing Conditions.
Existing		24	Fail		
P44	20	20	Pass	Pass	Refer to Figures 7a to 7e.
Existing		20	Pass		
P45	20	17	Pass	Pass	
Existing		13	Pass		

Table 6: Wind Tunnel Results Summary – GEM vs Comfort Criteria for 20% exceedance

Study Point	GEM (20% exceedance)			Description of Treatment
	Criterion (m/s)	Results (%)	Grade	
P01	5.0	27%	Fail	Refer to In-principal recommendations in Appendix E
Existing		18%	Pass	
P02	5.0	16%	Pass	
Existing		5%	Pass	
P03	5.0	24%	Fail	Refer to In-principal recommendations in Appendix E
Existing		8%	Pass	
P04	5.0	16%	Pass	
Existing		7%	Pass	
P05	5.0	14%	Pass	
Existing		4%	Pass	
P06	5.0	19%	Pass	
Existing		5%	Pass	
P07	5.0	17%	Pass	
P08		20%	Pass	
P09	5.0	19%	Pass	
Existing		7%	Pass	
P10	5.0	20%	Pass	
Existing		14%	Pass	
P11	5.0	9%	Pass	
Existing		3%	Pass	
P12	5.0	10%	Pass	
Existing		13%	Pass	

Attachment 4 Attachment 4 - PLN21/0981 - 81-95 Burnley Street & 26-34 Doonside Street, Richmond - Wind Tunnel testing

Study Point	GEM (20% exceedance)		Grade	Description of Treatment
	Criterion (m/s)	Results (%)		
P13	5.0	16%	Pass	
Existing		9%	Pass	
P14	5.0	22%	Fail	Refer to In-principal recommendations in Appendix E
P15	5.0	29%	Fail	Refer to In-principal recommendations in Appendix E
Existing		13%	Pass	
P16	4.0	35%	Fail	Refer to In-principal recommendations in Appendix E
Existing		25%	Fail	
P17	5.0	15%	Pass	
Existing		14%	Pass	
P18	5.0	14%	Pass	
Existing		11%	Pass	
P19	5.0	15%	Pass	
Existing		12%	Pass	
P20	5.0	10%	Pass	
Existing		16%	Pass	
P21	5.0	12%	Pass	
Existing		13%	Pass	
P22	5.0	23%	Fail	Refer to In-principal recommendations in Appendix E
Existing		22%	Fail	
P23	5.0	15%	Pass	
Existing		18%	Pass	
P24	5.0	14%	Pass	
Existing		14%	Pass	
P25	5.0	34%	Fail	Refer to In-principal recommendations in Appendix E
Existing		25%	Fail	
P26	5.0	14%	Pass	
Existing		24%	Fail	
P27	5.0	7%	Pass	
Existing		12%	Pass	
P28	5.0	14%	Pass	
Existing		19%	Pass	
P29	5.0	16%	Pass	
Existing		6%	Pass	
P30	5.0	16%	Pass	
Existing		10%	Pass	
P31	5.0	9%	Pass	
Existing		11%	Pass	
P32	5.0	6%	Pass	
Existing		14%	Pass	

Study Point	GEM (20% exceedance)		Grade	Description of Treatment
	Criterion (m/s)	Results (%)		
P33	5.0	31%	Fail	Refer to In-principal recommendations in Appendix E
Existing		15%	Pass	
P34	5.0	19%	Pass	
Existing		5%	Pass	
P35	5.0	16%	Pass	
Existing		5%	Pass	
P36	5.0	8%	Pass	
Existing		6%	Pass	
P37	5.0	5%	Pass	
Existing		4%	Pass	
P38	5.0	12%	Pass	
Existing		22%	Fail	
P39	5.0	14%	Pass	
Existing		4%	Pass	
P40	5.0	7%	Pass	
Existing		7%	Pass	
P41	5.0	12%	Pass	
Existing		8%	Pass	
P42	5.0	3%	Pass	
Existing		3%	Pass	
P43	5.0	21%	Pass	Better than or equivalent to Existing Conditions.
Existing		31%	Fail	
P44	5.0	24%	Fail	Refer to In-principal recommendations in Appendix E
Existing		16%	Pass	
P45	5.0	12%	Pass	
Existing		5%	Pass	

Note that, for any study points listed in Tables 5 and 6 with two rows of results data, the second row is for the existing site conditions. The test results shown in Tables 5 and 6 are without any treatments applied. If treatment is required, the treatment is described in Tables 5 and 6.

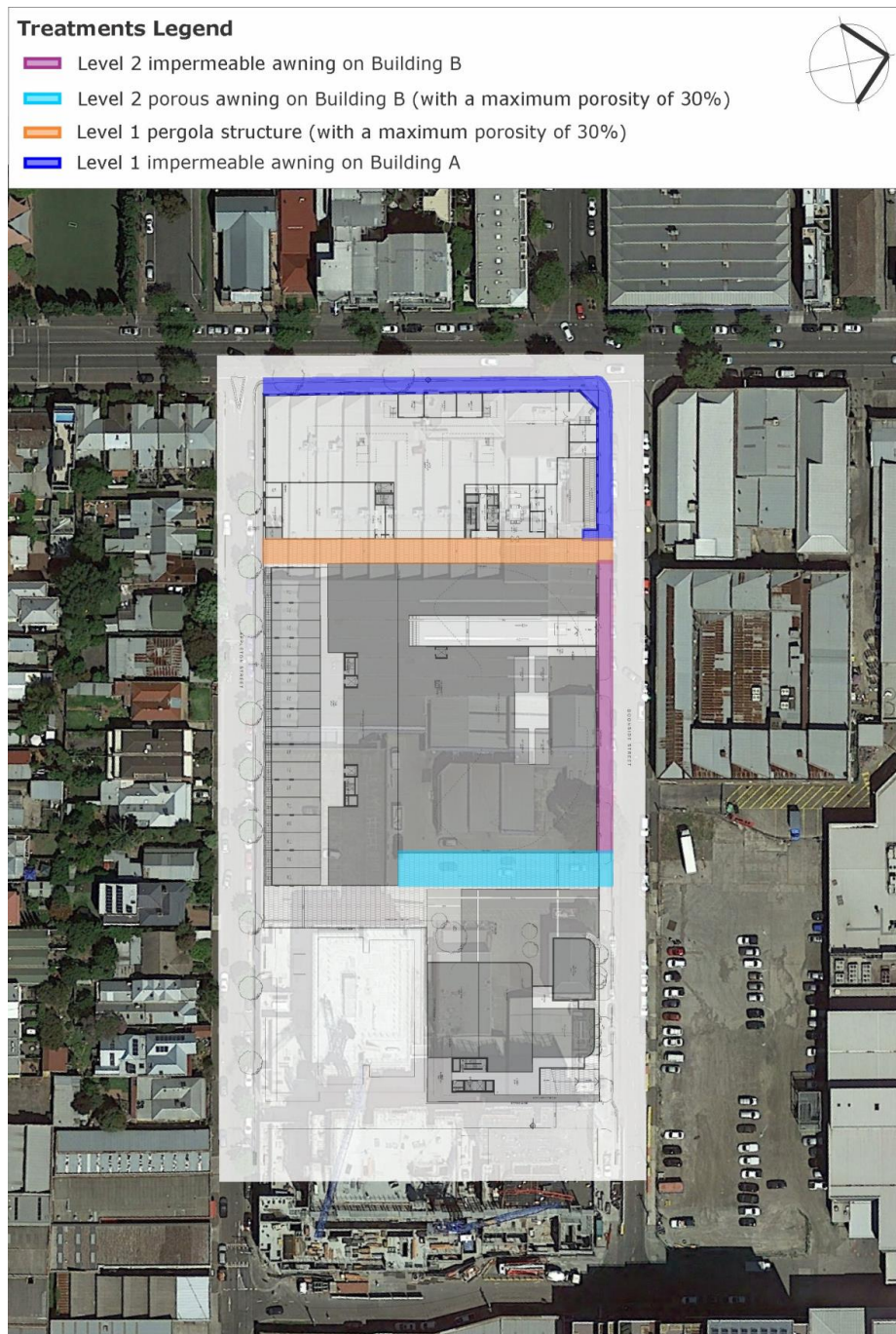






Figure 7a: Treatment Scheme – Level 1 and Level 2 Awnings on Buildings A and B

Treatments Legend

-  Bench with a 1.5m high impermeable backrest
-  Raised garden bed, 1-1.5m
-  Impermeable screen atop of the raised garden beds, with an overall height of 2.5m
-  2.5m high porous screen (with a maximum porosity of 30%)


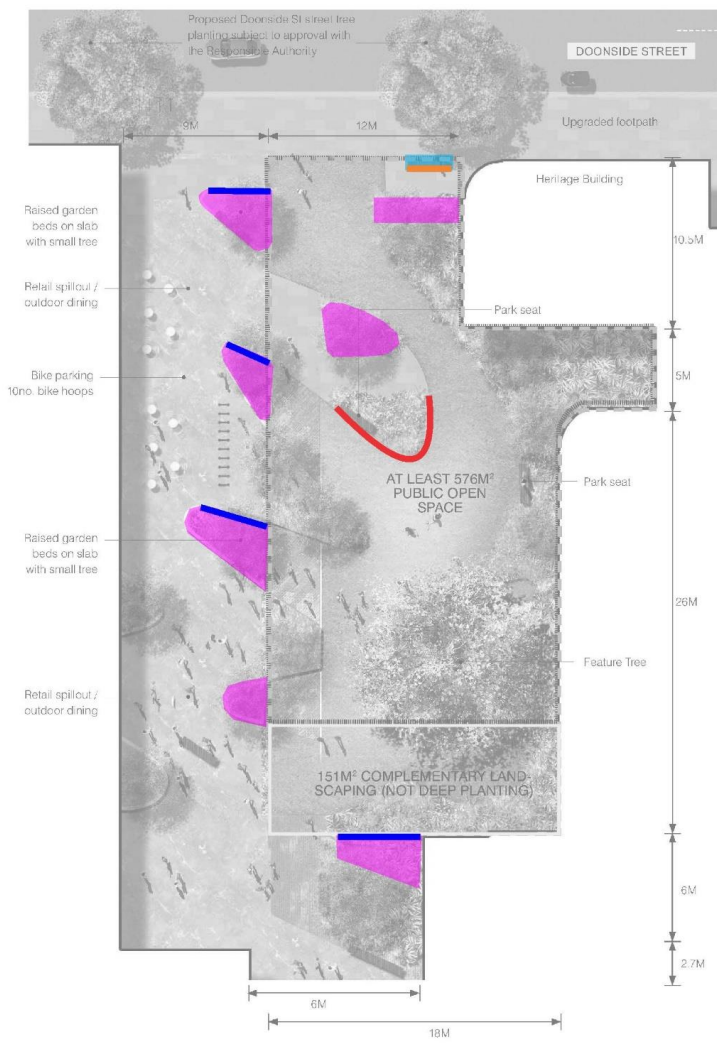





Figure 7b: Treatment Scheme – Doonside Park Communal Open Space

Treatments Legend

-  Fixed openings within existing window/door systems
-  Extension of the proposed lobby space

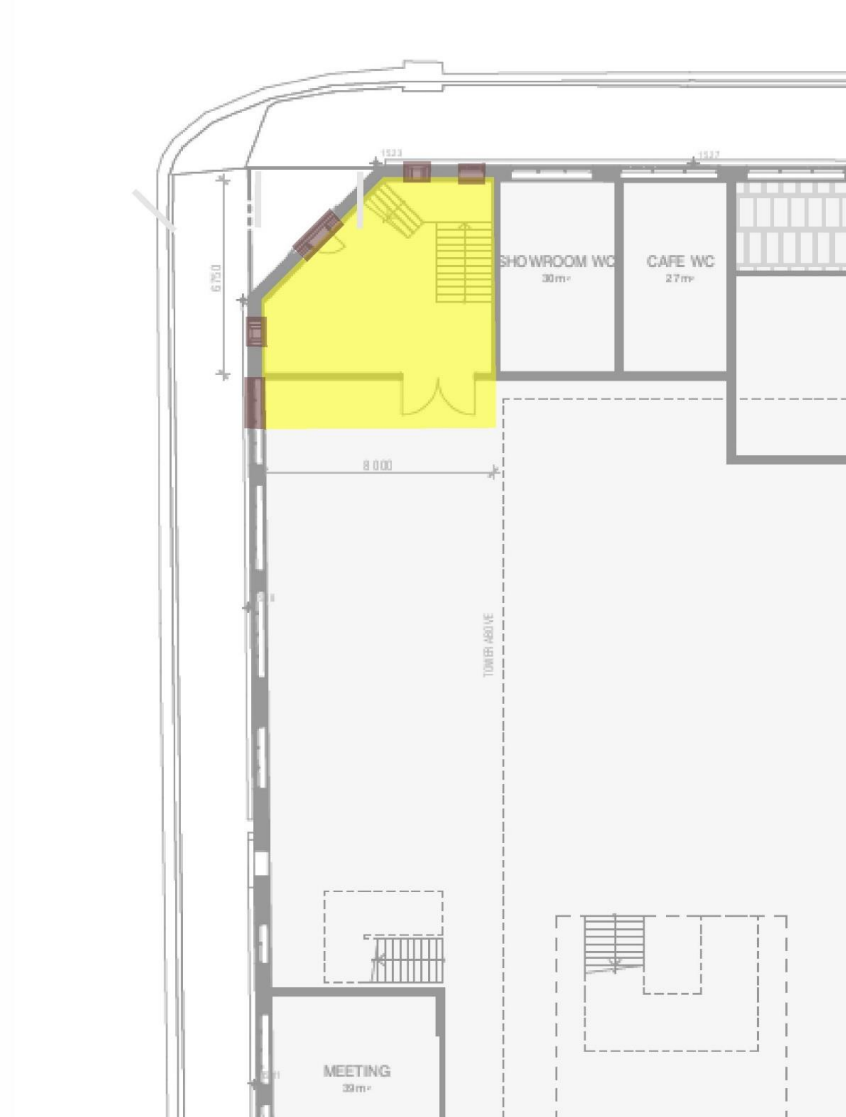



Figure 7c: Treatment Scheme – Building A – Proposed Lobby





Treatments Legend

- Impermeable balustrades, 1.5m high, 1.5m offset from edge of podium
- Inclusion of 4m x 4m balcony with the inclusion of a full-height porous screen along the western perimeter edge of the balcony (with a maximum porosity of 30%)




Figure 7d: Treatment Scheme – Building A – Level 2 Podium and Tower Balconies

Treatments Legend

-  Impermeable screen 3m high
-  Porous Canopy (with a maximum porosity of 30%)
-  Porous screen 3m high (with a maximum porosity of 30%)
-  Inclusion of 3m x 3m balcony with the inclusion of a full-height porous screen along the eastern perimeter edge of the balcony (with a maximum porosity of 30%)





Figure 7e: Treatment Scheme – Building C – Level 2 Podium and Tower Balconies

7 REFERENCES

- American Society of Civil Engineers (ASCE), 2003, "Outdoor Human Comfort and its Assessment – State of the Art".
- American Society of Civil Engineers (ASCE), ASCE-7-16, 2016, "Minimum Design Loads for Buildings and Other Structures".
- Australasian Wind Engineering Society, QAM-1, 2019, "Quality Assurance Manual: Wind Engineering Studies of Buildings", edited by Rofail A.W., et al.
- Australasian Wind Engineering Society (AWES), 2014, "Guidelines for Pedestrian Wind Effects Criteria".
- Council on Tall Buildings and Urban Habitat (CTBUH), 2013, "Wind tunnel testing of high-rise buildings", CTBUH Technical Guides.
- Davenport, A.G., 1972, "An approach to human comfort criteria for environmental conditions". Colloquium on Building Climatology, Stockholm.
- Deaves, D.M. and Harris, R.I., 1978, "A mathematical model of the structure of strong winds." Construction Industry and Research Association (U.K), Report 76.
- Engineering Science Data Unit, 1982, London, ESDU82026, "Strong Winds in the Atmospheric Boundary Layer, Part 1: Hourly Mean Wind Speeds", with Amendments A to E (issued in 2002).
- Melbourne, W.H., 1978, "Criteria for Environmental Wind Conditions". Journal of Wind Engineering and Industrial Aerodynamics, vol. 3, pp241-249.
- Rofail, A.W., and Kwok, K.C.S., 1991, "A Reliability Study of Wind Tunnel Results of Cladding Pressures". Proceedings of the 8th International Conference on Wind Engineering, Canada.
- Rofail, A.W., 2007, "Comparison of Wind Environment Criteria against Field Observations". 12th International Conference of Wind Engineering, Cairns, Australia.
- Standards Australia and Standards New Zealand, AS/NZS 1170.2, 2011, "SAA Wind Loading Standard, Part 2: Wind Actions".

APPENDIX A PUBLISHED ENVIRONMENTAL CRITERIA

A.1 Wind Effects on People

The acceptability of wind in an area is dependent upon the use of the area. For example, people walking or window-shopping will tolerate higher wind speeds than those seated at an outdoor restaurant. Quantifying wind comfort has been the subject of much research and many researchers, such as A.G. Davenport, T.V. Lawson, W.H. Melbourne, and A.D. Penwarden, have published criteria for pedestrian comfort for pedestrians in outdoor spaces for various types of activities. This section discusses and compares the various published criteria.

A.2 A.D. Penwarden (1973) Criteria for Mean Wind Speeds

A.D. Penwarden (1973) developed a modified version of the Beaufort scale which describes the effects of various wind intensities on people. Table A.1 presents the modified Beaufort scale. Note that the effects listed in this table refers to wind conditions occurring frequently over the averaging time (a probability of occurrence exceeding 5%). Higher ranges of wind speeds can be tolerated for rarer events.

Table A.1: Summary of Wind Effects on People (A.D. Penwarden, 1973)

Type of Winds	Beaufort Number	Hourly Mean Wind Speed (m/s)	Effects
Calm	0	0 - 0.3	
Calm, light air	1	0.3 - 1.6	No noticeable wind
Light breeze	2	1.6 - 3.4	Wind felt on face
Gentle breeze	3	3.4 - 5.5	Hair is disturbed, clothing flaps, newspapers difficult to read
Moderate breeze	4	5.5 - 8.0	Raises dust, dry soil and loose paper, hair disarranged
Fresh breeze	5	8.0 - 10.8	Force of wind felt on body, danger of stumbling
Strong breeze	6	10.8 - 13.9	Umbrellas used with difficulty, hair blown straight, difficult to walk steadily, wind noise on ears unpleasant
Near gale	7	13.9 - 17.2	Inconvenience felt when walking
Gale	8	17.2 - 20.8	Generally impedes progress, difficulty balancing in gusts
Strong gale	9	20.8 - 24.5	People blown over

A.3 A.G. Davenport (1972) Criteria for Mean Wind Speeds

A.G. Davenport (1972) also determined a set of criteria in terms of the Beaufort scale and for various return periods. Table A.2 presents a summary of the criteria based on a probability of exceedance of 5%.

Table A.2: Criteria by A.G. Davenport (1972)

Classification	Activities	5% exceedance Mean Wind Speed (m/s)
Walking Fast	Acceptable for walking, main public accessways.	7.5 - 10.0
Strolling, Skating	Slow walking, etc.	5.5 - 7.5
Short Exposure Activities	Generally acceptable for walking & short duration stationary activities such as window-shopping, standing or sitting in plazas.	3.5 - 5.5
Long Exposure Activities	Generally acceptable for long duration stationary activities such as in outdoor restaurants & theatres and in parks.	0 - 3.5

A.4 T.V. Lawson (1975) Criteria for Mean Wind Speeds

In 1973, T.V. Lawson, while referring to the Beaufort wind speeds of A.D. Penwarden (1973) (as listed in Table A.1), quoted that a Beaufort 4 wind speed would be acceptable if it is not exceeded for more than 4% of the time, and that a Beaufort 6 wind speed would be unacceptable if it is exceeded more than 2% of the time. Later, in 1975, T.V. Lawson presented a set of criteria very similar to those presented in A.G. Davenport (1972) (as listed in Table A.2). These criteria are presented in Table A.3 and Table A.4 for safety and comfort respectively.

Table A.3: Safety Criteria by T.V. Lawson (1975)

Classification	Activities	Annual Mean Wind Speed (m/s)
Safety (all weather areas)	Accessible by the general public.	0 – 15
Safety (fair weather areas)	Private areas, balconies/terraces, etc.	0 – 20

Table A.4: Comfort Criteria by T.V. Lawson (1975)

Classification	Activities	5% exceedance Mean Wind Speed (m/s)
Business Walking	Objective Walking from A to B.	8 - 10
Pedestrian Walking	Slow walking, etc.	6 - 8
Short Exposure Activities	Pedestrian standing or sitting for short times.	4 – 6
Long Exposure Activities	Pedestrian sitting for a long duration.	0 - 4

A.5 W.H. Melbourne (1978) Criteria for Gust Wind Speeds

W.H. Melbourne (1978) introduced a set of criteria for the assessment of environmental wind conditions that were developed for a temperature range of 10°C to 30°C and for people suitably dressed for outdoor conditions. These criteria are presented in Table A.5, and are based on maximum gust wind speeds with a probability of exceedance of once per year.

Table A.5: Criteria by W.H. Melbourne (1978)

Classification	Activities	Annual Gust Wind Speed (m/s)
Limit for Safety	Completely unacceptable: people likely to get blown over.	23
Marginal	Unacceptable as main public accessways.	16 - 23
Comfortable Walking	Acceptable for walking, main public accessways	13 - 16
Short Exposure Activities	Generally acceptable for walking & short duration stationary activities such as window-shopping, standing or sitting in plazas.	10 - 13
Long Exposure Activities	Generally acceptable for long duration stationary activities such as in outdoor restaurants & theatres and in parks.	0 - 10

A.6 Comparison of the Published Wind Speed Criteria

W.H. Melbourne (1978) presented a comparison of the criteria of various researchers on a probabilistic basis. Figure A.1 presents the results of this comparison, and indicates that the criteria of W.H. Melbourne (1978) are comparatively quite conservative. This conclusion was also observed by A.W. Rofail (2007) when undertaking on-site remedial studies. The results of A.W. Rofail (2007) concluded that the criteria by W.H. Melbourne (1978) generally overstates the wind effects in a typical urban setting due to the assumption of a fixed 15% turbulence intensity for all areas. It was observed in A.W. Rofail (2007) that the 15% turbulence intensity assumption is not real and that the turbulence intensities at 1.5m above ground is at least 20% and in a suburban or urban setting is generally in the range of 30% to 60%.

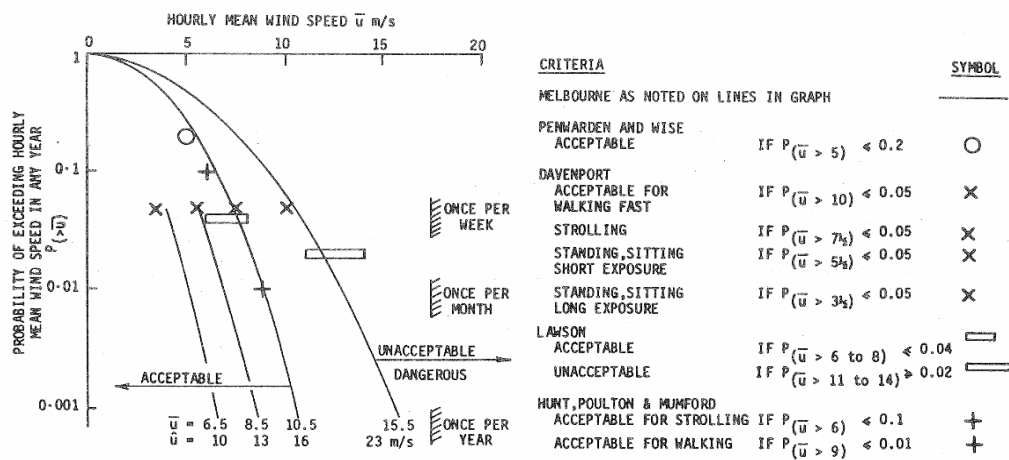


Figure A.1: Comparison of Various Mean and Gust Wind Environment Criteria, assuming 15% turbulence and a Gust Factor of 1.5 (W.H. Melbourne, 1978)

A.7 References relating to Pedestrian Comfort Criteria

Davenport, A.G., 1972, "An approach to human comfort criteria for environmental conditions". Colloquium on Building Climatology, Stockholm.

Davenport, A.G., 1977, "The prediction of risk under wind loading", 2nd International Conference on Structural Safety and Reliability, Munich, Germany, pp511-538.

Lawson, T.V., 1973, "The wind environment of buildings: a logical approach to the establishment of criteria". Bristol University, Department of Aeronautical Engineering.

Lawson, T.V., 1975, "The determination of the wind environment of a building complex before construction". Bristol University, Department of Aeronautical Engineering.

Melbourne, W.H., 1978, "Criteria for Environmental Wind Conditions". Journal of Wind Engineering and Industrial Aerodynamics, vol. 3, pp241-249.

Penwarden, A.D. (1973). "Acceptable Wind Speeds in Towns", Building Science, vol. 8: pp259-267.

Penwarden, A.D., Wise A.F.E., 1975, "Wind Environment Around Buildings". Building Research Establishment Report, London.

Rofail, A.W., 2007, "Comparison of Wind Environment Criteria against Field Observations". 12th International Conference of Wind Engineering, Cairns, Australia.

APPENDIX B DATA ACQUISITION

The wind tunnel testing procedures utilised for this study were based on the guidelines set out in the Australasian Wind Engineering Society Quality Assurance Manual (AWES-QAM-1-2019), ASCE 7-16 (Chapter C31), and CTBUH (2013). The wind speed measurements for the wind tunnel study were determined as coefficients using data acquired by either Dantec hot-wire probe anemometers or pressure-based wind speed sensors and converted to full-scale wind speeds using details of the regional wind climate obtained from an analysis of directional wind speed recordings from the local meteorological recording station(s).

B.1 Measurement of the Velocity Coefficients

The study model and proximity model were setup within the wind tunnel which was configured to the appropriate boundary layer profile, and the wind velocity measurements were monitored using either Dantec hot-wire probe anemometers or pressure-based wind speed sensors at selected critical outdoor locations. The wind velocity results presented in this study for each study point are representative of wind at a full-scale height of approximately 1.5m above ground/slab level. In the case of the Dantec hot-wire probe anemometers, the support of the probe is mounted such that the probe wire is vertical as much as possible to ensure that the measured wind speeds are independent of wind direction along the horizontal plane. In addition, care was taken in the alignment of the hot-wire probe wire and in avoiding wall-heating effects.

Wind speed measurements were made in the wind tunnel for 16 wind directions, at 22.5° increments. Data was acquired for each wind direction using a sample rate of 1024Hz. The sample length was determined to produce a full-scale sample time that is sufficient for this type of study. In the case of the pressure-based wind speed sensors, the phase lag between the various channels where data is acquired simultaneously is within 10% of a typical pressure cycle, and the signal is low-pass filtered at 500Hz and then digital filtering is applied over this range to provide an unbiased response from the pressure measurement system (A.W. Rofail, 2004).

The mean, gust and standard deviation velocity coefficients were determined from the data acquired in the wind tunnel. The gust velocity coefficients were also derived for each wind direction from by the following relation:

$$\hat{C}_V = \bar{C}_V + g \cdot \sigma_{C_V} \quad \text{B.1}$$

where:

\hat{C}_V is the gust velocity coefficient.

\bar{C}_V is the mean velocity coefficient.

g is the peak factor, taken as 3.0 for a 3-sec gust and 3.4 for a 0.5-sec gust.

σ_{C_V} is the standard deviation of the velocity coefficient measurement.

In the case of a Dantec hot-wire probe anemometer, the velocity coefficient is obtained as follows:

$$C_V = \frac{C_{V,study}}{C_{V,200m}} \quad \text{B.2}$$

where:

$C_{V,study}$ is the velocity coefficient measurement obtained from the Dantec hot-wire probe anemometer at the study point location.

$C_{V,200m}$ is the velocity coefficient measurement obtained from the Dantec hot-wire probe anemometer at the free-stream reference location at 200m height upwind of the model in the wind tunnel.

However, in the case of the pressure-based wind speed sensors, these are determined from the measured differential mean, standard deviation and maximum pressure coefficients obtained from the wind speed sensor. For this analysis all calculations are performed on the square root of the differential pressure measurements. The velocity coefficient at the pressure-based wind speed sensor location is then calculated as follows:

$$C_V = \frac{\alpha + \beta\sqrt{\Delta p}}{V_{200m}} \quad \text{B.3}$$

where:

C_V is the velocity coefficient measurement at the study point location.

α is a calibration coefficient for the pressure-based wind speed sensor.

β is a calibration coefficient for the pressure-based wind speed sensor.

Δp is the differential pressure obtained from the pressure-based wind speed sensor at the study point location.

V_{200m} is the wind speed at the free-stream reference location of 200m height (full-scale) in the wind tunnel, which is determined directly in the wind tunnel using a pitot static probe.

B.2 Calculation of the Full-Scale Results

The full-scale results determine if the wind conditions at a study location satisfy the designated criteria of that location. More specifically, the full-scale results need to determine the probability of exceedance of a given wind speed at a study location. To determine the probability of exceedance, the measured velocity coefficients were combined with a statistical model of the local wind climate that relates wind speed to a probability of exceedance. Details of the wind climate model are outlined in Section 4 of the main report.

The statistical model of the wind climate includes the impact of wind directionality as any local variations in wind speed or frequency with wind direction. This is important as the wind directions that produce the highest wind speed events for a region may not coincide with the most wind exposed direction at the site.

The methodology adopted for the derivation of the full-scale results for the maximum gust and the GEM wind speeds are outlined in the following sub-sections.

B.3 Maximum Gust Wind Speeds

The full-scale maximum gust wind speed at each study point location is derived from the velocity coefficient using the following relationship:

$$V_{study} = V_{ref,RH} \left(\frac{k_{200m,tr,T=1hr}}{k_{RH,tr,T=1hr}} \right) C_V \quad B.4$$

where:

V_{study} is the full-scale wind speed at the study point location.

$V_{ref,RH}$ is the full-scale reference wind speed at the study reference height. This value is determined by combining the directional wind speed data for the region (detailed in Section 4) and the upwind terrain and height multipliers for the site (detailed in Section 3).

$k_{200m,tr,T=1hr}$ is the hourly mean terrain and height multiplier at the free-stream reference location of 200m height.

$k_{RH,tr,T=1hr}$ is the hourly mean terrain and height multiplier at the study reference height (Section 3).

C_V is the velocity coefficient, obtained from either Equation B.2 (in the case of Dantec hot-wire probe anemometers) or Equation B.3 (in the case of pressure-based wind speed sensors).

The value of $V_{ref,RH}$ varies with each prevailing wind direction. Wind directions where there is a high probability that a strong wind will occur have a higher directional wind speed than other directions. To determine the directional wind speeds, a probability level must be assigned for each wind direction. These probability levels are set following the approach used in AS/NZS1170.2:2011, which assumes that the major contributions to the combined probability of exceedance of a typical load effect comes from only two 45 degree sectors.

B.4 Maximum Gust-Equivalent Mean Wind Speeds

The contribution to the probability of exceedance of a specified wind speed (ie: the desired wind speed for pedestrian comfort, as per the criteria) was calculated for each wind direction. These contributions are then combined over all wind directions to calculate the total probability of exceedance of the specified wind speed. To calculate the probability of exceedance for a specified wind speed a statistical wind climate model was used to describe the relationship between directional wind speeds and the probability of exceedance. A detailed description of the methodology is given by T.V. Lawson (1980).

The criteria used in this study is referenced to a probability of exceedance of 5% of a specified wind speed.

B.5 References relating to Data Acquisition

American Society of Civil Engineers (ASCE), ASCE-7-16, 2016, "Minimum Design Loads for Buildings and Other Structures".

Australasian Wind Engineering Society, QAM-1, 2019, "Quality Assurance Manual: Wind Engineering Studies of Buildings", edited by Rofail A.W., et al.

Council on Tall Buildings and Urban Habitat (CTBUH), 2013, "Wind tunnel testing of high-rise buildings", CTBUH Technical Guides.

Lawson, T.V., 1980, "Wind Effects on Buildings - Volume 1, Design Applications". Applied Science Publishers Ltd, Ripple Road, Barking, Essex, England.

Rofail A.W., Tonin, R., and Hanafi, D., 2004, "Sensitivity of frequency response to type of tubing", Australasian Wind Engineering Workshop, Darwin.

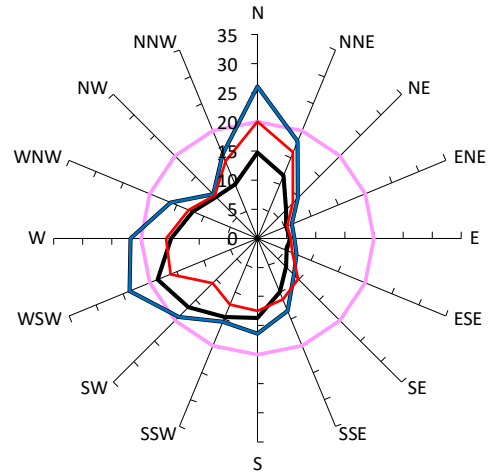
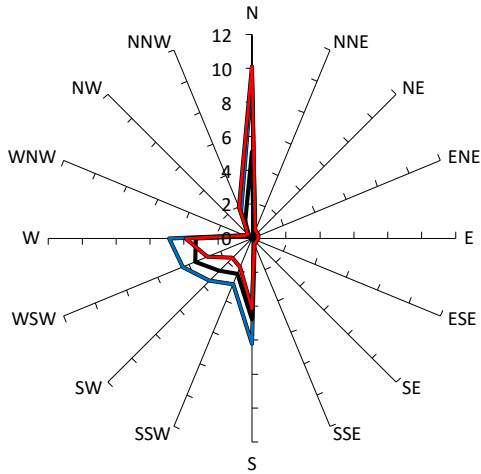
Standards Australia and Standards New Zealand, AS/NZS 1170.2, 2011, "SAA Wind Loading Standard, Part 2: Wind Actions".



APPENDIX C DIRECTIONAL PLOTS OF WIND TUNNEL RESULTS

Results for P01

Gust Equivalent Mean (m/s) Maximum Gust (m/s)



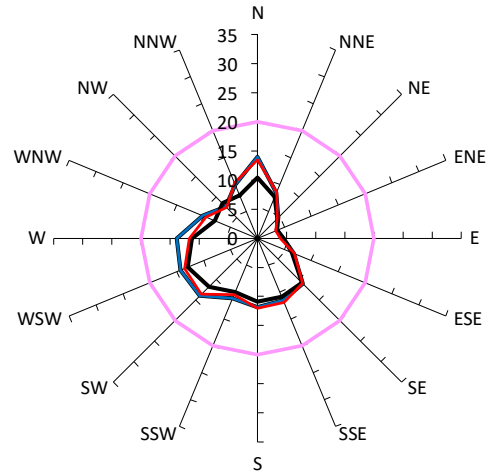
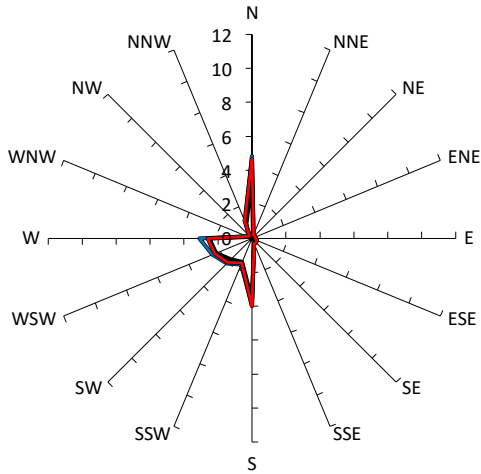
Comfort Criteria: 5m/s with 20% probability of exceedence

Safety Limit: 20m/s

Description	GEM Prob of Exceed %	Peak Gust m/s
— Criterion: Walking comfort (5m/s) Safety Limit (23m/s).	20%	20
— With development "as proposed", no vegetation or other treatments.	39%	26
— Existing Site Conditions	18%	19
— With the inclusion of the mitigation strategy detailed within the report.	27%	20
—		
—		
—		
—		
—		

Results for P11

Gust Equivalent Mean (m/s) Maximum Gust (m/s)



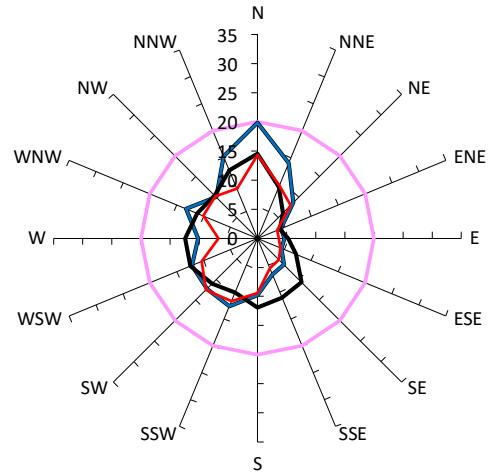
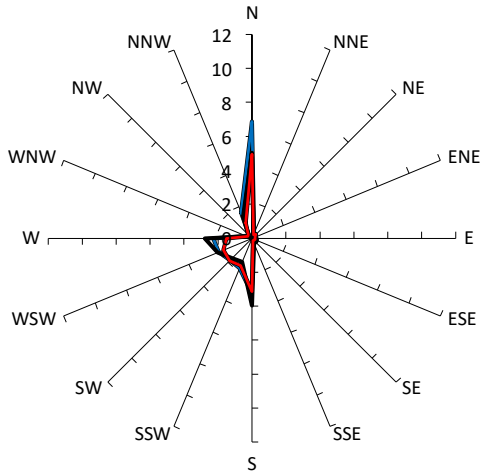
Comfort Criteria: 5m/s with 20% probability of exceedence

Safety Limit: 20m/s

Description	GEM Prob of Exceed %	Peak Gust m/s
— Criterion: Walking comfort (5m/s) Safety Limit (23m/s).	20%	20
— With development "as proposed", no vegetation or other treatments.	9%	14
— Existing Site Conditions	3%	13
— With the inclusion of the mitigation strategy detailed within the report.	7%	14
—		
—		
—		
—		
—		

Results for P13

Gust Equivalent Mean (m/s) Maximum Gust (m/s)



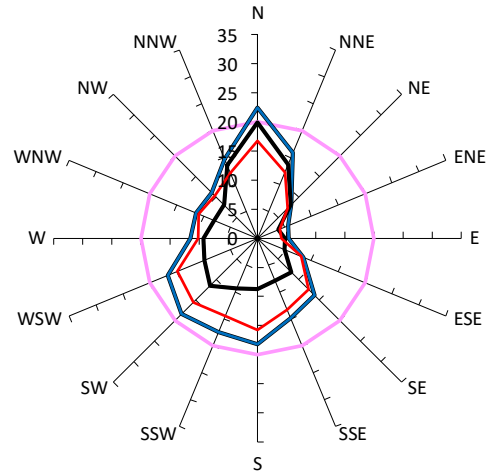
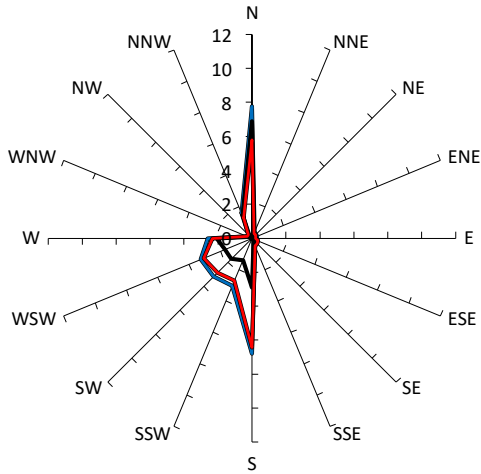
Comfort Criteria: 5m/s with 20% probability of exceedence

Safety Limit: 20m/s

Description	GEM Prob of Exceed %	Peak Gust m/s
— Criterion: Walking comfort (5m/s) Safety Limit (23m/s).	20%	20
— With development "as proposed", no vegetation or other treatments.	16%	20
— Existing Site Conditions	9%	15
— With the inclusion of the mitigation strategy detailed within the report.	6%	14
—		
—		
—		
—		
—		

Results for P15

Gust Equivalent Mean (m/s) Maximum Gust (m/s)



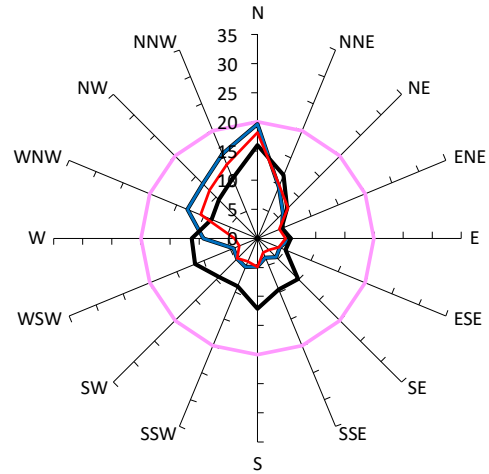
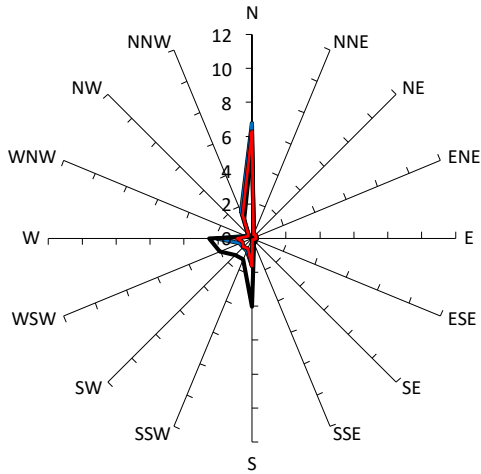
Comfort Criteria: 5m/s with 20% probability of exceedence

Safety Limit: 20m/s

Description	GEM Prob of Exceed %	Peak Gust m/s
— Criterion: Walking comfort (5m/s) Safety Limit (23m/s).	20%	20
— With development "as proposed", no vegetation or other treatments.	34%	22
— Existing Site Conditions	13%	20
— With the inclusion of the mitigation strategy detailed within the report.	29%	17
—		
—		
—		
—		
—		

Results for P18

Gust Equivalent Mean (m/s) Maximum Gust (m/s)



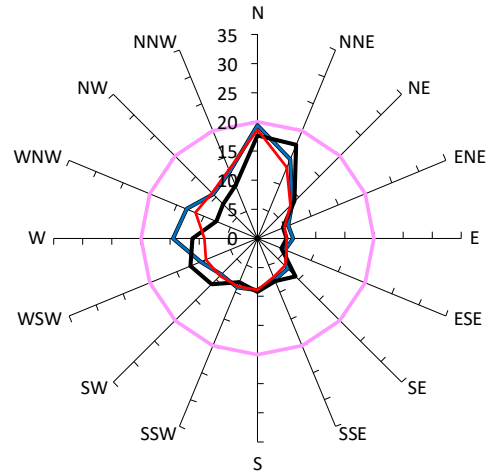
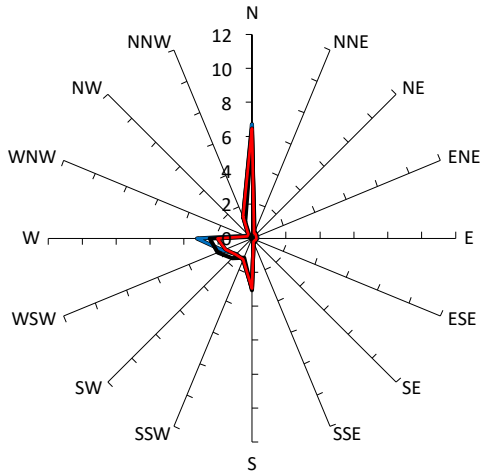
Comfort Criteria: 5m/s with 20% probability of exceedence

Safety Limit: 20m/s

Description	GEM Prob of Exceed %	Peak Gust m/s
— Criterion: Walking comfort (5m/s) Safety Limit (23m/s).	20%	20
— With development "as proposed", no vegetation or other treatments.	14%	20
— Existing Site Conditions	11%	16
— With the inclusion of the mitigation strategy detailed within the report.	11%	18
—		
—		
—		
—		
—		

Results for P19

Gust Equivalent Mean (m/s) Maximum Gust (m/s)



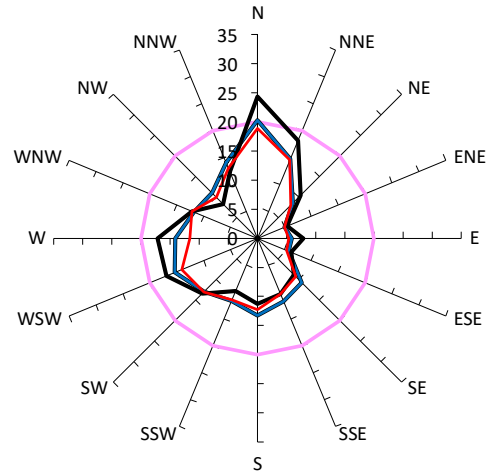
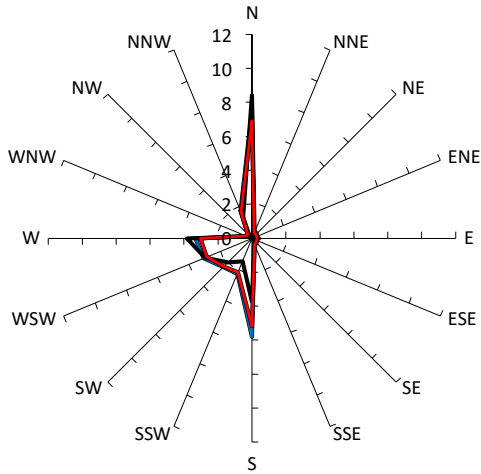
Comfort Criteria: 5m/s with 20% probability of exceedence

Safety Limit: 20m/s

Description	GEM Prob of Exceed %	Peak Gust m/s
— Criterion: Walking comfort (5m/s) Safety Limit (23m/s).	20%	20
— With development "as proposed", no vegetation or other treatments.	15%	19
— Existing Site Conditions	12%	18
— With the inclusion of the mitigation strategy detailed within the report.	12%	19
—		
—		
—		
—		
—		

Results for P22

Gust Equivalent Mean (m/s) Maximum Gust (m/s)



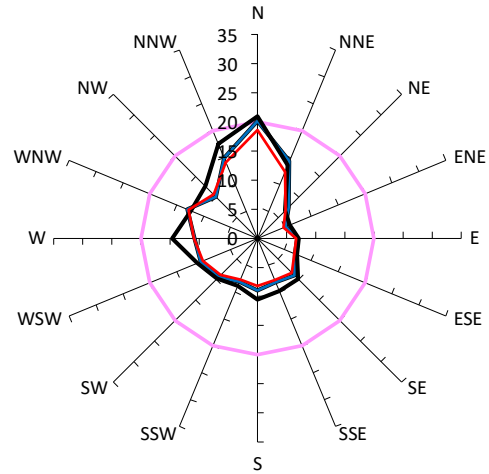
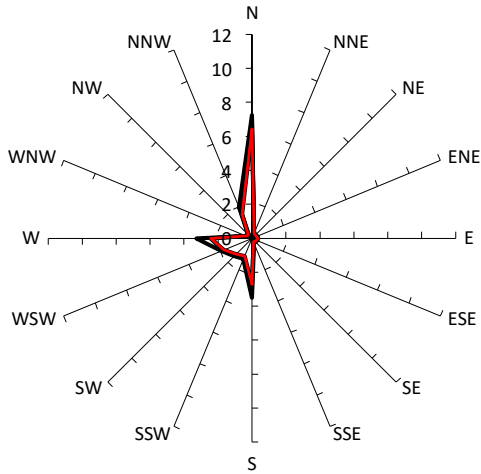
Comfort Criteria: 5m/s with 20% probability of exceedence

Safety Limit: 20m/s

Description	GEM Prob of Exceed %	Peak Gust m/s
— Criterion: Walking comfort (5m/s) Safety Limit (23m/s).	20%	20
— With development "as proposed", no vegetation or other treatments.	28%	20
— Existing Site Conditions	22%	24
— With the inclusion of the mitigation strategy detailed within the report.	23%	19
—		
—		
—		
—		
—		

Results for P23

Gust Equivalent Mean (m/s) Maximum Gust (m/s)



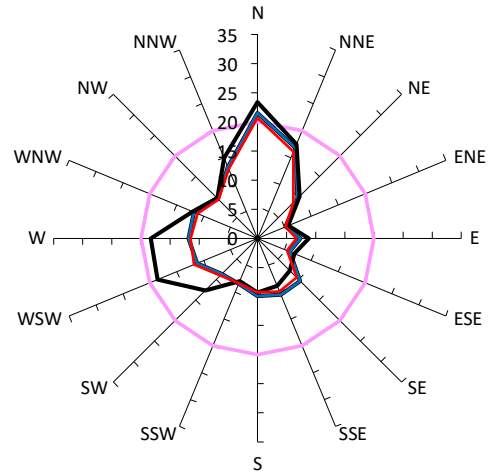
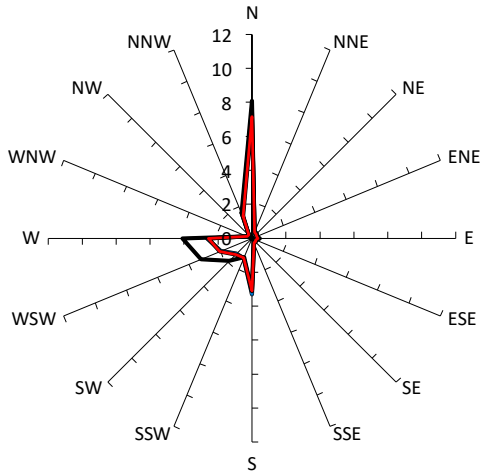
Comfort Criteria: 5m/s with 20% probability of exceedence

Safety Limit: 20m/s

Description	GEM Prob of Exceed %	Peak Gust m/s
— Criterion: Walking comfort (5m/s) Safety Limit (23m/s).	20%	20
— With development "as proposed", no vegetation or other treatments.	15%	20
— Existing Site Conditions	18%	21
— With the inclusion of the mitigation strategy detailed within the report.	13%	19
—		
—		
—		
—		
—		

Results for P26

Gust Equivalent Mean (m/s) Maximum Gust (m/s)



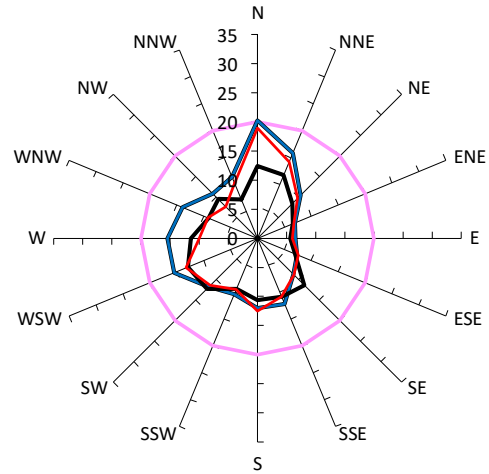
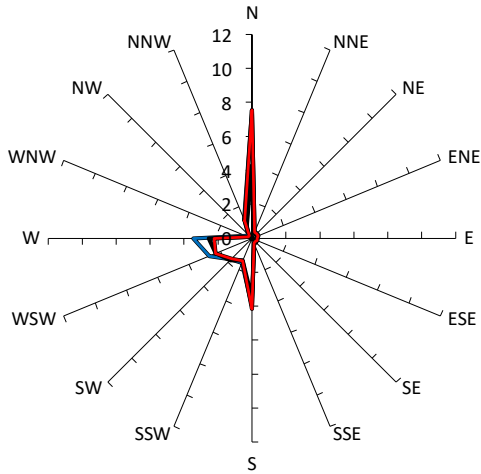
Comfort Criteria: 5m/s with 20% probability of exceedence

Safety Limit: 20m/s

Description	GEM Prob of Exceed %	Peak Gust m/s
— Criterion: Walking comfort (5m/s) Safety Limit (23m/s).	20%	20
— With development "as proposed", no vegetation or other treatments.	15%	22
— Existing Site Conditions	24%	23
— With the inclusion of the mitigation strategy detailed within the report.	14%	21
—		
—		
—		
—		
—		

Results for P34

Gust Equivalent Mean (m/s) Maximum Gust (m/s)



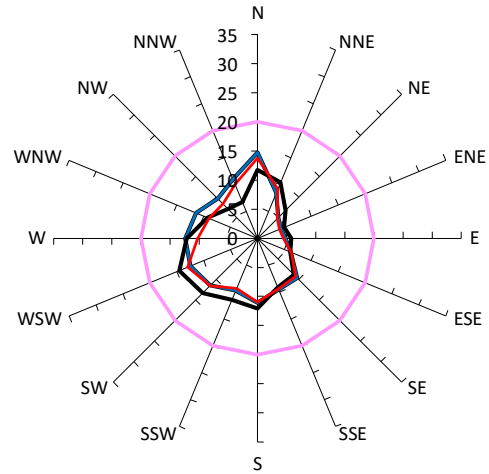
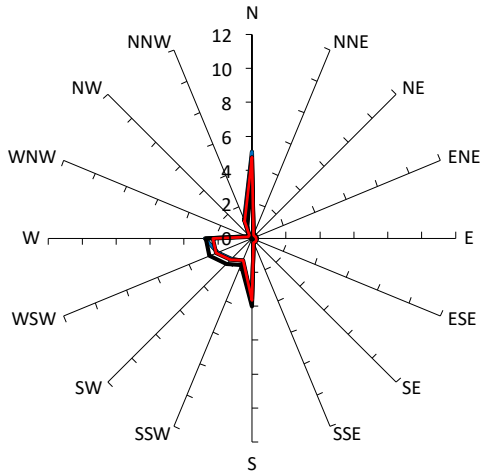
Comfort Criteria: 5m/s with 20% probability of exceedence

Safety Limit: 20m/s

Description	GEM Prob of Exceed %	Peak Gust m/s
— Criterion: Walking comfort (5m/s) Safety Limit (23m/s).	20%	20
— With development "as proposed", no vegetation or other treatments.	19%	20
— Existing Site Conditions	5%	13
— With the inclusion of the mitigation strategy detailed within the report.	15%	19
—		
—		
—		
—		
—		

Results for P36

Gust Equivalent Mean (m/s) Maximum Gust (m/s)



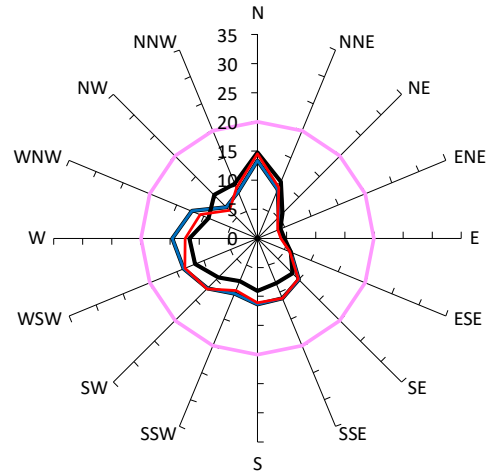
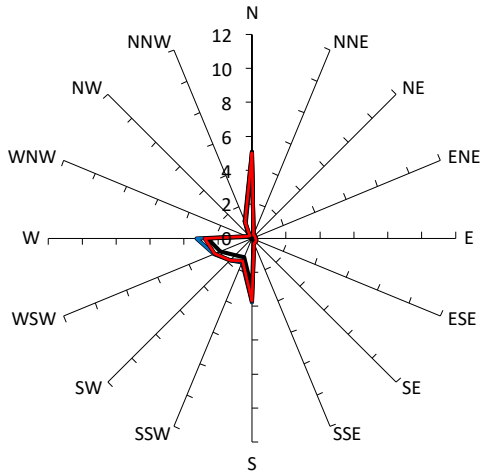
Comfort Criteria: 5m/s with 20% probability of exceedence

Safety Limit: 20m/s

Description	GEM Prob of Exceed %	Peak Gust m/s
— Criterion: Walking comfort (5m/s) Safety Limit (23m/s).	20%	20
— With development "as proposed", no vegetation or other treatments.	8%	15
— Existing Site Conditions	6%	15
— With the inclusion of the mitigation strategy detailed within the report.	5%	14
—		
—		
—		
—		
—		

Results for P40

Gust Equivalent Mean (m/s) Maximum Gust (m/s)



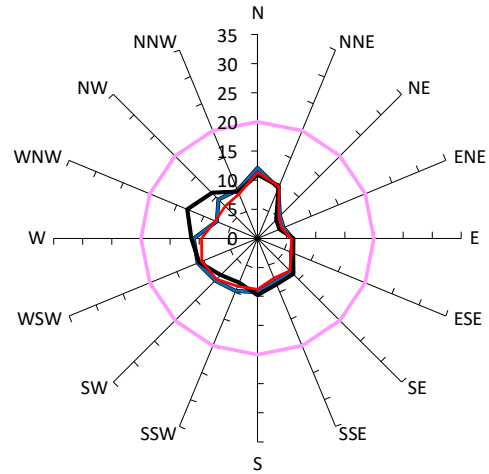
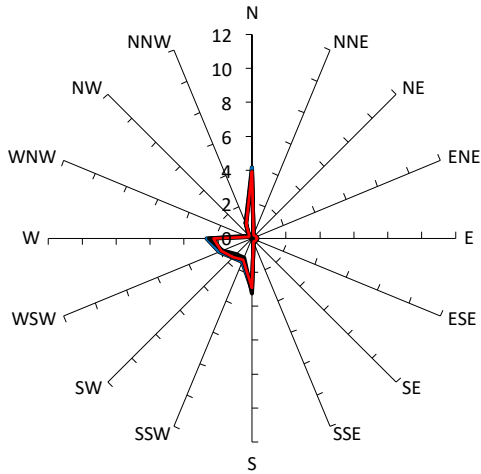
Comfort Criteria: 5m/s with 20% probability of exceedence

Safety Limit: 20m/s

Description	GEM Prob of Exceed %	Peak Gust m/s
— Criterion: Walking comfort (5m/s) Safety Limit (23m/s).	20%	20
— With development "as proposed", no vegetation or other treatments.	7%	15
— Existing Site Conditions	7%	15
— With the inclusion of the mitigation strategy detailed within the report.	8%	15
—		
—		
—		
—		
—		

Results for P42

Gust Equivalent Mean (m/s) Maximum Gust (m/s)



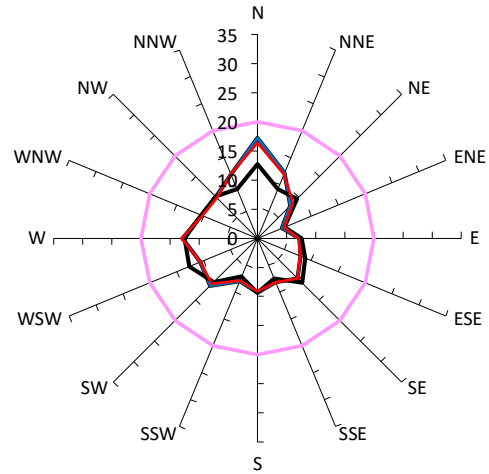
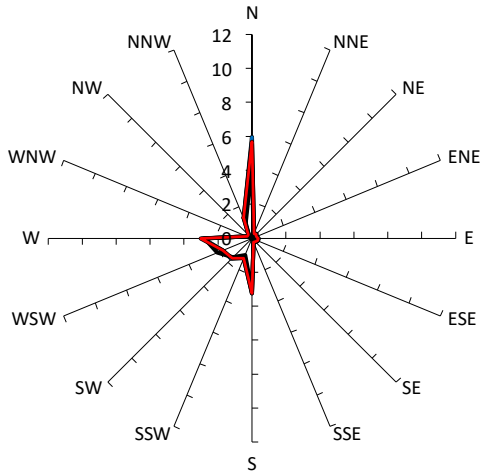
Comfort Criteria: 5m/s with 20% probability of exceedence

Safety Limit: 20m/s

Description	GEM Prob of Exceed %	Peak Gust m/s
— Criterion: Walking comfort (5m/s) Safety Limit (23m/s).	20%	20
— With development "as proposed", no vegetation or other treatments.	3%	12
— Existing Site Conditions	3%	13
— With the inclusion of the mitigation strategy detailed within the report.	2%	11
—		
—		
—		
—		
—		

Results for P45

Gust Equivalent Mean (m/s) Maximum Gust (m/s)



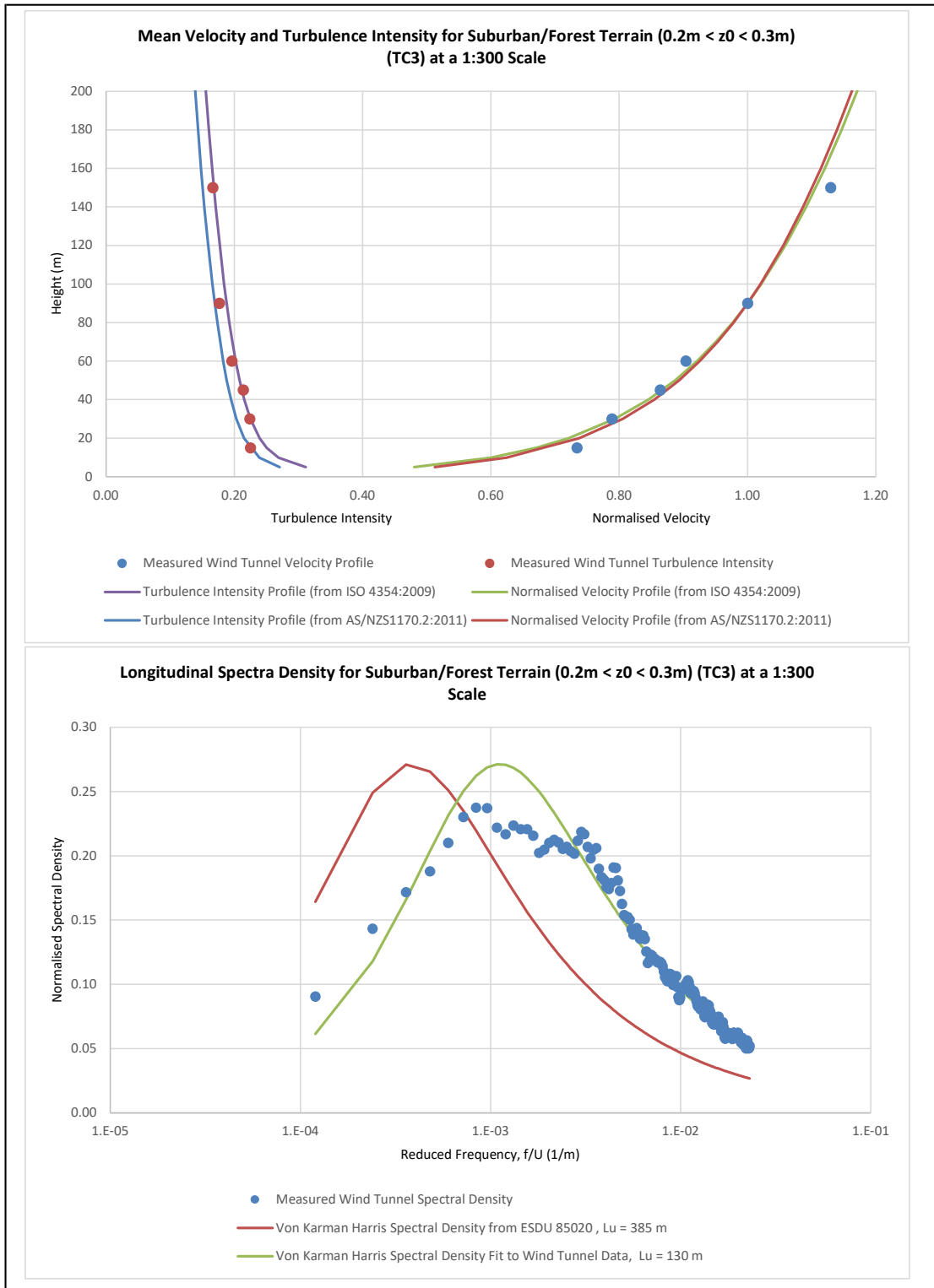
Comfort Criteria: 5m/s with 20% probability of exceedence

Safety Limit: 20m/s

Description	GEM Prob of Exceed %	Peak Gust m/s
— Criterion: Walking comfort (5m/s) Safety Limit (23m/s).	20%	20
— With development "as proposed", no vegetation or other treatments.	12%	17
— Existing Site Conditions	5%	13
— With the inclusion of the mitigation strategy detailed within the report.	12%	16
—		
—		
—		
—		
—		



APPENDIX D VELOCITY AND TURBULENCE INTENSITY PROFILES



Windtech Consultants



APPENDIX E IN-PRINCIPLE WIND MITIGATION STRATEGIES TO ADDRESS WIND COMFORT CRITERIA

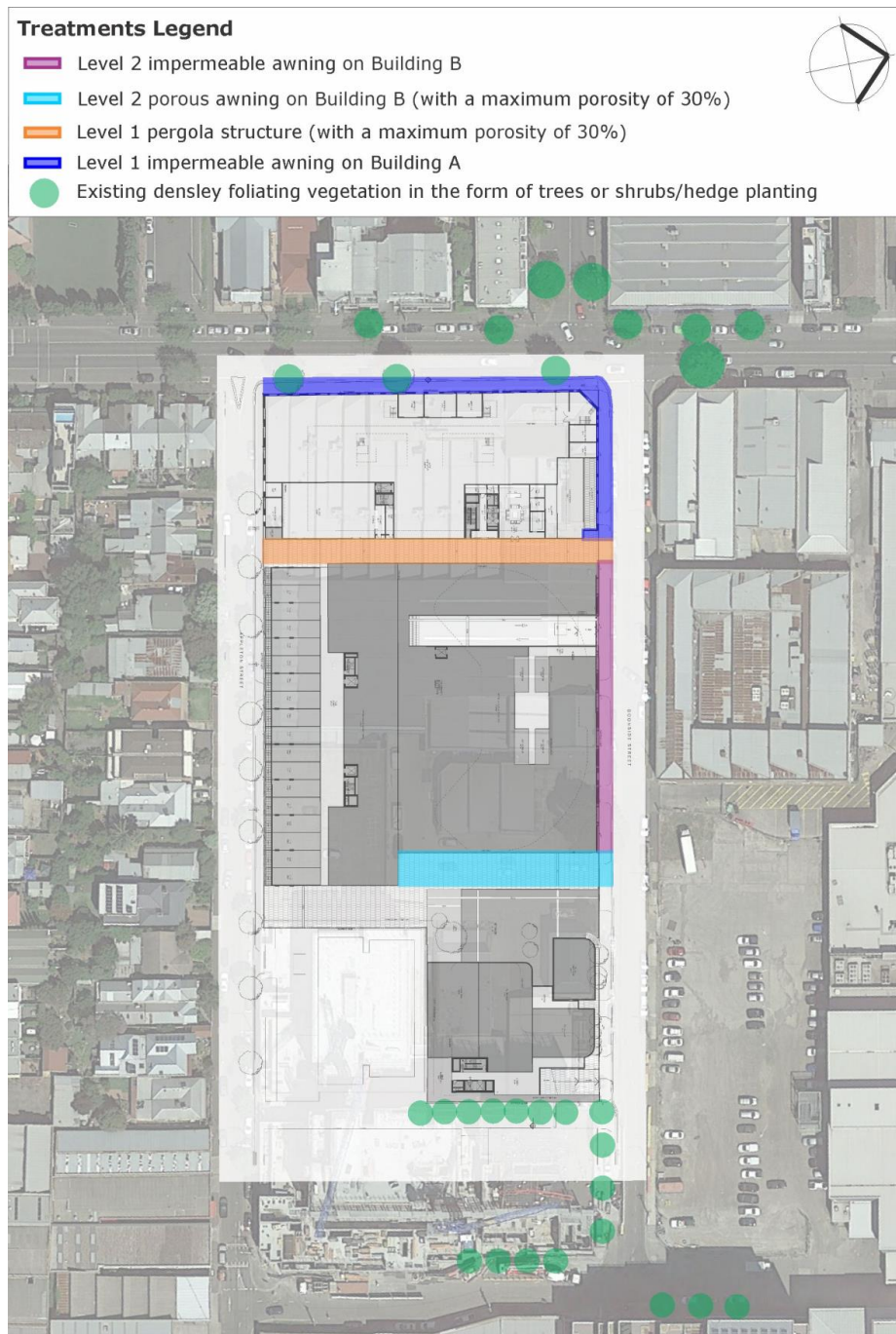


Figure E.1: Suggested Treatments – Overall Ground Level

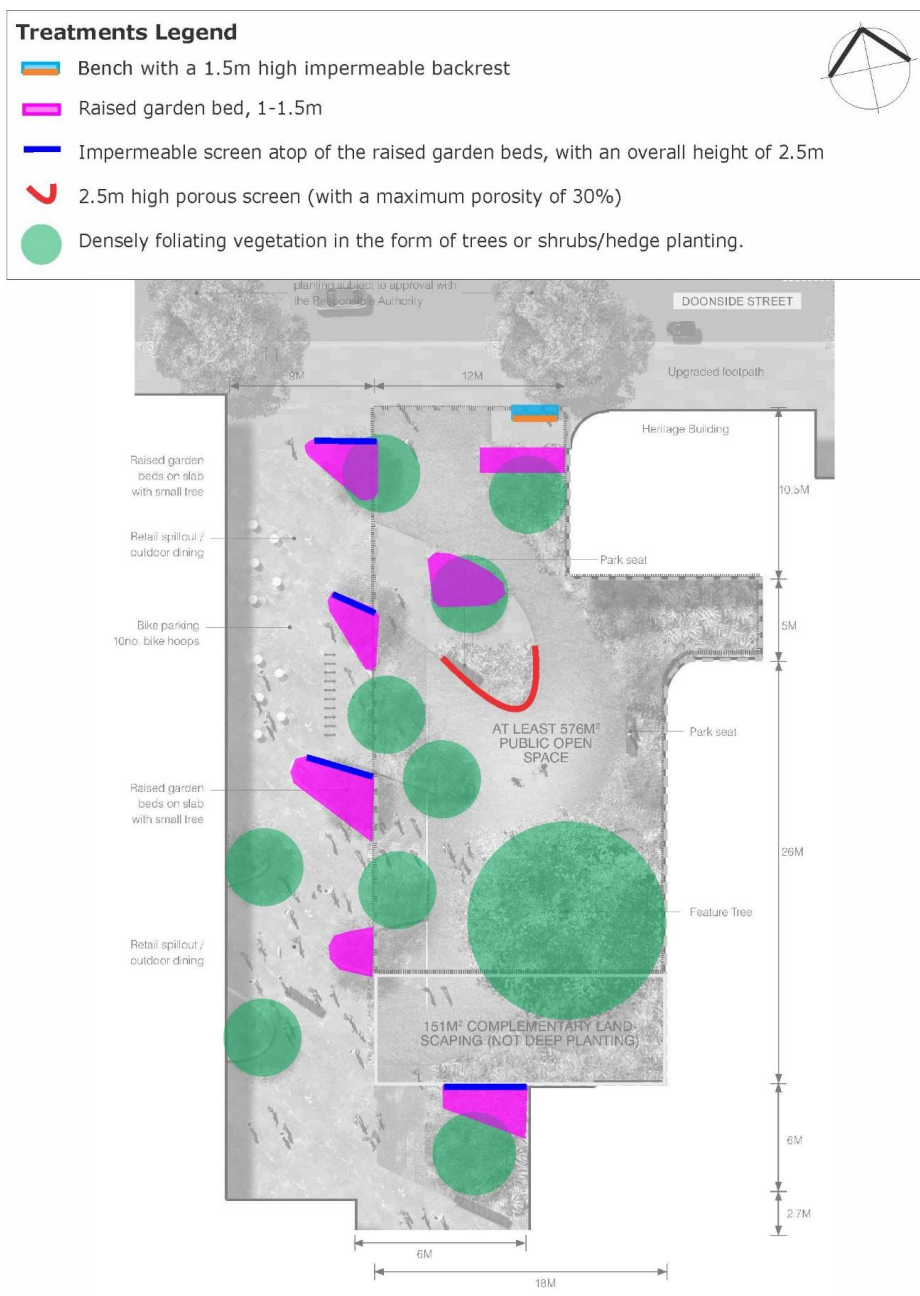


Figure E.2: Suggested Treatments – Doonside Park Communal Open Space



Development Plan – 81-95 Burnley Street and 26-34 Doonside Street Richmond

Environmentally Sustainable Design Framework

Prepared for: Gurner TM

Project No: MEL2264
Date: 3 May 2023
Revision: 04



Creating great environments with great people

Project:	Development Plan – 81-95 Burnley Street and 26-34 Doonside Street Richmond
Location:	81-95 Burnley St & 26-31 Doonside Street Richmond VIC 3121
Prepared by:	ADP Consulting Pty Ltd Level 13, 55 Collins Street Melbourne VIC 3000
Project No:	MEL2264
Revision:	04
Date:	3 May 2023

Rev	Date	Comment	Author	Signature	Technical Review	Signature	Authorisation & QA	Signature
01	20/09/21	For submission	David Zammit	DZ	Vickie Huang	VH	David Zammit	DZ
02	23/09/21	For submission	David Zammit	DZ	Vickie Huang	VH	David Zammit	DZ
03	16/02/23	To Address Council Response	Zain Siddiqui	ZS	Thomas Miers	TM	Thomas Miers	TM
04	03/05/23	For submission	Zain Siddiqui	ZS	Shruti Rajan	SR	Thomas Miers	TM

Project Team	
Client / Principal	Gurner TM
Architect	Fender Katsalidis
Services Consultant	ADP Consulting Pty Ltd
ESD Consultant	ADP Consulting Pty Ltd



Project: MEL2264 Development Plan – 81-95 Burnley Street and 26-34 Doonside Street Richmond
 Report: Environmentally Sustainable Design Framework
 Date: 3 May 2023 Rev: 04



Contents

1. Environmentally Sustainable Design Framework.....	4
1.2 ESD Approach.....	7
1.3 Summary of ESD Initiatives.....	8
Appendix A – Stormwater Management Plan	11

Project: MEL2264 Development Plan – 81-95 Burnley Street and 26-34 Doonside Street Richmond
Report: Environmentally Sustainable Design Framework
Date: 3 May 2023 Rev: 04

1. Environmentally Sustainable Design Framework

This report was prepared for Gurner in relation to the Environmentally Sustainable Design proposed for the multi-stage multi-building development proposed for the site at 81-95 Burnley Street and 26-34 Doonside Street, Richmond.

Statutory context

1.1.1 City of Yarra

The site is situated within the municipal boundaries of the City of Yarra. The City of Yarra requires developments to meet the national energy efficiency standards as outlined in Section J of the National Construction Code (NCC). When applying for a Planning Permit or a Building Permit, projects also need to include and demonstrate environmental sustainability measures.

The City of Yarra Planning Scheme Clause 22.17 outlines that the City acknowledges that the built environment has a significant impact on the wider natural environment and most current development practices are not sustainable in the long term and is committed to promoting sustainable design and development. Critical to achieving this commitment is for development to meet appropriate environmental design standards.

This policy provides a framework for early consideration of environmental sustainability at the building design stage to achieve the following efficiencies and benefits:

- > Easier compliance with building requirements through passive design
- > Reduction of costs over the life of the building
- > Improved affordability over the longer term through reduced running costs
- > Improved amenity and liveability
- > More environmentally sustainable urban form
- > Integrated water management

The City of Yarra Planning Scheme Clause 22.17-2 outlines key objectives. The overarching objective is that development should achieve best practices in environmentally sustainable development from the design stage to construction and operation.

The following objectives should be satisfied, where applicable:

1.1.1.1 Energy performance

- > To improve the efficient use of energy, by ensuring development demonstrates design potential for ESD initiatives at the planning stage.
- > To reduce total operating greenhouse gas emissions.



- > To reduce energy peak demand through design measures (eg. appropriate building orientation, shading to glazed surfaces, optimise glazing to exposed surfaces, space allocation for solar panels and external heating and cooling systems).

1.1.1.2 Water resources

- > To improve water efficiency.
- > To reduce total operating potable water use.
- > To encourage the collection and reuse of stormwater.
- > To encourage the appropriate use of alternative water sources (eg. greywater).

1.1.1.3 Indoor Environment Quality

- > To achieve a healthy indoor environment quality for the wellbeing of building occupants, including the provision of fresh air intake, cross ventilation, and natural daylight.
- > To achieve thermal comfort levels with minimised need for mechanical heating, ventilation and cooling.
- > To reduce indoor air pollutants by encouraging use of materials with low toxic chemicals.
- > To reduce reliance on mechanical heating, ventilation, cooling and lighting systems.
- > To minimise noise levels and noise transfer within and between buildings and associated external areas.

1.1.1.4 Stormwater Management

- > To reduce the impact of stormwater run-off.
- > To improve the water quality of stormwater run-off.
- > To achieve best practice stormwater quality outcomes.
- > To incorporate the use of water sensitive urban design, including stormwater re-use.

1.1.1.5 Transport

- > To ensure that the built environment is designed to promote the use of walking, cycling and public transport, in that order.
- > To minimise car dependency.
- > To promote the use of low emissions vehicle technologies and supporting infrastructure.

1.1.1.6 Waste management

- > To promote waste avoidance, reuse and recycling during the design, construction, and operation stages of development.
- > To ensure durability and long-term reusability of building materials.
- > To ensure sufficient space is allocated for future change in waste management needs, including (where possible) composting and green waste facilities.

1.1.1.7 Urban Ecology

- > To protect and enhance biodiversity within the municipality.
- > To provide environmentally sustainable landscapes and natural habitats and minimise the urban heat island effect.



- > To encourage the retention of significant trees.
- > To encourage the planting of indigenous vegetation.
- > To encourage the provision of space for productive gardens, particularly in larger residential developments.

These key objectives have been addressed by considering the following 9 key sustainable building categories as benchmarked in the BESS/ Green Star Buildings assessments which adopts the Sustainable Design Assessment in the Planning Process:

- > Management
- > Water
- > Energy
- > Storm Water
- > Indoor Environment Quality
- > Transport
- > Waste
- > Urban Ecology
- > Innovation

Overall, the proposed ESD initiatives of this development will meet the Council's overarching goal of promoting sustainable design and buildings.

1.2 ESD Approach

1.2.1 Project sustainability brief

An environmentally sustainable design assessment must be undertaken for each individual building, which will set out how this development will achieve:

- > Water-sensitive urban design objectives pursuant to the Yarra Planning Scheme, and
- > Environmentally sustainable design objectives pursuant to Yarra Planning Scheme.

These items will be achieved as follows:

Water-sensitive urban design objectives and requirements pursuant to the Yarra Planning Scheme; and

The WSUD objectives will use the MUSIC assessment to demonstrate Best Practice pollutant removal targets are met in line with planning scheme clauses 22.16-2 and 53.18-5. A combination of rainwater tanks, raingardens, proprietary devices and other treatment options will be explored when proposing a compliant stormwater solution as part of any further planning permit application.

Environmentally sustainable design objectives and requirements pursuant to the Yarra Planning Scheme

An SMP report is to be prepared in accordance with planning scheme clause 22.17-2. Objectives relating to energy, water, IEQ, stormwater, transport, waste and urban ecology will be addressed. Improvements on minimum energy efficiency requirements for dwellings are likely to form a central focus of the SMP assessment.

An SMP report will be prepared for each individual building and will utilize one of the following tools to demonstrate compliance as identified in the policy requirements, statutory requirements and the project brief.

- > **Either a Built Environment Sustainability Scorecard – A minimum 50% score, or**
- > **A Green Star Buildings – 4 Star certified rating.**



1.3 Summary of ESD Initiatives

Table 1 below shows a summary of ESD initiatives in the different SDAPP categories including Management, Water, Energy, Stormwater, IEQ, Transport, Waste Management and Urban Ecology.

The Summary of ESD initiatives provided below will set out whole of site goals and targets for a framework that can guide subsequent SMP'S for each individual building.

Table 1: Summary of ESD initiatives.

ESD Initiatives		
Management	<ul style="list-style-type: none"> > Improved thermal performance of building envelope > Landfill Diversion Target <ul style="list-style-type: none"> – 80% of construction and demolition waste is to be reused or recycled (in weight). 	<ul style="list-style-type: none"> > Metering strategy. > Building users guide.
Water	<ul style="list-style-type: none"> > Water efficient fittings, fixtures and appliances: <ul style="list-style-type: none"> – Showers: 4 Stars (≤7 L/min) – Toilets: 4 Stars – Taps: 6 Stars – Urinals: 6 Stars – Dishwashers: 5 Stars 	<ul style="list-style-type: none"> > Rainwater tanks to capture from nominated roof areas and connected to toilets, landscaping and bin wash. > Reduction in building systems' water use > Xeriscape or low-water use plant selection for all landscaping and irrigation via a subsurface drip.
Energy	<ul style="list-style-type: none"> > Target New Zero Development GURNER™ is a Climate Active carbon neutral certified company. For the proposed development, GURNER aims to make our developments carbon-neutral operationally. We are committing to an all-electric design, including solar panels, achieving 7-star NatHERS average rating and using either 100% offsite renewable energy sources (Green Power) or 5% of on-site renewable energy production. > High-Performance Fabric and Glazing <ul style="list-style-type: none"> – Following energy efficiency performance for residential areas as required by section J of the NCC 2022: <ul style="list-style-type: none"> > A minimum average NatHERS rating of 7 stars. > A minimum of 6-star NatHERS rating for each individual unit. > In addition, the City of Yarra requires the units located in NatHERS Climate Zone 21, to not 	<ul style="list-style-type: none"> > Ventilation and Air Conditioning <ul style="list-style-type: none"> – Energy efficient units within 1 star, or have a COP/EER within 85% of the best available system > Lighting <ul style="list-style-type: none"> – Lighting power density is reduced by at least 10% below the maximum lighting power density allowable for residences and all common areas accessible by residents. – Independent light switching is provided to each room of each sole-occupancy unit. Where open plan living, dining and kitchen areas are provided, each functional area is separately switched. – All common areas accessible by residents are provided with automated lighting control



	<ul style="list-style-type: none"> – exceed the maximum cooling load of 30 MJ/ m². – The non-residential areas will achieve a minimum 10% improvement over NCC 2022 Section J requirements. <ul style="list-style-type: none"> > This will be demonstrated by JV3 modelling or a DTS assessment. – High-performance LED lighting. 	<ul style="list-style-type: none"> > system(s), such as occupant detection. > Renewable energy <ul style="list-style-type: none"> – Renewable electricity support from offsite solar PV supplier to common areas. > Hot Water System: <ul style="list-style-type: none"> – Hot water supply from energy-efficient heat pumps. > Reduction of Gas Use: <ul style="list-style-type: none"> – No gas connection will be provided. The development is committed to be all-electric.
Stormwater	<ul style="list-style-type: none"> > Water Sensitive Urban Design (WSUD) and stormwater treatment systems to meet Best Practice pollutant reduction targets. 	<ul style="list-style-type: none"> > The WSUD targets are to be demonstrated via MUSIC modelling at TP stage. > Preliminary precinct-wide STORM modelling is included in Appendix A.
IEQ	<ul style="list-style-type: none"> > The development will achieve the minimum daylight requirements to meet best practice BESS IEQ. > The ventilation systems are designed to monitor the CO₂ concentration levels in non-residential spaces. > Low-volatile organic compound (VOC) paints, adhesives, and sealants will be specified in the proposed development. 	<ul style="list-style-type: none"> > High-performance double glazing. > All residential dwellings will have external operable windows to habitable rooms (e.g. living and bedrooms). > Low-emission formaldehyde timber products will be specified in the proposed development.
Transport	<ul style="list-style-type: none"> > Train and bus timetables installed at prominent locations. > Bike parking facilities for regular building occupants and visitors. > A Green Travel Plan (GTP) will be provided to occupants and residents. 	<ul style="list-style-type: none"> > Electric Vehicle Charging Points will be provided. > Infrastructure and load management plan for more EV charging parking spots to be provided.



Waste & Materials	<ul style="list-style-type: none"> > Recycling facilities as accessible as general waste facilities. > Multiple opportunities to minimize embodied carbon will be investigated during detailed design to reduce the embodied carbon of development. > Some methods to reduce embodied carbon that will be considered will be: <ul style="list-style-type: none"> – Reduction in Structural Steel and Concrete via improvements in design and specification. – Reuse of material from the demolishing of the current building onsite. – Specification of materials that use recycled, low carbon materials or Responsible Materials. 	<ul style="list-style-type: none"> > Use of light-coloured and high SRI materials and/or landscaping will be considered and maximized to reduce the Urban Heat Island Effect. > Four waste streams are already being considered by the development. A detailed circular economy strategy will be considered at the planning permit stage that will include considerations for e-waste and soft plastics. > Locally sourced building products.
Urban Ecology	<ul style="list-style-type: none"> > Communal terrace spaces for development. > >5% of the site will be covered in vegetation. > The design will be assessed under the Green Factor Tool to enhance the green infrastructure and biodiversity of the site. 	<ul style="list-style-type: none"> > Detailed design will investigate the introduction of additional vegetation on the roof and balconies as well as incorporating shade to exposed high-mass elements and pedestrian routes.



Appendix A – Stormwater Management Plan

Project: MEL2264 Development Plan – 81-95 Burnley Street and 26-34 Doonside Street Richmond
Report: Environmentally Sustainable Design Framework
Date: 3 May 2023 Rev: 04

11

Background

Melbourne Water's Stormwater Treatment Objective – Relative Measure (STORM) Calculator is a simple analysis method for stormwater treatment and water sensitive urban design (WSUD). It rates the performance of treatment measures such as rainwater tanks, wetlands, and infiltration systems relative to best practice targets, and calculates a weighted average score. A STORM score of 100 or greater indicates that treatment measures are of sufficiently high standard.

In order to demonstrate compliance, a score of 100% must be achieved using the Stormwater Treatment Objective – Relative Measure (STORM) tool, demonstrating that the following has been achieved:

- > Suspended solids – 80% retention of typical urban load
- > Total Nitrogen – 45% retention of typical urban load
- > Total Phosphorous – 45% retention of typical urban load
- > Litter – 70% reduction of typical urban load

As design progresses, the site stormwater management strategy will consider flows from the development as well as the streets, driveways and other impervious surfaces. The overall stormwater strategy will be detailed in the civil engineer's WSUD report and will be designed to ensure that council's best practice targets are met.

A provisional STORM rating has been carried out, based on the following WSUD measures:

- > Stormwater collection from all non-trafficable Building A roof areas and stored in a 50,000L rainwater tank connected to toilets for flushing and landscape irrigation.
- > Stormwater collection from all non-trafficable Building B roof areas and stored in a 70,000L rainwater tank connected to toilets for flushing and landscape irrigation.
- > Stormwater collection from all non-trafficable Building C roof areas and stored in a 50,000L rainwater tank connected to toilets for flushing and landscape irrigation.
- > Stormwater collection from all non-trafficable Building D roof areas and stored in a 30,000L rainwater tank connected to toilets for flushing and landscape irrigation.
- > Collection of rainwater from the remainder of the site will be directed towards the nearest legal point of discharge (LPG) and does not require any additional treatment.



The development achieves a STORM rating of 110% as shown below.

 **STORM Rating Report**

TransactionID: 1558962
 Municipality: YARRA
 Rainfall Station: YARRA
 Address: 81-95 Burnley Street
 Richmond
 VIC 3121
 Assessor: ADP Consulting
 Development Type: Residential - Mixed Use
 Allotment Site (m2): 12,812.00
 STORM Rating %: 110

Description	Impervious Area (m2)	Treatment Type	Treatment Area/Volume (m2 or L)	Occupants / Number Of Bedrooms	Treatment %	Tank Water Supply Reliability (%)
Building A Roof	2,700.00	Rainwater Tank	50,000.00	100	146.00	80.90
Building B Roof	3,000.00	Rainwater Tank	70,000.00	100	136.00	87.80
Building D Roof	2,000.00	Rainwater Tank	50,000.00	100	164.00	80.00
Building C Roof	1,200.00	Rainwater Tank	30,000.00	100	164.00	80.00
Heritage Roof	157.00	None	0.00	0	0.00	0.00
Hardscaping	1,478.00	None	0.00	0	0.00	0.00
Balconies and trafficable roofs	1,550.00	None	0.00	0	0.00	0.00

Project: MEL2264 Development Plan – 81-95 Burnley Street and 26-34 Doonside Street Richmond
 Report: Environmentally Sustainable Design Framework
 Date: 3 May 2023 Rev: 04



—

Creating great environments with great people

Melbourne
Level 11, 60 Albert Road
South Melbourne VIC 3205
T. 03 9521 1195

Sydney
Level 3, 8 Spring Street
Sydney NSW 2000
T. 02 8203 5447

Brisbane
Ground Floor, 102 Adelaide Street
Brisbane QLD 4000
T. 07 3088 4022

adpconsulting.com.au



81-95 Burnley Street & 26-34 Doonside Street, Richmond

Acoustic Town Planning Report

Prepared for: Burnley Street Developments by Gurner

Project No: MEL2264
Date: 20 June 2023
Revision: 04





Project: 81-95 Burnley Street & 26-34 Doonside Street, Richmond
Location: 81 Burnley Street
 Richmond, VIC 3121
Prepared by: ADP Consulting Pty Ltd
 Level 13, 55 Collins Street
 Melbourne VIC 3000
Project No: MEL2264
Revision: 04
Date: 20 June 2023

Rev	Date	Comment	Author	Signature	Technical Review	Signature	Authorisation & QA	Signature
00	02/09/21	DRAFT	AS		CC		DZ	
01	10/02/23	Issue	MLi		WG		DZ	
02	17/02/23	Update	WG		WG		DZ	
03	04/05/23	Update	MLi		WG		DZ	
04	19/06/23	Revised	MLi		WG		DZ	

Project Team

Client / Principal Burnley Street Developments by Gurner
Architect Fender Katsalidis



Project: MEL2264 81-95 Burnley Street & 26-34 Doonside Street, Richmond
 Report: Acoustic Town Planning
 Date: 20 June 2023 Rev: 04

Contents

1. Introduction	4
1.1 Document purpose	4
1.2 Reference design documentation, codes and standards	4
1.3 Site description	5
1.4 Project summary	7
2. Noise Measurements	8
2.1 Noise measurement equipment	8
2.2 Unattended noise measurements	8
2.3 Attended noise measurements	9
3. Acoustic design criteria	12
3.1 Noise emissions	12
3.2 Internal acoustic environment	15
4. Recommendations	22
4.1 Mechanical plant and equipment	22
4.2 Façade treatment	22
4.3 Music and patron noise	23
4.4 Retail gym	24
4.5 Lifts	24
4.6 Outdoor terraces	24
5. Conclusion	25

Appendices

Appendix A Glossary of Acoustic Terminology	26
---	----

Figures

Figure 1 Site and surrounds of 81-95 Burnley Street	6
Figure 2 Tower layout of 81-95 Burnley Street (from Architectural Drawings)	7

Tables

Table 1 Unattended background noise measurements, dB(A)	8
Table 2 Attended noise measurements, dB(A)	9

Project: MEL2264 81-95 Burnley Street & 26-34 Doonside Street, Richmond
Report: Acoustic Town Planning
Date: 20 June 2023 Rev: 04



Table 3	Noise emission criteria – noise sensitive area.....	12
Table 4	Day/evening period music noise limits (subject to change) – Indoor venue.....	13
Table 5	Night period music noise limits (subject to change) – Indoor venue.....	14
Table 6	AS/NZS 2107 recommended design sound levels and reverberation times.....	15
Table 7	Fire mode maximum sound pressure levels.....	16
Table 8:	Maximum internal airborne and structure-borne noise levels from communal amenity areas and gym.....	16
Table 9:	Building construction requirements.....	18
Table 10:	NCC specified constructions for wall impact sound insulation.....	19
Table 11:	Internal vibration limits.....	21

1. Introduction

1.1 Document purpose

ADP Consulting Pty Ltd has been engaged by Burnley Street Developments by Gurner to undertake acoustic engineering services for the proposed mixed-use development at 81-95 Burnley Street, Richmond.

This document is to be used as a briefing document, and to provide information to the client and the design team prior to the detailed design. It may also be issued to the Yarra City Council as part of the Town Planning Application.

This report addresses design criteria and provides preliminary advice for the following:

- > the impact of operations on nearby sensitive receivers (including noise emission from emergency plant and equipment)
- > internal noise levels and reverberation times
- > sound insulation between noisy areas and sensitive spaces
- > vibration requirements

The design criteria and acoustic treatment concepts in this report demonstrate the pathways by which these will be addressed by ADP Consulting and the project team through further analysis, recommendations, and coordination as the design progresses.

Acoustic terminology is included in Appendix A.

1.2 Reference design documentation, codes and standards

The following guidelines, standards, regulatory requirements, drawings, conditions and other project-specific information have been referenced in preparing this report:

- > Fender Katsalidis, Doonside Yards Architectural Drawings, dated 04 November 2021 (Architectural Drawings)
- > Gurner, 81-95 Burnley Street & 26-34 Doonside Street Development Plan, dated December 2022 (Development Plan)
- > Schedule 15 to clause 43.04 Development Plan Overlay in City of Yarra Planning Scheme
- > VIC EPA, Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues, Publication 1826.4, dated 1 July 2021 (EPA Noise Protocol)
- > VIC EPA, Summary of noise framework, Publication 1757.2, dated May 2021 (EPA Summary of Noise Framework)
- > VIC EPA, Guide to the Environment Protection Regulations, Publication 1753.2, dated May 2021 (EPA Guide to the EP Regulations)
- > National Construction Code 2019 – Volume One, Building Code of Australia, Class 2 to 9 Buildings (NCC)
- > Apartment Design Guidelines for Victoria, Victoria State Government Environment, Land, Water and Planning, dated December 2022 (ADG)

Project: MEL2264 81-95 Burnley Street & 26-34 Doonside Street, Richmond
Report: Acoustic Town Planning
Date: 20 June 2023 Rev: 04

- > AS/NZS 2107:2016 Acoustics – Recommended Design Sound Levels and Reverberation Times for Building Interiors (AS/NZS 2107)
- > AS 1055.2:1997 Acoustics – Description and Measurement of Environmental Noise Part 2: Application to Specific Situations (AS 1055.2)
- > AS 2670.2:1990 Evaluation of Human Exposure to Whole-Body Vibration Part 2: Continuous and Shock-Induced Vibration in Buildings (1 to 80 Hz) (AS 2670.2)
- > AS/NZS 1668.1:2015 The Use of Ventilation and Air Conditioning in Buildings Part 1: Fire and Smoke Control in Buildings (AS/NZS 1668.1)
- > Assessing Vibration: A Technical Guideline – NSW Department of Environment and Conservation, dated February 2006 (AVTG)
- > BS 6472–1992 – Evaluation of Human Exposure to Whole-Body Vibration in Buildings (1 to 80 Hz) (BS 6472)
- > Schedule 15 to Clause 43.04 Development Overlay (DP015) 81-95 Burnley Street and Doonside Street, Richmond.

1.3 Site description

The site is located within a Mixed-Use Zone (MUZ), with nearby land zones including general residential (GRZ2, GRZ3 and GRZ4), comprehensive development (CDZ1), health and community (PUZ3) industrial (INI1Z) neighbourhood residential (NRZ1), and road zones (RDZ1).

Specifically, the site is bounded by the following:

- > Doonside Street to the north (MUZ and CDZ1)
- > Appleton Street to the south (GRZ4 and NRZ1)
- > Embassy Richmond (multi-level residential building on 39 Appleton Street to the east (MUZ)
- > Burnley Street to the west (RDZ1 and GRZ4)

Other significant features surrounding the site include:

- > Trinity Catholic School to the south-east (GRZ4)
- > Victoria Gardens Shopping Centre to the north (CDZ1)
- > Yarra River and Annettes Place to the east (PPRZ and PUZ1)

The nearest noise sensitive receivers are as follows:

- > 2 – 38 Appleton Street 15 meters to the south,
- > Embassy Residences (39 Appleton Street) on the eastern border of the site.
- > 86 - 88 Burnley St 20 metres to the west
- > Trinity Catholic School 50 metres to south-west

Figure 1 provides a site map of the proposed development and its surrounds.

Figure 1 Site and surrounds of 81-95 Burnley Street



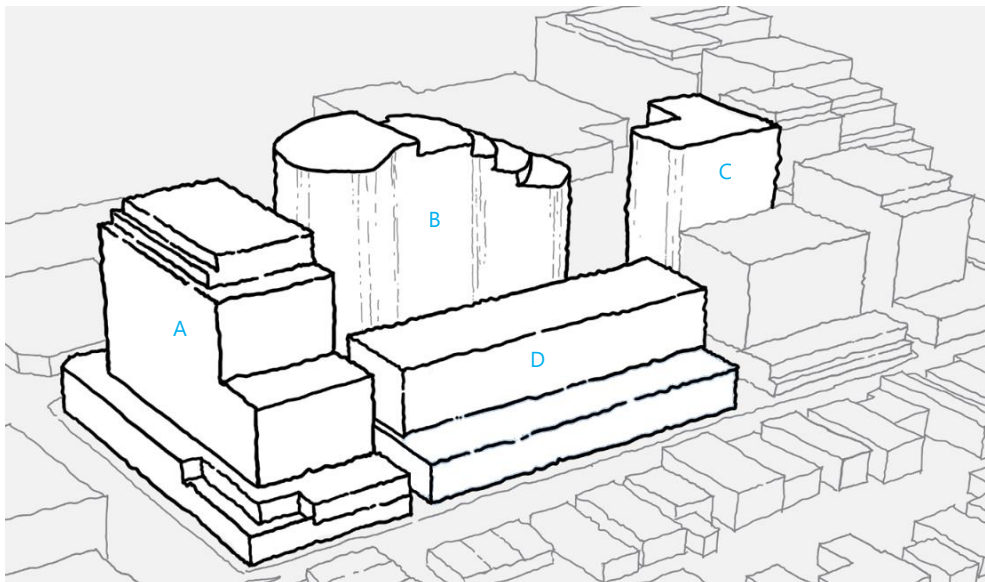
Project: MEL2264 81-95 Burnley Street & 26-34 Doonside Street, Richmond
Report: Acoustic Town Planning
Date: 20 June 2023 Rev: 04

1.4 Project summary

The project proposes the following land uses:

- > Approximately 15 storey mixed-use building (Building A), to include:
 - Residential Apartments
 - a multi-level Commercial Tenancy (Ground Floor, Showroom Level 1)
 - a Bar and Alfresco tenancy (Ground Floor)
- > Approximately 17 storey mixed-use building including (Building B), to include:
 - Residential Apartments
 - Retail Tenancies (Ground Floor)
- > Approximately 12 storey residential building (Building C), to include:
 - Residential Apartments
 - Retail Tenancies (Ground Floor)
 - Recreational Area (Ground Floor)
 - Commercial Tenancies (Level 1)
- > Approximately 7 storey residential building (Building D), to include:
 - Residential Apartments
 - Retail Tenancies (Ground Floor)
- > Basement area

Figure 2 Tower layout of 81-95 Burnley Street (from Architectural Drawings)



Project: MEL2264 81-95 Burnley Street & 26-34 Doonside Street, Richmond
Report: Acoustic Town Planning
Date: 20 June 2023 Rev: 04

2. Noise Measurements

2.1 Noise measurement equipment

The following instrumentation was used for noise measurements and analysis:

- > Noise Sentry NSRT Mk3 Class 1 sound level meter data logger (S/N: AnNerf2Y0%2doBICz0pRtD), utilised as an unattended noise logger (Location L1 – see Figure 1)
- > Noise Sentry NSRT Mk3 Class 1 sound level meter data logger (S/N: AtHcpPWQ2%+3KBICZwrxFD), utilised as an unattended noise logger (Location L2 – see Figure 1)
- > Bruel and Kjaer 2250 Integrating Sound Level Meter (S/N: 3030531), with Bruel and Kjaer Type 1 microphone comprising of:
 - ZC 0032 preamplifier (S/N: 31407)
 - 4189 capsule (S/N: 3318503)
- > Svan Type SV36 acoustic calibrator (S/N:106880)

All instrument systems has been laboratory calibrated using instrumentation traceable to Australian National Standards and certified within the last two years thus conforming to Australian Standards. The measurement system was also field calibrated prior to and after noise surveys. Calibration drift was found to be less than 0.2dB during attended measurements. No adjustments for instrument drift during the measurement period were warranted.

2.2 Unattended noise measurements

Unattended noise measurements were conducted for a period of 7 days between Friday 21 April 2023 and Friday 28 April 2023 at Location L1 and L2 (see Figure 1).

At this location, the long-term monitoring devices were both located in free field conditions, with the microphone:

- > L1 – top of carpark entry fence 3m above ground level
- > L2 – level 1 of the existing development 5m above ground level

Located at the north and west boundary of the subject site, and chosen to collect background noise levels in the area to set noise emission criteria for the proposed development.

It was observed that the background noise levels of the site and surrounds were predominantly influenced by noise contributions from road traffic and vehicle traffic / pedestrian activity on Burnley Street and Doonside Street.

Background noise levels at Location L1 and L2 are summarised in Table 1.

Table 1 Unattended background noise measurements, dB(A)

Location	Daytime (07:00-18:00)	Evening (18:00-22:00)	Night-time (22:00-07:00)	L _{Aeq,16h} 06:00-22:00	L _{Aeq,8h} 22:00-06:00
Location L1	50 dB _{L_{A90}}	46 dB _{L_{A90}}	47 dB _{L_{A90}}	59	57

Project: MEL2264 81-95 Burnley Street & 26-34 Doonside Street, Richmond
 Report: Acoustic Town Planning
 Date: 20 June 2023 Rev: 04

Location	Daytime (07:00-18:00)	Evening (18:00-22:00)	Night-time (22:00-07:00)	L _{Aeq,16h} 06:00-22:00	L _{Aeq,8h} 22:00-06:00
Location L2	59 dBL _{A90}	53 dBL _{A90}	42 dBL _{A90}	69	62

2.3 Attended noise measurements

ADP Consulting conducted attended noise measurements on Friday 21 April 2023 and Friday 28 April 2023 at Locations A1 to A3 (Figure 1).

These noise measurements were taken during key time periods to qualify and quantify the typical noise levels for the area, to inform acoustic requirements of the proposed development façades.

The ambient/traffic noise levels measured at Locations A1 to A3 are summarised in Table 2.

Table 2 Attended noise measurements, dB(A)

Date and time	Location and comments	Noise level, dB(A)		
		L _{eq}	L ₁₀	L ₉₀
Friday 21 April 2023, 4.23pm to 4.33pm	Location A1 – Measuring local traffic and ambient noise levels along Doonside Street at the carpark entry of Harry the Hirer carpark, in proximity to the carpark entry driveway.	59	58	46
Friday 21 April 2023, 4.35pm to 4.45pm	Location A2 – Measuring busy traffic and ambient noise levels along Burnley Street at the western façade of Harry the hirer, opposite carpark entry of 85-88 Burnley Street.	69	73	58
Friday 21 April 2023, 4.45pm to 4.55pm	Location A3 – Measuring local traffic and ambient noise levels along Appleton Street, traffic noise audible from Burnley street.	51	54	41
Friday 28 April 2023, 10.29am to 10.39am	Location A1 – Measuring local traffic and ambient noise levels along Doonside Street at the carpark entry of Harry the Hirer carpark, in proximity to the carpark entry driveway.	52	53	47
Friday 28 April 2023, 10.41am to 10.51am	Location A2 – Measuring busy traffic and ambient noise levels along Burnley Street at the western façade of Harry the hirer, opposite carpark entry of 85-88 Burnley Street.	69	73	55
Friday 28 April 2023, 10.52am to 11.02am	Location A3 – Measuring local traffic and ambient noise levels along Appleton Street, traffic noise audible from Burnley street.	53	57	41

Project: MEL2264 81-95 Burnley Street & 26-34 Doonside Street, Richmond
 Report: Acoustic Town Planning
 Date: 20 June 2023 Rev: 04

Date and time	Location and comments	Noise level, dB(A)		
		L _{eq}	L ₁₀	L ₉₀
Tuesday 20 June 2023, 3.46am to 3.56am	Location A1 – Measuring ambient noise levels along Doonside Street at the carpark entry of Harry the Hirer carpark, in proximity to the carpark entry driveway.	46	45	43
Tuesday 20 June 2023, 3.58am to 4.08am	Location A4 – Measuring ambient noise levels in front of Embassy Richmond.	43	43	41
Tuesday 20 June 2023, 4.11.am to 4.21am	Location A3 – Measuring ambient noise levels along Appleton Street, light traffic noise audible from Burnley street.	42	42	38
Tuesday 20 June 2023, 4.22.am to 4.32am	Location A2 – Measuring traffic and ambient noise levels along Burnley Street at the western façade of Harry the hirer, opposite carpark entry of 85-88 Burnley Street. 6 Large trucks pass-by during the measurement.	66	62	43
Tuesday 20 June 2023, 5.22.am to 5.32am	Location A1 – Measuring ambient noise levels along Doonside Street at the carpark entry of Harry the Hirer carpark, in proximity to the carpark entry driveway. Commercial truck loading activity, truck idle and pickup during the measurement.	57	57	45
Tuesday 20 June 2023, 5.33.am to 5.43am	Location A4 – Measuring ambient noise levels in front of Embassy Richmond. Loading activity not audible from Doonside Street.	48	49	45
Tuesday 20 June 2023, 5.45.am to 5.55am	Location A3 – Measuring ambient noise levels along Appleton Street, traffic noise audible from Burnley street.	47	46	42
Tuesday 20 June 2023, 5.56.am to 6.06am	Location A2 – Measuring traffic and ambient noise levels along Burnley Street at the western façade of Harry the hirer, opposite carpark entry of 85-88 Burnley Street. Multiple truck pass-by and two cars exiting apartment carpark.	69	74	50
Tuesday 20 June 2023, 6.08.am to 6.19am	Location A1 – Measuring ambient noise levels along Doonside Street at the carpark entry of Harry the Hirer carpark, in proximity to the carpark entry driveway. Light traffic and 2 cars entry into Harry the Hirer.	57	57	47

Project: MEL2264 81-95 Burnley Street & 26-34 Doonside Street, Richmond
 Report: Acoustic Town Planning
 Date: 20 June 2023 Rev: 04



Creating great
environments with
great people

Project: MEL2264 81-95 Burnley Street & 26-34 Doonside Street, Richmond
Report: Acoustic Town Planning
Date: 20 June 2023 Rev: 04

3. Acoustic design criteria

3.1 Noise emissions

New Environment Protection Regulations (EP Regulations) in Victoria started to take effect on 1 July 2021. The EP Regulations include the EPA Noise Protocol as the new reference document which sets the required approach to determine noise limits and assess noise emissions. The EPA Noise Protocol has replaced the following:

- > State Environment Protection Policy (Control of Noise from Commerce, Industry and Trade), SEPP N-1.
- > State Environment Protection Policy (Control of Music Noise from Public Premises), SEPP N-2.

3.1.1 Commercial, industrial and trade premises noise – EPA Noise Protocol Part I

Noise emission restrictions apply to base building and commercial tenant activity and systems (e.g. plant/equipment). These must be planned, designed and installed to include suitable sound attenuation, vibration isolation, and other necessary acoustic treatments. This report provides an approach that need to be incorporated in the proposed development to meet the noise emission requirements of the EPA Noise Protocol Part 1.

The requirements include determination of noise limits at the nearest external residential receivers, as well as within the proposed development, based on background noise levels and a zoning level set based on upon surrounding land use. For emergency equipment such as standby generators, standby boilers and fire pumps increased noise limits apply.

Two zoning noise limit calculation points have been selected to represent the different noise sensitive receivers as follows:

- > Embassy Richmond (39 Appleton Street, Richmond), on the eastern boundary of the project site
- > 85-88 Burnley Street, Richmond, west of the project site

Table 3 presents the noise limit criteria applicable,

Table 3 Noise emission criteria – noise sensitive area

Time of operation	Measured Background noise levels, dBL _{A90}	EPA Noise Protocol Part I noise limits, dBL _{Aeq,30min}	
		Operational	Emergency
Receivers: 2-38 Appleton Street, and Embassy Residences at 39 Appleton Street			
Day (7am to 6pm)	50 ¹	56	66
Evening (6pm to 10pm)	46 ¹	49	54
Night (10pm to 7am)	43 ²	46	55
Receivers: 85-88 Burnley Street			

Project: MEL2264 81-95 Burnley Street & 26-34 Doonside Street, Richmond
 Report: Acoustic Town Planning
 Date: 20 June 2023 Rev: 04

Time of operation	Measured Background noise levels, dBL_{A90}	EPA Noise Protocol Part I noise limits, $dBL_{Aeq,30min}$	
		Operational	Emergency
Day (7am to 6pm)	59 ³	65	75
Evening (6pm to 10pm)	53 ³	56	61
Night (10pm to 7am)	42 ³	45	50
Note:	<ol style="list-style-type: none"> 1. L_{A90} averaged from logger L1 2. Supplementary night period attended measurement at A4 was used as the night time logging data was deemed compromised by nearby commercial loading activity (Slide Productions, Victoria Gardens). 3. L_{A90} averaged from logger L2 		

The cumulative noise emissions from operations at the proposed development are to meet the specific noise criteria defined in Table 3.

At time of writing, the retail/commercial tenancies are yet to be identified / selected, therefore, each tenancy may be required to demonstrate compliance with the EPA Noise Protocol Part I and a separate submission to Council may be required.

3.1.2 Entertainment venues and events – EPA Noise Protocol Part II

Noise emission restrictions also apply to potential commercial music and entertainment noise. A methodology to determine noise limits as well as to assess music noise is included in the EPA Noise Protocol Part II

Any tenants that are expected to create commercial music and entertainment noise are to advise on their operational conditions (e.g., patron numbers and music noise and a separate assessment and submission to the Yarra City Council may be necessary to demonstrate that the requirements of the EPA Noise Protocol Part II are complied with.

Preliminary assessment criteria have been derived based on the measured background noise levels in Section 3.1.1. The criteria are presented in Table 4 and Table 5, and are applicable at noise sensitive receivers.

The assumed operating hours of the licensed premises are for the day, evening and night-time period.

Table 4 Day/evening period music noise limits (subject to change) – Indoor venue

Descriptor	dB(A)
Receivers: 2-38 Appleton Street, and Embassy Residences at 39 Appleton Street	
Base noise limit, L_{eq}	32
<i>Minimum measured period $L_{90,15min}$ falling within licensed operating hours of venue¹</i>	46

Project: MEL2264 81-95 Burnley Street & 26-34 Doonside Street, Richmond
 Report: Acoustic Town Planning
 Date: 20 June 2023 Rev: 04

Descriptor	dB(A)
Receivers: 2-38 Appleton Street, and Embassy Residences at 39 Appleton Street	
Calculated noise limit – any number of events, L_{eq}^3	51
Receivers: 85-88 Burnley Street	
Base noise limit, L_{eq}	32
Minimum measured period $L_{90,15min}$ falling within licensed operating hours of venue ²	47
Calculated noise limit – any number of events, L_{eq}^3	52
Note:	<ol style="list-style-type: none"> 1. $L_{90,15min}$ from logger data at L1. 2. $L_{90,15min}$ from logger data at L2. 3. The L_{Aeq} noise limits for indoor venues for the day/evening period are the background $L_{A90}+5$ dB, except where these fall below the base noise limit.

Table 5 Night period music noise limits (subject to change) – Indoor venue

Receivers: 2-38 Appleton Street, and Embassy Residences at 39 Appleton Street								
Descriptor	Frequency (Hz)							dB(A)
	63	125	250	500	1000	2000	4000	
Base noise limit, L_{10} (dB)	40	30	20	20	15	10	10	-
Minimum measured period $L_{90,15min}$ falling within licensed operating hours of venue (dB) ¹	51	49	44	41	40	32	22	43
Calculated noise limit, L_{10} (dB) ³	59	57	52	49	48	40	30	-
Receivers: 85-88 Burnley Street								
Descriptor	Frequency (Hz)							dB(A)
	63	125	250	500	1000	2000	4000	
Base noise limit, L_{10} (dB)	40	30	20	20	15	10	10	-
Minimum measured period $L_{90,15min}$ falling within licensed operating hours of venue (dB) ²	52	47	43	42	37	28	20	43
Calculated noise limit, L_{10} (dB) ³	60	55	51	50	45	36	28	-

Project: MEL2264 81-95 Burnley Street & 26-34 Doonside Street, Richmond
 Report: Acoustic Town Planning
 Date: 20 June 2023 Rev: 04

Receivers: 2-38 Appleton Street, and Embassy Residences at 39 Appleton Street

Descriptor	Frequency (Hz)							dB(A)
	63	125	250	500	1000	2000	4000	
Note:	<ol style="list-style-type: none"> 1. The spectrum data from attended measurements at location A1. 2. The spectrum data from attended measurements at location A2. 3. The L_{OCT10} noise limits for indoor venues for the night period are the background $L_{OCT90} + 8$ dB, except where this fall below the base noise limit. 							

3.2 Internal acoustic environment

3.2.1 Noise levels and reverberation times

Indoor background design noise levels, which are deemed acceptable to the majority of reasonable occupants are published in AS/NZS 2107. These apply to continuous/steady sources of noise (e.g. traffic, noise from plant equipment, etc.), and noise from fully fitted out and completed buildings, excluding occupant noise. The acoustic design will have to make appropriate allowances for the individual contributions from these different noise sources.

Furthermore, AS/NZS 2107:2016 refers to ideal reverberation times for various spaces. Low reverberation times are critical for speech intelligibility and perception of a space as having high acoustic quality.

The recommended design sound levels and reverberation times are presented in Table 6.

Table 6 AS/NZS 2107 recommended design sound levels and reverberation times

Type of occupancy	Design sound level, $dB_{Leq,T}$	Design reverberation time (T), range, s
Apartment sleeping areas– in inner city areas	35 to 40	-
Apartment living areas – in inner city areas	35 to 45	-
Residential common areas (e.g. foyer, lift lobby, corridors)	45 to 50	-
Private dining area	45 to 50	-
Office corridors and lobbies	45 to 50	< 1.0
General office areas	40 to 45	0.4 to 0.6
Fitness room	< 50	< 1.0
Small retail stores (general)	<50	Minimised
Coffee shops	40 to 50	Minimised
Restaurants	40 to 50	Minimised
Games room	45 to 50	< 1.0
Washrooms and toilets	45 to 55	-

Project: MEL2264 81-95 Burnley Street & 26-34 Doonside Street, Richmond
 Report: Acoustic Town Planning
 Date: 20 June 2023 Rev: 04

Type of occupancy	Design sound level, $dB_{L_{Aeq,T,r}}$	Design reverberation time (T), range, s
Kitchen and storage areas (including typical BOH areas)	< 55	-
Enclosed carparks	< 65	-

3.2.2 Fire mode noise conditions

Building systems which only operate in fire mode, and during periodic testing, do not add to background noise under typical conditions. In accordance with AS/NZS 1668.1:2015, these systems are subject to noise limits, relating not to occupant comfort but rather to occupant distress and the intelligibility of emergency commands.

The fire mode noise limits are presented in Table 7.

Table 7 Fire mode maximum sound pressure levels

Area type	Maximum SPL, L_{Aeq} , dB(A)
Occupied Area	65
Fire-isolated exit (e.g. fire stair)	80

3.2.3 Communal terraces

To minimise noise levels caused by the usage of outdoor amenity areas and terraces, noise limits for adjacent occupied areas within this development are proposed in Table 8 below.

Table 8: Maximum internal airborne and structure-borne noise levels from communal amenity areas and gym

Activity/operation	Adjacent space	Internal noise criterion, $dB_{L_{Amax}}$	
		Day/ Evening (7am to 10pm)	Night (10pm to 7am)
• Communal amenity areas	Residences	40	35
•	Office areas	45	

3.2.4 Noise intrusion

In cases where noise intrusion is not expected to be driven by commercial noise, the noise limit is based on the Australian Standards internal noise level provided in Section 3.2.1.

A summary of the noise intrusion criteria for the proposed development is provided in Table 9 below.

Table 9: Noise Intrusion Limits

Source	Noise limits,		Comment
	External	Internal	
Road traffic noise	NA	Bedrooms: 35dBL _{Aeq,8h} Living Rooms 40dBL _{Aeq,16h}	Based on City of Yarra Guidelines and Standard D16 and primarily applicable to Burnley Street.
Commercial noise	45 dBL _{Aeq,30min}	25 dBL _{Aeq,30min}	The reverse amenity EPA noise limit based on measured night-time background noise levels and zoning information away from Burnley Street (20dB reduction for outside to inside with closed windows)

3.2.5 Acoustic separation

Acoustic separation is important where there is a need to protect personal and sensitive conversations and/or to control noise disturbance.

The amount of noise transferred between the source and receiving space depends on:

- > The level of sounds created in the source room.
- > The sound insulation provided by walls, doors, roof, floor, ductwork and other elements separating the source and receiving spaces.
- > Sound flanking paths that allow sound to go around the intervening partition/floor.

Internal sound insulation of the residential component of the development needs to comply with the NCC requirements as a minimum.

As design progresses further specific internal sound insulation targets for other uses within the project will be determined on a case-by-case basis and with reference to sustainability targets and/or other design standards as required.

3.2.5.1 NCC requirements for residential buildings

For apartments of multi-residential buildings, the NCC specifies minimum sound insulation ratings between various occupancies. This is defined in terms of a weighted standardised level difference $D_{nT,w}$ and a weighted standardised level difference with adapted spectrum $D_{nT,w}+C_{tr}$. These ratings are determined by field testing conducted in accordance to AS/NZS 1276.1 or ISO 717.1.

The NCC also offers deemed-to-satisfy provisions based on wall sound insulation ratings determined by laboratory testing in accordance to AS/NZS 1276.1 or ISO 717.1 standards.

Table 10 schedules NCC field-tested sound insulation ratings needed to achieve compliance, along with corresponding NCC deemed-to-satisfy provisions.

Table 10: Building construction requirements

Element	Description	NCC performance	
		Deemed to Satisfy	Field testing rating
Walls	<u>Airborne Sound</u>		
	Separating any two sole occupancy units	$R_w + C_{tr} \geq 50$	$D_{nT,w} + C_{tr} \geq 45$
	Separating a habitable room in one dwelling and a laundry, kitchen, bathroom or toilet in another dwelling	$R_w + C_{tr} \geq 50$ + impact	$D_{nT,w} + C_{tr} \geq 45$ + impact
	Separating a sole occupancy unit and a stairway, public corridor, public lobby or the like, or parts of a different classification	$R_w \geq 50$	$D_{nT,w} \geq 45$
	Separating a sole occupancy unit and a plant room or lift shaft	$R_w \geq 50$ + impact	$D_{nT,w} \geq 45$ + impact
Doors	Door that separates a sole occupancy unit from a stairway, public corridor, public lobby or the like	$R_w \geq 30$	$D_{nT,w} \geq 25$
Floors	<u>Airborne Sound</u>		
	Separating any two sole occupancy units, or separating a sole occupancy unit from a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification	$R_w + C_{tr} \geq 50$	$D_{nT,w} + C_{tr} \geq 45$
	<u>Impact Sound</u>		
	Separating any two sole occupancy units, or separating a sole occupancy unit from a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification	$L_{n,w} \leq 62$	$L_{nT,w} \leq 62$
Services	If the adjacent room is a habitable room	$R_w + C_{tr} \geq 40$	N/A
	If the adjacent room is a non-habitable (wet) room	$R_w + C_{tr} \geq 25$	N/A
	Access panel in acoustical walls and acoustical barrier ceilings	$R_w + C_{tr} \geq 25$ equivalent	N/A
	If a storm water pipe passes through a sole-occupancy unit, it must be separated as stated above		

Note: Open kitchens are considered non-habitable (wet) source rooms but also habitable receiver rooms. For instance, where services are adjacent to a kitchen which is open to a living room, the kitchen would then be a habitable room and an NCC performance requirement of $R_w + C_{tr} \geq 40$ would apply to the services.

Where there is an identified risk of structure-borne sound transmission, the NCC requires a discontinuous construction, as scheduled in Table 11.

Table 11: NCC specified constructions for wall impact sound insulation

Wall or door type	Discontinuous construction
Wall separating a non-habitable (wet) area in one unit from a habitable room in adjacent unit; OR Wall separating a unit from a plant room or a lift shaft	Discontinuous construction means a wall having a minimum 20mm cavity between 2 separate leaves and: For masonry walls where ties are required between leaves, they are to be of the resilient type, and For walls other than masonry, no mechanical linkage between the leaves, except at the perimeter.

In addition to codified ratings, specific higher-performing constructions may be required in some areas (e.g. plant rooms, etc.) to reduce noise to the adjacent sensitive spaces. Similarly, specific detailed constructions and treatments may be needed to maintain the specified sound insulation rating even across wall elements beyond typical wall types, such as at the junction of internal walls and the façade.

Notwithstanding deemed-to-satisfy provisions based on lab tests, field performance is critically dependent on good workmanship and installation quality, which is also a requirement of the acoustic design.

3.2.6 Internal vibration levels

Limits for vibration of the building structure potentially affecting human comfort have been derived from AS 2670.2 and BS 6472, both of which are referenced and discussed practically in the AVTG. These standards propose maximum vibration levels in terms of baseline curves and multiplication factors.

In addition, the AAAC Gym Guideline provides the same maximum vibration level criteria recommendations as those contained within the standards and AVTG.

For the purpose of minimising the disturbing perceptibility of vibration within the occupied areas of this development; Table 12 and Table 13 specify recommended appropriate limits for continuous and impulsive floor vibration respectively in a simplified form.

With regard to the proposed Gym tenancy on Level 1 of the Mixed Use Building, it shall be noted that the AAAC Gym Guideline states:

- > *Perceived vibration resulting from the use and operation of gymnasiums and exercise facilities is generally not a significant issue at receiver locations. If structure-borne (regenerated) noise can be reduced to acceptable levels when designing mitigation, it is often the case that levels of vibration within receiver properties will be imperceptible.*
- > *Tables from the (AVTG) are provided below for reference, however the AAAC notes that the vibration resulting from the operation of gymnasiums and exercise facilities is likely to be neither continuous, nor impulsive, as per the (AVTG) definitions. As such, a typical objective for vibration emission from a gymnasium or exercise facility, is likely to fall within the ranges given by the (AVTG) for impulsive and continuous vibration.*
- > *For the provision of guidance, the AAAC considers that the "Continuous" levels may be used for guidance when assessing vibration from cardio areas, and repetitious or cyclical activities, given vibration resulting from such activities is typically continuous in nature, when in use.*
- > *The vibration events resulting from the dropping of weights may be classified as "occasional", typically with several occurrences per day, or per assessment period. Where the number of such events is only occasional the Preferred "Impulsive" levels may be used for guidance when assessing vibration from the weights areas.*

Where many weight dropping events are expected to occur during each period values below the "Impulsive" levels may be more appropriate.

- > The vibration generated from the dropping of weights onto the gym floor typically induces maximum acceleration in the vertical axis. Accordingly, the "Preferred Value, z-axis" criteria in (the below tables) should be applied to the analysis and assessment.

Table 12 Internal vibration limits – Continuous vibration

Adjacent space	Time	Weighted r.m.s. acceleration (mm/s ²) (1-80Hz)		Velocity (mm/s)	
		Preferred to Maximum values		Preferred to Maximum values	
		z axis	x/y axes	RMS velocity	Peak velocity
Residences, Sleeping areas	Day	10 to 20	7.1 to 14	0.20 to 0.40	0.28 to 0.56
	Night	7 to 14	5 to 10	0.14 to 0.28	0.20 to 0.40
Offices, Retail, Circulation / Other occupied spaces	Day or Night	20 to 40	14 to 28	0.40 to 0.80	0.56 to 1.10

Table 13 Internal vibration limits – Impulsive vibration

Adjacent space	Time	Weighted r.m.s. acceleration (mm/s ²) (1-80Hz)		Velocity (mm/s)	
		Preferred to Maximum values		Preferred to Maximum values	
		z axis	x/y axes	RMS velocity	Peak velocity
Residences	Day	300 to 600	210 to 420	6.0 to 12.0	8.6 to 17.0
	Night	100 to 200	71 to 140	2.0 to 4.0	2.8 to 5.6
Offices, Retail, Circulation / Other occupied spaces	Day or Night	640 to 1280	460 to 920	13.0 to 26.0	18.0 to 36.0

Radiated structure-borne noise caused by vibration from building services and plant shall be limited to ensure the internal noise limits are not exceeded.

3.2.7 Internal noise levels from gym tenancy impacts

Further to the vibration limits, airborne and structure-borne sound in sensitive areas adjacent to the gym tenancy and associated with impacts are recommended to comply with the limits scheduled in Table 14 which have been derived from the AAAC Gym Guideline.

Table 14 Maximum internal airborne and structure-borne sound pressure levels

Adjacent space	Internal noise criterion, L _{AFmax} (dB(A)) (31.5-250Hz)
----------------	---

Project: MEL2264 81-95 Burnley Street & 26-34 Doonside Street, Richmond
 Report: Acoustic Town Planning
 Date: 20 June 2023 Rev: 04



	Day (7am to 6pm)	Evening (6pm to 10pm)	Night* (10pm to 7am)
Residences	35	30	25
Offices, Retail, Circulation / Other occupied spaces	40	40	40

Note: *. In accordance with the AAAC Gym Guideline, the Night period shall be considered as 10pm to 8am on Sundays and public holidays.

Project: MEL2264 81-95 Burnley Street & 26-34 Doonside Street, Richmond
Report: Acoustic Town Planning
Date: 20 June 2023 Rev: 04

4. Recommendations

4.1 Mechanical plant and equipment

Commercial noise emissions, including plant noise emissions, from any base-building systems and commercial tenancies within the subject development are required to comply with the EPA Noise Protocol Part I noise limits.

At time of writing, plant and equipment selection is yet to be finalised. It is anticipated that provision has been included in the current scheme to incorporate standard acoustic treatment, such as silencers, barriers, acoustically lined ductwork, acoustic louvres, etc. to meet the noise emission requirements the EPA Noise Protocol Part I.

As the design progresses through the detailed design phase, acoustic measures will be incorporated in the design so that the noise emission criteria presented in Section 3.1.1 will be complied with.

Generally, the following allowances should be made for in the design:

- > Selection of low noise fans, allowance for smooth and low velocity airflow conditions in ductwork, use of attenuators and lined duct work while minimising regenerated noise at bends, take-offs and transitions.
- > Support points for major plant items should be structurally rigid. Mid span areas of floor slab should be avoided where practical. Ideally columns, thick structural slabs or very strong beams (local stiffening) should be provided in such cases.
- > For major plant items such as chillers, cooling towers and diesel generators, plant and associated motor and drive assemblies should be mounted on rigid integral steel chassis or concrete inertia bases (in accordance with ASHRAE).
- > Vibration isolation for rotating plant should have an isolation efficiency greater than 90%.
- > All penetrations to plant rooms should be properly dimensioned, packed and sealed. Main services ducts and pipes to have their own individual penetrations, with suitable spacing to allow good sealing.
- > Speed controllers, if used, should be of good quality and compatible with the motor model. Poor quality controllers can result in significant increase in motor noise, as much as 10dB(A), with an offensive.

4.2 Façade treatment

The road traffic noise intrusion criteria provided in Section 3.2.4 of 35dB_{L_{Aeq,8h}} and 40dB_{L_{Aeq,16h}} for sleeping areas is predicted to be met on the following basis:

- > The worst-case measured road traffic noise level of 69 dB_{L_{Aeq,16h}} and 62 dB_{L_{Aeq,8h}} measured 3m from Burnley Road during peak hour based on noise logging data.
- > An 8 m setback to the façade of the proposed development.
- > A standard 6/12/6 DGU that meets R_w35 (windows closed).
- > Any solid façade construction will have the same or higher acoustic performance as the DGU.

The commercial noise intrusion criteria provided in Section 3.2.4 of 25 dB(A) for any habitable space is predicted to be marginally exceeded on the following basis:

Project: MEL2264 81-95 Burnley Street & 26-34 Doonside Street, Richmond
Report: Acoustic Town Planning
Date: 20 June 2023 Rev: 04

- > The worst-case night-time commercial operational noise level of 57 dBL_{Aeq} measured opposite the Doonside Street parking and Victoria Gardens (location A1).
- > An 8 m setback to the façade of the proposed development.
- > A standard 6/12/6 DGU that meets R_w35 (windows closed).
- > Any solid façade construction will have the same or higher acoustic performance as the DGU.

A standard 6/12/6 DGU façade is calculated to marginally exceed the indoor EPA commercial noise limit by in the order of 2 dB. This exceedance is considered acceptable, reasonable amenity achieved and risk of noise nuisance and complaint addressed because:

- > A change of noise level in the order of 2dB is not typically considered noticeable.
- > The predicted noise level of 27 dB is very low and may be masked by typical apartment noise such as electronics or mechanical services; it is below other standards and guidelines for commercial noise.
- > The worst-case night-time noise scenario occurs during a 'shoulder period' in the early morning.
- > Some noise sources are not technically commercial noise and should be minimised through management of existing commercial operations (ie idling trucks on public roads).
- > Future development in this area; including the commercial operation opposite the Doonside Street parking and Victoria Gardens is expected to be developed with mixed use residential and lighter commercial uses.

A standard 6/12/6 DGU façade is recommended to address road traffic noise and commercial noise ingress.

It is not practical to meet the most onerous external reverse amenity commercial noise criteria on the Doonside Street façade and so internal noise amenity is provided to reduce the risk of noise nuisance and complaint.

Windows are required to be closed to achieve the R_w35 rating and so there is a requirement for alternative ventilation pathways that do not compromise the acoustic performance of the façade, such as mechanical ventilation or acoustically attenuated natural ventilation.

The final façade acoustic performance and construction should be refined during design development.

4.3 Music and patron noise

The development may include tenants that create commercial music and patron noise. These tenants are required to achieve compliance with the criteria presented in Section 3.1 and may require noise mitigation measures.

Tenants should provide specific details and operational conditions of this area (e.g. hours of operation, number of patrons, etc.) and assessed further during detailed design.

The tenants may consider best practice measures to limit venue noise emissions. Reference may be made to Victorian Planning Practice Note 81, dated May 2016, for measures to attenuate music venues. As stated in the Victorian Practice Note, these may include:

- > Orienting and positioning the stage or loudspeakers of external entertainment spaces to direct noise away from any noise sensitive residential uses.
- > Installing a sound limiter to cap the volume of any amplified sound to an appropriate level.
- > Implementing a venue management plan focussed on minimising noise.

Project: MEL2264 81-95 Burnley Street & 26-34 Doonside Street, Richmond
Report: Acoustic Town Planning
Date: 20 June 2023 Rev: 04

A separate application to council may be required prior to the operation of this facility.

4.4 Retail gym

Any noise and vibration transmitted by gyms within the proposed development is required to comply with the noise and vibration limits scheduled in Section 3.2.3 and Section 1 respectively. Specific gym designs to achieve these limits shall be the responsibility of the relevant contractor.

Noise mitigation/management measures may include:

- > 200mm concrete slabs.
- > Gym floors to incorporate resilient floor finishes where possible.
- > Walls and ceilings to incorporate sound absorptive finishes for reverberance and noise control.
- > Gym equipment to feature acoustic isolation treatments.
- > The development of an effective management strategy for body corporate and gym users.
- > Restriction on the times of operation to only the day and evening periods (7am to 10pm).

It is recommended that a any retail gym inclusion in the development is considered as part of the base build structural design to allow for any slab set down or stiffening or located at grade.

4.5 Lifts

The contractor is to ensure the following items are complied with:

- > The noise generated by the lift operation is to be 5dB(A) below the noise satisfactory levels presented in Section 3.2.1
- > Lift passby noise is to be inaudible inside habitable spaces inside hotel rooms.
- > Noise levels inside the lift care are not to exceed 55dB(A) under the following circumstances:
 - Door opening and closing
 - Accelerating and decelerating
- > Noise levels inside the lift care are not to exceed 50dB(A) when running at constant speed.
- > The lift chime is not to exceed 25dB(A) inside the apartment with the apartment door closed.
- > Lift guide alignment should be accurate enough such as to not give rise to increased levels of noise during operation.
- > Noise from lift shaft riser is to be inaudible in habitable spaces of apartments.
- > Lift shafts are to be constructed with a minimum R_w of 50.

4.6 Outdoor terraces

Impact noise will need to be addressed in the outdoor terraces/amenity to protect adjacent residences. The following treatment should be considered:

- > 200mm concrete slab.
- > Floor build-up to include an acoustic underlay for impact noise control
- > Apartment ceilings below to include resilient mounts and acoustic insulation in the cavity.

5. Conclusion

A site investigation of the existing surrounds at 81-95 Burnley Street, Richmond has been completed to determine existing noise levels for the environment and surrounds for a proposed mixed-use redevelopment of the site.

Current standards associated with the development have been reviewed and assessed in accordance with existing site constraints. Preliminary construction standards have been provided to ensure that relevant guidelines are satisfied.

ADP Consulting believe there are no site conditions, statutory or other requirements that would preclude this development from complying with the criteria defined in this report.

Project: MEL2264 81-95 Burnley Street & 26-34 Doonside Street, Richmond
Report: Acoustic Town Planning
Date: 20 June 2023 Rev: 04

Appendix A

Glossary of Acoustic Terminology

Air-borne sound

The sound emitted directly from a source into the surrounding air, such as speech, television or music.

Ambient sound

Of an environment: the all-encompassing sound associated with that environment, being a composite of sounds from many sources, near and far. This is normally taken to be the L_{Aeq} value.

Background noise level

The average of the lowest levels of the noise levels measured in an affected area in the absence of noise from occupants and from unwanted external ambient noise sources. Usually, the L_{A90} value represents the background noise level.

dB(A)

Unit of acoustic measurement weighted to approximate the sensitivity of human hearing to sound frequency.

Decibel scale

The decibel scale is logarithmic, to better represent the response of the human ear. For example, a 3 dB increase in the sound pressure level corresponds to a doubling in the sound energy. It is generally accepted that a 10 dB increase in the sound pressure level corresponds to a perceived doubling in loudness.

Examples of decibel levels of common sounds are as follows:

- > 0 dB(A) Threshold of human hearing
- > 30 dB(A) A quiet country park
- > 40 dB(A) Whisper in a library
- > 50 dB(A) Open office space
- > 70 dB(A) Inside a car on a freeway
- > 80 dB(A) Outboard motor
- > 90 dB(A) Heavy truck pass-by
- > 100 dB(A) Jackhammer / Subway train
- > 110 dB(A) Rock Concert
- > 115 dB(A) Limit of sound permitted in industry
- > 120 dB(A) 747 take off at 250 metres

Frequency

The repetition rate of the cycle measured in Hertz (Hz). The frequency corresponds to the pitch of the sound. A high frequency corresponds to a high-pitched sound and a low frequency to a low-pitched sound.

L_{90} , L_{10} , etc

A statistical measurement giving the sound pressure level which is exceeded for the given percentile of a measurement period (i.e., L_{90} is the level which is exceeded for 90 percent of a measurement period). L_{90} is commonly referred to as a basis for measuring the background sound level.

Project: MEL2264 81-95 Burnley Street & 26-34 Doonside Street, Richmond
Report: Acoustic Town Planning
Date: 20 June 2023 Rev: 04

L_{Aeq,T}

The equivalent continuous A-weighted sound pressure level. The value of the A-weighted sound pressure level of a continuous steady sound that, within a measurement time interval T, has the same A-weighted sound energy as the actual time-varying sound.

L_{Amax}

The maximum sound pressure level measured over the measurement period.

L_{Amin}

The minimum sound pressure level measured over the measurement period.

Day

Referred to as the period between 7 am and 6 pm for Monday to Saturday and 8 am to 6 pm for Sundays and Public Holidays.

Evening

Referred to as the period between 6 pm and 10 pm for Monday to Sunday and Public Holidays.

Night

Referred to as the period between 10 pm and 7 am for Monday to Saturday and 10 pm to 8 am for Sundays and Public Holidays.

Assessment background level (ABL)

The overall background noise level on each day, evening, and night periods for each day of the noise monitoring.

Rating background level (RBL)

The overall background level on each day, evening, and night periods for the entire length of noise monitoring.

Reverberation

The persistence, after emission by the source has stopped, of a sound field in an enclosure.

Sound isolation

A reference to the degree of acoustical separation between two spaces. Sound isolation may refer to sound transmission loss of a partition or to noise reduction from any unwanted noise source. The term 'sound isolation' does not specify any grade or performance quality and requires the units to be specified for any contractual condition.

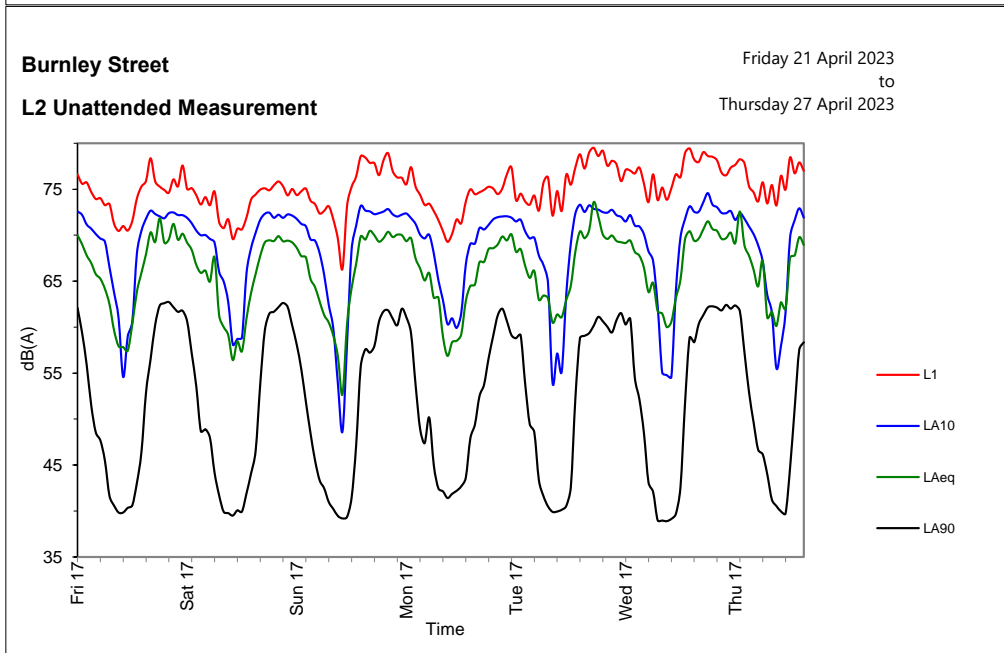
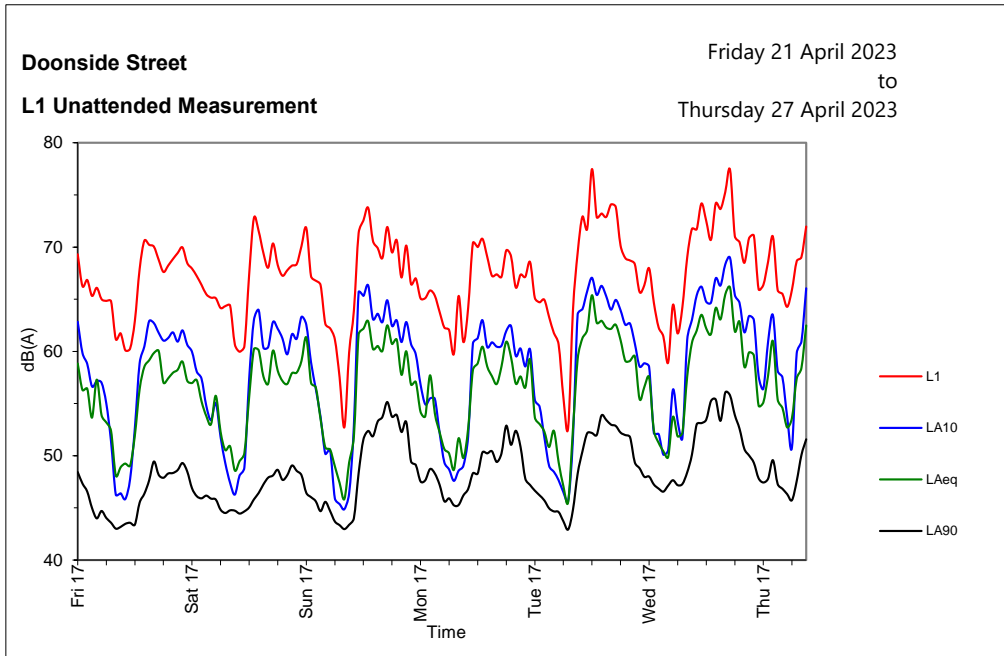
Sound pressure level, L_p, dB of a sound

A measurement obtained directly obtained using a microphone and sound level meter. Sound pressure level varies with distance from a source and with changes to the measuring environment. Sound pressure level equals 20 times the logarithm to the base 10 of the ratio of the R.M.S. sound pressure to the reference sound pressure of 20 micro-Pascals.

Project: MEL2264 81-95 Burnley Street & 26-34 Doonside Street, Richmond
Report: Acoustic Town Planning
Date: 20 June 2023 Rev: 04

Appendix B

Unattended Measurement Data



Project: MEL2264 81-95 Burnley Street & 26-34 Doonside Street, Richmond
 Report: Acoustic Town Planning
 Date: 20 June 2023 Rev: 04



—

Creating great environments with great people

Melbourne
Level 11, 60 Albert Road
South Melbourne VIC 3205
T. 03 9521 1195

Sydney
Level 3, 8 Spring Street
Sydney NSW 2000
T. 02 8203 5447

Brisbane
Level 16, 15 Adelaide Street
Brisbane QLD 4000
T. 07 3088 4022

adpconsulting.com.au



Housing Diversity & Adaptability Assessment

Final Report

Prepared by ASR Research
on behalf of Gurner™
December 21, 2021

TABLE OF CONTENTS

EXECUTIVE SUMMARY

1.	INTRODUCTION	1
1.1	BACKGROUND	1
1.2	SCHEDULE 15 TO CLAUSE 43.04 DEVELOPMENT PLAN OVERLAY.....	2
1.3	ASSESSMENT OBJECTIVES.....	2
2.	DESCRIPTION OF PROPOSED DEVELOPMENT	3
2.1	DEVELOPMENT VISION	3
2.2	PROPOSED HOUSING PRODUCT	4
3	REVIEW OF POLICIES, MODELS AND CASE STUDIES.....	5
3.1	OVERVIEW	5
3.2	IMPLICATIONS OF THE REVIEW OF POLICIES AND CASE STUDIES.....	6
4.	ANTICIPATED HOUSING AND DEMOGRAPHIC OUTCOMES OF PROPOSED DEVELOPMENT	8
4.1	ANTICIPATED HOUSING & DEMOGRAPHIC PROFILE OF PROPOSED DEVELOPMENT	8
4.2	ANTICIPATED SOCIAL AND AFFORDABLE HOUSING OUTCOMES	8
4.3	COMPARISON OF NORTH RICHMOND, CITY OF YARRA AND GREATER MELBOURNE HOUSING PROFILE	9
4.4	FORECAST POPULATION, HOUSEHOLD & DWELLING CHANGE FOR NORTH RICHMOND.....	12
5.	AFFORDABLE HOUSING ASSESSMENT	14
5.1	AFFORDABLE RENTAL, MORTGAGE AND DWELLING PURCHASE PRICE ESTIMATES	14
5.2	REAL ESTATE INSTITUTE OF VICTORIA MEDIAN HOUSING PRICE DATA FOR RICHMOND	15
5.3	AFFORDABLE RENTAL ESTIMATES.....	16
5.4	AFFORDABLE MORTGAGE ESTIMATES	18
5.5	PRIORITY TARGET GROUPS FOR SOCIAL AND AFFORDABLE HOUSING.....	20
6.	SUMMARY OF KEY CONCLUSIONS & RECOMMENDATIONS	21
6.1	SUMMARY OF PROPOSED HOUSING AND POPULATION OUTCOMES	21
6.2	KEY HOUSING DIVERSITY OUTCOMES	21
6.3	SOCIAL AND AFFORDABLE HOUSING OUTCOMES	22
6.4	PROPOSED AFFORDABLE HOUSING MODEL.....	24
6.5	CONSISTENCY WITH KEY HOUSING POLICIES, STRATEGIES AND PLANS	24
6.6	IMPLEMENTATION PLAN	25
6.7	MONITORING.....	25
	APPENDICES.....	27
APPENDIX 1.	OVERVIEW OF SOCIAL HOUSING	28
APPENDIX 2.	AFFORDABLE HOUSING SPECIFICATION OF INCOME RANGES (1 JULY, 2021)	29
APPENDIX 3.	REVIEW OF STATUTORY AND STRATEGIC DOCUMENTS	30
APPENDIX 4.	EXAMPLE OF A SOCIAL HOUSING & AFFORDABLE HOUSING AGREEMENT – NEW EPPING DEVELOPMENT	57

Attachment 7 Attachment 7 - PLN21/0981 - 81 - 95 Burnley Street & 26 - 34 Doonside Street Richmond - Final Housing Diversity Report

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

List of Figures

Figure 1 - Subject Site	1
Figure 2 – DPO15 Development Plan Vision	2

List of Tables

Table 1 - Anticipated Dwelling and Population Profile for Subject Site	8
Table 2 – North Richmond, City of Yarra and Greater Melbourne Housing Profile Compared	10
Table 3 – A Comparison of North Richmond, City of Yarra & Greater Melbourne Housing Characteristics.....	11
Table 4 - Forecast Population, Household & Dwelling Change for North Richmond	12
Table 5 -Specification of Income Ranges for the Greater Capital City Statistical Area of Melbourne	14
Table 6 – Richmond Median Property and Rental Prices by Bedroom Size (REIV June Qtr 2021 data).....	15
Table 7 - Affordable Weekly Rental Estimates Based on a Maximum of 30% of Weekly Income for Rent	16
Table 8 – Richmond Affordable Rent Assessment	17
Table 9 – Affordable Monthly Mortgage Estimates	18
Table 10 – Richmond Affordable Unit Purchase Prices	19
Table 11 – Weekly Income Limits for Eligible Households Applying for Social Housing in Victoria.....	28
Table 12 - Overview of State and Commonwealth Government Social Housing Initiatives	53

Executive Summary

1 Background

ASR Research was engaged by Gurner™ (the “client”), to prepare the following Housing Diversity & Adaptability Assessment, a key requirement of the proposed development of 81-95 Burnley Street and 26-34 Doonside Street, Richmond (the “subject site”).

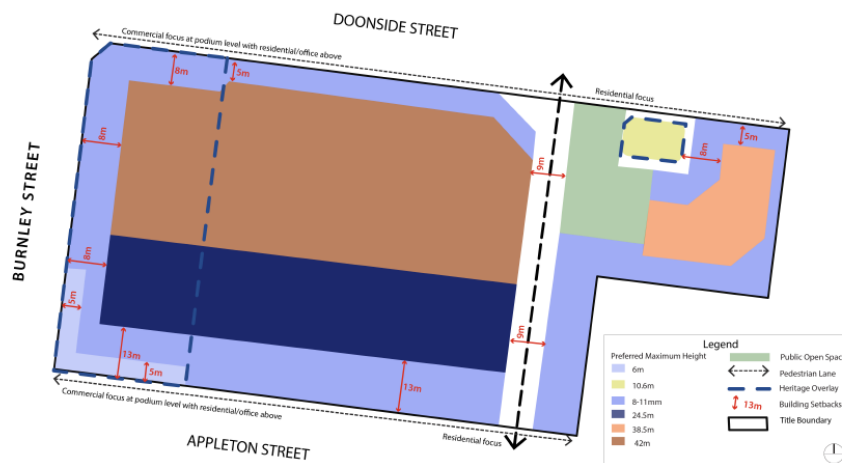
2 Schedule 15 to Clause 43.04 Development Plan Overlay

Schedule 15 to Clause 43.04 Development Plan Overlay (DPO15) applies to the subject site (shown below in Figure 1) and requires the preparation of...

“a Housing Diversity and Adaptability Report that provides the following information:

- *A demographic analysis of the types of people and households anticipated to live within the development based on the proposed dwelling design and bedroom mix.*
- *The model to provide 10% of the total number of dwellings as affordable housing.*
- *Demonstrate how the development plan responds to the particular housing needs of future residents across their lifetime.”*

Figure 1 – DPO15 Development Plan Vision



81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

3 Assessment Objectives

The specific objectives of the Housing Diversity & Adaptability Assessment were to:

1. Provide an understanding the current local and State housing policy context and describe the implications this will have on the delivery diverse housing options within the subject site;
2. Provide a detailed profile of current and projected population and housing characteristics and trends and identify how this will impact on the delivery of diverse housing within the subject site;
3. Review existing documented housing delivery models for the purpose of providing the client with affordable housing delivery options; and
4. Formulate of housing diversity delivery and implementation process-oriented strategy for the subject site.

4. Summary of Key Conclusions & Recommendations

4.1 Summary of Proposed Housing and Population Outcomes

In summary, the proposed development will:

- Generate between 545 to 645 apartments;
- Indicatively, 30% of all dwellings will be 1 bedroom apartments, 60% will be 2 bedroom and 10% will be 3 bedroom dwellings; and
- Based on 0.9 persons per bedroom, the subject site will generate a resident population of between approximately 880 to 1,045.
- Represent 4.3% to 5.0% of all dwellings in North Richmond by 2041;
- Represent 12.7% to 15.1% of all new dwellings to be delivered in North Richmond by 2041; and
- Represent 3.6% to 4.2% of the total population of North Richmond by 2041.

It is anticipated that the proposed development will broadly reflect the current profile of household types of people living in high density developments across the City of Yarra which currently consists of:

- A high proportion of lone person households (38%);
- Couple families with no children (30%);
- Group households (10%);

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

- One parent families (10%); and
- Couple families with children (9%).

4.2 Key Housing Diversity Outcomes

When compared to Richmond North and the City of Yarra, the proposed development will deliver:

- A much higher proportion of high-density apartments (100%) than Richmond North (57%) or the City of Yarra (37%);
- Subject to the outcome of discussions with prospective Housing Associations / Providers, a similar proportion of social housing as the City of Yarra (10%), but lower than the North Richmond (20%);
- A much higher proportion of 1 bedroom dwellings (30%) compared to North Richmond (21%) and the City of Yarra (18%);
- A much higher proportion of 2 bedroom dwellings (60%) compared to North Richmond (40%) and the City of Yarra (20%); and
- A much lower proportion of 3 bedroom dwellings (10%) compared to Richmond North (23%) and the City of Yarra (40%).

4.3 Social and Affordable Housing Outcomes

Overall Outcomes

- Given the anticipated dwelling yield ranging from 545 to 645 dwellings, the proposed development will likely generate a requirement for 55 to 65 affordable homes.

Social Housing

- Based on case studies presented in Section 3.11 of the main report, there are potentially a wide range of models and strategies for achieving the affordable housing requirement for the proposed development. Whilst there may be many potential models of provision the broad types can be summarised as:
 - **Purchase land and / or dwellings** (the Registered Housing Association may purchase land / or dwellings directly from its own funds or via equity partners, or via an application for some form of Government funding program - e.g. Federal Government NRAS program. External funding applications may not be successful and also take some time to be evaluated. Any arrangements between the Registered Housing

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

Association and the developer are likely to be subject to the outcome of these processes.);

- **Head lease agreements;**
- **Management of dwellings; and**
- **Rent-to-buy.**
- However, the developers of the subject site have indicated they have commenced discussions with a number of Registered Housing Associations (refer to Appendix 3.9 for more details of the Registered Housing Association sector) with a view to incorporating a component of social housing within the proposed development. The proposed development represents a significant contribution toward social and affordable housing outcomes in the local area including increasing the level of supply, and creating higher quality, better configured homes which better able to respond to changing demographic needs.
- Although there are a potentially a wide range of priority population target groups for the proposed social housing initiative, much of the detail about who to prioritise will need to be further discussed with the prospective Registered Housing Association / Provider partner. However, based on the analysis presented in the report the following rental demographic groups should be prioritised:
 - Very low to low income lone person households;
 - Very low to low income couples with no dependents; and
 - Very low to low income families (with one or two parents) and dependent children.

4.4 Proposed Affordable Housing Model

The proponent intends to pursue its affordable housing obligations (i.e. 10% of all new dwellings) by entering into an arrangement with a Registered Housing Association to purchase at a discounted rate the required number of dwellings (55 to 65 dwellings).

The broad process the proponent will undertake to pursue this option will consist of the following steps:

- The proponent will interview a range of interested Registered Housing Associations to partner with.
- Select one preferred partner.
- Confirm the number and type of apartments required and what the likely target population target groups for these dwellings will be.
- Determine where and how the social housing dwellings are to be located within the development.

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

- A broad model of provision will then need to be negotiated and confirmed between the developer and the Registered Housing Association.

4.5 Consistency with Key Housing Policies, Strategies and Plans

The proposed development is consistent with and supportive of the following key housing policies, strategies and plans reviewed as part of this report.

- Outcome 2 (Melbourne provides housing choice in locations close to jobs and services) of *Plan Melbourne 2017-2050*;
- *Homes for Victorians 2017* (Supporting people to buy their own home; promoting stability and affordability for renters; and increasing and renewing social housing stock);
- Key housing objectives of the **Yarra Planning Scheme**;
- The goals and directions of Council's *Housing Strategy (2018)* and *Social and Affordable Housing Strategy (2019)*. The Housing Strategy aims to ensure that a greater choice and diversity of housing is available to residents in the municipality's established areas including North Richmond. The Social and Affordable Housing Strategy aims to ensure a diverse population lives in the municipality by increasing the supply of social and affordable housing suitable to households at various income levels and requirements.
- Council's policy guidance in relation to *Affordable Housing Outcomes at Significant Developments*. This policy states that, when considering proposals for the rezoning of land for residential use that would allow the development of 50 or more dwellings, it is Council policy that a requirement (or requirements) will be included in the planning scheme provisions that secure at least 10% of the dwellings as affordable housing, which are to be transferred to a registered housing agency, or an alternative arrangement of equal or better benefit, to the satisfaction of Council.

4.6 Implementation Plan

It is recommended that the recommendations of this report should be implemented via a proposed Planning Agreement that applies to the subject site over multiple stages based on market forces and other factors.

The key requirement of the Planning Agreement is to ensure that 10% of all dwellings in the Development to be constructed and retained permanently as social housing dwellings.

Attachment 7 Attachment 7 - PLN21/0981 - 81 - 95 Burnley Street & 26 - 34 Doonside Street Richmond - Final Housing Diversity Report

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

The report has been based on a yield assumption ranging between 545 to 645. It is intended that should ultimate yield vary, the principles and requirements set out in this report can be scaled up or down.

An example of a Social Housing and Affordable Housing Planning Agreement from a recently approved development (New Epping in the City of Whittlesea) is provided in Appendix 4.

4.7 Monitoring

It is proposed that at the time of making a permit application for building works, the Owner nominate in the application the number of dwellings that are to be allocated as a Social or Affordable Housing in accordance with the proposed Planning Agreement.

At the completion of construction of the dwellings which are the subject of the permit, the Owner should provide a copy of the Occupancy Certificate from the Building Surveyor to Yarra City Council to show that the dwellings that have been constructed.

Yarra City Council will be responsible for keeping a register of permit applications granted and the cumulative number of units approved in each category. Similarly, the register should also reference the number of dwellings constructed.

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

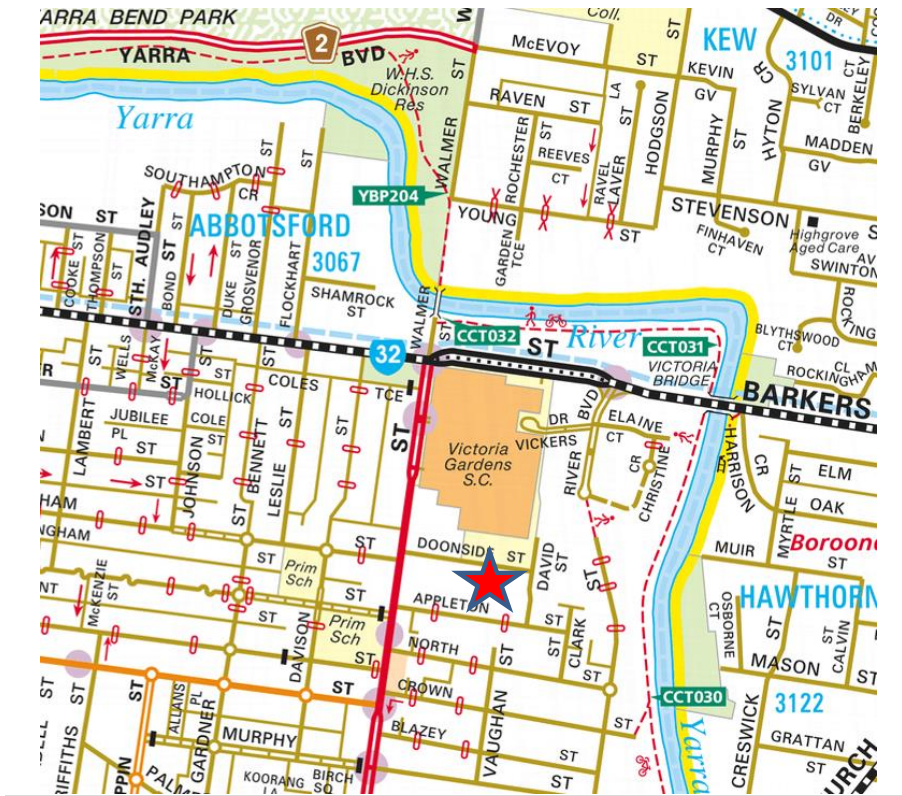
1. Introduction

1.1 Background

ASR Research was engaged by Gurner™ (the “client”), to prepare the following Housing Diversity & Adaptability Assessment, a key requirement of the proposed development of 81-95 Burnley Street and 26-34 Doonside Street, Richmond (the “subject site”), the location of which is shown in Figure 1 below.

The subject site is located at the north-eastern edge of the suburb of Richmond, approximately 5 kilometres from the Melbourne CBD and 1.5 kilometres from the Richmond Town Hall on Bridge Road. The site is within the Victoria Street – Richmond activity centre, just to the south of Victoria Gardens, which is a sub-regional shopping centre containing Kmart, Coles, Freedom, Rebel, a Hoyts cinema complex and a range of specialty retailers. IKEA is integrated into the centre. Public transport services comprise the 109 and 12 tram routes along Victoria Street, and the 48 and 75 tram routes along Bridge Road.

Figure 1 - Subject Site



81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

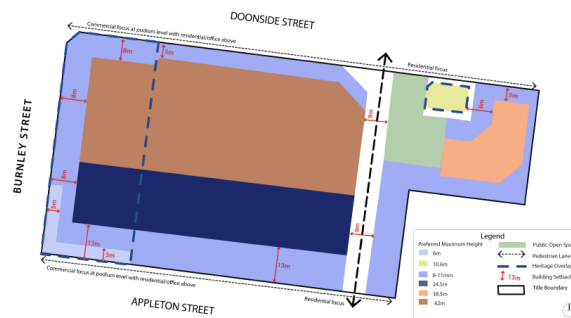
1.2 Schedule 15 to Clause 43.04 Development Plan Overlay

Schedule 15 to Clause 43.04 Development Plan Overlay (DPO15) applies to the subject site (shown below in Figure 2) and requires the preparation of...

“a Housing Diversity and Adaptability Report that provides the following information:

- *A demographic analysis of the types of people and households anticipated to live within the development based on the proposed dwelling design and bedroom mix.*
- *The model to provide 10% of the total number of dwellings as affordable housing.*
- *Demonstrate how the development plan responds to the particular housing needs of future residents across their lifetime.”*

Figure 2 – DPO15 Development Plan Vision



1.3 Assessment Objectives

The specific objectives of the Housing Diversity & Adaptability Assessment are to:

5. Provide an understanding the current local and State housing policy context and describe the implications this will have on the delivery diverse housing options within the subject site;
6. Provide a detailed profile of current and projected population and housing characteristics and trends and identify how this will impact on the delivery of diverse housing within the subject site;
7. Review existing documented housing delivery models for the purpose of providing the client with affordable housing delivery options; and
8. Formulate of housing diversity delivery and implementation process-oriented strategy for the subject site.

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

2. Description of Proposed Development

2.1 Development Vision

DPO15 includes the following “Development Plan Vision” for the subject site:

- To become a sustainable, mixed-use residential community, supported by convenience retailing services, community facilities, and employment opportunities augmenting the role of the Victoria Street Activity Centre.
- To recognise the opportunity of the site’s activity centre context, whilst respecting the low rise residential development to the south.
- To protect the reasonable amenity of residential properties on the south side of Appleton Street and to the east of the subject site.
- To provide improvements to the public domain, including pedestrian friendly environments along all street frontages, the provision of public open space and a pedestrian laneway.
- To provide a high standard of internal amenity, building separation and best practice environmentally sustainable design.
- To respect the scale and form of heritage places within and adjacent to the site.
- To provide for the conservation of heritage places within the site.
- To ensure that new development mitigates any adverse impact it may generate upon local traffic conditions.
- To ensure that the primary responsibility for noise attenuation rests with the agent of change.
- To ensure new development, does not unreasonably prejudice by way of reason of reverse amenity the ongoing operation of nearby existing commercial, industrial and warehouse businesses, including Victoria Gardens Shopping Centre.
- To provide for the sensitive adaptive re-use of heritage buildings in accordance with the Comprehensive Heritage Analysis referred to in Clause 4.2 of this schedule.
 - describes the relationship between the heritage place and any neighbouring or adjacent heritage place/s; and
 - establishes principles for managing the significance of the heritage place and its relationship with its surroundings.

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

2.2 Proposed Housing Product

As developer of the subject site, Gurner™ proposes to deliver between 545 to 645 residential apartments consisting of a mixture of 1, 2 and 3 bedrooms. At this stage, the developer has indicated these dwellings will be provided in the following proportions:

- 1 bedroom dwellings – 30%;
- 2 bedroom dwellings – 60%; and
- 3 bedroom dwellings – 10%.

The project will be designed to be staged to respond to market conditions and ideally the affordable housing stock would be salt and peppered through the development which will mean it could be delivered in stages.

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

3 Review of Policies, Models and Case Studies

3.1 Overview

This section assesses the implications of a number of important statutory planning policies and strategies that influence housing outcomes in Victoria and the City of Yarra and how these may impact on the proposed delivery of affordable housing at the subject site. In addition to the policy review, a number of existing social and affordable housing models and case studies are presented and discussed as the basis of determining what types of strategies may satisfy the requirements of DPO15. Appendix 3 contains a detailed review of statutory and strategic documents. The documents reviewed are:

- Plan Melbourne 2017;
- Homes for Victorians (2017);
- An overview of Statutory Amendments to the Planning and Environment Act 1987);
- A review of key housing elements of the Yarra Planning Scheme including:
 - Clause 16 Housing (16.01-1S Housing supply, 16.01-1R Housing supply - Metropolitan Melbourne, 16.01-2S Housing affordability);
 - Clause 21.03 Vision – Land Use;
 - Clause 21.04 Land Use (21.04-1 Accommodation and housing);
 - Clause 21.08 Neighbourhoods (21.08-9 North Richmond - area north of Bridge Road);
 - Clause 21.09 Monitoring and Review (21.09-1 Monitoring the Objectives of the Scheme);
 - Clause 22.11 Victoria Street East Precinct Policy;
 - Clause 58 Apartment Developments (58.02-3 Dwelling diversity objective); and
 - Clause 53.20 Housing by or on Behalf of the Director of Housing (53.20-1 Application).
- City of Yarra Housing Strategy (2018);
- City of Yarra Social and Affordable Strategy (2019);
- City of Yarra Policy Guidance Note: Affordable Housing Outcomes at Significant Developments (Adopted November 12, 2019);
- Public Housing - Affordable Housing Voluntary Contributions: Public Housing as an Affordable Housing Contribution (June 2018); and
- Community Housing - Affordable Housing Agreements.

Appendix 3 also contains a discussion of social and affordable housing funding sources and models of provision including: 1) The Village Alphington Case Study; 2) The Assemble Model Case Study - 393 Macaulay Road, Kensington, and 3) Nightingale Apartments Case Study, 55–63 Nicholson Street, Brunswick East.

3.2 Implications of the Review of Policies and Case Studies

Discussed below are some of the key implications of the material reviewed for the subject site.

- Given its location on the eastern edge of the Victoria Street, Abbotsford/Richmond Major Activity Centre, the subject site is ideally placed to satisfy the objectives and strategies contained in Outcome 2 of Plan Melbourne 2017. This Outcome aims to ensure Melbourne provides housing choice in locations close to jobs and services. Plan Melbourne points out that Melbourne will need 1.6 million new homes over the next 35 years. Issues that need to be addressed include: housing affordability, the types of housing available to cater for different household needs and lifestyles, and the provision of medium- and higher-density housing close to jobs and services. Another pressing issue is the growing number of homeless people and households waiting for public housing.
- Homes for Victorians (2017), the Victorian Government’s key housing strategy, commits significant additional funding (\$2.6 billion) toward increasing the supply of social and affordable housing and a range of other measures. By partnering with registered housing associations and housing providers, the subject site has an opportunity to potentially secure some of this funding to meet its social and affordable housing obligations.
- Three important changes were made to the Planning and Environment Act 1987 that came into effect on 1 June 2018. Those changes were: 1) adding a new objective to the Act “to facilitate the provision of affordable housing in Victoria”; 2) providing a definition of affordable housing – “affordable housing is housing, including social housing, that is appropriate for the housing needs of very low, low, and moderate-income households”, and 3) affirming the use of section 173 for voluntary affordable housing agreements. Section 3AB of the Act includes a specification of income ranges for all the households described above (refer to Appendix 2 for a copy of the specification of income ranges).
- The Yarra Planning Scheme includes a raft of State and Local housing policy objectives and strategies that the subject site will need to satisfy. These include (but not limited to): housing supply (Clause 16.01-1S); housing affordability (Clause 16.01-2S); the Municipal Strategic Statement (Clauses 21.03, 21.04, 21.08, 21.09-1); Victoria Street East Precinct (Clause 22.11); apartment developments (Clause 58.02-3, dwelling diversity objective); Housing by or on Behalf of the Director of Housing (Clause 53.20).
- The subject site is well placed satisfy the goals and directions of Council’s Housing Strategy (2018) and Social and Affordable Housing Strategy (2019). The Housing Strategy aims to ensure that a greater choice and diversity of housing is available to residents in the municipality’s established areas including North Richmond. The Social and Affordable

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

Housing Strategy aims to ensure a diverse population lives in the municipality by increasing the supply of social and affordable housing suitable to households at various income levels and requirements.

- City of Yarra Policy Guidance Note for affordable housing (Affordable Housing Outcomes at Significant Developments) states that, when considering proposals for the rezoning of land for residential use that would allow the development of 50 or more dwellings, it is Council policy that a requirement (or requirements) will be included in the planning scheme provisions that secure at least 10% of the dwellings as affordable housing, which are to be transferred to a registered housing agency, or an alternative arrangement of equal or better benefit, to the satisfaction of Council.
- The Department of Families, Fairness and Housing (formerly the Department of Health and Human Services) has prepared clear guidelines targeted at the development industry and Responsible Authorities who wish to pursue public housing initiatives through voluntary agreements pursuant to section 173 of the *Planning and Environment Act 1987* (Section 173 Agreements). Public Housing, as one form of social housing, may present a partnering option for the developers of the subject site seeking to fulfil its social housing obligations.
- The Community Housing Industry in Victoria includes ten Housing Associations and 30 Housing Providers that collectively own and manage over 19,000 properties with a combined asset value of over \$2.3 billion. Along with public housing, community housing is one form of social housing, that may present a partnering option for the developers of the subject site seeking to fulfil its social housing obligations
- The review of social and affordable housing models and case studies indicates that there are potentially a wide range models by which developers and social housing providers, generally working in partnership, can satisfy social and affordable housing obligations. Whilst there may be many potential models of provision the broad types can be summarised as:
 - **Purchase land and / or dwellings** (the Registered Housing Association may purchase land / or dwellings directly from its own funds or via equity partners, or via an application for some form of Government funding program - e.g. Federal Government NRAS program. External funding applications may not be successful and also take some time to be evaluated. Any arrangements between the Registered Housing Association and the developer are likely to be subject to the outcome of these processes.);
 - **Head lease agreements;**
 - **Management of dwellings; and**
 - **Rent-to-buy.**

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

4. Anticipated Housing and Demographic Outcomes of Proposed Development

4.1 Anticipated Housing & Demographic Profile of Proposed Development

Table 1 below provides a detailed summary of the key dwelling and population profile outcomes anticipated for the subject site. In summary, the proposed development will:

- Generate 545 to 645 apartment dwellings;
- Indicatively, 30% of all dwellings will be 1 bedroom apartments, 60% will be 2 bedrooms and 10% will be 3 bedrooms; and
- Based on 0.9 persons per bedroom¹, the subject site will generate a resident population of between approximately 880 to 1,045.

Table 1 - Anticipated Dwelling and Population Profile for Subject Site

	% of all apartments
1 bedroom	30%
2 bedroom	60%
3 bedroom	10%
Total	100%
Total Population (@0.9 persons per bedroom)	880 to 1,045

4.2 Anticipated Social and Affordable Housing Outcomes

Given the anticipated dwelling yield ranging from 545 to 645 dwellings, the proposed development will likely generate a requirement for 55 to 65 affordable homes. As described in Section 5 of this report, affordable housing is housing, including social housing, that is appropriate for the housing needs of very low, low, and moderate-income households.

As illustrated by the case studies presented in Section 3.11 of this report, there are potentially a wide range of models and strategies for achieving the affordable housing requirement for the proposed development. However, the developers of the subject site have indicated they have commenced discussions with a number of Registered Housing Associations (refer to Appendix 3.9 for more details

¹ Source: Australian Bureau of Statistics, 2016 Census of Population and Housing, average number of persons per bedroom for the City of Yarra.

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

of the Registered Housing Association sector) with a view to incorporating a component of social housing within the proposed development. The proposed development represents a significant contribution toward social and affordable housing outcomes in the local area including increasing the level of supply, and creating higher quality, better configured homes which better able to respond to changing demographic needs.

It is worth noting that, aside from a commitment to establishing a partnership with a Registered Housing Association / Provider, this assessment has determined that both 1 and 2 bedroom dwellings, if leased out privately, are likely to be affordable for certain household types at the upper end of the moderate income range. This is discussed in more detail in Section 5.3 of this report.

4.3 Comparison of North Richmond, City of Yarra and Greater Melbourne Housing Profile

This section presents a demographic analysis of the current housing profile of North Richmond, Yarra and Greater Melbourne in order to assess how the proposed housing outcomes of the subject site compares. Table 2 summarises some of the key housing related statistics for North Richmond based on the 2016 ABS Census of Population and Housing. Table 2 summarises how North Richmond compares to the City of Yarra and Greater Melbourne, based on more detailed data provided in Table 3 that follows it. Based on these housing statistics the proposed development will deliver:

- A much higher proportion of high-density apartments (100%) than Richmond North (57%) or the City of Yarra (37%);
- Subject to the outcome of discussions with prospective Housing Associations / Providers, a similar proportion of social housing as the City of Yarra (10%), but lower than the North Richmond (20%);
- A much higher proportion of 1 bedroom dwellings (30%) compared to North Richmond (21%) and the City of Yarra (18%);
- A much higher proportion of 2 bedroom dwellings (60%) compared to North Richmond (40%) and the City of Yarra (20%); and
- A much lower proportion of 3 bedroom dwellings (10%) compared to Richmond North (23%) and the City of Yarra (40%).

Attachment 7 Attachment 7 - PLN21/0981 - 81 - 95 Burnley Street & 26 - 34 Doonside Street Richmond - Final Housing Diversity Report

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

Table 2 – North Richmond, City of Yarra and Greater Melbourne Housing Profile Compared

Compared to Yarra, North Richmond has:	Compared to Greater Melbourne, North Richmond has:
a similar average household size	a much lower average household size
A lower proportion of separate houses	a much lower proportion of separate houses
a much lower proportion of medium density dwelling	a much higher proportion of medium density dwelling
a much higher proportion of high-density dwellings	a much higher proportion of high-density dwellings
a higher proportion of dwellings with 0 or 1 bedrooms	a much higher proportion of dwellings with 0 or 1 bedrooms
a slightly higher proportion of dwellings with 2 bedrooms	a much higher proportion of dwellings with 2 bedrooms
a slightly lower proportion of dwellings with 3 bedrooms	a much lower proportion of dwellings with 3 bedrooms
a lower proportion of dwellings with 4 or more bedrooms	a much lower proportion of dwellings with 4 or more bedrooms
a lower proportion of households who fully own their home	a much lower proportion of households who fully own their home
a lower proportion of households who are purchasing their own home	a much lower proportion of households who are purchasing their own home
a slightly lower proportion of households who are renting privately	a much higher proportion of households who are renting privately
a much higher proportion of households who rent some form of social housing	a much higher proportion of households who rent some form of social housing
a lower median weekly rental payment	a higher median weekly rental payment
a similar median weekly mortgage repayment	a much higher median weekly mortgage repayment
a similar proportion of households paying high mortgage repayments (\$2,600 or more per month)	a much higher proportion of households paying high mortgage repayments (\$2,600 or more per month)
a much lower proportion of households with high rental payments (over \$450 per week)	a much higher proportion of households with high rental payments (over \$450 per week)
a higher proportion of households with housing stress ²	a higher proportion of households with housing stress
a lower proportion of households with mortgage stress ³	a much lower proportion of households with mortgage stress
a higher proportion of households with rental stress ⁴ .	a much lower proportion of households with rental stress.

Source: Population and household forecasts, 2016 to 2041, prepared by .id (informed decisions), August 2018.

² Housing Stress is defined as per the NATSEM (National Centre for Social and Economic Modelling) model as households in the lowest 40% of incomes who are paying more than 30% of their usual gross weekly income on housing costs.

³ Mortgage Stress is defined as per the NATSEM (National Centre for Social and Economic Modelling) model as households in the lowest 40% of incomes who are paying more than 30% of their usual gross weekly income on home loan repayments.

⁴ Rental Stress is defined as per the NATSEM (National Centre for Social and Economic Modelling) model as households in the lowest 40% of incomes, who are paying more than 30% of their usual gross weekly income on rent.

Attachment 7 Attachment 7 - PLN21/0981 - 81 - 95 Burnley Street & 26 - 34 Doonside Street Richmond - Final Housing Diversity Report

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

Table 3 – A Comparison of North Richmond, City of Yarra & Greater Melbourne Housing

Characteristics

2016 ABS Census Housing Characteristic	North Richmond	City of Yarra	Greater Melbourne
Average household size (persons per household)	2.07	2.10	2.61
Housing types			
<i>Separate houses</i>	9.8%	13.4%	66.1%
<i>Medium density</i>	32.4%	48.1%	22.9%
<i>High density</i>	56.9%	37.1%	10.1%
Bedroom numbers			
<i>0 or 1 bedrooms</i>	21.3	17.8	6%
<i>2 bedrooms</i>	41.5	40.4	19.5%
<i>3 bedrooms</i>	23.3	24.3	40.1%
<i>4 bedrooms</i>	3.6	5.8	23.0%
<i>5 or more bedrooms</i>	0.8	1.3	4.8%
Households who fully own their home	13.3	18.2	29.0%
Households purchasing dwellings	17.7	20.4	34.3%
Households renting privately	39.0	40.3	25.8%
Households renting some form of social housing	19.5	9.5	2.6%
Median weekly rental payments	\$375	\$432	\$355
Median weekly mortgage repayments	\$497	\$500	\$421
Proportion of households with high mortgage payments (paying more than \$2,600 per month)	38.3%	38.5%	22.4%
Proportion of households with high rental payments (paying more than \$450 per week)	34.2%	45.4%	23.0%
Proportion of households with housing stress	13.5%	9.7%	11.7%
Proportion of households with mortgage stress	3.9%	4.6%	11.2%
Proportion of households with rental stress	19.8%	17.5%	27.4%

Source: Population and household forecasts, 2016 to 2041, prepared by .id (informed decisions), August 2018.

Table 4 on the following page summarises the current household types living in high density apartments across the City of Yarra. These statistics, based on the 2016 ABS Census provides some indication of what the household profile of the proposed development will look like. This includes:

- A high proportion of lone person households (38%);
- Couple families with no children (30%);
- Group households (10%);
- One parent families (10%); and
- Couple families with children (9%).

Attachment 7 Attachment 7 - PLN21/0981 - 81 - 95 Burnley Street & 26 - 34 Doonside Street Richmond - Final Housing Diversity Report

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

Table 4 – City of Yarra Household Type Profile of People Living in High Density Apartments

Family Household Composition Type	One bedroom	Two bedrooms	Three bedrooms	Total
Lone person household	60%	30%	16%	38%
One family household: Couple family with no children	33%	31%	16%	30%
Group household	3%	15%	8%	10%
One family household: One parent family	1%	10%	31%	10%
One family household: Couple family with children	1%	10%	24%	9%
One family household: Other family	0%	3%	3%	2%
Visitors only household	2%	1%	1%	1%
Two family household: Couple family with no children	0%	0%	0%	0%
Two family household: Couple family with children	0%	0%	1%	0%
Two family household: One parent family	0%	0%	0%	0%
Other non-classifiable household	0%	0%	0%	0%
Two family household: Other family	0%	0%	0%	0%
Three or more family household: Couple family with no children	0%	0%	0%	0%
Three or more family household: Couple family with children	0%	0%	0%	0%
Three or more family household: One parent family	0%	0%	0%	0%
Three or more family household: Other family	0%	0%	0%	0%

Data Source: Census of Population and Housing, 2016, TableBuilder

4.4 Forecast Population, Household & Dwelling Change for North Richmond

As shown in Table 5 below, the population of North Richmond will increase by 42% between 2021 (estimated population of approximately 17,500) and 2041 (projected population of approximately 24,800), accommodating approximately 7,350 additional residents. The number of dwellings in North Richmond will increase from approximately 8,500 in 2021 to approximately 12,800 by 2041. Average household size is anticipated to decline slightly from 2.1 persons in 2020 to 2.03 by 2041.

Table 5 - Forecast Population, Household & Dwelling Change for North Richmond

Summary	Forecast Year					Change from 2019 to 2041	% Change from 2019 to 2041
	2021	2026	2031	2036	2041		
Population	17,453	19,976	21,754	23,602	24,802	7,349	42%
Households	8,180	9,511	10,462	11,439	12,124	3,944	48%
Average household size	2.11	2.08	2.06	2.05	2.03	-0.08	-4%
Dwellings	8,498	10,026	11,028	12,058	12,780	4,282	50%

Source: Population and household forecasts, 2016 to 2041, prepared by .id (informed decisions), August 2018.

Attachment 7 Attachment 7 - PLN21/0981 - 81 - 95 Burnley Street & 26 - 34 Doonside Street Richmond - Final Housing Diversity Report

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

Based on these projections and assumptions the subject site will represent:

- 4.3% to 5.0% of all dwellings in North Richmond by 2041;
- 12.7% to 15.1% of all new dwellings to be delivered in North Richmond by 2041; and
- 3.6% to 4.2% of the total population of North Richmond by 2041.

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

5. Affordable Housing Assessment

As mentioned previously in Section 1.2, DPO15 states that the Housing Diversity & Adaptability Report must be prepared explaining the mix of housing proposed including “the model to provide 10% of the total number of dwellings as affordable housing”.

It should be noted that three important changes to the *Planning and Environment Act 1987* came into effect on 1 June 2018. Those changes were:

- Adding a new objective to the Act “to facilitate the provision of affordable housing in Victoria”.
- Providing a definition of affordable housing – “affordable housing is housing, including social housing, that is appropriate for the housing needs of very low, low, and moderate-income households”.
- Affirming the use of section 173 for voluntary affordable housing agreements “... a Responsible Authority may enter into an agreement with an owner of land for the development or provision of land in relation to affordable housing”.

5.1 Affordable Rental, Mortgage and Dwelling Purchase Price Estimates

Recent changes to the Planning and Environment Act introduced provisions related to Affordable Housing, including definitions for very low, low and moderate income households based on income ranges (“Section 3AB incomes ranges”). July 1, 2021 values for the Greater Capital City Statistical Area of Melbourne are shown below in Table 6 and gazetted for three main household types.

Table 6 -Specification of Income Ranges for the Greater Capital City Statistical Area of Melbourne

	Very low income range (annual)	Low income range (annual)	Moderate income range (annual)
Single adult	Up to \$26,200	\$26,201 to \$41,920	\$41,921 to \$62,860
Couple, no dependant	Up to \$39,290	\$39,291 to \$62,870	\$62,871 to \$94,300
Family (with one or two parents) and dependent children	Up to \$55,000	\$55,001 to \$88,020	\$88,021 to \$132,030

Source: Section 3AB of the *Planning and Environment Act 1987* – 1 July 2021

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

5.2 Real Estate Institute of Victoria Median Housing Price Data for Richmond

Table 7 below shows more recent property and rental median price data⁵ available from Real Estate Institute of Victoria (REIV) website for the suburb of Richmond. It indicates that the median Richmond house price as of the June quarter 2021 was \$1.46 million and the median rental house price was \$670 per week. The Richmond median unit price was \$710,000 and median rental unit price was \$440 per week.

The data also provides a breakdown of median property (house and units) and rental prices by the number of bedrooms the property contains.

Median house rental prices in Richmond range from \$600 per week for a 2 bedroom home to \$998 per week for a 4 bedroom home. Median unit rental prices range from \$350 per week for a 1 bedroom unit to \$800 per week for a 3 bedroom unit.

Table 7 – Richmond Median Property and Rental Prices by Bedroom Size (REIV June Qtr 2021 data)

	House	Unit
Buy		
1 BR	-	\$410,000
2 BR	\$1,250,000	\$677,750
3 BR	\$1,590,000	\$1,330,000
4 BR	\$2,240,000	-
Median house price	\$1.46 million	\$710,000
Rent		
1 BR	-	\$350
2 BR	\$600	\$523
3 BR	\$795	\$800
4 BR	\$998	-
Median rent price	\$670	\$440

Source: <https://reiv.com.au/market-insights/suburb/richmond>

⁵ Refers to property data for 12 months ending June 30 2021.

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

5.3 Affordable Rental Estimates

Table 8 below provides affordable weekly rent estimates based on the Section 3AB income ranges and on the assumption that no more than 30% of household income is spent on rent. Note that the 30% benchmark is presented for discussion purposes as it is a number quoted in the property industry, but not a legislated or agreed benchmark. It indicates that the affordable weekly rental figures will range as follows:

- from up to \$151 per week (for very low income singles) to \$363 per week for a moderate income single adult;
- from \$227 per week (for a very low income couple with no dependent) to \$544 per week for a moderate income couple with no dependents; and
- from \$317 per week (for a very low income family with dependent children) to \$762 per week for a moderate income a family (with one or two parents) and dependent children.

Table 8 - Affordable Weekly Rental Estimates Based on a Maximum of 30% of Weekly Income for Rent

	Very low income range (annual)		Low income range (annual)		Moderate income range (annual)	
Single adult	Up to	\$151	\$151	\$242	\$242	\$363
Couple, no dependant	Up to	\$227	\$227	\$363	\$363	\$544
Family (with one or two parents) and dependent children	Up to	\$317	\$317	\$508	\$508	\$762

Table 9 on the following page assesses which Section 3AB income ranges can afford to rent either a 1 bedroom, 2 bedroom or 3 bedroom unit (using REIV June quarter 2021 median unit price data) without exceeding 30% of monthly household income on mortgage repayments. Median rental house prices are excluded from this assessment as the proposed development will consist predominantly of apartment dwellings. The shaded figures in Table 9 represent the income ranges that can afford to rent either a 1 bedroom, 2 bedroom or 3 bedroom unit.

Table 9 also shows that for those seeking to rent a 1 bedroom unit, the income ranges which satisfy the criteria above are:

- A couple with no dependents on the upper end of the moderate income range; and
- Families (with one or two parents) and dependent children on the upper end of the low income range and the moderate income range.

Attachment 7 Attachment 7 - PLN21/0981 - 81 - 95 Burnley Street & 26 - 34 Doonside Street Richmond - Final Housing Diversity Report

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

For those seeking to rent a 2 bedroom unit, the income ranges which satisfy the criteria above are:

- A couple with no dependents on the upper end of the moderate income range; and
- Families (with one or two parents) and dependent children on the upper end of the low income range and the moderate income range.

For those seeking to rent a 3 bedroom unit, none of the income ranges satisfy the criteria above.

Table 9 – Richmond Affordable Rent Assessment⁶

1 Bedroom Unit: Richmond					
Median Rent for 1 Bedroom Unit		\$350.00			
	Very low income range (annual)	Low income range (annual)		Moderate income range (annual)	
Single adult	-\$205	-\$204	-\$117	-\$117	-\$1
Couple, no dependant	-\$132	-\$132	-\$1	-\$1	\$174
Family (with one or two parents) and dependent children	-\$45	-\$45	\$139	\$139	\$383
2 Bedroom Unit: Richmond					
Median Rent for 2 Bedroom Unit		\$523.00			
	Very low income range (annual)	Low income range (annual)		Moderate income range (annual)	
Single adult	-\$378	-\$377	-\$290	-\$290	-\$174
Couple, no dependant	-\$305	-\$305	-\$174	-\$174	\$1
Family (with one or two parents) and dependent children	-\$218	-\$218	-\$34	-\$34	\$210
3 Bedroom Unit: Richmond					
Median Rent for 3 Bedroom Unit		\$800.00			
	Very low income range (annual)	Low income range (annual)		Moderate income range (annual)	
Single adult	-\$655	-\$654	-\$567	-\$567	-\$451
Couple, no dependant	-\$582	-\$582	-\$451	-\$451	-\$276
Family (with one or two parents) and dependent children	-\$495	-\$495	-\$311	-\$311	-\$67

⁶ The figures shown represent the difference between median unit rents in Richmond and affordable weekly rental estimates for the three main household types and three income ranges.

5.4 Affordable Mortgage Estimates

Table 10 below provides affordable monthly mortgage estimates based on the Section 3AB income ranges, and on the assumption that no more than 30% of household income is spent on mortgage repayments. It indicates that the affordable monthly mortgage figures will range as follows:

- from up to \$655 per month (for very low income singles) to \$1,572 per month for a moderate income single adult;
- from \$982 per month (for a very low income couple with no dependent) to \$2,358 per month for a moderate income couple with no dependents; and
- from \$1,375 per month (for a very low income family with dependent children) to \$3,301 per month for a moderate income a family (with one or two parents) and dependent children.

Table 10 – Affordable Monthly Mortgage Estimates Based on a Maximum of 30% of Monthly Income on Mortgage Repayments

	Very low income range (annual)		Low income range (annual)		Moderate income range (annual)	
Single adult	Up to	\$655	\$655	\$1,048	\$1,048	\$1,572
Couple, no dependant	Up to	\$982	\$982	\$1,572	\$1,572	\$2,358
Family (with one or two parents) and dependent children	Up to	\$1,375	\$1,375	\$2,201	\$2,201	\$3,301

Table 11 on the following page assesses which Section 3AB income ranges have the capacity to purchase either a 1 bedroom, 2 bedroom or 3 bedroom unit (using REIV June quarter 2021 median unit price data) without exceeding 30% of monthly household income on mortgage repayments. The other key assumptions used in these calculations were:

- 2.32% variable home loan interest rate⁷;
- 30 year loan term;
- Buyers are eligible for the \$10,000 first home buyers grant;
- A 10% deposit made by the buyer (excluding the first home buyers grant); and
- first home buyer duty exemption for dwellings valued at \$600,000 or less.

⁷ Based on average interest rate July 2021, [Mortgage calculator - Moneysmart.gov.au](https://www.moneySMART.gov.au/mortgage-calculator)

Attachment 7 Attachment 7 - PLN21/0981 - 81 - 95 Burnley Street & 26 - 34 Doonside Street Richmond - Final Housing Diversity Report

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

The shaded figures in Table 10 represent the income ranges that can afford to purchase either a 1 bedroom, 2 bedroom or 3 bedroom unit.

For those seeking to purchase a 1 bedroom unit⁸, the income ranges which satisfy the criteria above are:

- Single adults on the upper end of the moderate income range;
- A couple with no dependents on the upper end of the low income range and the moderate income range; and
- Families (with one or two parents) and dependent children on the upper end of the low income range and the moderate income range.

For those seeking to purchase a 2 bedroom unit, the income ranges which satisfy the criteria above are:

- A couple with no dependents on the upper end of the moderate income range; and
- Families (with one or two parents) and dependent children on the upper end of the moderate income range.

For those seeking to purchase a 3 bedroom unit, none of the income ranges satisfy the criteria.

Table 11 – Richmond Affordable Unit Purchase Prices⁹

Unit / Bedroom Type	Median \$				
1 Bedroom Unit: Richmond					
Median 1 Bedroom Unit Price	\$410,000				
Monthly Mortgage Repayment	\$1,395				
	Very low income range (annual)	Low income range (annual)		Moderate income range (annual)	
Single adult	-\$740	-\$740	-\$347	-\$347	\$177
Couple, no dependant	-\$413	-\$413	\$177	\$177	\$963
Family (with one or two parents) and dependent children	-\$20	-\$20	\$806	\$806	\$1,906
2 Bedroom Unit: Richmond					
Median 2 Bedroom Unit Price	\$677,750				
Monthly Mortgage Repayment	\$2,325				
	Very low income range (annual)	Low income range (annual)		Moderate income range (annual)	

⁸ Median prices are based on Real Estate Institute of Victoria (REIV) data for June quarter 2021.

⁹ The figures shown represent the difference between median mortgage estimates in Richmond for units and affordable monthly mortgage estimates for the three main household types and three income ranges.

Attachment 7 Attachment 7 - PLN21/0981 - 81 - 95 Burnley Street & 26 - 34 Doonside Street Richmond - Final Housing Diversity Report

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

Unit / Bedroom Type	Median \$				
Single adult	-\$1,670	-\$1,670	-\$1,277	-\$1,277	-\$754
Couple, no dependant	-\$1,343	-\$1,343	-\$753	-\$753	\$33
Family (with one or two parents) and dependent children	-\$950	-\$950	-\$125	-\$124	\$976
3 Bedroom Unit: Richmond					
Median 3 Bedroom Unit Price	\$1,330,000				
Monthly Mortgage Repayment	\$4,590				
	Very low income range (annual)	Low income range (annual)		Moderate income range (annual)	
Single adult	-\$3,935	-\$3,935	-\$3,542	-\$3,542	-\$3,019
Couple, no dependant	-\$3,608	-\$3,608	-\$3,018	-\$3,018	-\$2,233
Family (with one or two parents) and dependent children	-\$3,215	-\$3,215	-\$2,390	-\$2,389	-\$1,289

5.5 Priority Target Groups for Social and Affordable Housing

Although there are a potentially a wide range of priority population target groups for social and affordable housing, much of the detail about who to prioritise will need to be further discussed with the prospective Registered Housing Association partner the developer is seeking to partner with.

However, based on the analysis presented in Section 6.6 the following rental demographic groups should be prioritised:

- Very low to low income lone person households;
- Very low to low income couples with no dependents; and
- Very low to low income families (with one or two parents) and dependent children.

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

6. Summary of Key Conclusions & Recommendations

6.1 Summary of Proposed Housing and Population Outcomes

In summary, the proposed development will:

- Generate between 545 to 645 apartments;
- Indicatively, 30% of all dwellings will be 1 bedroom apartments, 60% will be 2 bedroom and 10% will be 3 bedroom dwellings; and
- Based on 0.9 persons per bedroom, the subject site will generate a resident population of between approximately 880 to 1,045.
- Represent 4.3% to 5.0% of all dwellings in North Richmond by 2041;
- Represent 12.7% to 15.1% of all new dwellings to be delivered in North Richmond by 2041; and
- Represent 3.6% to 4.2% of the total population of North Richmond by 2041.

It is anticipated that the proposed development will broadly reflect the current profile of household types of people living in high density developments across the City of Yarra which currently consists of:

- A high proportion of lone person households (38%);
- Couple families with no children (30%);
- Group households (10%);
- One parent families (10%); and
- Couple families with children (9%).

6.2 Key Housing Diversity Outcomes

When compared to Richmond North and the City of Yarra, the proposed development will deliver:

- A much higher proportion of high-density apartments (100%) than Richmond North (57%) or the City of Yarra (37%);
- Subject to the outcome of discussions with prospective Housing Associations / Providers, a similar proportion of social housing as the City of Yarra (10%), but lower than the North Richmond (20%);
- A much higher proportion of 1 bedroom dwellings (30%) compared to North Richmond (21%) and the City of Yarra (18%);

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

- A much higher proportion of 2 bedroom dwellings (60%) compared to North Richmond (40%) and the City of Yarra (20%); and
- A much lower proportion of 3 bedroom dwellings (10%) compared to Richmond North (23%) and the City of Yarra (40%).

6.3 Social and Affordable Housing Outcomes

Overall Outcomes

- Given the anticipated dwelling yield ranging from 545 to 645 dwellings, the proposed development will likely generate a requirement for 55 to 65 affordable homes.

Private Rental

- For those seeking to rent a 1 bedroom unit, the Section 3AB income ranges which satisfy the key criteria (i.e. no more than 30% of household income is spent on rent) are:
 - A couple with no dependents on the upper end of the moderate income range; and
 - Families (with one or two parents) and dependent children on the upper end of the low income range and the moderate income range.
- For those seeking to rent a 2 bedroom unit, the Section 3AB income ranges which satisfy the key criteria (i.e. no more than 30% of household income is spent on rent) are:
 - A couple with no dependents on the upper end of the moderate income range; and
 - Families (with one or two parents) and dependent children on the upper end of the low income range and the moderate income range.
- For those seeking to rent a 3 bedroom unit, none of the Section 3AB income ranges satisfy the key criteria.

Private Home Purchasers

- For those seeking to purchase a 1 bedroom unit¹⁰, the Section 3AB income ranges which satisfy the key criteria (i.e. no more than 30% of household income is spent on a mortgage) are:
 - Single adults on the upper end of the moderate income range;

¹⁰ Median prices are based on Real Estate Institute of Victoria (REIV) data for June quarter 2021.

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

- A couple with no dependents on the upper end of the low income range and the moderate income range; and
- Families (with one or two parents) and dependent children on the upper end of the low income range and the moderate income range.
- For those seeking to purchase a 2 bedroom unit, the Section 3AB income ranges which satisfy the key criteria (i.e. no more than 30% of household income is spent on a mortgage) are:
 - A couple with no dependents on the upper end of the moderate income range; and
 - Families (with one or two parents) and dependent children on the upper end of the moderate income range.
- For those seeking to purchase a 3 bedroom unit, none of the Section 3AB income ranges satisfy the key criteria.

Social Housing

- As illustrated by the case studies presented in Section 3.11 of this report, there are potentially a wide range of models and strategies for achieving the affordable housing requirement for the proposed development. Whilst there may be many potential models of provision the broad types can be summarised as:
 - **Purchase land and / or dwellings** (the Registered Housing Association may purchase land / or dwellings directly from its own funds or via equity partners, or via an application for some form of Government funding program - e.g. Federal Government NRAS program. External funding applications may not be successful and also take some time to be evaluated. Any arrangements between the Registered Housing Association and the developer are likely to be subject to the outcome of these processes.);
 - **Head lease agreements;**
 - **Management of dwellings; and**
 - **Rent-to-buy.**
- However, the developers of the subject site have indicated they have commenced discussions with a number of Registered Housing Associations (refer to Appendix 3.9 for more details of the Registered Housing Association sector) with a view to incorporating a component of social housing within the proposed development. The proposed development represents a significant contribution toward social and affordable housing outcomes in the local area including increasing the level of supply, and creating higher quality, better configured homes which better able to respond to changing demographic needs.
- Although there are a potentially a wide range of priority population target groups for the proposed social housing initiative, much of the detail about who to prioritise will need to be

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

further discussed with the prospective Registered Housing Association / Provider partner. However, based on the analysis presented in the report the following rental demographic groups should be prioritised:

- Very low to low income lone person households;
- Very low to low income couples with no dependents; and
- Very low to low income families (with one or two parents) and dependent children.

6.4 Proposed Affordable Housing Model

The proponent intends to pursue its affordable housing obligations (i.e. 10% of all new dwellings) by entering into an arrangement with a Registered Housing Association to purchase at a discounted rate the required number of dwellings (45 to 50 dwellings).

The broad process the proponent will undertake to pursue this option will consist of the following steps:

- The proponent will interview a range of interested Registered Housing Associations to partner with.
- Select one preferred partner.
- Confirm the number and type of apartments required and what the likely target population target groups for these dwellings will be.
- Determine where and how the social housing dwellings are to be located within the development.
- A broad model of provision will then need to be negotiated and confirmed between the developer and the Registered Housing Association.

6.5 Consistency with Key Housing Policies, Strategies and Plans

The proposed development is consistent with and supportive of the following key housing policies, strategies and plans reviewed as part of this report.

- Outcome 2 (Melbourne provides housing choice in locations close to jobs and services) of *Plan Melbourne 2017-2050*;
- *Homes for Victorians 2017* (Supporting people to buy their own home; promoting stability and affordability for renters; and increasing and renewing social housing stock);
- Key housing objectives of the **Yarra Planning Scheme**;
- The goals and directions of Council's *Housing Strategy (2018)* and *Social and Affordable Housing Strategy (2019)*. The Housing Strategy aims to ensure that a greater choice and

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

diversity of housing is available to residents in the municipality's established areas including North Richmond. The Social and Affordable Housing Strategy aims to ensure a diverse population lives in the municipality by increasing the supply of social and affordable housing suitable to households at various income levels and requirements.

- Council's policy guidance in relation to ***Affordable Housing Outcomes at Significant Developments***. This policy states that, when considering proposals for the rezoning of land for residential use that would allow the development of 50 or more dwellings, it is Council policy that a requirement (or requirements) will be included in the planning scheme provisions that secure at least 10% of the dwellings as affordable housing, which are to be transferred to a registered housing agency, or an alternative arrangement of equal or better benefit, to the satisfaction of Council.

6.6 Implementation Plan

It is recommended that the recommendations of this report should be implemented via a proposed Planning Agreement that applies to the subject site over multiple stages based on market forces and other factors.

The key requirement of the Planning Agreement is to ensure that 10% of all dwellings in the Development to be constructed and retained permanently as social housing dwellings.

The report has been based on a yield assumption ranging between 545 to 645. It is intended that should ultimate yield vary, the principles and requirements set out in this report can be scaled up or down.

An example of a Social Housing and Affordable Housing Planning Agreement from a recently approved development (New Epping in the City of Whittlesea) is provided in Appendix 4.

6.7 Monitoring

It is proposed that at the time of making a permit application for building works, the Owner nominate in the application the number of dwellings that are to be allocated as a Social or Affordable Housing in accordance with the proposed Planning Agreement.

At the completion of construction of the dwellings which are the subject of the permit, the Owner should provide a copy of the Occupancy Certificate from the Building Surveyor to Yarra City Council to show that the dwellings that have been constructed.

Attachment 7 Attachment 7 - PLN21/0981 - 81 - 95 Burnley Street & 26 - 34 Doonside Street Richmond -
Final Housing Diversity Report

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

Yarra City Council will be responsible for keeping a register of permit applications granted and the cumulative number of units approved in each category. Similarly, the register should also reference the number of dwellings constructed.

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

Appendices

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

Appendix 1. Overview of Social Housing

Social housing

Social housing is an umbrella term that includes both public housing and community housing. It generally indicates housing that involves some degree of subsidy.

Public housing

Public housing is housing owned and managed by Homes Victoria. The government provides public housing to eligible Victorians including people who are:

- unemployed
- on low incomes
- live with a disability or a mental illness
- who are at risk of homelessness.

Community Housing

Community housing is housing owned or managed by community housing providers. The community housing sector and government work in partnership to deliver more housing to more Victorians who need support. Community housing providers are highly regulated, not-for-profit organisations that specialise in housing the diverse range of tenants that require both public and affordable homes. Because of their not-for profit structure they can deliver services cost effectively and to high standards.

Weekly Income Limits for Eligible Households Applying for Social Housing in Victoria

The current weekly income limits for eligible households applying for social housing in Victoria are shown in Table 12 below.

Table 12 – Weekly Income Limits for Eligible Households Applying for Social Housing in Victoria

Household Type	Register of Interest	Priority Housing
Single	\$1,059	\$593
Couple	\$1,621	\$1,025
Family with one or two parents and dependent children	\$2,186	\$1,062
Each additional dependent	\$355	\$37
Asset limit	\$34,656 ¹¹	\$13,699 ¹²

Source: Social Housing Eligibility, HousingVic, 1 April 2021 (<https://www.housing.vic.gov.au/social-housing-eligibility>)

¹¹ The asset limit goes up to \$115,522 for households who need major or full disability modifications.

¹² The asset limit goes up to \$115,522 for households who need major or full disability modifications.

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

Appendix 2. Affordable Housing Specification of Income Ranges (1 July, 2021)

Affordable housing

Affordable housing is a broad term describing housing suitable for the needs of a range of low to moderate income households and priced (whether bought or rented) so these households can meet their other essential living costs.

Planning and Environment Act 1987
SECTION 3AB – SPECIFICATION OF INCOME RANGES

Order in Council

The Governor in Council under section 3AB of the **Planning and Environment Act 1987** and on the recommendation of the Minister for Planning, the Minister administering the **Planning and Environment Act 1987**, hereby specifies, with respect to affordable housing that is not social housing, the following ranges to be the very low income range, low income range and moderate income range respectively:

Table 1 – Greater Capital City Statistical Area of Melbourne

	Very low income range (annual)	Low income range (annual)	Moderate income range (annual)
Single adult	Up to \$ 26,200	\$ 26,201 to \$41,920	\$41,921 to \$62,860
Couple, no dependant	Up to \$ 39,290	\$ 39,291 to \$62,870	\$62,871 to \$94,300
Family (with one or two parents) and dependent children	Up to \$ 55,000	\$ 55,001 to \$88,020	\$88,021 to \$132,030

Table 2 – Rest of Victoria

	Very low income range (annual)	Low income range (annual)	Moderate income range (annual)
Single adult	Up to \$19,090	\$19,091 to \$30,550	\$30,551 to \$45,820
Couple, no dependant	Up to \$28,640	\$28,641 to \$45,820	\$45,821 to \$68,730
Family (with one or two parents) and dependent children	Up to \$40,090	\$40,091 to \$64,150	\$64,151 to \$96,220

Note: Table 1 and 2 are derived from annual area median income from the Australian Bureau of Statistics 2016 Census of Population and Housing and indexed using the Australian Bureau of Statistics Housing Group of the Consumer Price Index

This Order applies from 1 July 2021.

Dated: 22 June 2021

Responsible Minister:

HON. RICHARD WYNNE MP
Minister for Planning

SAMUAL WALLACE
Acting Clerk of the Executive Council

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

Appendix 3. Review of Statutory and Strategic Documents

3.1 Plan Melbourne 2017

Plan Melbourne 2017 is a metropolitan planning strategy that defines the future shape of the city and state over the next 35 years. Integrating long-term land use, infrastructure and transport planning, Plan Melbourne sets out the strategy for supporting jobs and growth, while building on Melbourne's legacy of distinctiveness, liveability and sustainability. The plan includes:

- 9 principles to guide policies and actions
- 7 outcomes to strive for in creating a competitive, liveable and sustainable city
- 32 directions outlining how these outcomes will be achieved
- 90 policies detailing how these directions will be turned into action

In addition, a separate 5-year Implementation Plan with 112 actions has been developed. Of particular relevance to this assessment are the directions and policies outlined in Outcome 2 (housing related directions). The directions and polices associated with these two outcomes are summarised below.

Outcome 02: Melbourne provides housing choice in locations close to jobs and services

Manage the supply of new housing in the right locations to meet population growth and create a sustainable city

- Maintain a permanent urban growth boundary around Melbourne to create a more consolidated, sustainable city
- Facilitate an increased percentage of new housing in established areas to create a city of 20-minute neighbourhoods close to existing services, jobs and public transport
- Plan for and define expected housing needs across Melbourne's regions
- Provide certainty about the scale of growth in the suburbs

Deliver more housing closer to jobs and public transport

- Facilitate well-designed, high-density residential developments that support a vibrant public realm in Melbourne's central city
- Direct new housing and mixed-use development to urban-renewal precincts and sites across Melbourne
- Support new housing in activity centres and other places that offer good access to jobs, services and public transport
- Provide support and guidance for greyfield areas to deliver more housing choice and diversity

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

- Require development in growth areas to be sequenced and staged to better link infrastructure delivery to land release

Increase the supply of social and affordable housing

- Utilise government land to deliver additional social housing
- Streamline decision-making processes for social housing proposals
- Strengthen the role of planning in facilitating and delivering the supply of social and affordable housing
- Create ways to capture and share value uplift from rezonings

Facilitate decision-making processes for housing in the right locations

- Support streamlined approval processes in defined locations
- Facilitate the remediation of contaminated land, particularly on sites in developed areas of Melbourne with potential for residential development

Provide greater choice and diversity of housing

- Facilitate housing that offers choice and meets changing household needs
- Provide a range of housing types in growth areas

3.2 Homes for Victorians (2017)

Homes for Victorians is the Victorian Government's response to the housing affordability crisis in Victoria. The documents details the following five broad initiatives:

1. Supporting people to buy their own home
2. Increasing the supply of housing through faster planning
3. Promoting stability and affordability for renters
4. Increasing and renewing social housing stock
5. Improving housing services for Victorians in need

The \$2.6 billion Homes for Victorians plan will increase and renew public housing and address homelessness.

The plan includes:

- \$1 billion Social Housing Growth Fund to increase the supply of social and affordable housing
- \$1.1 billion in financial support for the social housing sector

Attachment 7 Attachment 7 - PLN21/0981 - 81 - 95 Burnley Street & 26 - 34 Doonside Street Richmond - Final Housing Diversity Report

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

- Increased housing support for survivors of family violence through the \$152 million Family Violence Housing Blitz
- An extra 913 social housing dwellings through the \$120 million Social Housing Pipeline
- \$109 million to help move homeless Victorians into stable housing
- \$185 million Public Housing Renewal Program
- \$33 million to help 4,000 Victorians get a private rental home.

The Homes for Victorians plan should result in:

- Around 6,000 new social housing homes
- About 2,500 existing public housing residences renewed
- Help for 19,000 people who are homeless or at the risk of being homeless.

3.3 Statutory Amendments to the Planning and Environment Act 1987

Three important changes were made to the Planning and Environment Act 1987 that came into effect on 1 June 2018. Those changes were:

- Adding a new objective to the Act “to facilitate the provision of affordable housing in Victoria”.
- Providing a definition of affordable housing – “affordable housing is housing, including social housing, that is appropriate for the housing needs of very low, low, and moderate-income households”.
- Affirming the use of section 173 for voluntary affordable housing agreements “... a Responsible Authority may enter into an agreement with an owner of land for the development or provision of land in relation to affordable housing”.

The role of planning

Homes for Victorians: Affordability, access and choice (March 2017) and *Plan Melbourne 2017-2050* (March 2017) recognise the critical need to increase the supply of affordable housing.

Both strategies found that the planning system alone cannot address all issues relating to the affordability of housing, but acknowledged that there is a role for the planning system to facilitate the supply of affordable housing.

Objective of the changes

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

The objective of the recent changes to the Planning and Environment Act 1987 (the Act) is to facilitate the supply of affordable housing through the planning system.

The changes to the Act are also intended to provide a framework that allows for innovative approaches to the delivery of affordable housing and flexibility for parties when reaching an affordable housing agreement.

Section 173 agreements for affordable housing

One mechanism to facilitate the supply of affordable housing is through a voluntary agreement between a Responsible Authority (generally a local council) and a landowner to deliver affordable housing as part of new developments.

Such agreements are generally referred to as section 173 agreements. The power to enter into the agreement arises under section 173 of the Act.

Affordable Housing Definition

Meaning of affordable housing:

(1) For the purposes of this Act, affordable housing is housing, including social housing, that is appropriate for the housing needs of any of the following—

- (a) very low income households;
- (b) low income households;
- (c) moderate income households.

(2) For the purposes of determining what is appropriate for the housing needs of very low income households, low income households and moderate income households, regard must be had to the matters specified by the Minister by notice published in the Government Gazette.

(3) Matters specified by the Minister by notice under subsection (2) cannot include price ranges or prices for the purchase or rent of housing.

(4) In this section—

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

- **low income households** means households with a household income within the income range specified as a very low income range by Order under section 3AB (refer to Appendix 2 for a copy of the specification of ranges);
- **moderate income households** means households with a household income within the income range specified as a moderate income range by Order under section 3AB;
- **social housing** has the same meaning as in section 4(1) of the Housing Act 1983;
- **very low income households** means households with a household income within the income range specified as a very low income range by Order under section 3AB.

Order in Council specifying income ranges

(1) The Governor in Council, on the recommendation of the Minister, by Order published in the Government Gazette, may specify— (a) a range of household income as a very low income range; and (b) a range of household income as a low income range; and (c) a range of household income as a moderate income range (refer to Appendix 2 for a list these income ranges).

(2) An Order under this section may specify a range of household income as a very low income range, a low income range or a moderate income range by reference to statistical data published by the Australian Bureau of Statistics.

3.4 Yarra Planning Scheme

The Planning Scheme is a statutory document that guides and shapes development in the City of Yarra. It includes State Government provisions as well as local policies specific to Yarra and a strategic vision for the municipality.

Clause 16 Housing

- Planning should provide for housing diversity, and ensure the efficient provision of supporting infrastructure. Planning should ensure the long term sustainability of new housing, including access to services, walkability to activity centres, public transport, schools and open space.
- Planning for housing should include the provision of land for affordable housing.

Clause 16.01-1S Housing supply

Objective

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

To facilitate well-located, integrated and diverse housing that meets community needs.

Strategies

- Ensure that an appropriate quantity, quality and type of housing is provided, including aged care facilities and other housing suitable for older people, supported accommodation for people with disability, rooming houses, student accommodation and social housing.
- Increase the proportion of housing in designated locations in established urban areas (including under-utilised urban land) and reduce the share of new dwellings in greenfield, fringe and dispersed development areas.
- Encourage higher density housing development on sites that are well located in relation to jobs, services and public transport.
- Identify opportunities for increased residential densities to help consolidate urban areas.
- Facilitate diverse housing that offers choice and meets changing household needs by widening housing diversity through a mix of housing types.
- Encourage the development of well-designed housing that:
 - Provides a high level of internal and external amenity.
 - Incorporates universal design and adaptable internal dwelling design.
 - Support opportunities for a range of income groups to choose housing in well-serviced locations.
- Plan for growth areas to provide for a mix of housing types through a variety of lot sizes, including higher housing densities in and around activity centres.

16.01-1R Housing supply - Metropolitan Melbourne

Strategies

- Manage the supply of new housing to meet population growth and create a sustainable city by developing housing and mixed use development opportunities in locations that are:
 - In and around the Central City.
 - Urban-renewal precincts and sites.
 - Areas for residential growth.
 - Areas for greyfield renewal, particularly through opportunities for land consolidation.
 - Areas designated as National Employment and Innovation Clusters.
 - Metropolitan activity centres and major activity centres.

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

- Neighbourhood activity centres - especially those with good public transport connections.
- Areas near existing and proposed railway stations that can support transit-oriented development.
- Identify areas that offer opportunities for more medium and high density housing near employment and transport in Metropolitan Melbourne.
- Facilitate increased housing in established areas to create a city of 20 minute neighbourhoods close to existing services, jobs and public transport.
- Provide certainty about the scale of growth by prescribing appropriate height and site coverage provisions for different areas.
- Allow for a range of minimal, incremental and high change residential areas that balance the need to protect valued areas with the need to ensure choice and growth in housing.
- Create mixed-use neighbourhoods at varying densities that offer more choice in housing.

16.01-2S Housing affordability

Objective

To deliver more affordable housing closer to jobs, transport and services.

Strategies

- Improve housing affordability by:
 - Ensuring land supply continues to be sufficient to meet demand.
 - Increasing choice in housing type, tenure and cost to meet the needs of households as they move through life cycle changes and to support diverse communities.
 - Promoting good housing and urban design to minimise negative environmental impacts and keep costs down for residents and the wider community.
 - Encouraging a significant proportion of new development to be affordable for households on very low to moderate incomes.
- Increase the supply of well-located affordable housing by:
 - Facilitating a mix of private, affordable and social housing in suburbs, activity centres and urban renewal precincts.
 - Ensuring the redevelopment and renewal of public housing stock better meets community needs.
 - Facilitate the delivery of social housing by identifying surplus government land suitable for housing.

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

Clause 21.03 Vision

Under the Land Use heading the vision for Yarra includes:

“The City will accommodate a diverse range of people, including families, the aged, the disabled, and those who are socially or economically disadvantaged.”

Clause 21.04 Land Use

21.04-1 Accommodation and housing

Yarra is experiencing consistent residential growth. The Metropolitan Strategy, Melbourne 2030, identifies that this trend will continue. Yarra will continue to accommodate its share of the housing growth of the inner Melbourne Metropolitan region (comprising the Cities of Melbourne, Port Phillip, Stonnington and Yarra).

However, in order to protect valued character, and particularly its heritage places, the majority of new development will be accommodated on strategic redevelopment sites. These sites are generally located in, abutting, or close to activity centres, or in locations that offer good access to services and transport as required under Melbourne 2030. Other areas such as those in Mixed Use or Business zones will accommodate some population growth, while most established Residential 1 zones are stable and will experience minimal change. See Figure 2.

The diverse population of Yarra is valued by the community. In land use terms this will be managed by encouraging the provision of housing for all household structures, and for people with diverse needs. As the population ages, disabilities are becoming more prevalent and a wider range of housing is required. Provision needs to be made for housing that can be adapted to cater for people with disabilities and older persons.

In accommodating new development, the following are under threat and, where possible, must be retained:

- Housing appropriate for families with children
- A continued supply of good quality affordable housing. This includes both existing housing stock and new development
- Rooming house accommodation
- Private and public housing stock and residential care to cater for an ageing population.

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

Due to the historic mixed land use pattern of Yarra the interface of residential land use and commercial and industrial activities must be managed to provide reasonable amenity for residents. It is also important that new development provides high levels of amenity for existing and future residents.

Objective 1 To accommodate forecast increases in population.

- Strategy 1.1 Ensure that new residential development has proper regard for the strategies applicable to the neighbourhood in question identified in clause 21.08.
- Strategy 1.2 Direct higher density residential development to Strategic Redevelopment Sites identified at clause 21.08 and other sites identified through any structure plans or urban design frameworks.
- Strategy 1.3 Support residual population increases in established neighbourhoods.

Objective 2 To retain a diverse population and household structure.

- Strategy 2.1 Support the provision of affordable housing for people of all abilities, particularly in larger residential developments and on Strategic Redevelopment Sites.
- Strategy 2.2 Encourage residential development which allows people to age in their existing homes and communities by supporting a range of housing types.
- Strategy 2.3 Support the development of new residential care facilities.
- Strategy 2.4 Encourage the retention of dwellings in established residential areas that are suitable for families with children.

Objective 3 To reduce potential amenity conflicts between residential and other uses.

- Strategy 3.1 Ensure new residential development in the Mixed Use, Business 1, Business 2, and Business 5 Zones and near Industrial and Business Zones is designed to minimise the potential negative amenity impacts of existing non-residential uses in the vicinity.
- Strategy 3.2 Apply the Interface Uses policy at clause 22.05.
- Strategy 3.3 Ensure the location, design and operation of community facilities minimises the potential for negative amenity impacts on the surrounding area.
- Strategy 3.4 Discourage late night and 24 hour trading activities located near residential zones to minimize impacts on residential amenity.
- Strategy 3.5 Apply the Caretakers' Houses policy at clause 22.06.
- Strategy 3.6 Apply the Licensed Premises policy at clause 22.09.

Clause 21.08 Neighbourhoods

21.08-9 North Richmond (area north of Bridge Road)

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

This part of Richmond is largely residential and Victorian and Edwardian in its origins. The consistent character of the residential areas must be protected. The Victoria Street Major Activity centre runs along the northern boundary of this neighbourhood. This activity centre spans approximately 2 kilometres and incorporates a variety of land uses along its length – some vibrant and others more dormant in terms of activity and street frontage. Within the centre are three precincts:

Victoria Street West

- This precinct extends from Hoddle Street to Church Street. Asian cuisine, footpath trading and remnant industrial /warehouse areas dominate this vibrant area. The heart of the precinct is between Shelley and Church Streets and is characterised by a wide array of restaurants, bakeries, grocers, fishmongers, butchers, cafes, electrical and bric-a-brac shops.

Victoria Street link

- This precinct spans the area between Church Street and Grosvenor Street. This linking area includes residential and commercial development and a wide range of land uses. New development in this part of the precinct must include active frontages.

Victoria Street East

- This precinct incorporates the area between Grosvenor Street in the west and the Yarra River to the east. It includes a combination of retail, bulky goods, entertainment, residential and office land uses. The centre has a key interface with the Yarra River, which defines its northern and eastern boundaries. Significant parts of this precinct have recently undergone extensive redevelopment. With a number of key sites in the area still up for redevelopment, it will continue to evolve. New development must enhance the landscape qualities of the Yarra River and include active frontages on Victoria Street and the River. The Victoria Gardens development has the capacity to incorporate further residential development. To the east of Burnley Street is an area of mixed industrial character with a pocket of low rise residential development. Given the proximity of this area to Victoria Gardens and the limited demand envisaged for the reuse of large industrial sites, there is potential for a wider range of employment uses including offices to locate in this precinct. It is important to:
 - Protect the pocket of Residential 1 zoned land.
 - Provide land use close to the Victoria Gardens Activity Centre that supports the role of the centre i.e. residential plus mixed uses.
 - Continue to retain industry but allow office development further south and east of the Residential 1 and Mixed Use areas.

Implementation of strategies

Attachment 7 Attachment 7 - PLN21/0981 - 81 - 95 Burnley Street & 26 - 34 Doonside Street Richmond - Final Housing Diversity Report

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

The implementation of land use strategies in clause 21.04 includes: Supporting a change of use to residential plus mixed uses in the industrial area abutting the southern boundary of Victoria Gardens.

Clause 21.09 Monitoring and Review

21.09-1 Monitoring the Objectives of the Scheme

Issue	Indicator	Target	source
Land use			
Residential development	Increase in population numbers. Percentage of new dwellings on strategic redevelopment sites.	1.02% increase per annum until 2016	Australian Bureau of Statistics (ABS)
Housing diversity	Number of one, two, three + bedroom dwellings.	Housing diversity	ABS
Housing affordability	Increase in number of dwellings managed by social housing providers including Office of Housing	Affordable housing options	Council data
Employment	Number of local jobs.	No decrease in employment opportunities	ABS
Built form			
Heritage	Number of demolitions of contributory dwellings within heritage areas.	No loss of contributory buildings	Council data
Open Space			
Increase in area of Public Open Space	Total area (Ha.) of Public Open Space in the municipality	Increase in Public Open Space	Council data

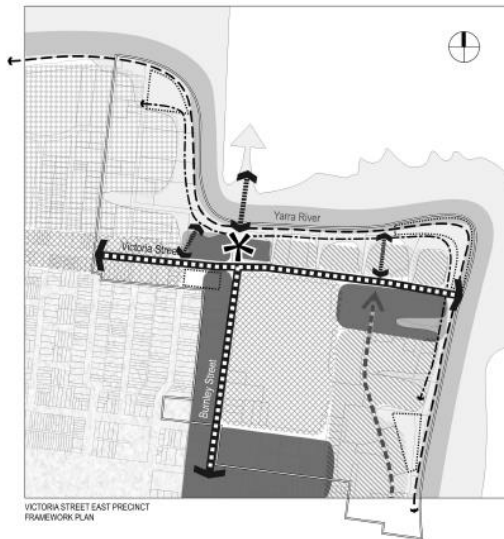
Clause 22.11 Victoria Street East Precinct Policy

This policy applies to all land in the Victoria Street East Precinct as shown on Map 1 forming part of this policy.

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

Map 1 Victoria Street East Precinct Framework Plan



LEGEND

- Improved pedestrian amenity and access along main roads
- Pathway in 'natural' setting
- Pathway in 'urban' setting
- Links to river corridor
- Pedestrian connection to River Street
- Precinct Boundary
- Native Landscape
- Existing Parklands/ Reserves
- Walmer Street Gateway
Pedestrian priority and improved Access to river
- Mixed Use
- Retail Focus
- Employment Focus
- Residential Focus
- Established Housing



To provide for higher intensity residential development within the Major Activity Centre where this will not be discordant with the built form and amenity of residential areas to the west and south of the Precinct.

Clause 58 Apartment Developments

Clause 58.02-3 Dwelling diversity objective

To encourage a range of dwelling sizes and types in developments of ten or more dwellings.

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

Standard D3

Developments of ten or more dwellings should provide a range of dwelling sizes and types, including dwellings with a different number of bedrooms.

Clause 53.20 Housing by or on Behalf of the Director of Housing

Purpose

- To facilitate the development of well-designed social housing and affordable housing to meet existing and future needs.
- To increase the social housing and affordable housing stock in Victoria.
- To ensure the development of housing by or on behalf of the Director of Housing does not unreasonably impact on the amenity of adjoining dwellings.

Clause 53.20-1 Application

This clause applies to an application under a provision of a residential zone (other than the Low Density Residential Zone) to construct or extend a dwelling, or to construct or extend a front fence, if the application is made by or on behalf of the Director of Housing. In this clause, Director of Housing means 'Director of Housing' as defined in the Housing Act 1993 and the body corporate established under the Housing Act 1993.

3.5 Yarra Housing Strategy (September 2018)

Yarra's population is growing. By 2031, an extra 32,970 people will move to Yarra and will live in an additional 13,400 homes. As more people choose to call Yarra home, housing growth needs to be planned and managed in a way that maintains the city's key characteristics, liveability and creates additional benefits, including:

- increased supply of affordable housing;
- greater choice and diversity of housing; and
- well-designed internal and outdoor communal spaces in new development.

The Yarra Housing Strategy includes four strategic directions that articulate Yarra's preferred growth strategy, which responds to the unique context of Yarra, including:

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

- Strategic direction 1: Monitor population growth, land capacity and evolving development trends in Yarra to plan for future housing growth and needs;
- Strategic direction 2: Direct housing growth to appropriate locations;
- Strategic direction 3: Plan for more housing choice to support Yarra’s diverse community; and
- Strategic direction 4: Facilitate the provision of more affordable housing in Yarra.

The adopted Yarra Housing Strategy has guided and informed decisions on how residential land in the municipality will evolve and develop into the future.

Following Council’s adoption of the new Yarra Housing Strategy, we commenced a successful program of work to implement the directions of the Housing Strategy, including the drafting of proposed new local housing planning policies being introduced via Amendment C269yara¹³.

3.6 City of Yarra Social and Affordable Housing Strategy (2019)

The Victorian Government is the main supplier and manager of public housing in the state and registered housing agencies are the main community housing providers. Although Yarra Council is not the main policy player, Council can support and contribute to social and affordable housing in a number of ways. Council’s overall strategy is to ensure that Yarra maintains a diverse population by increasing the supply of affordable housing for households with various income levels and requirements.

It will achieve this:

- through our role as a planning authority
- by contributing land, buildings and assets
- by partnering with and facilitating the work of other stakeholders
- by advocating to other levels of government

Council’s overarching strategy is to:

Ensure a diverse population by increasing the supply of social and affordable housing suitable to households at various income levels and requirements. The four strategic directions stated in this plan

¹³ The public Panel Hearing in relation to Amendment C269yara is scheduled to commence on Tuesday 5 October 2021 and conclude on Friday 29 October 2021.

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

flow from this overarching strategy and are based on the roles identified for local government to support an increase of social and affordable housing supply at the municipal level.

- STRATEGIC DIRECTION 1 (SD1): Be a leading local government in realising affordable housing outcomes at new developments across Yarra;
- STRATEGIC DIRECTION 2 (SD2): Make effective and prudent direct investments in social and affordable housing;
- STRATEGIC DIRECTION 3 (SD3): Partner, facilitate and engage with all stakeholders to increase social and affordable housing in Yarra; and
- STRATEGIC DIRECTION 4 (SD4): Continue to pursue evidence-based, strategic advocacy to other levels of government for improved housing outcomes.

Some of the more relevant directions identified by the Strategy include:

- SD1.1 Enhance Council policy and practice in regards to affordable housing agreements at significant developments
 - Direction 1.1.1 When land is rezoned to allow residential use, this positively impacts the site value and Council considers that it is reasonable to capture some of this value and direct it towards improving the provision of affordable housing in the municipality. Council will continue to seek provisions for at least 10% affordable housing to be transferred to a registered housing agency, or an alternative of equal or better benefit, to the satisfaction of Council, at the rezoning of land for residential use that allows more than 50 dwellings. The Policy Guidance Note: Affordable Housing Outcomes at Significant Developments (the Policy Guidance Note) has been updated to reflect this.
 - Direction 1.1.2 Council expects that an affordable housing agreement will be reflected in the Development Plan Overlay (DPO) or a S173 until the conditions are met, or for a predefined number of
 - years. The specific expectations are articulated in the Policy Guidance Note.
 - Direction 1.1.3 Council will continue to request Housing Diversity Reports from proponents and that these reports provide the information necessary for informed consideration. The specific expectations are articulated in the Policy Guidance Note.
 - Direction 1.1.7 Council will investigate whether there are particular circumstances where cash-in-lieu of dwellings delivered in-situ is either warranted or advantageous and how such funds could be managed (for instance a trust). Upon completion, Council will consider whether the Policy Guidance Note is to be amended to include this option.

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

- SD1.2 Seek quality, 'tenure blind' outcomes at developments which are to include affordable housing
 - Direction 1.2.1 Council expects that any affordable housing should be tenure blind and integrated with market housing, meaning that subsidised and private dwellings should not be able to be readily differentiated through either their appearance, quality or amenity and should have equal access to all communal indoor and outdoor spaces.
 - Direction 1.2.2 Council expects affordable housing dwellings to promote high accessibility standards by being in accordance with Livable Housing Design Guidelines' Silver level or higher.
 - Direction 1.2.3 Council expects affordable housing dwellings to be built to a high standard in terms of durability and energy-efficiency to decrease ongoing maintenance costs.

- SD3.4 Facilitate planning applications for registered housing agencies
 - Direction 3.4.1 Council will investigate options to support planning applications from registered housing agencies, including: 1) the streamlining of planning approvals, and 2) exemptions from third party appeals, parking requirements and/or height provisions. Upon completion a report will be provided to Council for its consideration.

3.7 City of Yarra Policy Guidance Note: Affordable Housing Outcomes at Significant Developments (Adopted November 12, 2019)

1. The purposes of this policy are:

- 1.1 The City of Yarra is a vibrant and diverse municipality. Through the Council Plan and other strategic documents, Council expresses its commitment to maintain and support a socially, economically and culturally diverse community.
- 1.2 Sustaining a diverse population requires a diversity of housing available at prices that can be afforded by households with very low, low and moderate incomes. Yarra City Council (Council) has a long and proud tradition of advocating for the best housing outcomes for its residents and is committed to working to increase the supply of social and affordable housing in the municipality.
- 1.3 Council wants to see effective partnerships between community housing providers and property developers to deliver affordable housing within the municipality.

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

- 1.4 This policy guidance note is provided so that applicants and other interested parties can understand Yarra City Council's expectations relating to affordable housing outcomes at significant developments (providing 50 or more dwellings).
- 1.5 This policy guidance note includes information on Registered Housing Associations and Registered Housing Providers in the state of Victoria.
- 1.6 This note may be updated from time-to-time by Council as and if required.

3. *Guidance*

- 3.1. When land is rezoned to allow residential use, this positively impacts the site value and Council considers that it is reasonable to capture some of this value and direct it towards improving the provision of affordable housing in the municipality.
- 3.2. When considering proposals for the rezoning of land for residential use that would allow the development of 50 or more dwellings, it is Council policy that a requirement (or requirements) will be included in the planning scheme provisions that secure at least 10% of the dwellings as affordable housing, which are to be transferred to a registered housing agency, or an alternative arrangement of equal or better benefit, to the satisfaction of Council.
- 3.3. A requirement for affordable housing that is imposed on the land when it is rezoned will attach to the land and must be considered by individuals, corporations or government entities in the purchase of the land for development.
- 3.4. In securing the delivery of affordable housing, Council will seek to ensure that the affordable housing will:
 - Meet identified local needs both initially and subsequently, once constructed and into the future.
 - Be affordable – as per the State government legislated income bands – both initially and subsequently, once constructed and into the future.
 - Be tenure-blind and integrated with market housing, meaning that subsidised and private dwellings should not be able to be readily differentiated through either their appearance, quality or amenity and should have equal access to all communal indoor and outdoor spaces.
 - Promote high accessibility standards by being in accordance with Liveable Housing Design Guidelines Silver level or higher.
 - Be built to a high standard in terms of durability and energy-efficiency to decrease ongoing maintenance costs.
- 3.5. Council encourages developers to meet their affordable housing obligations by forming partnerships with Registered Housing Agencies (see list below).

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

- 3.6. Council planning officers will offer the following services to developers to assist in the successful delivery of affordable housing:
 - 3.6.1. Interpretation and advice of planning policy and guidance, and what this means for an individual site.
 - 3.6.2. Assistance in calculating the required amount and mix of affordable housing.
 - 3.6.3. Advice on the standard and quality of the proposed housing, design, layout and other development control matters.
- 3.7. Affordable housing will often be secured through a requirement in a Schedule to the Development Plan Overlay (DPO) and/or an agreement made under Section 173 (s173) of the Planning and Environment Act 1987. A s173 is placed on the title to a site until the conditions are met, or for a predefined number of years, as agreed between Council, the developer/landowner and a registered housing agency.
- 3.8. As part of a DPO, Council will also require a Housing Diversity Report to be submitted for Council's consideration and approval. A Housing Diversity Report will need to include information such as:
 - 3.8.1. A demographic analysis of the types of people and households anticipated to live within the development based on the proposed dwelling design and bedroom mix.
 - 3.8.2. A response to the 'Specified Matters under Section 3AA(2)' of the Planning and Environment Act 1987 with regard to the affordable housing that is proposed for the site.
 - 3.8.3. An outline of a preferred delivery model for achieving the agreed affordable housing outcome.
 - 3.8.4. Evidence of genuine discussions that have been had with registered housing agencies.
 - 3.8.5. Financial information as it pertains to project feasibility.
- 3.9. Council has identified a range of households that fall within the definition of affordable housing (as per the Planning and Environment Act 1987) and are unable to afford safe, secure and appropriate housing in the local market. These groups have specific needs – number of bedrooms, accessibility, supportive services etc. – that Council wants addressed at significant developments in Yarra. These households are:
 - 3.9.1. homeless persons,
 - 3.9.2. lower income renters,
 - 3.9.3. Aboriginal and Torres Strait Islander people,
 - 3.9.4. people with disabilities, and
 - 3.9.5. key workers in the local economy.

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

- 3.10. Further information about these groups, including implications for housing products and support services is available in the Yarra Social and Affordable Housing Strategy, 2019.

3.8 Public Housing - Affordable Housing Voluntary Contributions: Public Housing as an Affordable Housing Contribution (June 2018)

The Department of Health and Human Services has recently prepared a short guide, targeted at the development industry and Responsible Authorities, which provides an outline of how Public Housing relates to the delivery of Affordable Housing through voluntary agreements pursuant to section 173 of the *Planning and Environment Act 1987* (**Section 173 Agreements**).

Where a Responsible Authority and a landowner/developer wish to negotiate an outcome of the provision of Public Housing as an Affordable Housing contribution, the Responsible Authority and landowner must also obtain the Director of Housing's agreement to the proposal. The Director of Housing will, therefore, be a party to any Section 173 Agreement and must be satisfied that the portfolio's interests are met prior to signing any Section 173 Agreement.

The short guide details the processes, requirements and responsibilities associated with implementing the agreement. Matters covered include:

- At what stage in the town planning process a Section 173 Agreement be negotiated with the Director of Housing;
- Whether the Director of Housing will make a contribution towards the construction of Public Housing;
- Whether the Director of Housing accept cash or land contributions;
- Who will own the Public Housing dwellings once they are constructed;
- The types of ongoing liabilities the Director of Housing will accept;
- Minimum environmental sustainability requirements;
- Other Public Housing design requirements;
- Who determines what type of public housing is needed;
- Minimum dwelling sizes; and
- How to make a request to the Director of Housing.

3.8 Community Housing - Affordable Housing Agreements

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

Victoria has a highly-regulated not-for-profit community housing industry that partners with all levels of government, financiers, land owners, developers and builders to deliver affordable housing.

Several organisations are developers in their own right, delivering large-scale residential projects. Others are experienced in working with developers on projects that include affordable and social housing.

The Community Housing Industry in Victoria includes ten **Housing Associations** and 30 **Housing Providers** that collectively own and manage over 19,000 properties with a combined asset value of over \$2.3 billion.

The Community Housing Industry Association of Victoria (CHIA Victoria) works to support the growth of community housing as the most effective and efficient means of ensuring more disadvantaged Victorians can enjoy the dignity of safe, secure and appropriate housing.

The CHIA Victoria website (<https://chiavic.com.au/developers/>) includes a section on Affordable Housing Agreements with community housing organisations. Outlined below are some of the key considerations and advice to developers in relation to establishing affordable housing agreements.

- *In relation to voluntary negotiations, there is no standardised model that establishes whether a dwelling is to be gifted or sold to a Community Housing Organisation.*
- *Planning negotiations that require delivery of affordable housing could entail the gifting of completed dwellings or land to a Community Housing Organisation, or the sale of dwellings or land at an acceptable discount rate.*
- *The delivery model will depend on the negotiations between the land owner and the Council, which should be informed by the advice of a Community Housing Organisation.*
- *The capacity of a Community Housing Organisation to purchase a dwelling will vary.*
- *Developers are encouraged to read the Government Guidance on voluntary planning negotiations available here.*
- *Community Housing Organisations have limited financial capacity due to the low-income nature of their tenants.*
- *The capacity of a Housing Organisation to purchase a dwelling and the price they can pay will depend on a range of factors that need to be discussed with individual organisations.*
- *Each local council will determine its affordable housing needs. The Community Housing Industry Association Victoria strongly encourages councils to defer to Community Housing Organisations on specific housing requirements when negotiating planning outcomes.*

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

- *In the case of voluntary planning negotiations, the dwellings are expected to be owned by a Registered Housing Association, however there may be instances where a third party owns the dwellings and the Housing Organisation undertakes the management.*
- *Within the context of voluntary planning negotiations the Community Housing Sector's first preference is for land or built-form outcomes to be gifted as a result of planning negotiations. This may result in a smaller percentage of dwellings that would be achieved if dwellings were discounted.*
- *Land contributions may be an acceptable affordable housing contribution, particularly in larger rezonings. Any council conditions relating to the development of this land must be agreed by the proposed Community Housing Organisation recipient.*
- *There may be some circumstances where a cash contribution may be acceptable. Community Housing Organisations have the required skills and focus to ensure this contribution is appropriately utilised in an acceptable affordable housing outcome.*
- *The decision as to which organisation to partner with is up to the individual developers.*
- *Developers are encouraged to contact a number of Community Housing Organisations to determine organisation interest in your product offering and partnership proposal. For large developments a developer may want to undertake a more formal process to select a preferred community housing partner.*

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

3.9 Registered Housing Associations

Registered housing associations are larger, more complex businesses with the skills, expertise and resources to manage, maintain and grow a viable social housing portfolio. They expand new housing through construction, purchase or acquisition, using a mix of government funds and private sector investment. They also manage housing properties owned by them or leased from other parties, such as the Director of Housing.

The ten currently registered housing associations in Victoria are:

- Aboriginal Housing Victoria Limited
- Common Equity Housing Limited
- Community Housing (Vic) Ltd
- Housing Choices Australia Limited
- HousingFirst Limited
- Loddon Mallee Housing Services Ltd (trading as Haven; Home, Safe)
- Rural Housing Network Limited (trading as BeyondHousing)
- Unison Housing Limited
- Wintringham Housing Ltd
- Women's Housing Ltd

3.10 Housing Providers

Housing providers range in size and primarily manage rental housing portfolios for other parties, such as the Director of Housing (DoH). Some housing providers own properties, however their growth is small scale compared with housing associations. Housing providers often specialise in particular client groups which may include disability housing, aged tenants and youth housing.

The 29 currently registered housing providers in Victoria are:

- Active Community Housing Ltd
- Baptcare Affordable Housing Ltd
- BAYSA Ltd
- Centacare Housing Services Ltd
- EACH Housing Ltd
- Eastcoast Housing
- Eastern Suburbs Rental Housing Co-operative Limited

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

- Inner East Social Housing Group Limited
- Launch Housing Ltd
- Mallee Accommodation & Support Program Ltd
- Mission Australia Housing (Victoria)
- Northcote Rental Housing Co-operative Ltd.
- Northern Geelong Rental Housing Co-operative Ltd
- Prahran/Malvern Community Housing Inc.
- Salvation Army Housing (Victoria)
- Servants Community Housing Limited
- South Port Community Housing Group Inc
- SouthEast Housing Cooperative Ltd
- St Kilda Community Housing Ltd
- Sunshine/St Albans Rental Housing Co-operative Ltd
- The Haven Foundation Ltd
- United Housing Co-operative Ltd
- Uniting Housing Australia Limited
- Victorian Women's Housing Association Limited
- (trading as Women's Property Initiatives)
- VincentCare Community Housing
- WAYSS Limited
- West Turk Housing and Elderly Services Co-operative Ltd
- Williamstown Rental Housing Co-operative Ltd
- YWCA Housing

3.11 Social and Affordable Housing Funding Sources and Models of Provision

As pointed out by Marcus Spiller in his Evidence¹⁴ on social and affordable housing on behalf of the City of Port Phillip to Amendment GC81¹⁵ the housing needs of high priority population groups such as the homeless, marginal households and low income households experiencing rental stress, can be met in or combination of two ways – “1) income transfers to bring market rents down to affordable levels and (2) the provision of social housing, that is, housing permanently provided at an affordable rent by the Government or Government licenced not for profit community landlords” (page 4).

¹⁴ Evidence of Marcus Spiller Regarding Social & Affordable Housing (March 5, 2018), prepared on behalf of the City of Port Phillip as part of Amendment GC81 Planning Panel process.

¹⁵ On 5 October 2018 the Minister for Planning approved new planning controls (Amendment GC81) and released the final Fishermans Bend Framework.

Attachment 7 Attachment 7 - PLN21/0981 - 81 - 95 Burnley Street & 26 - 34 Doonside Street Richmond - Final Housing Diversity Report

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

He points out that social housing can be created in several ways including the following four main methods:

1. government acquisition and operation;
2. government provision of up-front and/or recurrent subsidies to registered non-government providers;
3. regulatory requirements for mandatory inclusion of social housing in new development, and
4. value capture or sharing, involving the sale of regulated development rights in return for social housing provision.

He argues that while 1 and 2 were traditionally the most dominant methods (both of which he refers to as a form of 'tax/transfer' strategy¹⁶), neither can be relied upon to fully deliver on all future social housing need (page 4). Methods 3 and 4 on the other hand are recent additions to the Victorian policy scene. Both the State and Federal Governments have policy and funding measures / initiatives to boost the supply of social housing. These are summarised in the Table 6 below:

Table 13 - Overview of State and Commonwealth Government Social Housing Initiatives

Homes for Victorians initiatives	Description
Victorian Social Housing Growth Fund	\$1 billion fund invested that produces approx. \$70m p.a. for: 1. Capital for new social and affordable housing on non-government land (DHHS/Treasury will run annual funding rounds 2. Rental subsidies for properties leased on the private market.
Loan Guarantee	Up to \$1 billion available as a loan guarantee program, to help Housing Associations access finance at affordable interest rates.
Loan Facility	A \$100 million revolving loan facility providing low cost, long-term subordinate loans to Housing Associations
Public housing transfer program	Management transfer of 4,000 public housing properties. \$3 million in establishment grants.
Inclusionary housing	Pilot on surplus government land to deliver 100 social homes (developer to receive discount on land) In major developments: voluntary arrangements with developers and land owners to provide affordable housing in exchange for rezoning. Social housing provided at nil cost,

¹⁶ Tax / transfer strategies involve the redistribution of resources raised through the general tax system towards particular social ends.

Attachment 7 Attachment 7 - PLN21/0981 - 81 - 95 Burnley Street & 26 - 34 Doonside Street Richmond - Final Housing Diversity Report

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

Homes for Victorians initiatives	Description
	affordable housing at discount.
Public Housing Renewal Program	\$185 million for complete replacement of social housing on nine sites in Brunswick, North Melbourne, Heidelberg West, Clifton Hill, Brighton, Prahran, Hawthorn, Northcote and Ascot Vale.
Social Housing Pipeline	Range of previously announced initiatives including tender involving new social housing on vacant and underutilised
Rooming Houses	Further \$20 million for upgrades to DHHS owned rooming houses \$10 million already allocated, remaining \$10 million by EOJ process
Victorian Property Fund	Up to \$100 million in grants over next four years
Commonwealth Programs	
National Housing Infrastructure Facility	\$1 billion made available in grant and loan funding to address infrastructure chokepoints that are impeding housing development in critical areas of undersupply. To be administered by the National Housing Finance and Investment Corporation
National Housing and Homelessness Agreement	Additional funding of \$375 million over three years to fund front line homelessness services
Tax incentives for private investment in affordable housing	Managed investment funds which provide affordable housing (managed by registered affordable housing providers) will qualify for a 60% (as opposed to the standard 50%) discount on measured capital gain for taxation purposes.
National Housing Finance and Investment Corporation	Will issue affordable housing bonds to provide cheaper and longer-term finance for the community housing sector

Aside from social housing, there are a broad range of other approaches that could contribute to affordable housing:

- Build-to-rent (BTR)** involves the construction of dwellings specifically for the rental market, rather than the more traditional route in which developers build dwellings to sell, either to owner occupiers or investors. BTR is a long-term investment vehicle with the developer either holding the building and collecting the rental profit over a prolonged period, or selling shares in the project to institutional or private investors who collect the apportioned profit. However, the Australian taxation system is not currently optimised to facilitate the BTR model as a larger source of affordable housing. However, this may change in future.
- Rent-to-own schemes** (also known as rent-to-buy schemes) are leasing agreements that afford renters the right to buy a home at the end of a pre-determined rental period, at a price agreed prior to signing the agreement. They make it easier for aspiring property owners to get onto the property ladder, by eliminating the need to save a traditional deposit and by delaying the need to secure finance from a bank or lending institution.

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

- A **shared equity scheme** is a way to share the cost of buying a home with an equity partner, such as a private investor, not-for profit organisation or government housing authority. The equity partner usually contributes around 20-25% of the property's purchase price, but could contribute more. In return, they are entitled to a share of the property's increase (or decrease) in value over time. The equity partner may own a percentage of the property, and/or may charge ongoing service fees. Under a shared equity scheme, a deposit is much lower, or may not be required at all. Typically the buyer will not need to pay lender's mortgage insurance (LMI) if the amount they borrow is 80% or less of the purchase price of the property.
- A **community land trust** is a not-for-profit entity that holds title to land in perpetuity, to create and steward perpetually affordable housing and provide community benefit. Community land trusts also steward land for agriculture, recreation and conservation. They underpin comprehensive community development through community-based, accountable governance and engaged membership.

3.9.1 The Village Alphington Case Study

As part of one of the first large scale inclusionary zoning projects in Victoria, 150 new affordable homes are going to be available for rent in Melbourne's north east by 2020. National not-for-profit housing provider Community Housing Ltd (CHL) formed a partnership with private developers Alpha Partners to deliver affordable housing in The Village Alphington. The proposed neighbourhood centre, including retail and a community hub, is to be developed on the former Amcor paper mill site, about 6.5 kilometres from Melbourne's CBD.

The Development Plan for 2,500 new dwellings with a mix of apartments, townhouses and single family homes, has been approved. The developers committed to include affordable dwellings for moderate income households as a result of the City of Yarra's 'inclusionary zoning' planning application requirements under Section 173.

As part of the partnership, CHL will lease one and two bedroom apartments from the developers at a fixed rent for 10 years that will be subleased to eligible tenants at below 75 per cent market rent. CHL will retain the titles to 10 apartments as part of the agreement.

The primary target tenant group will be essential service workers on moderate incomes who provide key services in the community such as nurses, hospitality workers, teachers and childcare specialists.

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

3.9.2 The Assemble Model Case Study - 393 Macaulay Road, Kensington

Assemble Communities have piloted a rent-to-own model. Prospective purchases sign a five-year lease with the option to purchase their home for an agreed fixed price at the end of the term, being today's market price with fixed 1.75% increases per year for approximately 7 years. Unlike other programs, the "Assemble Model" provides incoming residents with rent stability, transparency on price, financial coaching and community services to support a "path to home ownership" with an option to buy their apartment at the end of a five-year period. The success of this model is confined to inner city markets currently as it relies on strong capital growth during the planning, build and rent phase to build equity for the renter.

3.9.3 Nightingale Apartments Case Study, 55-63 Nicholson Street, Brunswick East

The Nightingale Model aims to deliver multi-residential housing in cities that are environmentally sustainable, financially affordable and socially inclusive.

Nightingale apartment projects are generally funded by a group of ethical investors who have all agreed to a maximum profit of 15%. By contrast, developers typically work on margins of about 20% and will benefit from higher sales prices or lower construction costs, where as under the Nightingale model, these risks or gains are shared with the buyers

Under the Nightingale model construction costs are driven down by not having second bathrooms, air conditioning, display suites and real estate agent commissions. This enables the housing to be substantially more affordable than a typical apartment.

Attachment 7 Attachment 7 - PLN21/0981 - 81 - 95 Burnley Street & 26 - 34 Doonside Street Richmond -
Final Housing Diversity Report

81-95 Burnley Street and 26-34 Doonside Street, Richmond

Housing Diversity & Adaptability Assessment

**Appendix 4. Example of a Social Housing & Affordable Housing Agreement – New
Epping Development**

Bryce
Raworth
CONSERVATION | HERITAGE

Heritage Analysis

81-95 Burnley Street & 26-34 Doonside Street
Richmond

December 2021



bryceraworth.com.au

246 Albert Road
South Melbourne VIC 3205
+61 3 9525 4299
info@bryceraworth.com.au

Contents

1.0	Introduction	2
2.0	Sources of Information	2
3.0	History	3
4.0	Description	9
5.0	Heritage Listings	16
6.0	Statements of Significance	17
7.0	Significance of Individual Elements	18
8.0	Heritage Overlay	19
9.0	Development Plan Overlay	22
10.0	Proposal	24
11.0	Discussion	25
12.0	Conclusion	28

|

1.0 Introduction

This report was prepared for Gurner™ in respect to the Development Plan proposed for the site at 81-95 Burnley Street and 26-34 Doonside Street, Richmond. It provides a heritage analysis of the Development Plan, as required under Schedule 15 to Clause 43.04 Development Plan Overlay:

Comprehensive Heritage Analysis

A Comprehensive Heritage Analysis must be prepared by a suitably qualified professional that includes the following, having regard to the heritage expert assessments prepared for Amendment C223yara:

- *Written description of the heritage places;*
- *History of the heritage places;*
- *Assessment of significance of individual elements; and*
- *Copies of the existing Statements of Significance of HO252 and HO375.*

2.0 Sources of Information

The following documents have been reviewed in the preparation of this report:

- The relevant provisions of the Yarra Planning Scheme, notably the Heritage Overlay at Clause 43.01, the Development Guidelines for Sites Subject to the Heritage Overlay at Clause 22.02, Built Form and Design Policy at Clause 22.10 and Schedule 15 to Clause 43.04 Development Plan Overlay.
- Heritage expert witness statements in relation to Amendment C223 to the Yarra Planning Scheme and associated panel report.
- *Heritage Gap Study: Review of 17 Heritage Precincts* (Context Pty Ltd, 2014).
- *City of Yarra Heritage Gap Study* (Graeme Butler & Assoc., 2007)
- *City of Yarra Heritage Review* (Allom Lovell & Assoc., 1998).

3.0 History

At the end of the nineteenth century, a number of tanneries were dispersed along the banks of the Yarra River on the east side of Burnley Street. Industrial development in this area continued into the early twentieth century with the establishment of the Vickers Ruwolt engineering works on Victoria Street around 1915.



Figure 1 Part of a 1902 MMBW plan showing the subject site (shaded red). It was largely undeveloped land at that time apart from two dwellings on the Burnley Street frontage and several dwellings fronting Appleton Street. 'Doonside' (Dame Nellie Melba's birthplace) was located to the north of the subject site. Source: State Library of Victoria.

Concerns about the impact of noxious industries eventually resulted in zoning by-laws that divided Richmond into residential and factory areas. In 1929, the east side of Burnley Street in the vicinity of Appleton Street was recommended as a factory area. This included land occupied by 'Doonside', Dame Nellie Melba's birthplace (where her father David Mitchell resided until his death in 1916). Doonside was demolished in February 1931 and the estate subdivided and offered for sale in May of that year, providing 34 lots on Burnley, Doonside, Appleton Streets and David Streets (the latter named after David Mitchell).

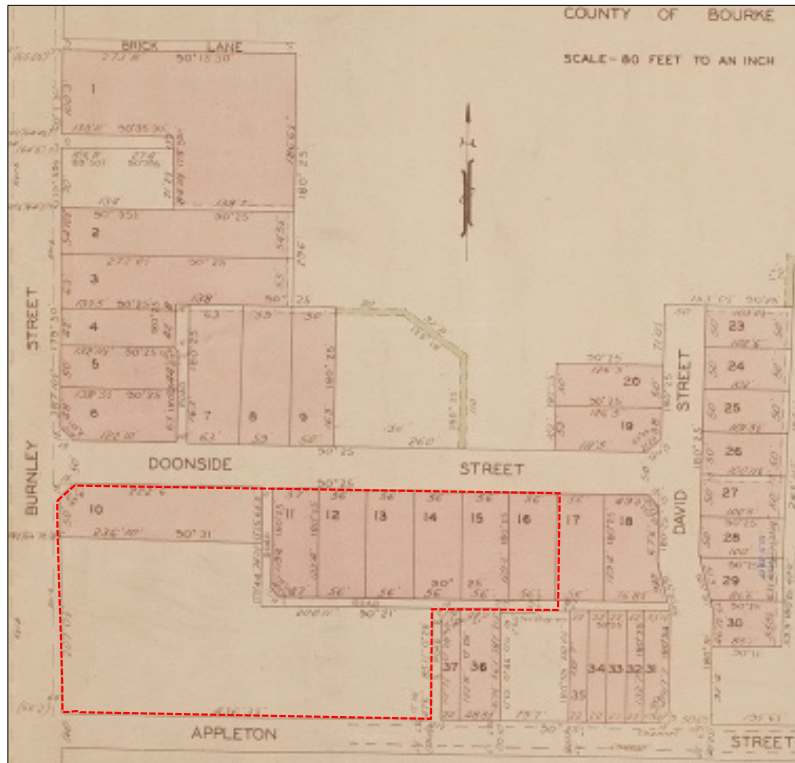


Figure 2 Part of the 1930 plan of subdivision for the Doonside Estate. The dashed lined marks the extent of the subject site. Source: Yarra Ranges Regional Museum.

Predating the Doonside Estate subdivision, a fibrous plaster factory was built c1925 on the north-east corner of Burnley Street and Appleton Street (first listed as in Sands and McDougall Directory as 89-95 Burnley Street). In 1930, the plaster factory was taken over by Russell Manufacturing Co. Pty Ltd, a firm allied with Repco. Established in 1926 as the Replacement Parts Co. (later abbreviated to become 'Repco') the company distributed automotive spare parts and accessories, stocking its own products and those of other firms. Russell Manufacturing are first listed at 89-95 Burnley Street in the 1931 Sands and McDougall directory. East of the factory, Appleton Street remained a residential streetscape.¹

¹ Sands and McDougall directory, 1931.

RepcO reportedly selected the Burnley Street site because it was bound on three sides by roads and could accommodate a reasonably straight and uninterrupted production sequence.² The foundry buildings were open sided according to a 1933 description:

*...climatic conditions are such that no glazing is necessary for the shops, nor is there need for heating, whilst obviously, ventilation is automatic. The main foundry shop, which is 100 feet by 200 ft, is divided into two main bays, wherein the two main products, pistons and rings are self contained units...*³

Around 1939, Repco/Russell Manufacturing constructed a double-storey office and laboratory building at present day 26 Doonside Street.⁴ In March 1942, the company purchased additional land and expanded northwards along Burnley Street towards the Doonside Street corner.⁵ A new building erected on this site in the same year was described in a contemporary advertisement:

*RepcO is closely associated with Australia's war effort on the industrial front and is engaged in producing its quota of munitions and war equipment as well as a steady flow of automotive parts for essential services. To meet the extra strain placed on the manufacturing division, a new plant and extension of its foundry were completed...*⁶

During the Second World War, Russell Manufacturing supplied the United States Army with pistons and piston rings.⁷ To meet wartime demand Repco acquired additional foundry floorspace in 1943, measuring 40 ft by 132 ft (12.2m x 40.2m).⁸ Also in 1943, residences at 5 and 7 Appleton Street disappear from Sands and McDougall directories. These sites were presumably absorbed into the expanding Russell factory.

A 1945 aerial photograph shows factory buildings encompassing almost all of the subject site apart from the eastern end of the Appleton Street boundary where a small number residences remained.

2 'A Modern Australian Foundry', in *Foundry Trade Journal*, September 7, 1933, p.129. Repco Ltd company records, University of Melbourne.

3 Ibid.

4 Allom Lovell & Assoc., *City of Yarra Heritage Review: Building Citations*, p.122.

5 Repco Company records, University of Melbourne Archives.

6 Sands and McDougall Directory, 1943, p. a58.

7 Repco Company records, University of Melbourne Archives.

8 Repco Company records, University of Melbourne Archives.

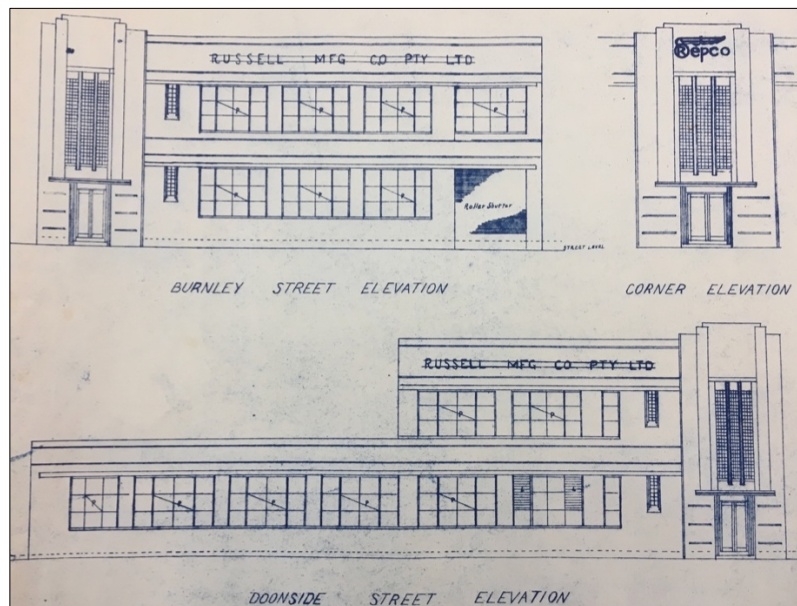


Figure 3 Undated (c1942) architectural drawings for the Repco building on the corner of Burnley and Doonside Streets. Source: Public Record Office Victoria.



Figure 4 A 1945 aerial photograph showing the Repco factory with large scale industrial development to its north (the subject site is indicated by a dashed line). Source: University of Melbourne Library.

In the post war years Repco steadily increased its business, thriving on its manufacture of parts for the Holden motor car. By 1958, the Russell factory had expanded further east along Appleton Street to take over sites at no.13 and 15. From 1962, Sands and McDougall directories list a Russell Manufacturing storage facility at 21-27 Appleton Street.⁹

Repco moved into high-performance engine construction in the 1960s in association with Formula 1 driver Jack Brabham. They developed a new V8 engine for Brabham, which had its first successful testing at the Burnley Street factory in March 1965.¹⁰ The following year, Brabham won the French, British, Dutch and German Grands Prix and World Formula One Driver's Championship. Around the same time the production of the Repco-Brabham engine was relocated from Richmond to another Repco facility at Maidstone.¹¹

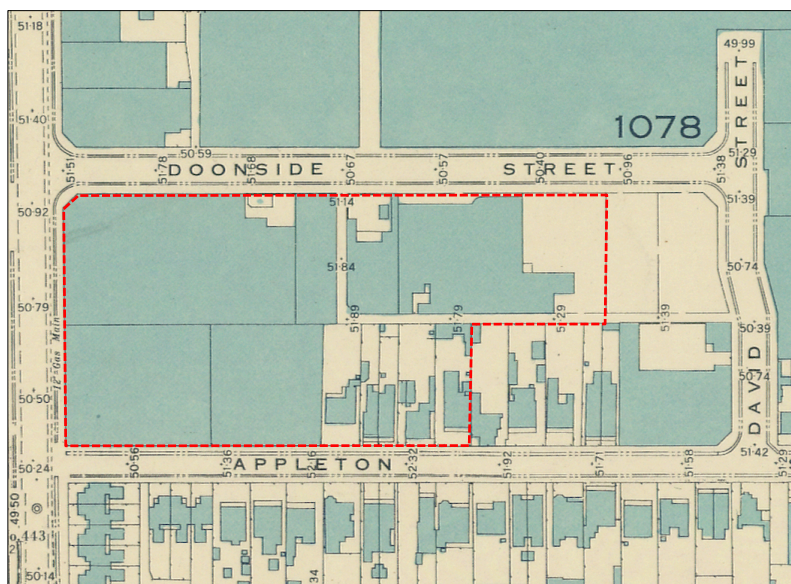


Figure 5 Extract from a 1950 MMBW plan showing most of the subject site developed with factory buildings but with five modest dwellings remaining on the Appleton Street frontage. Source: State Library of Victoria.

⁹ Sands and McDougall Directory, 1962.

¹⁰ www.motorsportsalmanac.com/mastuff/articles/RN_020310.pdf

¹¹ <http://repco.com.au/CA2571B70016E7AE/page/About+Us?OpenDocument&1=06-About+Us-&2=-&3=->



Figure 6 A 1957 photograph Repco building on the corner of Burnley Street and Doonside Street. Source: 'Repco Record' (University of Melbourne Archives).

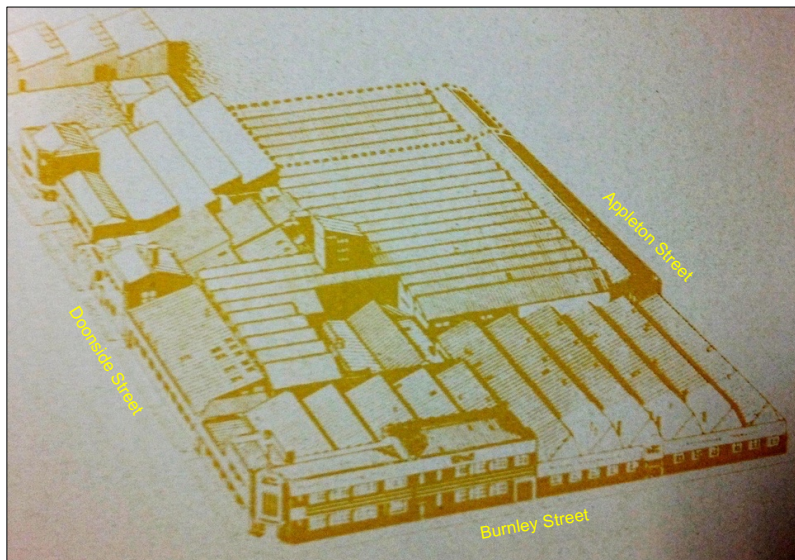


Figure 7 A c1962 illustration of the Repco factory complex. Source: University of Melbourne Archives.

4.0 Description

The subject site comprises a large parcel of land bound by Burnley Street to the west, Doonside Street to the north, Appleton Street to the south and recent multi-storey apartment development to the east. The site is, in part, occupied by the former Repco factory complex, which was constructed in stages from c1930 through to the late twentieth century.

The principal double-storey Moderne style building on the corner of Burnley and Doonside Streets was built for Repco in 1942. It has face brick walls and regularly spaced multi-pane steel framed windows with continuous concrete hoods providing a strong horizontal emphasis, counterposed by the vertical glass block windows above the corner entry.

The 1942 Repco building remains broadly intact in terms of its external form, but it has undergone various unsympathetic alterations. The alterations include an upper storey addition on the Doonside Street façade, removal of original signage, replacement of some original window frames and overpainting brickwork.

The southern end of the Burnley Street frontage (on the corner of Appleton Street) is occupied by a c1930s single-storey factory building with a saw tooth roof. It has face brick walls to the street boundaries with regularly spaced steel framed windows under a rendered parapet. The parapet has simple interwar Moderne style detailing in the form of horizontal incisions. The stepped pediment on the Burnley Street frontage is also characteristic of the interwar Moderne style. The street façade appears to remain largely intact to its interwar state but all the walls and rendered surfaces have been painted over and the Burnley Street entrance has been infilled. There is also a plainly designed first floor addition on the Burnley Street frontage (abutting the southern end of the 1942 double storey building).

The former Repco complex also includes a double-storey interwar Moderne style office building at 26 Doonside Street. This building has a parapeted facade with manganese and cream brick walls. The curved corner is surrounded by rendered vertical fins and a cantilevered concrete canopy above the entry. Port hole windows on the facade are typical of the Moderne style.

The balance of the site is occupied by a series of utilitarian factory buildings of one to two storeys, typically with sawtooth roofs and overpainted brick walls. There is also a modern tilt-up concrete building with a roof top carpark deck at the eastern end of the Appleton Street boundary.



Figure 8 The former Repco/Russell Manufacturing building on the corner of Burnley and Doonside Streets.



Figure 9 The Burnley Street façade.



Figure 10 *Interwar Moderne style former Repco building on the corner of Burnley and Appleton Streets.*



Figure 11 *The Appleton Street frontage to the subject site showing modern tilt up concrete building with multi-storey development on the adjacent site in the background.*



Figure 12 The Doonside Street frontage of the subject site looking east.



Figure 13 The former Repco building at 26 Doonside Street, located at the eastern end of the subject site.

In terms of its context, the subject site is located in a part of Richmond that was historically characterised by factories and warehouses of one to two storeys, but which is currently experiencing substantial change with a number of multi storey apartment buildings completed or approved for construction on redundant industrial sites.

The north side of Doonside Street, opposite the subject site, retains single and double-storey interwar industrial buildings (77 Burnley Street & 1 Doonside Street) and a large parcel of vacant land currently used as a carpark. The Victoria Gardens shopping centre backs onto the carpark.

The land to the immediate east of the subject site has been redeveloped with an apartment complex ranging from eight to thirteen storeys in height (36-44 Doonside Street and 27-41 Appleton Street). Further to the east, the single-storey façade of the former Builders' Steel Form Supply Co. was retained and incorporated into a multi-storey development (9-11 David Street).

The subject site also interfaces with a fine grain residential streetscape on the south side of Appleton Street. Notwithstanding that it is partially included in a Heritage Overlay precinct, Appleton Street does not present as a homogenous or highly intact heritage environment. The south side of the street contains a relatively diverse mix of late-Victorian, Edwardian and interwar residences in varying states of intactness, along with double storey infill at 14/14A Appleton Street and some architecturally non-descript single-storey post war workshops further to the east.



Figure 14 View from the Burnley Street looking east along Appleton Street. The subject site is to the left.



Figure 15 Double-storey interwar former factories on the north side of Doonside Street, opposite the subject site.



Figure 16 Carpark on the north side of Doonside Street, opposite the subject site. The Victoria Gardens shopping centre is visible behind the carpark.



Figure 17 *Recent multi-storey development at the eastern end of Appleton Street.*



Figure 18 *Multi-storey development at 9-11 David Street incorporating the single-storey façade of the Builders' Steel Form Supply Co.*

5.0 Heritage Listings

The land at 81-95 Burnley Street is partially covered by a site-specific heritage overlay HO375 – ‘Russell Manufacturing Pty Ltd later Repco’. The heritage overlay encompasses the pre-1945 office building and factory to a depth of 34 metres from the Burnley Street frontage. The former Repco Offices at 26 Doonside Street (at the rear of the subject site) is listed separately on the Heritage Overlay schedule as HO252. External paint controls apply to both HO252 and HO375 but there are no internal alteration controls or tree controls. The balance of the subject site has no Heritage Overlay controls.

South of the subject site, the residential properties at 8-38 Appleton Street form part of the Yarraberg Precinct (HO460). Separate Heritage overlays apply to the dwellings at 2-6 Appleton Street (HO374) and adjoining properties at 97-103 Burnley Street (HO369). An individual heritage overlay control applies to 24 Appleton Street (HO370).

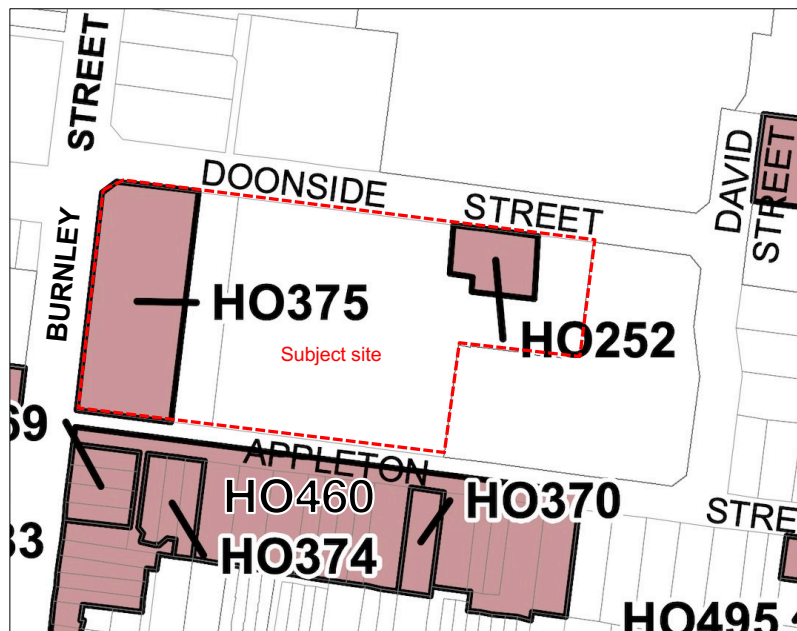


Figure 19 Map showing individual Heritage Overlay controls applying to 26 Doonside Street (HO252) and the front part of 81-95 Burnley Street (HO375).

6.0 Statements of Significance

The statements of significance for the buildings at 81-95 Burnley Street and 26 Doonside Street are reproduced below.

81-95 Burnley Street (HO375):

What is significant?

The Russell Manufacturing Company Pty Ltd (later Repco) building at 81-95 Burnley Street, Richmond is significant to the extent of the pre-1945 fabric. Built in stages for the Russell Manufacturing Company Pty Ltd, the brick (overpainted) building has a strong Moderne styling, with horizontal banding on the main elevations.

Post-1945 alterations and additions to the building are not significant.

How is it significant?

The Russell Manufacturing Company Pty Ltd (later Repco) building is aesthetically and historically significant to the locality of Richmond and the City of Yarra.

Why is it significant?

The Russell Manufacturing Company Pty Ltd (later Repco) building is aesthetically significant (Criterion E):

- *for its strong Moderne styling as ideally presented on a corner site.*
- *for the relationship with the significant Moderne style former Repco Building at 26 Doonside Street (HO256).*

The Russell Manufacturing Company Pty Ltd (later Repco) building is historically significant (Criteria A & H):

- *as tangible evidence of the large factories built during the interwar period when Richmond became a centre of manufacturing in Victoria.*
- *for the association with the successful motor spare parts firm of Russell Manufacturing Company Pty Ltd.*

26 Doonside Street (HO252):

What is significant?

The building, built c.1939 as an office and laboratories for the Russell Manufacturing Co., which later became Repco at 26 Doonside Street, Richmond is significant. It is a two storey Moderne style bichromatic brick building. It is approximately square in plan, with a curved corner at the northwest. The building is oriented north-west, and the composition of the main panels of brickwork is approximately symmetrical about a diagonal axis which runs through the corner entrance, which has a cantilevered concrete canopy. The north and west elevations are of face manganese brick, whilst large panels of cream brick give the appearance of wrapping around this, leaving a vertical strip of dark brown brick above the entrance. This corner element is decorated with a narrower vertical strip of horizontally-striped tapestry brickwork, and surmounted by three white painted vertical concrete fins. The north elevation features two bands of windows, each comprising three panels of multi-paned steel-framed windows with manganese brick spandrels and sills.

These windows turn the corner to the east elevation; to their right are two vertically placed circular windows, probably to a staircase. The west wall of the building was once attached to a single-storey building which has since been demolished, with the exception of part of the front wall and cream brick parapet which adjoins No. 26.

How is it significant?

The former Repco office and laboratory building at 26 Doonside Street, Richmond, is of local architectural significance of the City of Yarra.

Why is it significant?

It is architecturally and aesthetically significant as a particularly sophisticated example of a small building in the Moderne style, which exhibits an interesting composition of a limited palette of materials. It is thus distinctive for a building of its size and type. The demolition of other adjacent buildings has increased the aesthetic contribution of this building to an otherwise architecturally undistinguished industrial streetscape. (Criteria D & E)

7.0 Significance of Individual Elements

As noted, the subject site is covered by a Heritage Overlay to the extent of the Moderne style office/factory building at 81-95 Burnley Street (to a depth 34 metres) and the Moderne style building at 26 Doonside Street.

Within the heritage overlay curtilage, there is some variation in the degree of significance of different constituent elements. These may be categorised using a three-tiered classification system that divides the fabric into that which is of primary significance, that which is of secondary significance, and that which is of little/no significance.

Elements and spaces of primary significance are those that contribute in a fundamental way to an understanding of the significance of the site and are predominantly intact in form and fabric to the significant phase of the site's development.

Elements deemed to be of primary significance include:

- The Moderne style street facades to main factory/office building to the extent of their original pre 1945 form and fabric.
- The double storey Moderne style facade to 26 Doonside Street (including the east and west elevations).
- The unpainted face brickwork to 26 Doonside Street.

Elements and spaces of secondary significance are of a contributory nature in understanding the overall significance of the site. While they contribute to understanding the history and significance of the place, they are not of individual distinction with regard to the original plan form, fabric or function. They may not be completely intact to their original construction and form.

Elements of secondary significance include:

- Sawtooth roofs behind the principal street facades [for their ability to demonstrate the original industrial character of the place] but accepting that these roofs are largely concealed in views from the street and are not integral to the heritage character of the place.

Elements of little or no significance contribute little or nothing to an overall understanding of the significance of the site, and which post-date the identified period(s) of significance or which may be so heavily altered as to have lost whatever significance they originally had.

Elements of little or no significance include:

- All post war fabric (eg upper storey additions to Doonside and Burnley Streets, external paint finishes, modern signage and non-original windows/doors).
- The single-storey brick wall with modern garage door abutting the west side of 26 Doonside Street.
- All hard and soft landscape elements.
- All interiors (noting that internal alteration controls do not apply to the site).

8.0 Heritage Overlay

As noted above, heritage overlay controls apply to two discrete areas of the subject site. These parts of the site are therefore subject to the provisions of Clause 43.01 of the Yarra Planning Scheme, the Heritage Overlay. The schedule specifies that there are external paint controls but no internal alteration controls or tree controls under this overlay. The purpose of the heritage overlay is as follows:

To implement the Municipal Planning Strategy and the Planning Policy Framework.

To conserve and enhance heritage places of natural or cultural significance.

To conserve and enhance those elements which contribute to the significance of heritage places.

To ensure that development does not adversely affect the significance of heritage places.

To conserve specified heritage places by allowing a use that would otherwise be prohibited if this will demonstrably assist with the conservation of the significance of the heritage place.

Before deciding on an application, in addition to the decision guidelines in Clause 65, the responsible authority will need to consider, as appropriate:

- *The Municipal Planning Strategy and the Planning Policy Framework.*
- *The significance of the heritage place and whether the proposal will adversely affect the natural or cultural significance of the place.*
- *Any applicable statement of significance (whether or not specified in the schedule to this overlay), heritage study and any applicable conservation policy.*
- *Any applicable heritage design guideline specified in the schedule to this overlay.*

- *Whether the location, bulk, form or appearance of the proposed building will adversely affect the significance of the heritage place.*
- *Whether the location, bulk, form and appearance of the proposed building is in keeping with the character and appearance of adjacent buildings and the heritage place.*
- *Whether the demolition, removal or external alteration will adversely affect the significance of the heritage place.*
- *Whether the proposed works will adversely affect the significance, character or appearance of the heritage place.*
- *Whether the proposed subdivision will adversely affect the significance of the heritage place.*
- *Whether the proposed subdivision may result in development which will adversely affect the significance, character or appearance of the heritage place.*
- *Whether the proposed sign will adversely affect the significance, character or appearance of the heritage place.*
- *Whether the lopping or development will adversely affect the health, appearance or significance of the tree.*
- *Whether the location, style, size, colour and materials of the proposed solar energy system will adversely affect the significance, character or appearance of the heritage place.*

Proposals for redevelopment of heritage overlay sites must also be assessed in terms of Clause 22.02 – Development Guidelines for Sites Subject to the Heritage Overlay. Inter alia, Clause 22.02 has the following objectives:

- *To conserve the historic fabric and maintain the integrity of places of cultural heritage significance.*
- *To retain significant view lines to, and vistas of, heritage places.*
- *To preserve the scale and pattern of streetscapes in heritage places.*
- *To encourage the preservation, maintenance, restoration and where appropriate, reconstruction of heritage places.*
- *To ensure the adaptation of heritage places is consistent with the principles of good conservation practice.*
- *To ensure that additions and new works to a heritage place respect the significance of the place. To encourage the retention of ‘individually significant’ and ‘contributory’ heritage places.*

Clause 22.02 also provides the following policies the relevant to the current application:

22.02-5.1

Demolition Removal of Part of a Heritage Place or Contributory Elements

Encourage the removal of inappropriate alterations, additions and works that detract from the cultural significance of the place.

Generally discourage the demolition of part of an individually significant or contributory building or removal of contributory elements unless:

- *That part of the heritage place has been changed beyond recognition of its original or subsequent contributory character(s).*

- For a contributory building:
 - that part is not visible from the street frontage (other than a laneway), abutting park or public open space, and the main building form including roof form is maintained; or
 - the removal of the part would not adversely affect the contribution of the building to the heritage place.
- For individually significant building or works, it can be demonstrated that the removal of part of the building or works does not negatively affect the significance of the place.

[...]

22.02-5.7 New Development, Alterations or Additions

22.02-5.7.1 General

Encourage the design of new development and alterations and additions to a heritage place or a contributory element to a heritage place to:

- Respect the pattern, rhythm, orientation to the street, spatial characteristics, fenestration, roof form, materials and heritage character of the surrounding historic streetscape.
- Be articulated and massed to correspond with the prevailing building form of the heritage place or contributory elements to the heritage place.
- Be visually recessive and not dominate the heritage place. Be distinguishable from the original historic fabric.
- Not remove, cover, damage or change original historic fabric. Not obscure views of principle façades.
- Consider the architectural integrity and context of the heritage place or contributory element.

Encourage setbacks from the principal street frontage to be similar to those of adjoining contributory buildings; where there are differing adjoining setbacks, the greater setback will apply.

Encourage similar façade heights to the adjoining contributory elements in the street. Where there are differing façade heights, the design should adopt the lesser height.

Minimise the visibility of new additions by:

- Locating ground level additions and any higher elements towards the rear of the site.
- Encouraging ground level additions to contributory buildings to be sited within the 'envelope' created by projected sight lines (see Figure 1)
- Encouraging upper level additions to heritage places to be sited within the 'envelope' created by projected sight lines (for Contributory buildings refer to Figure 2 and for Individually significant buildings refer to Figure 3).
- Encouraging additions to individually significant places to, as far as possible, be concealed by existing heritage fabric when viewed from the front street and to read as secondary elements when viewed from any other adjoining street.

Discourage elements which detract from the heritage fabric or are not contemporary with the era of the building such as unroofed or open upper level decks or balconies, reflective glass, glass balustrades and pedestrian entrance canopies.

[...]

22.02-5.7.2 Specific Requirements (where there is a conflict or inconsistency between the general and specific requirements, the specific requirements prevail)

[...]

Industrial, Commercial and Retail Heritage Place or Contributory Elements

Encourage new upper level additions and works to:

- Respect the scale and form of the existing heritage place or contributory elements to the heritage place by being set back from the lower built form elements. Each higher element should be set further back from lower heritage built forms.
- Incorporate treatments which make them less apparent.

[...]

22.02-7 Decision Guidelines

Before deciding on an application the responsible authority will consider:

- Whether there should be an archival recording of the original building or fabric on the site.
- The heritage significance of the place or element as cited in the relevant Statement of Significance or Building Citation.

9.0 Development Plan Overlay

In addition to the Heritage Overlay, a Development Plan Overlay has been applied to the subject site (DPO15). The DPO include the following permit conditions relevant to heritage matters:

For development of parts of the site within the Heritage Overlay a condition that requires:

- The engagement of a suitably qualified person to:
 - Prepare a schedule of conservation works for the retained facades of the heritage buildings at 81-95 Burnley Street and the exterior form of the heritage building at 26-34 Doonside Street, including time frames for each action to the Responsible Authority's satisfaction;
 - Undertake archival recordings of the heritage buildings (81-95 Burnley Street and 26-34 Doonside Street) to the responsible authority's satisfaction prior to any demolition on the site; and
 - Prepare a heritage maintenance plan defining the ongoing cyclical repair and maintenance for the retained facades of the heritage buildings at 81-95 Burnley Street and the exterior form of the heritage building at 26-34 Doonside Street to the responsible authority's satisfaction.
- The permit holder to implement the conservation works and heritage management plan to the satisfaction of the responsible authority within the time frames provided.

It is a requirement of the DPO that a Heritage Impact Statement be prepared as follows:

- A Heritage Impact Statement prepared by a suitably qualified professional that assesses the impact of the proposed development on the heritage values of the heritage place.

- *A sightline analysis and 3D modelling of the proposed development from key view points in the public realm to enable an assessment of the visual impact of the development on the heritage places within the site.*

The DPO also requires that the Development Plan be in accordance with the vision for heritage sites:

- *To respect the scale and form of heritage places within and adjacent to the site.*
- *To provide for the conservation of heritage places within the site.*
- *To provide for the sensitive adaptive re-use of heritage buildings in accordance with the Comprehensive Heritage Analysis referred to in Clause 4.2 of this schedule.*
 - *describes the relationship between the heritage place and any neighbouring or adjacent heritage place/s; and*
 - *establishes principles for managing the significance of the heritage place and its relationship with its surroundings.*

Additionally, the Development Plan is to include the following built form guidelines to assist in the implementation of the vision:

- *Maximum building heights and envelopes responding to the site context;*
- *Building setbacks from street boundaries that ensure that new future development does not overwhelm the scale of the heritage buildings on the site and presents acceptably to lower scale buildings in the vicinity of the site, including dwellings on the south side of Appleton Street;*
- *Building setbacks from the facades of 81-95 Burnley Street that ensure the heritage building can be understood as having a three dimensional form;*
- *Preferred minimum upper level (above podium) setbacks of:*
 - *13 metres from the Appleton Street site boundary.*
 - *8 metres from the Burnley Street site boundary.*
 - *8 and 5 metres from the Doonside Street site boundary.*
 - *9m from habitable room windows or balconies of the Embassy building directly to the east and south*
- *Ensure new buildings are well spaced (preferred minimum 9 metres between buildings above podium);*
- *Buildings set back a minimum of 8 metres (above podium) from the heritage building at 26-34 Doonside Street;*
- *Inter-floor heights within the heritage buildings on the site to ensure they relate to the existing floor levels and/or fenestration patterns;*
- *Ensure the retention of key heritage fabric of:*
 - *the Appleton Street, Burnley Street and Doonside Street elevations of 81-95 Burnley Street (former Repco Factory) for the extent of the building within in heritage overlay; and*
 - *external form of 21 Doonside Street (former Repco Offices and Laboratories), while allowing for adaptive reuse.*
- *Active frontages to Burnley Street, Doonside Street, open space and the pedestrian lane, as appropriate;*
- *The design and use of materials must be respectful of the industrial heritage of the site and its surrounds to the north and east, as well as to the residential heritage to the south.*
- *Provide for high quality architecture and spaces throughout the site and respond to heritage places through, as appropriate [inter alia]:*

- *use contemporary architectural detail which complements and responds to the significant elements of the heritage buildings*
- *avoid highly articulated facades above retained heritage buildings,*
- *ensure there is solid built form behind retained facades and avoid balconies behind existing openings.*

10.0 Proposal

The Development Plan for the subject site proposes a mix of residential and commercial uses, along with public open space and pedestrian routes. New built form generally has a low rise podium expression to the street edges with a series of multi storey elements rising above.

The facades of the Burnley Street heritage building are to be retained and provided with new internal spaces for commercial uses. An upper storey addition is proposed for single-storey heritage façade at the corner of Burnley and Appleton Street. An apartment tower (Building A) sits behind the heritage façade with an 8 metre setback from Burnley and Doonside Streets and 11 metres setback from Appleton Street. Building A reaches an overall height of 49.6-metres and steps down in height to the south to create a low-rise interface with the existing one-two storey residential heritage overlay streetscape opposite the subject site.

The heritage building at 26 Doonside Street is to be retained with new public open space to its west and south west and a double-storey podium to its east and south. The podium is setback from the front and rear of the heritage building with the point of connection limited to a small-scale atrium structure that does not fully envelop the sides and rear and thus allows for the building to be read as a three dimensional entity. An apartment tower (Building C) rises above the podium with an 8 metre setback to the side and rear of the heritage building, and an overall height of 40.3 metres. It takes the curved forms of the interwar Moderne style heritage building as its design inspiration.

The central part of the subject site (outside of the Heritage Overlay) is to be developed with a 55.9 metre tall apartment tower with a curvilinear plan form (Building C) and a podium/streetwall reinforcing the height datum of the double-storey Burnley Street heritage façade. A smaller scale townhouse block (Building D) addresses the Appleton Street boundary with an 11 metre high streetwall and upper levels at a 13 metre setback (rising to a height of 25.4 metres).

The Development Plan also proposes a network of pedestrian lanes through the site, using bricks salvaged from demolition works as a paving material. The laneways create open space that physical separates the heritage facades from new podium elements whilst also breaking down the overall sense of scale and mass of new development.

11.0 Discussion

The Development Plan has generally been prepared in accordance with the Development Plan Overlay, most notably in terms of the objective of retaining significant heritage fabric identified in the DPO, ie: the external form of the former Repco building at 21 Doonside Street and the street elevations of former Repco offices and factory at 81-95 Burnley Street (to the extent of the Heritage Overlay).

New built form is to be respectful of the scale and form of heritage buildings within and adjacent to the site. A key design strategy is the use of podiums that maintain a streetwall height commensurate with the double-storey heritage facades. The Development Plan also prescribes a range of materials and finishes for new buildings and landscape elements that respond to the industrial heritage character of existing buildings and their predominate face brick materiality.

As per the DPO, multi-storey elements have 8 metre setbacks from the double-storey heritage facades to Doonside and Burnley Streets. It is recognised that the proposed 11 metre upper level setback of the Building A tower from the Appleton Street frontage is less than the (13 metre) setback sought by the DPO. This does not give rise to adverse or unacceptable heritage impacts, or otherwise create the potential for new built form to visual dominate the retained heritage façade or the heritage overlay streetscape on the south side of Appleton Street. The 2 metre difference in the upper level setback to Appleton Street represents a fairly minor departure from the DPO and does not bring about a pronounced change in built form outcomes given the relatively low height of the Building A tower at its southern end. The step down in the height of Building A, in combination with the 11 metre setback provides an appropriate transition to the low scale heritage fabric on Appleton Street.

Building A also includes a first floor addition in part with no setback from Appleton Street heritage façade, whereas the DPO shows a consistent five metre setback in the same location. The potential impacts of this aspect of the proposed Development Plan are mitigated by the upper level setback or 'indent' provided at the corner of Appleton and Burnley Street – this will help to maintain the legibility of the single-storey heritage façade and its visual prominence at the exposed corner location.

Furthermore, there are precedents to demonstrate that single level additions can be built at no or minimal setback from a retained heritage façade without being visually dominant or creating a situation where the host building is overwhelmed. This can be achieved by the use of a visually lightweight and visually recessive architectural expression for new works.

At the more sensitive interface with Appleton Street the proposed building heights accord with the DPO. In instances where the proposed building heights and upper level setbacks differ from the built form guidelines of the DPO, it should be noted that these are *preferred* outcomes. The proposed Development Plan meets the requirements of the DPO that it be *generally* in accordance with the Indicative Framework Plan.

This notwithstanding, the building heights proposed by the Development Plan are not significantly taller than those of the DPO, only being an additional 1.8 metres in the case of Building C. Building A is 7.6 metres taller than the height preferred for this part of the site, but its uppermost levels have a relatively small 'footprint' on account of the setbacks increasing as the building gains height. As such, the additional height to Building A does not result in a substantially greater visual bulk.

The DPO is predicated on the fundamental premise that the subject site is capable of accommodating large scale multi-storey development proximate to the heritage facades. Accepting this, the question of maximum building heights is largely a matter to be determined by non-heritage planning considerations, such as overshadowing, amenity and urban design.

In terms of changes to the fabric of the Heritage Overlay buildings, the Development Plan anticipates the removal of existing roofs behind the Burnley Street façade. The roofs to the double-storey component are entirely concealed by parapets and adopt a generic hipped form that does not contribute to the place's interwar Moderne heritage character or otherwise help to explain the original use of the building. The sawtooth roofs behind the single-storey façade on the corner of Burnley and Appleton Street are evidently related to the original use of the place as a factory but they are mostly concealed in views from street level.

The existing saw-tooth roofs are neither readily visible from the public realm nor a major element in the architectural composition of the place. Furthermore, the statement of significance for 81-95 Burnley Street makes no reference to existing roof forms. The building is considered to be significant for its strong interwar Moderne style, its relationship to the other Repco building at 26 Doonside Street, as tangible evidence of large factories built during the interwar period, and for the association with Russell Manufacturing (a company affiliated with Repco). These aspects of significance will not be diminished by the removal of the sawtooth roofs. The significance of the building primarily resides in the street facades and to that extent retention of the facades as proposed is deemed appropriate.

Accepting that the Burnley Street heritage building would be retained only to the extent of its street facades, this should not be judged inappropriate on the basis that facadism is inappropriate per se.

Clause 22.02 does not make any specific reference to facadism being something that is to be avoided, and there are many approved and constructed precedent developments in the City of Yarra that retain only the heritage facades – one example in the immediate environs of the subject site being the former Builders' Steel Form Supply Co. at 9-11 David Street (HO250). Also in the City of Yarra, the former MacRoberston's Confectionary factory garage on the corner of Gore and Johnston Street was retained as a façade only with a multi-storey envelope to its rear. Facadism has also been found to be an appropriate outcome in respect to the redevelopment of certain sites on the Victorian Heritage Register, notably the former Dimmey's store, Swan Street Richmond (VHR 2100).

Further to this issue, the DPO does not rule of the removal of existing fabric behind the heritage facades but instead seeks to mitigate the perception of a facadist outcome by ensuring that there is '*solid built form behind the retained facades*'. The Development Plan responds to this directive by providing enclosed and roofed over space behind the retained Burnley Street heritage façade. The smaller heritage building at 26 Doonside Street is retained 'in the round' albeit with a visually discrete atrium structure connection to the new built form to its rear and side.

In addition to the built form guidelines of DPO15, and as already noted, applications for redevelopment of the heritage building will still need to address the local heritage policies at Clause 22.02. Under Clause 22.02, applications that involve substantial demolition of built form in the heritage overlay curtilages will need to demonstrate that the works will not negatively affect the significance of the place.

Clause 22.02 recognises that industrial heritage buildings are generally not as sensitive to upper level additions as might be the case for residential heritage places. Upper level additions to industrial places are not required to be contained within a sightline envelope, as per residential buildings, nor does Clause 22.02 specify minimum setbacks for additions. Upper level additions to industrial buildings are encouraged to respect the scale and form of the existing heritage place and to incorporate treatments that make the additions less apparent. The principles laid out in Clause 22.02-5.7 also call for the external architectural treatment of any new building envelope to be visually respectful of its heritage context. The Development Plan anticipates such outcomes.

12.0 Conclusion

In conclusion, the proposed Development Plan has been prepared with careful regard for character and setting of the heritage buildings on the subject site. Impacts on adjacent heritage overlay places have also been taken into consideration.

The industrial history of the subject site is celebrated through the retention of significant heritage fabric and also in the indicative palette of building materials and architectural treatments throughout. The key objectives of the Development Plan Overlay are met in terms of respecting the scale and form of the heritage buildings and establishing a firm basis for managing the significance of the site and its relationship with its surroundings.

In addition to having been prepared in general accordance with the relevant DPO, the Development Plan follows precedent established by other completed and approved developments the City of Yarra involving industrial heritage places in respect to the extent of retention of heritage fabric and the height and upper level setbacks of new built form.

08 August 2022

Reeds Ref: 23917E

Attention: Tim Mills
Gurner™
168 Williams Road
Prahran Victoria 3181

Re: 81-95 BURNLEY STREET AND 26-34 DOONSIDE STREET, RICHMOND (HARRY THE HIRER)

Drainage Assessment (revised)- DPO15 of the Yarra Planning Scheme

Reeds Consulting have been engaged by Gurner™ to undertake a preliminary review of existing Council drainage system adjacent to the subject site located at 81 Burnley Street and 26-34 Doonside Street, Richmond to support the Development Plan application to the City of Yarra.

The aim of this drainage assessment is to undertake;

- a catchment analysis of the existing drainage system in Burnley Street and Doonside Street;
- a capacity assessment of the existing drainage system into which the future development will be discharged;
- a flood analysis which determines the overland flow depth in the road reserves during a 1 in 100 year flood.
- and respond to Council's comments of 30 March 2022

Reeds reviewed available Council drainage MOCS information, Vicmap and Lidar contours, and planning scheme overlays to facilitate the preliminary drainage assessment. Reeds also made a Legal Point of Discharge (LPOD) request with City of Yarra however this advice is still pending.

1. A Catchment Analysis of the Existing Stormwater Drainage System in Burnley Street and Doonside Street.

Reeds analysis of the drainage catchment for the area that contributes stormwater to the existing stormwater drainage system in Burnley Street and Doonside Street utilised the available contour information indicates that the existing landform surrounding the site is quite flat which makes accurate external catchment delineation difficult to achieve in the absence of detailed Council drainage information. Further to this, internal drainage in Victoria Gardens Shopping Centre located to the north of the site isn't captured on Council MOCS plans. We have made a conservative assessment of the external road catchments particularly in Burnley Street which does include the Victoria Gardens Shopping Centre existing multi-storey carpark fronting Burnley Street into the drainage catchment boundary.

Council has provided additional information in relation to their drainage network, which we have utilised to update our assessment.

In addition we have completed a site inspection of the existing building and associated roof drainage system to assess the site catchment and confirm that a portion of the existing roof does drain to Appleton Street (west) via a series of downpipes discharging to pop outs into the kerb and channel.

H:\23917\Overall\Correspondence\Drainage Memo\23917e - drainage assessment report-GT - Rev 3 - 2022 08 08.docx

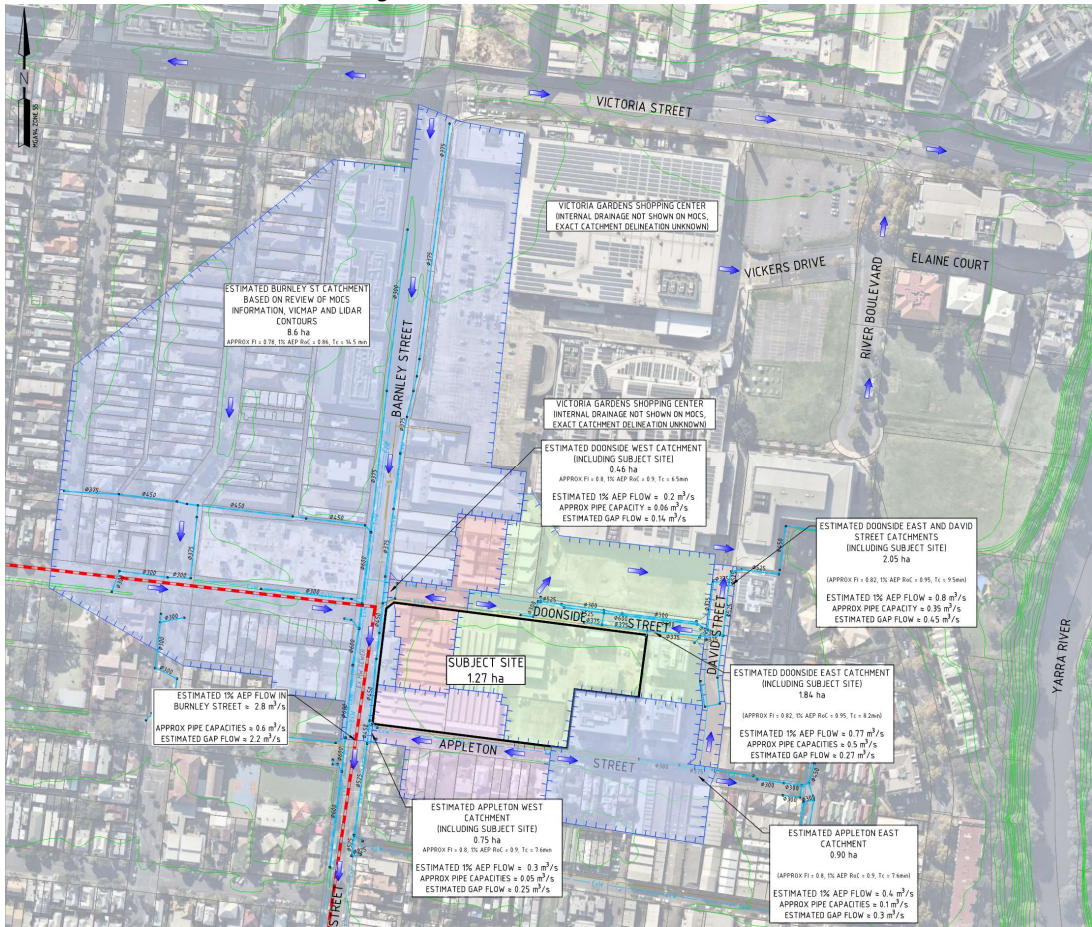
p (03) 8660 3000
ACN 079 642 818 ABN 17 251 075 871
www.reedsconsulting.com.au

survey@reedsconsulting.com.au
engineering@reedsconsulting.com.au
planning@reedsconsulting.com.au

Lvl 6, 440 Elizabeth Street
Melbourne Victoria 3000
GPO Box 2240
Melbourne Victoria 3001



Figure 1 – External Catchment Plan.



2. A Capacity Assessment for the Existing Drainage System into which the Future Development will be discharged

The capacity assessment of the existing drainage system has been based on Reeds adopting the drainage sizes shown on available Council MOCS information. Without access to detailed design plans or Council GIS information at the issue date of this report, it was assumed that the existing drains have been laid at constant depth hence their grades (and capacities) were estimated based on review of existing road longitudinal grades. Given the relatively flat nature of the landform this is a reasonable assumption. The detailed level and feature survey of Council's local underground drainage network will be completed at some time in the future.

Burnley Street

- The estimated capacity of ex 600Ø and 450Ø Council drains in the road reserve is approximately 0.6m³/s

Doonside Street

- The estimated capacity of ex 300 Ø, 375 Ø and 600Ø Council drains in the road reserve is approximately 0.5m³/s

The site does not drain into the existing drain in Appleton Street and hence there has not been assessment of the capacity of that drain.

3. A Flood Analysis which Determines the Overland Flow Depth within the Road Reserve During a 1 in 100 year flood

The flood analysis which determines the overland flow depth within the road reservations during a 1 in 100 year flood utilises the catchment analysis and existing capacity assessment of the drainage system to generate the gap flow measured against the PC-Convey capacity of the road reserve as per the following;

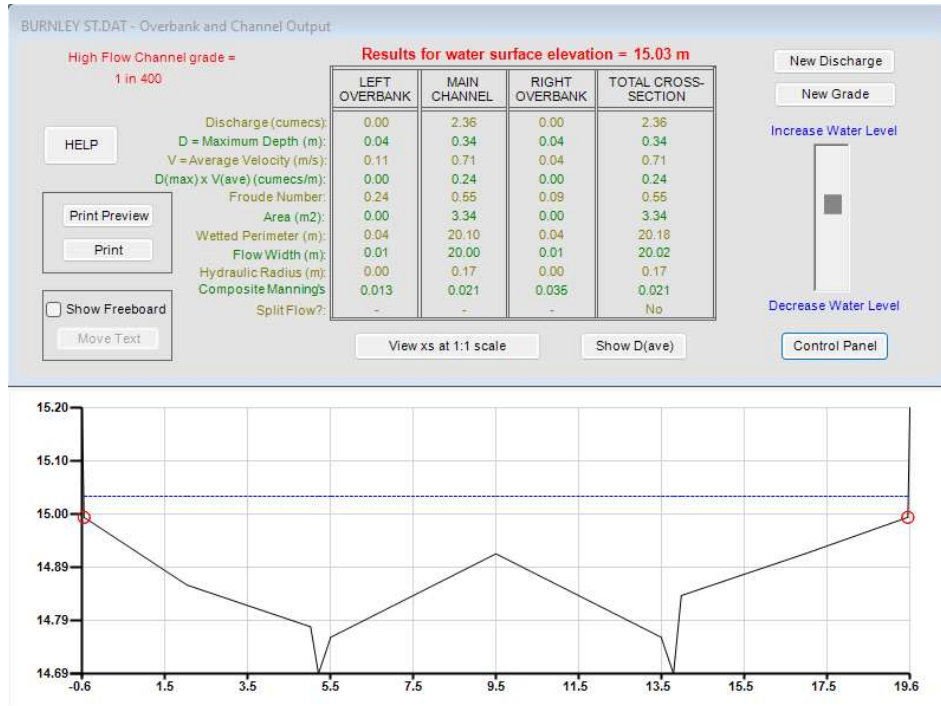
Estimated 1% AEP overland flows in Burnley Street:

- Our analysis suggests that Burnley Street adjacent to the site services a drainage catchment of approximately 8.6 ha
- Total 1% AEP flow in the road reserve is estimated at 2.8m³/s
- The estimated capacity of ex 600Ø and 450Ø Council drains in the road reserve is approximately 0.6m³/s
- The estimated 1% AEP overland gap flow in the road reserve is approximately 2.2m³/s
- Estimated flow depth in the road reserve is approximately 0.34m which is near the limit of safe overland flow requirements
- Our assessment suggests that in a 1% AEP storm event the capacity of Burnley Street will be exceeded with flows overtopping top of the footpath hence it is recommended to set finished floor levels above the footpath to ensure protection of the site to Council requirements
- PC-Convey section of Burnley Street is shown in Figure 2 below.
- Further advice will be sought from Council when the civil design is in progress, in particular the existing Council drainage system grades and capacities, as well as confirmation of our conservative external catchment area to confirm the external 1% AEP flows and flood depths in the existing road reserve.

Figure 2 – Estimated gap flow in Burnley Street



LAND SURVEYING
 CIVIL ENGINEERING
 PLANNING
 DEVELOPMENT CONSULTING



Estimated 1% AEP overland flows in Doonside Street:

- Our analysis suggests that Doonside Street falls in a westerly and easterly direction as shown in our plans
- The critical catchment is Doonside Street East which includes the proposed development (subject to Council LPOD advice)
- Doonside Street (East) is estimated to service a drainage catchment of approximately 1.84 ha
- Total 1% AEP flow is estimated at 0.77m³/s
- The estimated capacity of ex 300Ø, 375Ø and 600Ø Council drains in the road reserve is approximately 0.5m³/s
- The estimated 1% AEP overland gap flow in the road reserve is approximately 0.27m³/s
- Estimated flow depth in the road reserve is approximately 0.16m which appears to be contained within the existing road pavement based on available Lidar data
- Our assessment suggests that in a 1% AEP storm event Doonside Street (East) will contain local catchment flows
- PC-Convery section of Doonside Street is shown in Figure 3 below.

Figure 3 – Estimated gap flow in Doonside Street (East)

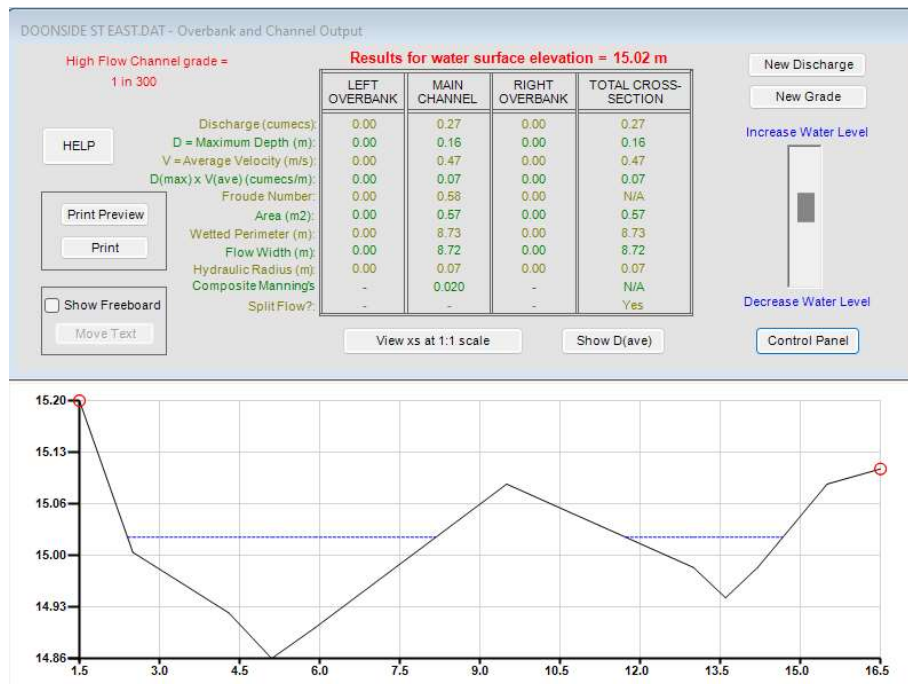


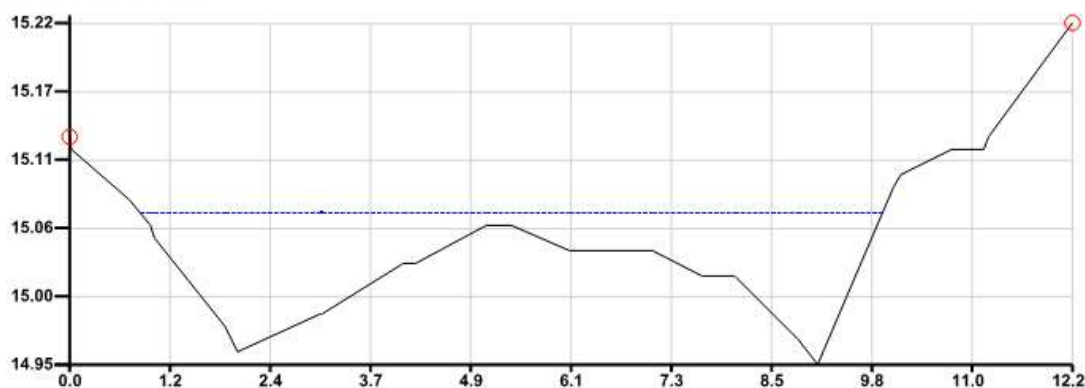
Figure 4 – Existing drainage system assessment plan

Estimated 1% AEP overland flows in Appleton Street:

- Our analysis suggests that Appleton Street falls in a westerly and easterly direction as shown in our plans
- The critical catchment is Appleton Street West which includes the proposed development (subject to Council LPOD advice)
- Appleton Street (West) is estimated to service a drainage catchment of approximately 0.75 ha
- Total 1% AEP flow is estimated at 0.25m³/s
- There are no underground drainage pipes in Appleton Street West.
- Estimated flow depth in the road reserve is approximately 0.12m which appears to be contained within the existing road pavement based on available Lidar data
- Our assessment suggests that in a 1% AEP storm event Appleton Street (West) will contain local catchment flows
- PC-Convey section of Appleton Street is shown in Figure 5 below.

PROJECT: Doonside
 Appleton St-West
 Print-out date: 05/08/2022 - Time: 9:45
 Data File: H:\23917\Overall\Design\PC-Convey\APPLETON ST - West.dal

1. CROSS-SECTION:



2. DISCHARGE INFORMATION:

100 year (1%) storm event

Total discharge = 0.25 cumecs

There is no pipe discharge

Overland / Channel / Watercourse discharge = 0.250 cumecs

3. RESULTS: Water surface elevation = 15.070m

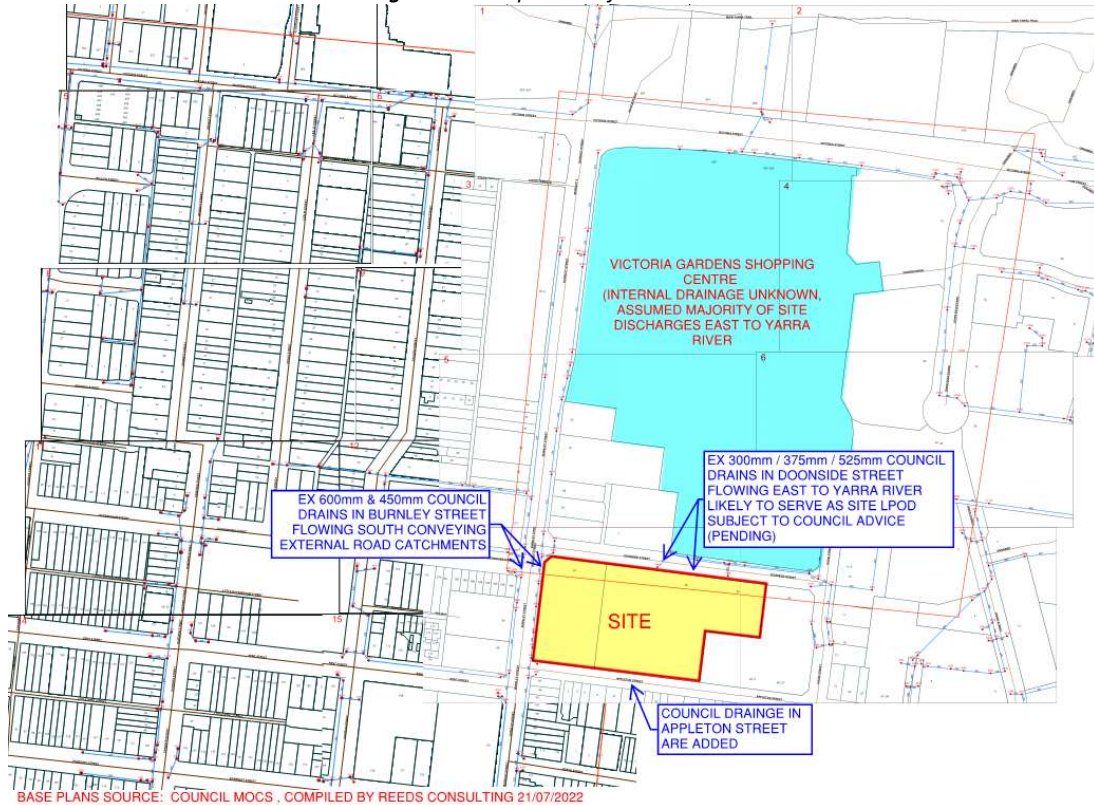
Existing 1% AEP flood levels in Burnley, Doonside & Appleton Street:

Based on our analysis the preliminary flood modelling, flood depth plan has been prepared, refer to appendix suggests that Doonside Street falls in

4. Compilation of Council MOCS Plans

As a part of our investigation, we had prepared the compilation of the Council MOCS plans, refer figure 5.

Figure 5 – Compilation of Council MOCS Plans



For any queries regarding this matter please contact the undersigned or Gordon Templeton of our office.

Yours faithfully,
for REEDS CONSULTING PTY LTD

Sasha Jelacic
Senior Drainage Engineer / Engineering Associate

Disclaimer

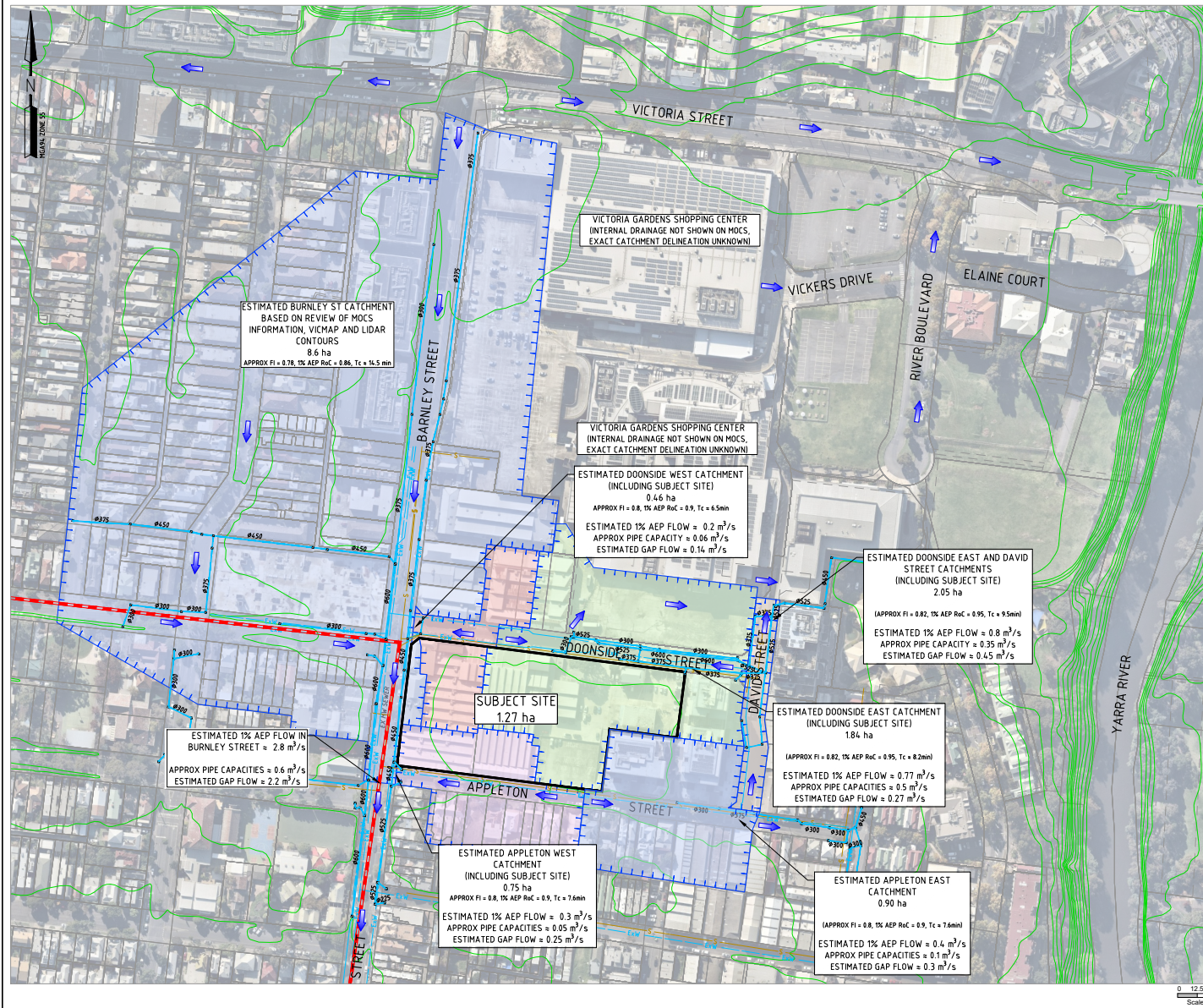
The information contained within this report has been derived from initial reports or information from the Authorities either verbally or in writing however, until such time as formal detailed investigations are undertaken, applications made and the applicable formal conditions, statutory permits and all relevant approvals obtained, it should only be used as a guide.



LAND SURVEYING
CIVIL ENGINEERING
PLANNING
DEVELOPMENT CONSULTING

ANNEXURE 1 – External Catchment Plan

Attachment 9 Attachment 9 - PLN21/0981 - 81-95 Burnley Street & 26-34 Doonside Street, Richmond - Final Drainage Report



PLAN21/0981/EXTERNAL DRAINAGE SERVICES PLANS/DP/01 - EXTERNAL CATCHMENT PLANNING

THIS DRAWING IS NOT TO BE COPIED OR SCALED

VERSION	REMARKS	DATE	BY
B	UPDATED PIPE DETAILS BASED ON COUNCIL ADVICE	26.07.22	MA
A	PRELIMINARY ISSUE	13.08.21	MA

DRAWN BY	H. AHOOGHALANDARI	DESIGNED BY	H. AHOOGHALANDARI
MELWAY	2H F4	CHECKED BY	X.XXXXX
DATUM	AHD	AUTHORISED BY	G. TEMPLETON

REEDS CONSULTING

LAND SURVEYING
CIVIL ENGINEERING
PLANNING
LANDSCAPE ARCHITECTURE
DEVELOPMENT CONSULTING

Scale 1:1250 @ A1

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVIDED ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

PRELIMINARY PLAN ONLY
NOT APPROVED FOR CONSTRUCTION

CITY OF YARRA
81 BURNLEY STREET
RICHMOND
EXTERNAL CATCHMENT PLAN

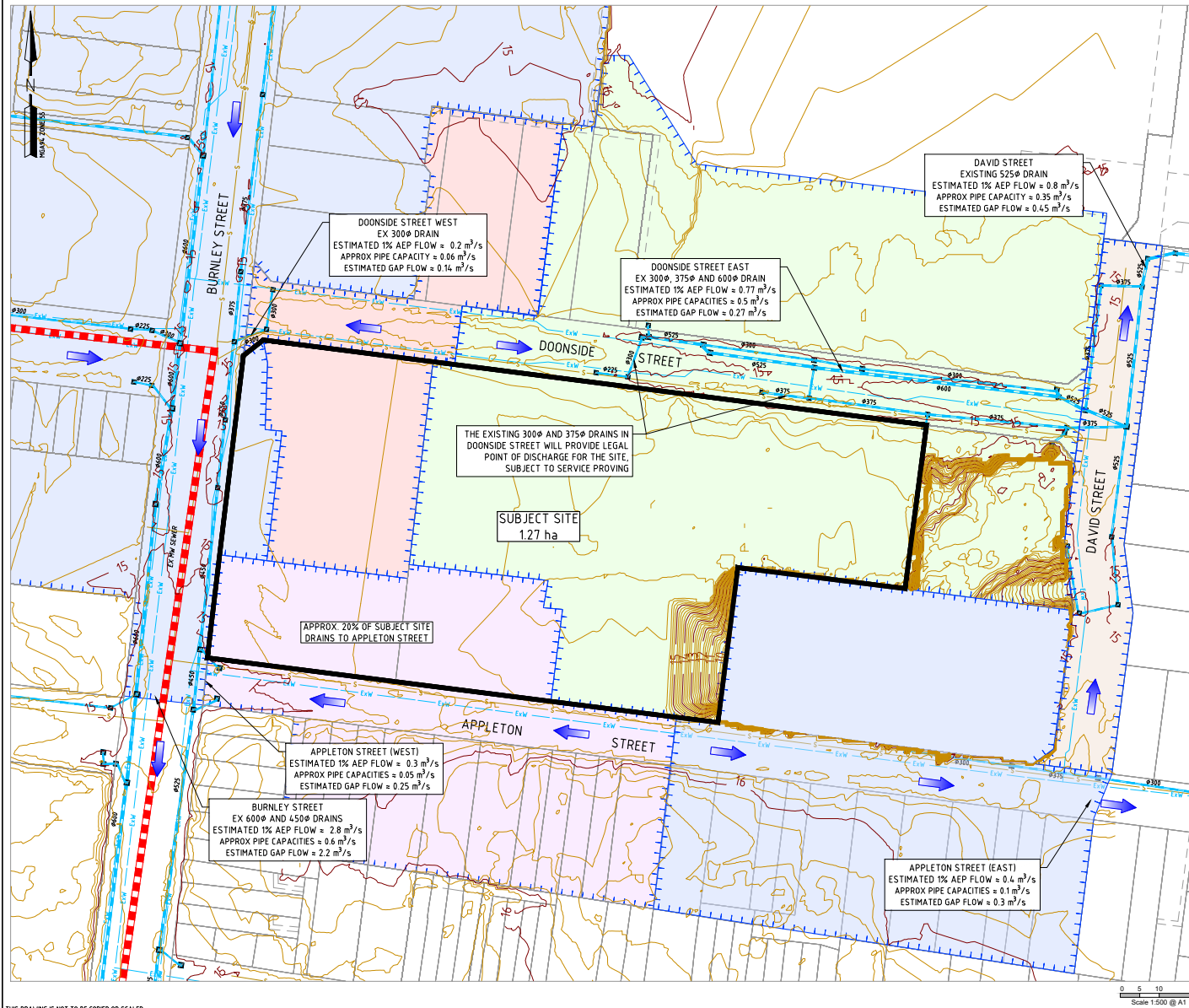
DRAWING No.	VERSION
OH1	B
REFERENCE	
23917E	
SHEET	1 OF 3



LAND SURVEYING
CIVIL ENGINEERING
PLANNING
DEVELOPMENT CONSULTING

ANNEXURE 2 – Existing Drainage System Assessment Plan

Attachment 9 Attachment 9 - PLN21/0981 - 81-95 Burnley Street & 26-34 Doonside Street, Richmond - Final Drainage Report



LEGEND

- SUBJECT SITE BOUNDARY
- CATCHMENT BOUNDARY
- ~ EX LIDAR SURFACE CONTOUR (1m)
- ~ EX LIDAR SURFACE CONTOUR (0.5m)
- INDICATIVE ALIGNMENT OF EXTERNAL MINOR/MAJOR CATCHMENT FLOWS
- INDICATIVE ALIGNMENT OF EXISTING COUNCIL DRAINAGE BASED ON MOCS INFORMATION
- - - INDICATIVE ALIGNMENT OF EXISTING MELBOURNE WATER SEWER BASED ON MOCS INFORMATION

NOTES

DETAILS SHOWN HERE ARE PRELIMINARY AND SUBJECT TO DETAILED DESIGN AND AUTHORITY APPROVAL

EXISTING COUNCIL DRAINAGE PIPES SHOWN ON THIS PLAN ARE BASED MOCS INFORMATION, TO BE CONFIRMED BY SURVEY

EXISTING COUNCIL DRAINAGE PIPE GRADES AND CAPACITIES ARE ESTIMATED BASED ON AVAILABLE CONTOUR INFORMATION AND ARE TO BE CONFIRMED BY FEATURE SURVEY OR COUNCIL

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVIDED ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

PRELIMINARY PLAN ONLY
NOT APPROVED FOR CONSTRUCTION

A:\2021\PROJECTS\LOADING SETS\MS PLANS\DRP1E_D01_CATCHMENT PLAN.DWG

THIS DRAWING IS NOT TO BE COPIED OR SCALED

Scale 1:500 @ A1

VERSION	REMARKS	DATE	BY
B	UPDATED PIPE DETAILS BASED ON COUNCIL ADVICE	26.07.22	MA
A	PRELIMINARY ISSUE	13.08.21	MA

DRAWN BY	H. AHOOGHALANDARI	DESIGNED BY	H. AHOOGHALANDARI
MELWAY	2H F4	CHECKED BY	X.XXXXX
DATUM	AHD	AUTHORISED BY	G. TEMPLETON

REEDS CONSULTING

LAND SURVEYING
CIVIL ENGINEERING
PLANNING
LANDSCAPE ARCHITECTURE
DEVELOPMENT CONSULTING

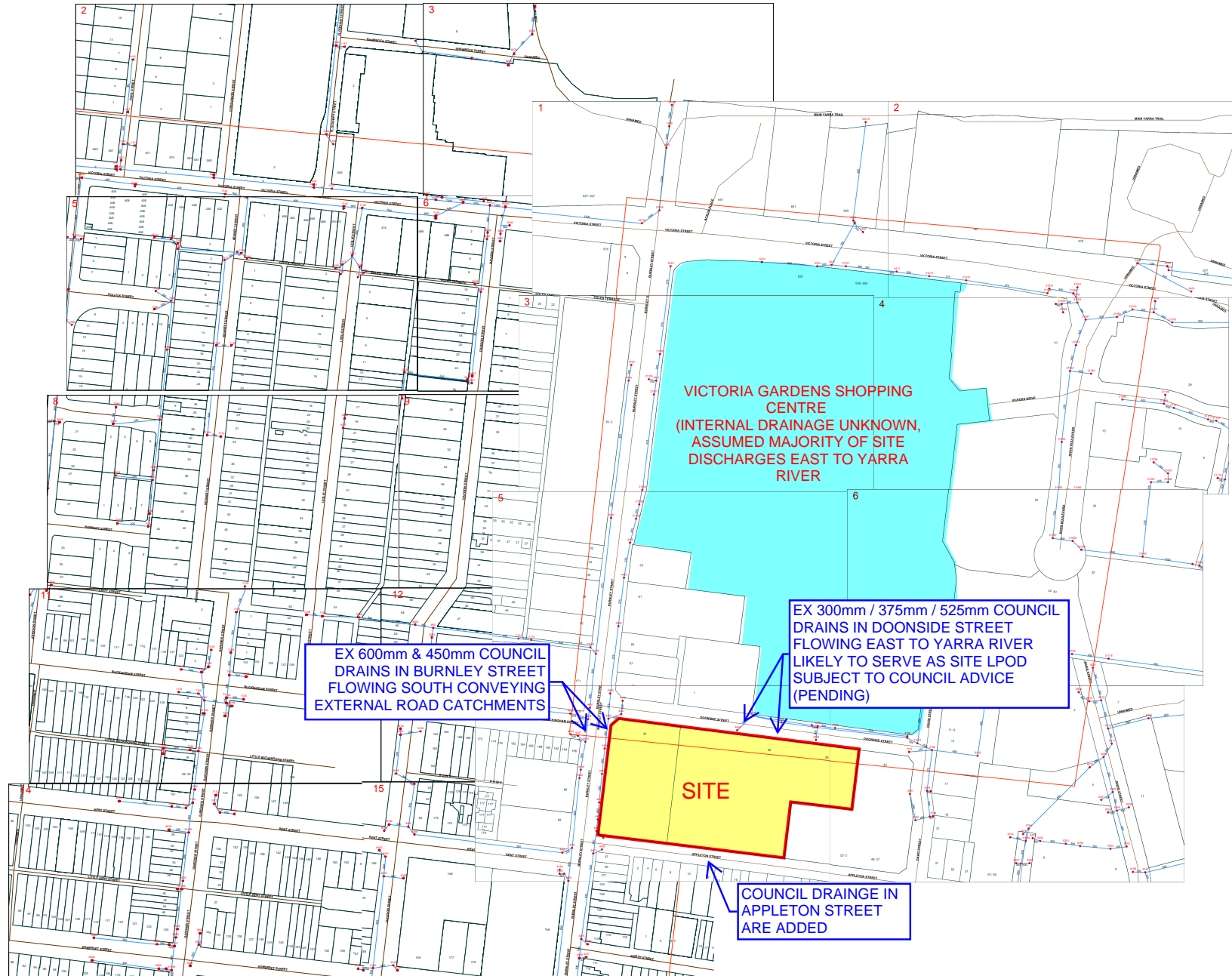
100A, ALEXANDRIA DRIVE, MELBOURNE VIC 3000
Tel: 03 9592 9000
www.reedsconsulting.com.au

CITY OF YARRA 81 BURNLEY STREET RICHMOND EXTERNAL DRAINAGE SYSTEM ASSESSMENT		DRAWING No. OCD1	VERSION B
		REFERENCE 23917E	
		SHEET 2	OF 3



LAND SURVEYING
CIVIL ENGINEERING
PLANNING
DEVELOPMENT CONSULTING

ANNEXURE 3 – Compilation of Council MOCS Information



EX 600mm & 450mm COUNCIL DRAINS IN BURNLEY STREET FLOWING SOUTH CONVEYING EXTERNAL ROAD CATCHMENTS

EX 300mm / 375mm / 525mm COUNCIL DRAINS IN DOONSIDE STREET FLOWING EAST TO YARRA RIVER LIKELY TO SERVE AS SITE LPOD SUBJECT TO COUNCIL ADVICE (PENDING)

COUNCIL DRAINAGE IN APPLETON STREET ARE ADDED

BASE PLANS SOURCE: COUNCIL MOCS , COMPIED BY REEDS CONSULTING 21/07/2022



LAND SURVEYING
CIVIL ENGINEERING
PLANNING
DEVELOPMENT CONSULTING

ANNEXURE 4 – Existing 1% AEP Flood Levels

Attachment 9 Attachment 9 - PLN21/0981 - 81-95 Burnley Street & 26-34 Doonside Street, Richmond - Final Drainage Report



LEGEND

- SUBJECT SITE BOUNDARY
- INDICATIVE ALIGNMENT OF EXISTING COUNCIL DRAINAGE BASED ON MOCS INFORMATION
- INDICATIVE ALIGNMENT OF EXISTING MELBOURNE WATER SEWER BASED ON MOCS INFORMATION
- 15.0 ESTIMATED EXISTING 1% AEP FLOOD LEVEL CONTOUR

FLOOD DEPTHS

- 0
- 0.02
- 0.05
- 0.09
- 0.15
- 0.25
- 0.30
- 0.40
- 0.55

ESTIMATED EXISTING 1% AEP FLOOD DEPTHS

NOTES

DETAILS SHOWN HERE ARE PRELIMINARY AND SUBJECT TO DETAILED HYDRAULIC MODELLING AND AUTHORITY APPROVAL

FLOOD MODELING METHOD: HECRAS V6 2-DIMENSIONAL FLOW (CELL SIZE: 0.5m x 0.5m)

FLOOD MODELLING BASED ON AVAILABLE 2018 LIDAR DATA

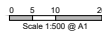
FLOOD LEVEL RESULTS IN HATCHED BOX IS SUBJECT TO CHANGE DUE TO LACK OF FEATURE SURVEY AND LEVEL INFORMATION

THE AVAILABLE LIDAR DATA IS NOT REPRESENTATIVE OF CURRENT ROAD UPGRADE WORKS IN DAVID STREET; HENCE, THE MODEL RESULTS ARE SUBJECT TO CHANGE

FLOOD LEVELS SHOWN ON THIS PLAN WILL BE CONFIRMED AS PART OF DETAILED DESIGN

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVIDED ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

PRELIMINARY PLAN ONLY
NOT APPROVED FOR CONSTRUCTION



THIS DRAWING IS NOT TO BE COPIED OR SCALED

VERSION	REMARKS	DATE	BY
A	PRELIMINARY ISSUE	26.07.22	MA

DRAWN BY	H. AHOOGHALANDARI	DESIGNED BY	H. AHOOGHALANDARI
MELWAY	2H F4	CHECKED BY	X.XXXXX
DATUM	AHD	AUTHORISED BY	G. TEMPLETON

REEDS CONSULTING

LAND SURVEYING
CIVIL ENGINEERING
PLANNING
LANDSCAPE ARCHITECTURE
DEVELOPMENT CONSULTING

1000, 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1008, 1009, 1010, 1011, 1012, 1013, 1014, 1015, 1016, 1017, 1018, 1019, 1020, 1021, 1022, 1023, 1024, 1025, 1026, 1027, 1028, 1029, 1030, 1031, 1032, 1033, 1034, 1035, 1036, 1037, 1038, 1039, 1040, 1041, 1042, 1043, 1044, 1045, 1046, 1047, 1048, 1049, 1050, 1051, 1052, 1053, 1054, 1055, 1056, 1057, 1058, 1059, 1060, 1061, 1062, 1063, 1064, 1065, 1066, 1067, 1068, 1069, 1070, 1071, 1072, 1073, 1074, 1075, 1076, 1077, 1078, 1079, 1080, 1081, 1082, 1083, 1084, 1085, 1086, 1087, 1088, 1089, 1090, 1091, 1092, 1093, 1094, 1095, 1096, 1097, 1098, 1099, 1100, 1101, 1102, 1103, 1104, 1105, 1106, 1107, 1108, 1109, 1110, 1111, 1112, 1113, 1114, 1115, 1116, 1117, 1118, 1119, 1120, 1121, 1122, 1123, 1124, 1125, 1126, 1127, 1128, 1129, 1130, 1131, 1132, 1133, 1134, 1135, 1136, 1137, 1138, 1139, 1140, 1141, 1142, 1143, 1144, 1145, 1146, 1147, 1148, 1149, 1150, 1151, 1152, 1153, 1154, 1155, 1156, 1157, 1158, 1159, 1160, 1161, 1162, 1163, 1164, 1165, 1166, 1167, 1168, 1169, 1170, 1171, 1172, 1173, 1174, 1175, 1176, 1177, 1178, 1179, 1180, 1181, 1182, 1183, 1184, 1185, 1186, 1187, 1188, 1189, 1190, 1191, 1192, 1193, 1194, 1195, 1196, 1197, 1198, 1199, 1200, 1201, 1202, 1203, 1204, 1205, 1206, 1207, 1208, 1209, 1210, 1211, 1212, 1213, 1214, 1215, 1216, 1217, 1218, 1219, 1220, 1221, 1222, 1223, 1224, 1225, 1226, 1227, 1228, 1229, 1230, 1231, 1232, 1233, 1234, 1235, 1236, 1237, 1238, 1239, 1240, 1241, 1242, 1243, 1244, 1245, 1246, 1247, 1248, 1249, 1250, 1251, 1252, 1253, 1254, 1255, 1256, 1257, 1258, 1259, 1260, 1261, 1262, 1263, 1264, 1265, 1266, 1267, 1268, 1269, 1270, 1271, 1272, 1273, 1274, 1275, 1276, 1277, 1278, 1279, 1280, 1281, 1282, 1283, 1284, 1285, 1286, 1287, 1288, 1289, 1290, 1291, 1292, 1293, 1294, 1295, 1296, 1297, 1298, 1299, 1300, 1301, 1302, 1303, 1304, 1305, 1306, 1307, 1308, 1309, 1310, 1311, 1312, 1313, 1314, 1315, 1316, 1317, 1318, 1319, 1320, 1321, 1322, 1323, 1324, 1325, 1326, 1327, 1328, 1329, 1330, 1331, 1332, 1333, 1334, 1335, 1336, 1337, 1338, 1339, 1340, 1341, 1342, 1343, 1344, 1345, 1346, 1347, 1348, 1349, 1350, 1351, 1352, 1353, 1354, 1355, 1356, 1357, 1358, 1359, 1360, 1361, 1362, 1363, 1364, 1365, 1366, 1367, 1368, 1369, 1370, 1371, 1372, 1373, 1374, 1375, 1376, 1377, 1378, 1379, 1380, 1381, 1382, 1383, 1384, 1385, 1386, 1387, 1388, 1389, 1390, 1391, 1392, 1393, 1394, 1395, 1396, 1397, 1398, 1399, 1400, 1401, 1402, 1403, 1404, 1405, 1406, 1407, 1408, 1409, 1410, 1411, 1412, 1413, 1414, 1415, 1416, 1417, 1418, 1419, 1420, 1421, 1422, 1423, 1424, 1425, 1426, 1427, 1428, 1429, 1430, 1431, 1432, 1433, 1434, 1435, 1436, 1437, 1438, 1439, 1440, 1441, 1442, 1443, 1444, 1445, 1446, 1447, 1448, 1449, 1450, 1451, 1452, 1453, 1454, 1455, 1456, 1457, 1458, 1459, 1460, 1461, 1462, 1463, 1464, 1465, 1466, 1467, 1468, 1469, 1470, 1471, 1472, 1473, 1474, 1475, 1476, 1477, 1478, 1479, 1480, 1481, 1482, 1483, 1484, 1485, 1486, 1487, 1488, 1489, 1490, 1491, 1492, 1493, 1494, 1495, 1496, 1497, 1498, 1499, 1500, 1501, 1502, 1503, 1504, 1505, 1506, 1507, 1508, 1509, 1510, 1511, 1512, 1513, 1514, 1515, 1516, 1517, 1518, 1519, 1520, 1521, 1522, 1523, 1524, 1525, 1526, 1527, 1528, 1529, 1530, 1531, 1532, 1533, 1534, 1535, 1536, 1537, 1538, 1539, 1540, 1541, 1542, 1543, 1544, 1545, 1546, 1547, 1548, 1549, 1550, 1551, 1552, 1553, 1554, 1555, 1556, 1557, 1558, 1559, 1560, 1561, 1562, 1563, 1564, 1565, 1566, 1567, 1568, 1569, 1570, 1571, 1572, 1573, 1574, 1575, 1576, 1577, 1578, 1579, 1580, 1581, 1582, 1583, 1584, 1585, 1586, 1587, 1588, 1589, 1590, 1591, 1592, 1593, 1594, 1595, 1596, 1597, 1598, 1599, 1600, 1601, 1602, 1603, 1604, 1605, 1606, 1607, 1608, 1609, 1610, 1611, 1612, 1613, 1614, 1615, 1616, 1617, 1618, 1619, 1620, 1621, 1622, 1623, 1624, 1625, 1626, 1627, 1628, 1629, 1630, 1631, 1632, 1633, 1634, 1635, 1636, 1637, 1638, 1639, 1640, 1641, 1642, 1643, 1644, 1645, 1646, 1647, 1648, 1649, 1650, 1651, 1652, 1653, 1654, 1655, 1656, 1657, 1658, 1659, 1660, 1661, 1662, 1663, 1664, 1665, 1666, 1667, 1668, 1669, 1670, 1671, 1672, 1673, 1674, 1675, 1676, 1677, 1678, 1679, 1680, 1681, 1682, 1683, 1684, 1685, 1686, 1687, 1688, 1689, 1690, 1691, 1692, 1693, 1694, 1695, 1696, 1697, 1698, 1699, 1700, 1701, 1702, 1703, 1704, 1705, 1706, 1707, 1708, 1709, 1710, 1711, 1712, 1713, 1714, 1715, 1716, 1717, 1718, 1719, 1720, 1721, 1722, 1723, 1724, 1725, 1726, 1727, 1728, 1729, 1730, 1731, 1732, 1733, 1734, 1735, 1736, 1737, 1738, 1739, 1740, 1741, 1742, 1743, 1744, 1745, 1746, 1747, 1748, 1749, 1750, 1751, 1752, 1753, 1754, 1755, 1756, 1757, 1758, 1759, 1760, 1761, 1762, 1763, 1764, 1765, 1766, 1767, 1768, 1769, 1770, 1771, 1772, 1773, 1774, 1775, 1776, 1777, 1778, 1779, 1780, 1781, 1782, 1783, 1784, 1785, 1786, 1787, 1788, 1789, 1790, 1791, 1792, 1793, 1794, 1795, 1796, 1797, 1798, 1799, 1800, 1801, 1802, 1803, 1804, 1805, 1806, 1807, 1808, 1809, 1810, 1811, 1812, 1813, 1814, 1815, 1816, 1817, 1818, 1819, 1820, 1821, 1822, 1823, 1824, 1825, 1826, 1827, 1828, 1829, 1830, 1831, 1832, 1833, 1834, 1835, 1836, 1837, 1838, 1839, 1840, 1841, 1842, 1843, 1844, 1845, 1846, 1847, 1848, 1849, 1850, 1851, 1852, 1853, 1854, 1855, 1856, 1857, 1858, 1859, 1860, 1861, 1862, 1863, 1864, 1865, 1866, 1867, 1868, 1869, 1870, 1871, 1872, 1873, 1874, 1875, 1876, 1877, 1878, 1879, 1880, 1881, 1882, 1883, 1884, 1885, 1886, 1887, 1888, 1889, 1890, 1891, 1892, 1893, 1894, 1895, 1896, 1897, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908, 1909, 1910, 1911, 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919, 1920, 1921, 1922, 1923, 1924, 1925, 1926, 1927, 1928, 1929, 1930, 1931, 1932, 1933, 1934, 1935, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 2680, 2681, 2682, 2683, 2684, 2685, 2686, 2687, 2688, 2689, 2690, 2691, 2692, 2693, 2694, 2695, 2696, 2697, 2698, 2699, 2700, 2701, 2702, 2703, 2704, 2705, 2706, 2707, 2708, 2709, 2710, 2711, 2712, 2713, 2714, 2715, 2716, 2717, 2718, 2719, 2720, 2721, 2722, 2723, 2724, 2725, 2726, 2727, 2728, 2729, 2730, 2731, 2732, 2733, 2734, 2735, 2736, 2737, 2738, 2739, 2740, 2741, 2742, 2743, 2744, 2745, 2746, 2747, 2748, 2749, 2750, 2751, 2752, 2753, 2754, 2755, 2756, 2757, 2758, 2759, 2760, 2761, 2762, 2763, 2764, 2765, 2766, 2767, 2768, 2769, 2770, 2771, 2772, 2773, 2774, 2775, 2776, 2777, 2778, 2779, 2780, 2781, 2782, 2783, 2784, 2785, 2786, 2787, 2788, 2789, 2790, 2791, 2792, 2793, 2794, 2795, 2796, 2797, 2798, 2799, 2800, 2801, 2802, 2803, 2804, 2805, 2806, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2815, 2816, 2817, 2818, 2819, 2820, 2821, 2822, 2823, 2824, 2825, 2826, 2827, 2828, 2829, 2830, 2831, 2832, 2833, 2834

7.2 Amendment C286yara – Open Space Contributions – Peer Review

Reference	D23/291411
Author	Leonie Kirkwood - Project and Planning Coordinator
Authoriser	General Manager City Sustainability and Strategy
Disclosure	The authoriser, having made enquiries with members of staff involved in the preparation of this report, asserts that they are not aware of any general or material conflicts of interest in relation to the matters presented.

Purpose

1. To provide an overview of the outcomes of the peer review on the methodology of the apportionment of costs in Amendment C286 and outline the next steps in the process to reconvene the Independent Planning Panel and finalise Amendment C286yara – Open Space Contributions.

Critical analysis

History and background

2. The Yarra Open Space Strategy 2020 (YOSS) and the associated Technical Report 2020 identified the public open space needs of existing and future residents and workers of Yarra, gaps in the provision of public open space and opportunities to address those gaps.
3. The two YOSS reports informed Amendment C286, which proposes to increase public open space contributions from developments that subdivide land in Yarra from 4.5 per cent (residential subdivisions only) to 10.1 per cent (all eligible residential, commercial and industrial subdivisions).
4. Amendment C286 expands the application of the rate from residential subdivisions to include residential, industrial and commercial subdivisions.
5. The amendment was exhibited between 7 September to 5 October 2021. 72 submissions were received.
6. The Panel Hearing was conducted over 11 hearing days between December 2021 and February 2022.
7. The Panel released an interim report on 14 April 2022 (see **Attachment One**). The report concluded:
 - (a) the Yarra Open Space Strategy, 2020, is strategically justified and is a sound and appropriate strategy;
 - (b) there is a clearly established need for the existing open space contribution rate to be increased as a matter of some urgency;
 - (c) the open space projects proposed to meet identified needs are, with a minor exception, supported;
 - (d) the proposal by Council to add 30 per cent (adjusted down to 20 per cent during the Hearing) to Capital Improved Value of land to be acquired for new open space is not supported by the Panel which regards 10 per cent as appropriate;
 - (e) the amount of the total costs apportioned to new residents and workers has not been adequately justified and should be subject to peer review before the Amendment can be finalised;
 - (f) the Hearing be adjourned pending the completion of this further work; and

- (g) while this further work recommended by the Panel is being undertaken, Council should seek approval from the Minister for Planning for an interim increase in the open space contribution rate to 7.4 per cent. This would occur via the preparation of a new Planning Scheme Amendment.
8. Flowing from these conclusions, the Panel made three key recommendations; that Council should:
- (a) request an interim open space contribution rate of 7.4 per cent through a separate amendment process until Amendment C286 is finalised;
 - (b) conduct a peer review of the apportionment of costs between the existing and new population; and
 - (c) replace the 30 per cent allowance added to the Capital Improved Value (CIV) of land with 10 per cent in the calculation of the open space contribution rate.

Discussion

Interim public open space contribution rate

- 9. The application of an interim open space contribution rate of 7.4 per cent was considered by Council on 31 May 2022.
- 10. The request for a Ministerial Amendment, Amendment C306yara, was subsequently lodged and is under consideration by the Department of Transport and Planning (DTP).
- 11. Officers have impressed on DTP the need for the interim rate and have been in regular discussions to progress the amendment. No decision has been made regarding the proposed interim rate.

Peer review

- 12. At the May 2022 meeting, Council considered the Panel's recommendation to undertake a peer review.
- 13. The peer review has been conducted by Rob Panozzo of ASR Research (see **Attachment Two**). It has focussed on the Panel's Recommendation 2.
- 14. The Panel did not provide any specific guidelines for the peer review, but recommended the following parameters:
 - (a) The review should be undertaken by at least one suitably qualified person with open space planning experience;
 - (b) The review should be restricted to the apportionment of project-by-project costs between existing and new populations. Population forecasts and project costs should not be the subject of review;
 - (c) The qualitative methodology used in the apportionment of costs is acceptable and should not be the subject of review;
 - (d) The Panel concludes that the 'eight factors' influencing the apportionment of costs listed Council's expert witness statement are acceptable and should not be the subject of review, although commentary on them and their relative importance could be considered;
 - (e) The extensive field work undertaken by Council's consultant need not be repeated provided relevant records can be provided to the reviewer; and
 - (f) Where the reviewer finds that the apportionment of costs is different to that proposed by Council's consultant, the reviewer's recommended apportionment should be provided together with a clear rationale for the recommended change.

Addressing Apportionment

- 15. Addressing apportionment, i.e. the total costs apportioned to new residents and workers versus existing residents and workers, is the key focus of the peer review.

16. In the YOSS technical report that underpins Amendment C286, to calculate the total cost of the projects, Council's consultants apportioned a percentage cost of each project to new and existing populations. For example, for some projects/actions, the split was 50 new/50 existing whereas for others it was 30 new/70 existing or 80 new/20 existing etc.
17. The apportionment ratio was informed by 'eight factors':
 - (a) existing open space within the precinct;
 - (b) spatial distribution of existing open space;
 - (c) hierarchy, character and condition of the existing open space;
 - (d) existing level of use and satisfaction with open space;
 - (e) existing urban layout;
 - (f) location and magnitude of forecast future resident and worker population growth;
 - (g) future population densities; and
 - (h) proposed urban form.
18. The Panel, in its report, noted the apportionment methodology that informed the rate proposed in Amendment C286 appeared to rest on the consultant's professional judgement. The Panel could not be confident about how these factors were applied and what weight was given to them. As a result, the Panel could not conclude that the apportionments, as proposed, were justified.
19. The peer review considered three methodologies:
 - (a) Method 1 - A methodology based solely on the quantum of new population. The public open space rate achieved using this method is 5.1 per cent (based on a 30 per cent allowance added to CIV, which the Panel did not accept. If the 30 per cent allowance was reduced to 10 per cent as recommended by the Panel, the public open space rate would be lower, and below 5 per cent);
 - (b) Method 2 - The methodology used in YOSS; and
 - (c) Method 3 – An alternative methodology.
20. The peer review found that Method 1 is a far simpler and more replicable apportionment methodology, however it 'fails to reflect the genuine and complex open space needs of high density inner suburban municipalities such as the City of Yarra and fails to provide sufficient financial resources to implement important open space measures that many locations within the City of Yarra desperately need.'
21. Regarding Method 2, the peer review notes the eight criteria used in the YOSS are all valid considerations. The peer review acknowledges this method is based on a more nuanced and complex understanding of local open space needs. However, the peer review notes that the 'systematic and consistent application of this method is problematic given the high level of subjective judgement required to determine which apportionment ratio to use for particular factors and what weighting to apply to these factors'.
22. As such, the peer review considers the use of an alternative methodology (Method 3) to consider the apportionment issue. This method derives a public open space contribution rate based on weightings benchmarked against targets for public open space used by the Victorian Planning Authority (VPA) in Melbourne's growth areas.
23. Target 11 (T11) of the Precinct Structure Planning Guidelines: New Communities in Victoria (October 2021) (PSP Guidelines) states the open space network should seek to meet the following minimum targets:
 - (a) Within residential areas (including activity centres) – 10 per cent of net developable area (NDA) for local parks and sports field reserves; and
 - (b) Within dedicated employment and/ or economic activity areas – 2 per cent of the net developable area (NDA) for local parks.

24. The peer review considers population density in Yarra relative to the 10 per cent of NDA for open space target. The PSP Guidelines currently anticipate the provision of 20 dwellings per hectare of NDA, which equates to 62 people per hectare of NDA (based on 3.1 persons per dwelling). The peer review takes the position that if less dense urban locations are expected to be supplied with at least 10 per cent unencumbered local public open space, then so should the most dense urban locations like the City of Yarra.
25. The peer review also considers the worker population density based on the PSP Guideline target of 1 job per dwelling (which equates to 20 workers per hectare of NDA). The peer review reduces the new worker population density weighting to 20 per cent, to align with the PSP Guidelines which allocate only 2% of NDA employment land hectares for public open space.

Addressing Capital Improved Value (CIV)

26. The public open space contribution calculation uses CIV as the basis for calculating the value of land. CIV is the assessed market value of the property including both land and all improvements such as buildings.
27. Council's original methodology which formed the basis of Amendment C286 included a 30 per cent margin added on top of CIV to address what was considered to be the actual cost to Council in purchasing new land for public open space.
28. Through the course of the hearing, Council accepted that there was not sufficient justification for an allowance of 30% above CIV for the land acquisition component of the public open space contribution rate calculation. However, Council submitted that there is a legitimate justification for an allowance of 20% above CIV. (Noting this would reduce the proposed open space contribution rate to 9.35 per cent.)
29. The Panel accepted that CIV is an 'appropriate, but imperfect measure' of land value. However, it did not accept that 30 or 20 per cent allowance was justified or defensible. The Panel recommended an allowance of 10 per cent be added to the cost of purchasing land.
30. The adoption of the 10 per cent margin reduces the 10.1 per cent public open space rate originally sought in Amendment C286 to 8.67 per cent.
31. The peer review adopts the CIV allowance recommended by the Panel (i.e. 10 per cent).

Peer review outcomes

32. Using the alternative methodology (Method 3), the peer review arrives at a public open space contribution rate of 9.4 per cent (using the 10 per cent CIV allowance recommended by the Panel).
33. It is important to note, there is a high degree of uncertainty around public open space methodologies, including the alternative methodology used in the peer review to calculate a public open space contribution rate. There is no agreed methodology for the calculation of public open space contributions in established residential areas. The State Government flagged in Open Space for Everyone - Open Space Strategy for Metropolitan Melbourne 2021, that it would 'review and ensure the effectiveness of current open space contribution guidelines in addressing legacy issues and differing needs in established suburbs, growth areas and areas of entrenched disadvantage'. However, this work has not progressed.
34. It is also noted other inner city councils and recently approved amendments have approved rates of 5 to just over 8 per cent. In Melbourne, Stonnington and Port Phillip, 5 to 8 per cent applies depending on the location and setting. 5.7 per cent applies in Maribyrnong. In Glen Eira, a rate of 8.3 per cent was recently approved across the municipality (with the exception of two specific development areas). In Monash Amendment C169, currently under consideration by the Department of Transport and Planning, Council adopted the Panel recommended rate of 7.61 per cent.

35. The purpose of the peer review is not to form a new position for Council to adopt the rate recommended by the peer reviewer. It was prepared in response to an issue identified by the Panel that 'the amount of the total costs apportioned to new residents and workers has not been adequately justified and should be subject to peer review before the Amendment can be finalised'.
36. Council should be aware that the alternative methodology in the peer review is a new approach for deriving a public open space contribution rate.
37. Council's position when the Panel hearing closed in February 2022 was to advocate for a public open space contribution rate of 9.35 per cent (based on a 20 per cent CIV). If the Panel's recommendation to proceed with the 10 per cent CIV allowance is accepted, the public open space contribution rate would be 8.67 per cent, noting the Panel did not support the use of the 20 per cent CIV. Officers will provide a report to Council on 12 September with a recommended approach.

Community and stakeholder engagement

38. The broader community and submitters were notified during the exhibition and hearing process of Amendment C286.
39. Should Council resolve to reconvene the Panel in September, Council officers will notify the Panel and the Panel would notify previous participants and set further hearing dates.

Policy analysis

40. The amendment supports the following themes in the Yarra 2036 Community Vision – Shared Spaces and Growing Sustainably:
 - (a) Priority 7.1 - All our shared spaces are made physically accessible and welcoming to people of all abilities, linguistic, cultural backgrounds and age groups;
 - (b) Priority 7.3 - Create and innovate solutions to maximise the use of under or unused streets and spaces;
 - (c) Priority 7.4 - Increase availability and diversify use of open spaces to address existing shortages and respond to population growth; and
 - (d) Priority 8.4 - Ensure that as we grow, community services and public spaces are adapted and created so that our unique lifestyle is maintained and continues to improve.
41. The amendment supports the following strategies in the Council Plan 2021-2025:
 - (a) Strategic Objective 1: Climate and Environment - Yarra urgently mitigates climate change while also adapting to its impacts and developing resilience in everything we do. The community, business and industry are supported and encouraged to do the same.'; and
 - (b) Strategic Objective 4 – Place and nature – 'Yarra's public places, streets and green open spaces bring our community together. They are planned to manage growth, protect our unique character and focus on people and nature.'

Climate emergency and sustainability implications

42. An expanded open space network would help achieve a number of sustainability actions in Council strategies:
 - (a) Developing biodiversity corridors;
 - (b) Creating opportunities for sustainable water management (e.g. through passive irrigation and stormwater harvesting); and
 - (c) Reducing the urban heat island effect by creating more permeable surfaces.

Community and social implications

43. The Panel has recognised the importance of the rate in meeting community needs resulting from increased development in the municipality.
44. Progressing Amendment C286 would ensure that more open space can be delivered for the community, enabling space to exercise and socialise.

Economic development implications

45. Progressing Amendment C286 would ensure Yarra remains an attractive place to live and work as it supports the creation of new open space.
46. The application of the open space rate to residential, commercial and industrial subdivisions would enable Council to provide for open space demands in both residential and employment areas and serve both the resident and worker population.

Human rights and gender equality implications

47. The upgrade and improvement of the open space network through the application of a new open space contribution rate would support the Yarra community and enhance their quality of life and liveability of Yarra.

Operational analysis

Financial and resource impacts

48. An increase of the open space contribution rate from 4.5 per cent and the inclusion of non-residential subdivisions in the rate is a very important matter for Council to assist in funding both the new and improved open space provision in the municipality over the next 15 years. (Noting the projects in the Yarra Open Space Strategy would need to be funded from a mix of general rates revenue, grants and the public open space contribution rate.)
49. The costs associated with the 2022 panel process, including panel fees, representation and other experts who provided evidence on behalf of Council were met by the 2022/23 budget. The majority of the costs associated with the preparation of the peer review were also paid in 2022/23.
50. Costs for this financial year will include further panel, legal and statutory costs and are budgeted for in the 2023/24 Strategic Planning budget.

Legal Implications

51. There are no known legal implications. The amendment is being progressed in accordance with the Planning and Environment Act 1987. The amendment process has included an Independent Planning Panel hearing that has enabled submitters to be heard. The Panel has released an interim report that was considered by Council.

Conclusion

52. The peer review has been completed.
53. The completion of the peer review has been an important step in the process and will help to inform the Panel about the issue of apportionment.
54. The peer review has considered the public open space planning principles established by the Victorian Planning Authority - Precinct Structure Planning Guidelines (adapted to an established urban context) and quantitative data such as population densities and public open space supply in the City of Yarra.
55. Officers will report back to the Council Meeting of 12 September with a proposed position and next steps.
56. The next steps in the process would be to request Planning Panels Victoria reconvene the Amendment C268yara Panel hearing and refer the peer review and Council's position on that material for consideration.

57. It is understood the Panel would re-notify submitters to Amendment C286 and hold a Directions Hearing. The further public hearing would follow.
58. Recommencement of the Panel Hearing would occur at the first available opportunity, dependent on the availability of Panel members, legal representation and submitters.
59. Providing the peer review to the Planning Panel is necessary to progress Amendment C286 and secure a revised permanent public open space contribution rate in the Yarra Planning Scheme.

RECOMMENDATION

1. That Council:
 - (a) note the findings of the Amendment C286yarra Open Space Project Cost Apportionment Final Report (dated 2 August 2023) prepared by Robert Panozzo; and
 - (b) receive a report from officers on 12 September 2023 that outlines a recommended position and next steps in the process to reconvene the Amendment C286yara Independent Planning Panel Hearing.

Attachments

- 1 [↓](#) Attachment 1 - C286yara Interim Panel Report
- 2 [↓](#) Attachment 2 - Review of Open Space Project Cost Apportionment for Amendment C286yarra Robert Panozzo

**Planning
Panels
Victoria**

**Yarra Planning Scheme Amendment C286yara
Open Space Contributions**

Interim Panel Report

Planning and Environment Act 1987

14 April 2022



How will this report be used?

This is a brief description of how this report will be used for the benefit of people unfamiliar with the planning system. If you have concerns about a specific issue you should seek independent advice.

The planning authority must consider this report before deciding whether or not to adopt the Amendment.

[section 27(1) of the *Planning and Environment Act 1987* (the PE Act)]

For the Amendment to proceed, it must be adopted by the planning authority and then sent to the Minister for Planning for approval.

The planning authority is not obliged to follow the recommendations of the Panel, but it must give its reasons if it does not follow the recommendations. [section 31 (1) of the PE Act, and section 9 of the *Planning and Environment Regulations 2015*]

If approved by the Minister for Planning a formal change will be made to the planning scheme. Notice of approval of the Amendment will be published in the Government Gazette. [section 37 of the PE Act]

Planning and Environment Act 1987

Interim Panel Report pursuant to section 25 of the PE Act

Yarra Planning Scheme Amendment C286yara286yara

Open Space Contributions

14 April 2022



Rodger Eade, Chair



Dr Meredith Gibbs, Member



John Hartigan, Member

Contents

	Page
1 Introduction.....	1
1.1 The Amendment.....	1
1.2 Background	1
1.3 Yarra Open Space Strategy 2030	2
1.4 Council’s approach	9
1.5 Procedural issues	10
1.6 Summary of issues raised in submissions	12
1.7 The Panel’s approach	12
2 Planning context.....	13
2.1 Planning policy framework.....	13
2.2 Other relevant planning strategies and policies	14
2.3 Planning scheme provisions	17
2.4 Ministerial Directions and Practice Notes.....	17
2.5 Discussion and conclusion	17
3 Yarra Open Space Strategy.....	19
3.1 Projections of the new resident and worker population	19
3.2 Quantum and distribution of proposed open space	21
3.4 Proposed commencement and end dates for implementation of the Strategy.....	33
3.5 Conclusions and recommendations	36
4 Open space contribution rate	37
4.1 Value of land to be developed for open space	37
4.2 Capital value of proposed open space projects	42
4.3 Apportionment between existing and new populations	44
4.4 Value of land required to accommodate future residents and workers.....	54
4.5 Recommendation	56
5 Issues arising in calculating and applying the open space contribution	57
5.1 Proposed approach to acquiring land	57
5.2 Municipal-wide contribution rate.....	59
5.3 Transitional provisions	65
5.4 Offsets for the provision of communal open space	68
6 Impacts of the proposed open space contribution rate	73
6.1 Economic viability of projects and impact on housing affordability.....	73
7 Statutory planning issues	77
7.1 Proposed changes to the Schedule to Clause 53.01.....	77
7.2 Public Open Space Contribution policy	77
7.3 Recommendation	78

8	Interim open space contribution rate	79
8.1	Process for setting an interim contribution rate	79
8.2	Interim contribution rate	80
8.3	Peer review	81
8.4	Conclusions	81
8.5	Recommendations	82

Appendix A Submitters to the Amendment

Appendix B Parties to the Panel Hearing

Appendix C Document list

Appendix D Panel recommended version of the Schedule to Clause 53.01

Appendix E Panel recommended version of Clause 22.12

List of Tables

	Page
Table 1 Chronology of events	2
Table 2 Yarra open space hierarchy	4
Table 3 Open space project cost allocation	7
Table 4 Relevant parts of Plan Melbourne	15
Table 5 Apportionment ratios	45
Table 6 Open space contribution rate by precinct	60

List of Figures

	Page
Figure 1 Open space planning precincts and sub precincts	3
Figure 2 Existing open space in Yarra	4
Figure 3 Yarra open space gap analysis	5
Figure 4 Indicative provision of new open space	6
Figure 5 Components of population change	19

Glossary and abbreviations

CIV	Capital Improved Value
Contributions Report	<i>Yarra Open Space Strategy 2020: Public Open Space Contributions</i> , Environment & Land Management Pty Ltd in association with Thompson Berrill Landscape Design Pty Ltd, 10 December 2020
Council	Yarra City Council
DCP	Development Contribution Plan
DELWP	Department of Environment, Land, Water and Planning
HIA	Housing Industry Association
new population/s	The projected resident and worker populations forecast to move to or come to work in Yarra between 2016 and 2031
PAO	Public Acquisition Overlay
PE Act	<i>Planning and Environment Act 1987</i>
Planning Scheme	Yarra Planning Scheme
POPC	Preliminary Opinion of Probable Costs
PPN	Planning Practice Note
SEES	Yarra Spatial Economic and Employment Strategy 2018 prepared by SGS Consulting
Technical Report	<i>Yarra Open Space Strategy 2020 Technical Report</i> , Thompson Berrill Landscape Design Pty Ltd in association with Environment & Land Management Pty Ltd
UDIA	Urban Development Institute of Australia
UHIE	Urban heat island effect
VCAT	Victorian Civil and Administrative Tribunal
YOSS	<i>Yarra Open Space Strategy 2020</i> , Thompson Berrill Landscape Design Pty Ltd in association with Environment & Land Management Pty Ltd

Overview

Amendment summary	
The Amendment	Yarra Planning Scheme Amendment C286yarayara
Common name	Open Space Contributions
Brief description	Increase the contribution for open space at Clause 53.01 of the Yarra Planning Scheme from 4.5 per cent to 10.1 per cent of site value to support the implementation of the Yarra Open Space Strategy 2020.
Subject land	All residential, commercial and industrial land in the City of Yarra
The Proponent	Yarra City Council
Planning Authority	Yarra City Council
Authorisation	18 June 2021
Exhibition	7 September to 5 October 2021
Submissions	Number of Submissions: 72, including four late submissions. Of these 43 opposed and 27 supported the Amendment. The position of the remaining two is unknown.
Panel process	
The Panel	Rodger Eade (Chair), Meredith Gibbs and John Hartigan
Directions Hearing	By video conference, 10 November 2021
Panel Hearing	By video conference, 6, 7, 8, 9, 13, 14 15 and 17 December 2021 and 9, 10 and 23 February 2022
Site inspections	No site inspection was required
Parties to the Hearing	See Appendix B
Citation	Yarra PSA C286yara [2022] PPV
Date of this report	14 April 2022

Executive summary

Yarra Planning Scheme Amendment C286yara (the Amendment) seeks to increase the public open space contribution rate in the Schedule to Clause 53.01 from 4.5 to 10.1 per cent. It proposes to do this by making the following changes to the Planning Scheme:

- amending the Schedule to Clause 53.01 to require that all subdivision provides a public open space contribution at a rate of 10.1 per cent
- replacing Clause 22.12 Public Open Space Contribution with a new Clause 22.12
- amending the Schedule to Clause 72.08 to insert the following documents into the table at Clause 1.0:
 - *Yarra Open Space Strategy 2020* Thompson Berrill Landscape Design Pty Ltd in association with Environment & Land Management Pty Ltd
 - *Yarra Open Space Strategy 2020 Technical Report* Thompson Berrill Landscape Design Pty Ltd in association with Environment & Land Management Pty Ltd.

There were 72 submissions to the exhibited Amendment, with 43 opposed to, and 27 supporting the Amendment. The position of the remaining two is unknown.

The key focus of those opposed to the Amendment was that the increase in the open space contribution rate from the current 4.5 per cent of land area or site value to 10.1 per cent is excessive. The increase was opposed because:

- some open space projects proposed were not needed
- the cost of both the land and capital components of the costs of open space projects was excessive
- the apportionment of total project costs between existing and new users of open space was inappropriate
- there were no transitional provisions for projects part way through their approval processes
- there would be a detrimental impact on housing affordability.

The key underpinning strategic document is the *Yarra Open Space Strategy 2020*, which is proposed to be introduced into the Yarra Planning Scheme. The current open space strategy was prepared in 2006 and is now significantly out of date because of the magnitude of development both residential and non-residential that has occurred in the intervening period. The strategy and its strategic underpinnings were not significantly challenged.

The proposed new strategy forecasts that between 2016 and 2031 there will be an additional 77,000 new residents and workers in Yarra, generating a need for a significant amount of new and upgraded open space. Much of the forecast growth will occur in areas that were traditionally developed for manufacturing industry much of which no longer exists. These areas are not well endowed with open space. To meet this identified need the *Yarra Open Space Strategy 2020* proposes 26 new open space projects and the upgrade or expansion of a number of existing open spaces.

The Yarra Open Space Strategy 2020 proposes projects with a total cost \$564.9 million. The cost is very high because many of the new open space projects require Yarra City Council to acquire significant land, which in this and other inner municipalities has to be acquired at a very significant cost to Council.

Most submitters recognised that the current open space contribution rate of 4.5 per cent is inadequate but strongly opposed the magnitude of the increase proposed for the contribution rate.

At the Hearing, this opposition focussed mainly on two issues. The first of these was the addition by Council of 30 per cent to the Capital Improved Value of land to be acquired to cover the costs to Council of acquiring the required land. Secondly, the total costs of the open space projects was apportioned between existing users and the municipality's new residents and workers with approximately 67 per cent of the total costs being apportioned to the new users. This apportionment to new users was strongly opposed by a number of submitters.

Having considered submissions and evidence, the Panel broadly concludes:

- the *Yarra Open Space Strategy, 2020*, is strategically justified and is a sound and appropriate strategy
- there is a clearly established need for the existing open space contribution rate to be increased as a matter of some urgency
- the open space projects proposed to meet identified needs are with a minor exception, supported
- the proposal by Council to add 30 per cent (adjusted down to 20 per cent during the Hearing) to Capital Improved Value of land to be acquired for new open space is not supported by the Panel which regards 10 per cent as appropriate
- the amount of the total costs apportioned to new residents and workers has not been adequately justified and should be subject to peer review before the Amendment can be finalised
- the Hearing be adjourned pending the completion of this further work
- while this further work recommended by the Panel is being undertaken, Council should seek approval from the Minister for Planning for an interim increase in the open space contribution rate to 7.4 per cent. This would occur via the preparation of a new Planning Scheme Amendment.

For the reasons set out in Chapter 8, the Panel considers this to be an interim report pending the completion of the extra work recommended by the Panel. A final report will be prepared after that work has been undertaken.

Recommendations

Based on the reasons set out in this Report, the Panel recommends:

- 1 **Prepare and seek Ministerial approval under the Planning and Environment Act 1987, for a new Planning Scheme Amendment which:**
 - a) **includes an open space contribution rate of 7.4 per cent in the Schedule to Clause 53.01.**
 - b) **includes exemptions in the Schedule to Clause 53.01 as set out in the version of the Schedule at Appendix D.**
 - c) **amends the Schedule to Clause 72.08 to insert the following documents into the table at Clause 1.0:**
 - *Yarra Open Space Strategy 2020* Thompson Berrill Landscape Design Pty Ltd in association with Environment & Land Management Pty Ltd

- **Yarra Open Space Strategy 2020 Technical Report Thompson Berrill Landscape Design Pty Ltd in association with Environment & Land Management Pty Ltd (Technical Report).**
 - d) **deletes Action 7.5B-4 in Fairfield from the *Yarra Open Space Strategy 2020*, the *Yarra OpenSpace Strategy Technical Report 2020*, and from Preliminary Opinion of Probable Costs.**
 - e) **replaces the exhibited Clause 22.12 with the version at Appendix E.**
2. **Commission a peer review of the apportionment of total open space Action costs between existing and new resident and worker users of open space.**
 3. **Replace the 30 per cent allowance added to Capital Improved Value of land with 10 per cent, in calculating the cost of land to be acquired for future open space, in the calculation of the open space contribution rate.**

1 Introduction

1.1 The Amendment

(i) Amendment description

The purpose of the Amendment is to increase the public open space contribution rate in the Schedule to Clause 53.01 from 4.5 per cent to 10.1 per cent to collect funds to support the implementation of the *Yarra Open Space Strategy 2020* (YOSS).

Specifically, the Amendment proposes to:

- amend the Clause 53.01 Schedule to require subdivisions to provide a public open space contribution at a rate of 10.1 per cent of the total land area
- replace Clause 22.12 Public Open Space Contribution with a new Clause 22.12
- amend the Schedule to Clause 72.08 to insert the following documents into the table at Clause 1.0:
 - *Yarra Open Space Strategy 2020* Thompson Berrill Landscape Design Pty Ltd in association with Environment & Land Management Pty Ltd
 - *Yarra Open Space Strategy 2020 Technical Report* Thompson Berrill Landscape Design Pty Ltd in association with Environment & Land Management Pty Ltd (Technical Report).

(ii) The subject land

The Amendment applies to all residential, industrial and commercial land in the municipality.

1.2 Background

Open space planning in Yarra is currently undertaken under the guidance of the *Yarra Open Space Strategy 2006*. Since the time of adoption of that strategy, Council has continued to develop and at a faster pace than was forecast. Growth is forecast to continue over the period to 2031, the planning horizon for the new open space strategy, the YOSS.

The forecast development over the next 15 years is significant with a 40 per cent increase in the resident population and a 47 per cent increase in the worker population visiting and using open space, thereby increasing demand on existing space and facilities. The extent of forecast growth changes across different parts of the municipality. Less than 10 per cent growth is forecast in Princes Hill-Carlton North, compared to 106 per cent in Cremorne-Richmond South-Burnley and 214 per cent in Fairfield-Alphington.

Over 85 per cent of Yarra's population lives in medium and high density dwellings compared to 33 per cent in Greater Melbourne. This means that residents have less private open space available to them which increases their reliance on public open space. Typically, this adds to the amount of people using public open space and increases the diversity of reasons why they use it.

Many of the areas in Yarra that are forecast to change are the former industrial and manufacturing areas which historically did not have public open space. These areas are being redeveloped to become mixed use precincts with a combination of residential, commercial and business use. This is introducing increased building heights and a change to a predominantly office-based professional workforce. Surveys undertaken as part of the development of YOSS found that 60 per

cent of workers visit public open space during the day at least once a week. With increased numbers of people working and living in the former industrial precincts there is a need to provide new areas of public open space in these areas.

The chronology for the preparation of this Amendment is set out in Table 1.

Table 1 Chronology of events

Date	Event / Description
April 2003	Council commissioned Thompson Berrill Landscape Design Pty Ltd and Environment & Land Management Pty Ltd to prepare the 2006 Strategy
19 December 2006	Council adopted 2006 Strategy
12 June 2008	Amendment C87 was gazetted, implementing the recommendations of the 2006 Strategy
February – March 2018	Consultation undertaken to inform the YOSS
20 January – 15 March 2020	Consultation undertaken on the Draft 2019 YOSS
July 2020	YOSS finalised
1 September 2020	Council adopted the YOSS
15 September 2020	Council resolved to request the Minister for Planning for authorisation to prepare the Amendment
December 2020	Council submitted a request for authorisation to prepare the Amendment to the Minister
18 June 2021	Council received authorisation to prepare the Amendment from the Minister subject to conditions
20 July 2021	Council resolved to make changes to the Amendment to satisfy the conditions of authorisation and give notice of the Amendment
7 September 2021	Public exhibition of the Amendment commenced
5 October 2021	Public exhibition of the Amendment ended
19 October 2021	Council resolved to refer all submissions to a Planning Panel
26 October 2021	Planning Panel convened in respect of the Amendment
10 November 2021	Directions Hearing held in respect of the Amendment
6 December 2021	Public Hearing commenced

Source: Council Part A submission, Attachment A

1.3 Yarra Open Space Strategy 2030

(i) Methodology

The YOSS and the proposed open space contribution rate were developed broadly as follows:

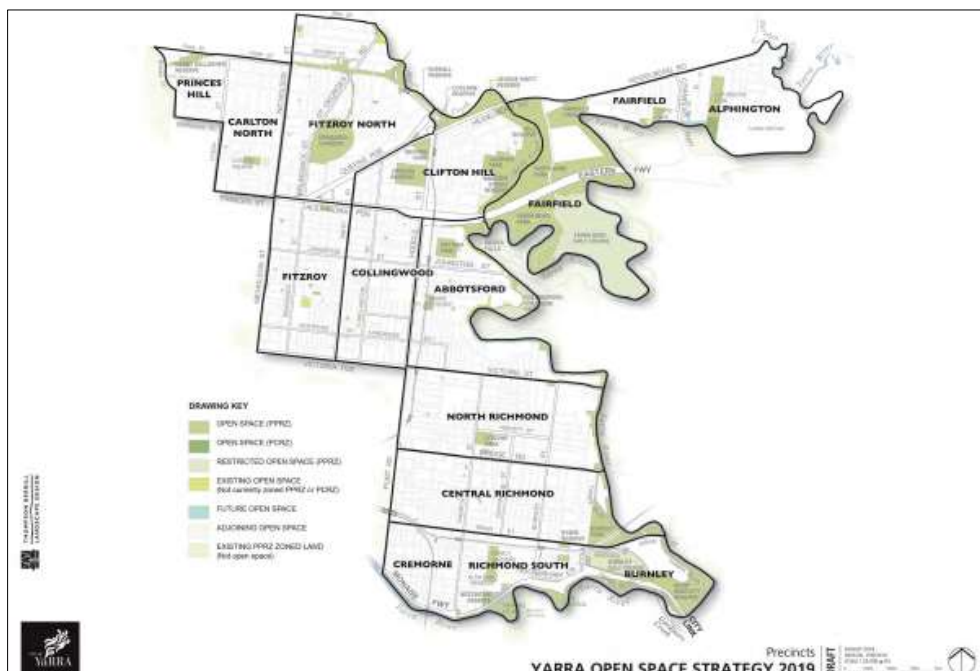
- assessment of current open space provision
- assessment of open space needs of the current and future forecast resident and worker populations based on both community surveys and expert input on open space provision requirements

- analysis of the gap between current provision and forecast future requirements on a precinct-by-precinct basis
- assessment of the needs gap in terms of open space hierarchy needs
- development of proposed projects to meet the future needs
- estimating a Preliminary Opinion of Probable Costs (POPC) of the proposed projects
- estimate of the proportion of project costs attributable to the new population on a project-by-project basis
- calculation of the open space levy required to raise the revenue required to meet the new population’s contribution to the costs of proposed projects.

(ii) Precincts and sub-precincts

The analysis and proposed future provision of open space were precinct-based. Ten precincts were identified based on existing suburb boundaries. Each precinct was divided into sub-precincts. Precinct and sub-precinct boundaries are set out in Figure 1.

Figure 1 Open space planning precincts and sub precincts



Source: Yarra Open Space Strategy: Public Open Space Contributions, 2020, Figure 2

(iii) Existing open space

Based on research undertaken in preparing the YOSS, Yarra currently has 107 open space reserves occupying a total of 263.4 hectares. This equates to 13.5 per cent of the total land area of the municipality. If open space area which is only accessible by members or on a fee-paying basis is included, the total current open space increases to 348.66 hectares or 17.8 per cent of land area.

Existing open space as identified in the work undertaken for the YOSS is set out in Figure 2.

Figure 2 Existing open space in Yarra



Source: Yarra Open Space Strategy 2020, Technical Report, Appendix A

(iv) Open Space hierarchy

The open space hierarchy adopted by Yarra is summarised in Table 2. The future need for open space was assessed based on the projected growth in both residents and workers.

Table 2 Yarra open space hierarchy

Size	Catchment	Purpose
Regional open space		
Unlimited	No specific distance for Melbourne wide population	Primarily caters for regional population including residents of Yarra
City-wide open space		
Generally 3 to 7 hectares	Located within 1 kilometre of 95 per cent of dwellings	Primarily caters for residents and workers of Yarra
Neighbourhood open space		
Minimum of 1 hectare	Located within 400 metres walking distance of dwellings and workplaces	For neighbourhood use within walking distance of home or workplace and provides a multiple range of facilities
Small neighbourhood open space		
0.5 to 0.99 hectares	Located within 300 metres walking distance of homes and workplaces	Large enough to provide for at least three activities. For example, multi-use half court, play area and picnic facility

Size	Catchment	Purpose
Local open space		
0.1 to 0.49 hectares	Located within 200 metres walking distance of homes and workplaces	Large enough to provide for two activities. For example, a play area and grassed area with seating
Small local open space		
0.1 to 0.3 hectares	Located within 150 metres walking distance of homes and workplaces	Generally able to provide for a single use

Source: Yarra Open Space Strategy 2020, Technical Report, Table 3-1

(v) Projected growth

For the period between 2016 and 2031, which is the period for the data used in preparing the YOSS, the population is forecast to increase by over 77,000 people, which represents a 41 per cent increase in the number of residents and a 47 per cent increase in the number of workers.

(vi) Gap analysis

Based on the existing provision and the estimated future need for open space, analysis was done to identify the gaps in current provision, as illustrated in Figure 3. The areas without any colour are areas where a gap in provision has been identified. Figure 3 shows significant gaps in Collingwood-Cremorne and parts of Richmond in particular.

Figure 3 Yarra open space gap analysis

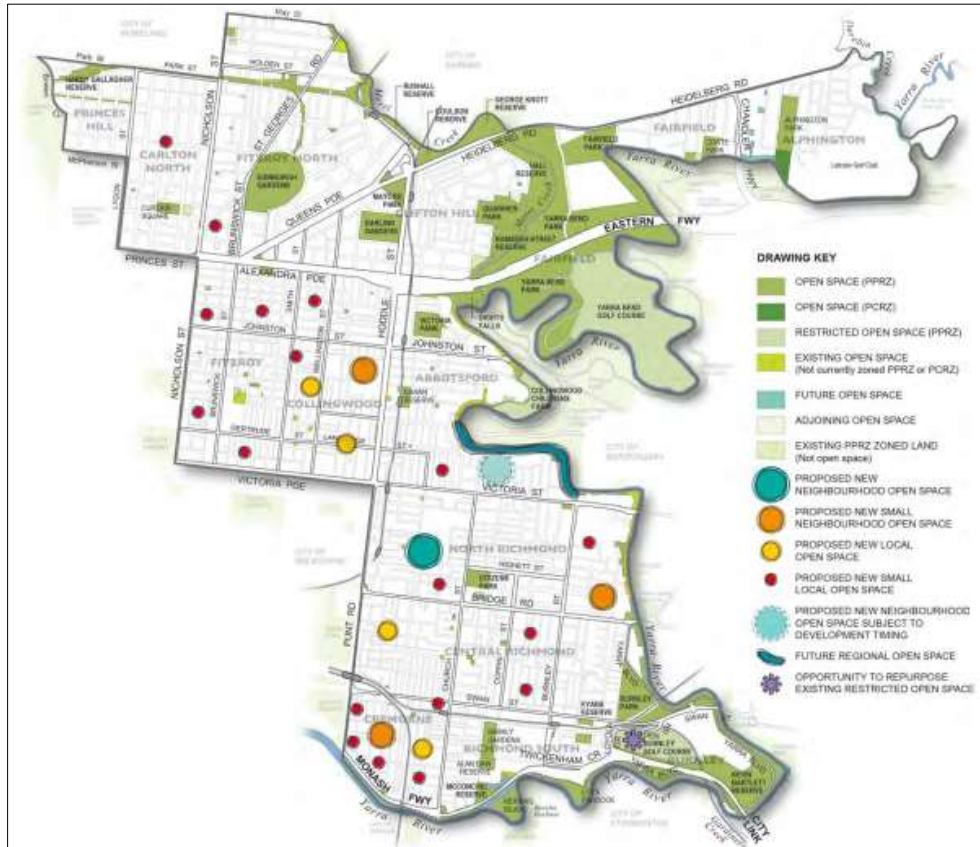


Source: Yarra Open Space Strategy 2020, Technical Report, Appendix A

(vii) Proposed new open space

A schematic plan of the proposed 26 open space projects identified in the YOSS, showing the various levels in the open space hierarchy and indicative locations is set out in Figure 4.

Figure 4 Indicative provision of new open space



Source: Yarra Open Space Strategy 2020, Public Open Space Contributions, Figure 1

(viii) Open space contribution rate

The open space contribution rate is calculated using the following formula:

$$\text{Contribution rate} = \frac{\text{Total allocation of open space project costs to the new population}}{\text{Total site value of the estimated land to accommodate the new population}} \text{ multiplied by } 100$$

Detailed consideration of the various factors which contribute to the numerator and denominator in this equation is set out in Chapter 4. The following section provides an overview of the basic data used in the rate calculation.

Numerator

The starting point is calculating the total cost of open space projects to be funded by the contribution. An allocation of the total cost as between the existing and forecast (or new) population is then made.

Preliminary Opinion of Probable Costs (POPC) is an approach used by open space planners to make a provisional estimate of the likely future cost of providing open space. The YOSS POPC only includes proposed projects that would be fully or partially funded by an open space contribution under Clause 53.01 of the Yarra Planning Scheme (Planning Scheme). These projects (called ‘Actions’ in the YOSS) include the provision and establishment or upgrade of neighborhood, small neighborhood, local and small local open space. The YOSS POPC also includes the costs of providing facilities for the local community in higher order open space including the Regional and City-wide open space. The (revised) POPC summary by precinct is set out in Table 3.

Table 3 Open space project cost allocation

Precinct	Total value of included projects	Allocation to existing population	Allocation to forecast population
Abbotsford	\$15,910,482	\$8,055,284	\$7,855,198
Carlton North – Princes Hill	\$10,461,318	\$9,938,252	\$523,066
Central Richmond	\$53,299,684	\$24,851,251	\$28,448,433
Clifton Hill	\$5,120,000	\$4,096,000	\$1,024,000
Collingwood	\$147,856,471	\$49,118,463	\$98,738,008
Cremorne, Richmond South and Burnley	\$157,614,101	\$40,369,225	\$117,244,876
Fairfield – Alphington	\$6,266,108	\$2,880,814	\$3,385,294
Fitzroy	\$78,681,285	\$29,640,209	\$49,041,076
Fitzroy North	\$17,926,385	\$6,802,405	\$11,123,980
North Richmond	\$76,252,211	\$11,100,373	\$65,151,838
Municipal total	\$569,388,045	\$186,852,276	\$382,535,769

Source: Yarra Open Space Strategy, Public Open Space Contributions, Appendix A.

Denominator

Based on Council valuation records, Council estimated that total value of land forecast to be developed to 2031 at \$3.789 billion.

Calculation

Council arrived at the proposed open space contribution by calculating the per centage of the total costs allocated to the new population, being \$379,973,479, as a per centage of \$3,789,238,260, resulting in a rate of 10.0 per cent. The exhibited rate of 10.1 per cent was calculated using an earlier version of the POPC which accounts for the difference. It is noted that if this calculation is applied on a precinct-by-precinct basis, contribution rates much higher than this would apply in some precincts. Further discussion of municipal-wide versus precinct-based contribution rates is in Chapter 5.2. It is also noted that the Council’s final proposed contribution rate was lower again, 9.35 per cent, based on adjustments to the value of land to be developed for open space as discussed further in Chapter 4.1.

(ix) Underpinning principles

This section sets out the principles underpinning the assessment undertaken by the Panel. Their application in particular aspects of the Panel’s consideration is included in following Chapters as relevant.

It was generally accepted that the principles set out in the Eddie Barron case¹, while applied in that instance to development contributions, are relevant here. However, in this context they can be interpreted differently. The interpretations applied by the Panel in this instance are as follows:

Need

In this case the relevant need is the need for new or upgraded open space infrastructure. This is broadly consistent with the interpretation that flows from Eddie Barron, as applied with respect to development contributions.

Nexus

The interpretation of nexus commonly applied with respect to development contributions is that the contributions made should be spent in the area in which they are raised. Council submitted that for funds raised under Clause 53.01 there is no requirement in the *Subdivision Act 1988* or in Clause 53.01 itself that contributions be spent in the exact area in which they are raised. In the context of open space, Council submitted that the requirement is that, rather than a *spatial* nexus there must be a *causal* nexus, that is a link between the subdivision and the need to provide more or upgraded open space. In his evidence, Mr Shipp (for the Planning and Property Partners (PPP) group of clients) gave a slightly different interpretation but he did not argue for the spatial nexus interpretation which underpins development contributions. The Panel accepts Council’s submissions in this respect.

Equity

In its Supplementary Part B submission, Council submitted that there are three equity considerations relevant in this instance:

- first, there is a need to do equity [sic] as between existing and new residents, to ensure that contributions are collected in an appropriate proportion from the new population only ...
- second, there is the need for equity between residential and worker populations, to reflect any differential needs for open space arising as between those two populations ...
- third, there is a need for equity between different parts of the municipality, which are differentially served by open space. Some parts of the municipality, by reasons of location or accident of history are far better served than other parts ...²

In his evidence, Mr Shipp agreed that the first two of these are relevant but did not address the third. The Panel accepts that each of the three interpretations of the equity principle are relevant, and they form the basis of a significant part of the Panel’s assessment in Chapters 3, 4 and 5.

Accountability

Council submitted that the strict accountability requirements that apply to development contributions and which are set out in Part 3AB of the *Planning and Environment Act (1987)* (PE Act) do not apply here. Rather, the *Subdivision Act 1988* merely requires that funds raised be

¹ *Eddie Barron Constructions v Shire of Pakenham* 6 AATR 10.

² Document 76, [8].

spent on the provision of open space within the municipality. Mr Shipp's interpretation did not differ materially from this. The Panel accepts this position.

1.4 Council's approach

To deliver the required open space needs of the municipality, Council's approach is to use Clause 53.01 of the Planning Scheme to generate contributions of land or a cash contribution equal to a percentage of site value at the time of subdivision. The Panel considers that it has used this provision appropriately.

In his expert evidence for the PPP group of clients, Mr Milner criticised this approach, stating:

The strategic work, with its focus on resident and worker populations and not on subdivision, draws attention to the fundamental weakness of being dependent upon subdivision and a categorisation of land use and subdivision between residential, industrial or commercial purposes as a basis of levying open space contributions.³

The Panel understands the concern raised by Mr Milner. It considers that the primary driver of the need for new open space infrastructure is population, both residents and workers. Subdivision is a useful but imperfect indicator of likely future populations; imperfect because not all larger developments will be subdivided. For example, many commercial developments are not subdivided and an increasing number of residential developments, such as build to rent and student accommodation, are not subdivided. This gives rise to a fundamental inequity between development which is subdivided and therefore contributes to the provision of open space, and development which is not subdivided and creates an increased need for open space but does not contribute under this mechanism.

The Melbourne metropolitan open space strategy, *Open Space for Everyone*, which was introduced into the Planning Scheme during the Hearing through Amendment VC199, has as one of its enabling actions an update to funding and financing models. The Panel considers that it would be appropriate to review the use of the basis of, and trigger for, Clause 53.01 open space contributions as part of any future review of open space funding mechanisms.

It is not the Panel's role to discuss this issue in detail or to suggest alternative models. However, the Panel has a responsibility to identify fundamental weaknesses where it sees them. It considers that given the nature of much commercial development, particularly in inner areas, the Clause 53.01 methodology used is no longer fit for purpose. This is not a criticism of Council. It has used an appropriate mechanism available to it.

Mr Balding submitted that he supported YOSS but did not support the proposed levy. He submitted that on-street car parking spaces used by residents were significantly under-priced and he suggested an annual fee of approximately \$2,000, the revenue for which could be used to provide open space. The Panel offers no comment on this approach.

Consulting Surveyors Victoria (CSV), a body that represents Victorian firms of surveyors, submitted that the lack of discretion in the application of Clause 53.01 can lead to inequity in some cases (Document 51). CSV's concerns focussed on the blanket application of Clause 53.01 to subdivisions necessary for land tenure matters such as realignment of boundaries or a reduction in the number of lots, rather than 'development' as such, and which do not result in an increase in the need for open space.

³ Document 29, [63].

In oral submissions, after acknowledging the existing exemption in Clause 53.01-1 for two-lot subdivisions where the relevant council considers it unlikely that each lot will be further subdivided, Mr Shone for CSV explained that, in practice, CSV members were reporting that councils are deeming two-lot subdivision as being able to be re-subdivided more and more often. Mr Shone explained that as a result, landowners were turning to 'sub-optimal' alternatives such as 99-year leases to avoid having to pay open space contributions for basic boundary realignments which do not create any additional need for open space.

The Panel acknowledges the concerns of CSV and its members and notes that they are not specific to the Yarra provisions. The Panel considers that there may be a case for exemption of purely administrative subdivisions but is concerned how this would be defined and the administrative burden on councils in applying any appropriately worded exemption. For example, how would a council officer determine that a subdivision was purely administrative and would not result in an increase in open space needs. Further, it seems to the Panel that the current issues being experienced result from the *application* of the current exemption, rather than the provision itself.

The Panel considers that it is outside the scope of its role to comment further on the suitability of the existing exemptions to Clause 53.01 but wishes to place CSV's concerns on the record. It is an issue that could be taken up in any future review.

1.5 Procedural issues

Translation of local policy

Initially, Council had not proposed changes to Clause 22.12 as part of the draft Amendment documents. This was because Council had proposed to translate the current Clause 22.12 into Clause 19.02-6L (Public Open Space Contribution) as part of Council's translation of local policy into the Municipal Planning Statement and Planning Policy Framework via Amendment C269yara. To avoid confusion, Council considered that Clause 22.12 should not form part of the Amendment at that stage. Amendment C269yara is proceeding in parallel with this Amendment.

As a condition of authorisation of this Amendment, the delegate of the Minister required an updated Clause 22.12 Open Space Policy to be exhibited. A revised Clause 22.12 was prepared and exhibited. The subsequent translation of Clause 22.12 will depend on the timing of the approval of Amendment C269yara and of this Amendment.

Exhibition period

In its Part A submission, Council advised the Amendment had been exhibited for slightly less than the statutory minimum exhibition period of one month. Notice of the Amendment was sent by post and email on 6 September 2021 and published in the Government Gazette on 9 September 2021. The exhibition period closed on 5 October 2021. Council acknowledged this shortcoming at the Hearing and no submitter raised an issue in response. The Panel determined that there was no evidence that any submitter or potential submitter was detrimentally impacted by the defect and, as provided for under section 166(1) of the PE Act, it would continue to hear and report on the Amendment.

Request for further information

At the Hearing, Mr Gobbo made a submission for a group of clients represented by Planning and Property Partners Pty Ltd⁴ on the appropriateness of the approach used by Council to apportion open space project costs between existing and new populations. As a result, the Panel issued a Direction dated 20 December 2021 (Document 102) seeking further information from Council on the approach used. This followed a pre-Hearing Direction seeking information on the same issue. The Panel made the Direction on the basis that under section 161 (1)(d) of the PE Act it may inform itself in any way it sees fit. Mr Gobbo objected strongly to this proposed request by the Panel on the grounds that he had completed his cross examination of Council's witness, Ms Joanna Thompson, on this matter and that at the time he had almost completed his submission. In subsequent correspondence, Rigby Cooke on behalf of Porta Investments Pty Ltd (Porta), submitted that:

... any such explanation must be limited to an explanation of what was considered in the apportionment that was actually made for the Amendment as exhibited not an ex post facto explanation of the details so provided.⁵

The Panel did not accept the submission by Mr Gobbo. To ensure that all parties were afforded natural justice, the Panel allowed submitters further opportunity to submit on the information provided by Council, both orally at the Hearing on 9 February 2022 and in writing.

The information requested by the Panel was provided (Documents 116 to 121) and was presented to the Panel on 9 February 2022. Further written submissions in response to the further information provided by Council were accepted until 12 noon on 16 February 2022 and the Panel reconvened on 23 February 2022 to allow Council to respond to these. Written submissions on the further information provided to the Panel were received from Piedimonte Properties Pty Ltd (Piedimonte), Porta, and the PPP group of clients (Documents 131 to 133).

With respect to the claimed unfairness of this process in response to the further information provided by Council, Ms Pepler for the PPP group of clients submitted:

The material has also been allowed following Council being able to hear the full case against it. It provides Council with an opportunity to create new substantive technical material to respond to the case put against it, but without the opportunity for proper challenge or response. This process does not allow for procedural fairness.⁶

Norton Rose Fulbright on behalf Piedimonte also submitted that the process was unfair.

The Panel responds that it has afforded parties an opportunity to respond to the further information it requested. The Panel notes that Table 1 in Document 121 is new information prepared specifically for the response to the Panel's request, a matter which was raised on the submissions on the new information and acknowledged by Ms Thompson. It is weighted accordingly by the Panel. This is discussed further in Chapter 4.3 which addresses apportionment between existing and new populations.

⁴ At the Hearing, Mr Gobbo QC and Ms Pepler represented a group of 13 clients of Planning and Property Partners Pty Ltd. Refer to Appendix B of this Report for a full list of submitters.

⁵ Document 104.

⁶ Document 133, [3].

1.6 Summary of issues raised in submissions

The key issues raised were:

- the magnitude of the proposed increase in the open space contribution rate
- the strategic justification for the increased contribution rate
- lack of transitional provisions
- inconsistency of proposed rate as compared to that imposed in other municipalities
- the appropriateness of a single rate for the whole municipality
- apportionment of costs between existing and new users of open space
- the total costs of open space, both land and capital components
- impact on housing affordability
- justification for imposing the contribution on non-residential uses
- lack of bespoke arrangements for strategic redevelopment sites
- the adequacy of open space in Yarra currently
- impact of the contribution rate on the economic viability of projects
- need for greater flexibility in the way in which an increased contribution is implemented
- the consideration of the principles of need, nexus, accountability and equity
- the currency of the data on which the YOSS is based
- the timing of the Amendment in relation to the economic impact of COVID19.

1.7 The Panel's approach

The Panel has assessed the Amendment against State and local policy. Further, it has assessed the YOSS and its proposed implementation. It has not undertaken a formal 'net community benefit' analysis. This is because the need for more and enhanced open space in Yarra is clear and was not disputed. The Panel considers that the implementation of the Amendment will generate significant benefits for existing and new populations in Yarra.

The Panel considered all written submissions made in response to the exhibition of the Amendment, and submissions, evidence and other material presented to it during the Hearing. It has reviewed a large volume of material and has had to be selective in referring to the more relevant or determinative material in this Report. All submissions and materials have been considered by the Panel in reaching its conclusions, regardless of whether they are specifically mentioned in the Report.

This Report deals with the issues under the following headings:

- Planning context
- Yarra Open Space Strategy (YOSS)
- Open space contribution rate
- Issues arising in calculating and applying the open space contribution
- Impacts of the proposed open space contribution rate
- Statutory planning issues
- Interim open space contribution rate.

2 Planning context

2.1 Planning policy framework

Council submitted that the Amendment is supported by various clauses in the Planning Policy Framework. These are summarised below.

Victorian planning objectives

The Amendment will assist in implementing State policy objectives set out in section 4 of the PE Act by facilitating the fair, orderly economic and sustainable use and development of land. Council submitted that this objective is addressed by providing:

- an equitable method to collect contributions for public open space based on the need created by subdivision of new development
- certainty and consistency as to the required public open space contribution for subdivision of land in Yarra.

Further, Council submitted that the Amendment addresses the following objectives in section 4 of the PE Act:

- to secure a pleasant, efficient and safe working, living and recreational environment for all Victorians and visitors to Victoria
- to protect public utilities and other assets and enable the orderly provision and co-ordination of public utilities and other facilities for the benefit of the community
- to balance the present and future interests of all Victorians.

Clause 11 - Settlement

The Amendment supports Clause 11 by:

- building on strengths and capabilities of each region across Victoria to respond sustainably to population growth and changing environments
- developing settlements that will support resilient communities and their ability to adapt and change
- balancing strategic objectives to achieve improved land use and development outcomes at a regional, catchment and local level.

Clause 12 - Environmental and landscape values

The Amendment supports Clause 12 by ensuring that natural features are protected and enhanced.

Clause 15 - Built Environment

The Amendment supports Clause 15 by promoting a diversity of public open space to support future subdivision development that foster a healthy lifestyle and achieve community benefit from well-designed neighbourhoods.

Clause 19 - Community Infrastructure

The Amendment supports Clause 19 by seeking to protect and expand the public open space network to address the current and future gaps of provision.

Clause 21.02 – Municipal Strategic Statement

With respect to open space this Clause recognises:

There is an inherent discrepancy in open space distribution across the municipality due to historical settlement patterns and types of land use. The majority of Yarra's open space is located in the north-eastern area of the municipality with just over 70% located in North Fitzroy, Clifton Hill, Alphington and Fairfield, where 25% of the population lives. By contrast, Collingwood has just 0.12 hectares of open space with 7.4% of the population in residence there. 13% of Yarra's population lives in Fitzroy where there is a total of 2.2 hectares of open space. Other areas with almost no open space include Cremorne and North Richmond. There are important open space resources adjacent to Yarra's boundary, one of which is Princes Park.⁷

Clause 22.12 - Public Open Space Contributions)

The Amendment supports the following objectives of Clause 22.12 which are common to both the existing and amended Clause 22.12:

- to fund a fair proportion of the open space projects contained in the YOSS that will meet the needs of the forecast residential commercial and business population
- to contribute to improvements to existing public open space and provide new public open space on behalf of the forecast population
- to expand the public open space network to accommodate the growth in population predominantly in medium to high density urban development located across the municipality.

The Amendment meets these objectives by:

- addressing current and future gaps in the provision of public open space to support the needs of new residents
- ensuring that adequate public open space is provided for development, including sites that seek higher residential densities
- improving the diversity, functionality and inclusiveness of public open space facilities and landscape settings to meet the needs of the community.

2.2 Other relevant planning strategies and policies

State and regional plans and strategies

(i) Plan Melbourne

Plan Melbourne 2017-2050 (Plan Melbourne) sets out strategic directions to guide Melbourne's development to 2050, to ensure it becomes more sustainable, productive and liveable as its population approaches 8 million. It is accompanied by a separate implementation plan that is regularly updated and refreshed every five years.

Plan Melbourne is structured around seven Outcomes, which set out the aims of the plan. The Outcomes are supported by Directions and Policies, which outline how the Outcomes will be achieved. Outcomes that are particularly relevant to the Amendment are set out in Table 4.

⁷ Document 22, [122].

Table 4 Relevant parts of Plan Melbourne

Outcome	Directions	Policies
5. A city of inclusive, vibrant and healthy neighbourhoods	5.1 Create a city of 20 minute neighbourhoods	5.4.1 Network of accessible high quality local open spaces
	5.3 Deliver social infrastructure to support strong communities	
	5.4 Local parks and green neighbourhoods	
6. Sustainable and resilient city	6.4 Cooler and greener Melbourne	6.4.1 Support a cooler and greener Melbourne by greening urban areas, buildings, transport corridors and open spaces to create an urban forest.
		6.4.2 Strengthen the integrated metropolitan open space network

(ii) Protecting Victoria’s Biodiversity 2037

The strategy recognises that the natural environment is fundamental to the health and wellbeing of every Victorian.

(iii) Lower Yarra River Corridor Study, 2016

This Department of Environment, Land, Water and Planning (DELWP) commissioned study was aimed to ensure that development does not further encroach on the river and impact its value for recreational purposes.

(iv) Yarra River Action Plan 2017

A Victorian Government prepared plan which supports the importance of the Yarra River corridor as an open space corridor that adjoins the City of Yarra.

(v) Yarra River Protection (Willip-gin Birrarung Murrn) Act 2017

This Act enshrines the protection of the Yarra River. The Act includes a number of guiding principles which affect how the Council protects and manages the river and associated parklands.

(vi) Draft Yarra Strategic Plan

This integrated corridor plan was developed collaboratively by the Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation and all 15 state and local agencies involved in managing the river.

(vii) Active Victoria – A strategic framework for sport and recreation in Victoria 2017-2021

This framework highlights the benefits of sport and active recreation in developing a healthier community, economic growth and jobs, community cohesion and liveability.

(viii) Inner Melbourne Action Plan – regional sport and recreation strategy

Prepared for inner metropolitan councils, this plan recognises that historic approaches will not be enough to meet current and future sport and recreation needs due to the high cost of land.

(ix) Open Space for Everyone

Open Space for Everyone: Open Space Strategy for Metropolitan Melbourne, 2021 (Open Space for Everyone) is a broad strategic policy prepared by the State government with a vision of Melbourne being a city in nature with a flourishing and valued network of public open space that is shared and accessible to everyone. Based around the following four goals, it sets out actions to deliver on its vision for future open space in metropolitan Melbourne:

- improved community health and well being
- healthier biodiversity
- enhanced climate change resilience
- maximised economic and social benefits.

During the Hearing, this adopted State strategy was introduced into the Planning Scheme at Clause 19.02-6R through Amendment VC199, therefore giving it greater weight.

Relevant Council Plans and Strategies

(x) Council Plan 2017 – 2021

The community consultation undertaken in the preparation of this plan identified open space as the second most important characteristic that residents like about Yarra and the third most important issue for Council to address. The Plan is based around seven objectives which open space has a role in contributing towards.

(xi) Yarra Housing Strategy 2018

This strategy addresses housing trends in Yarra and the challenges arising from the continuing trend of higher density housing projects. This has provided input into the open space strategy.

(xii) Yarra Spatial Economic and Employment Strategy 2018

This strategy provides a detailed assessment of land use and floorspace demand in six retail (mixed use) and seven commercial/ industrial precincts in Yarra. The YOSS uses the non-residential forecasts prepared as part of this strategy as input.

(xiii) Urban Forest Strategy 2017

This strategy provides a clear direction for the future care and management of trees in Yarra. It includes evidence of the cooling effect of the tree canopy cover in Yarra.

(xiv) City of Yarra Biodiversity Health Survey, Discussion Paper 2018

This study establishes a baseline for biodiversity values associated with open space. A total of 30 open spaces were assessed along with 10 pocket parks and 12 streetscapes.

(xv) Yana Ngargna Plan 2020-2023

The Plan clearly sets out the role of the Yana Ngargna working group who guide action and coordinate projects that build cultural awareness and confidence across Council. The plan has four

priority commitments which include protecting important places and improved health and wellbeing outcomes.

2.3 Planning scheme provisions

The Amendment applies to all land zoned for residential, industrial and commercial purposes in the City of Yarra.

2.4 Ministerial Directions and Practice Notes

Ministerial Directions

The Amendment is consistent with Ministerial Direction 9, Metropolitan Strategy as it:

- provides a greater understanding of public open space needs for the Yarra
- increases the availability, usability and access to public open space
- provides opportunities for social interaction
- greens the urban environment.

The exhibited Explanatory Report discusses how the Amendment meets the relevant requirements of Ministerial Direction 11 (Strategic Assessment of Amendments).

Planning Practice Notes

The following Planning Practice Notes (PPN) are relevant:

PPN13 – Incorporated and Background Documents

PPN13 provides guidance on when a document should be an incorporated or background document and describes the role of each. The Amendment has been prepared having regard to PPN13 and as such it is proposed to include the YOSS as a reference document, replacing the 2006 Strategy.

PPN70 – Open Space Strategies

PPN70 provides guidance on the preparation of an open space strategy, including open space classifications and undertaking analysis in relation to existing supply, future demand and gaps in the existing open space network. Council submitted that there is a high level of correlation between the methodology adopted in the YOSS and PPN70. PPN70 sets out a list of principles that an open space strategy should include. Council included an assessment of YOSS against these principles at Attachment D to its Part A submission (Document 22).

PPN70 does not provide guidance on the methodology for calculating an open space contribution rate, nor on apportioning costs of open space projects between residents and workers or between existing and new populations.

2.5 Discussion and conclusion

Some submitters contended that the Amendment lacked strategic justification. However, these submissions generally focussed on aspects of the Council's approach rather than the overall support in State and local policy for the provision of appropriate high quality open space, a matter which was either essentially supported or at least not challenged to the extent that is of concern to the Panel.

For the reasons set out in the following Chapters, the Panel concludes that the Amendment is supported by, and implements, the relevant sections of the Planning Policy Framework, and is consistent with the relevant Ministerial Directions and Practice Notes. The Amendment is well founded and strategically justified, and the Amendment should proceed subject to addressing the more specific issues raised in submissions as discussed in the following Chapters. However as set out in Chapter 8, finalisation of the Amendment should not occur until further work is undertaken by Council.

3 Yarra Open Space Strategy

This Chapter outlines the key elements in determining the need for and distribution of future open space in Yarra.

In Chapter 2, it was concluded that the Amendment is broadly strategically supported by State and local policy. Further there was little suggestion that the YOSS was not strategically supported by policy. In its part B submission, Council assessed the YOSS against the strategic principles in PPN70. Under cross examination by Ms Brennan, Mr Milner conceded that the YOSS was generally sound, well researched and laudable and broadly complies with PPN70. The Panel concludes that the YOSS is well supported in policy.

3.1 Projections of the new resident and worker population

(i) The issues

The issues are:

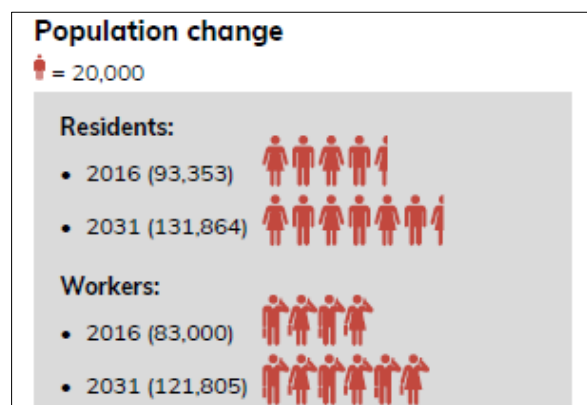
- whether the projections of new resident population are appropriate
- whether the projections of new worker population are appropriate.

(ii) Background

The resident population forecasts used in preparing the YOSS are based on data from .id Consulting dated 16 October 2018 which indicates that Yarra’s resident population is expected to increase by about 40 per cent between 2016 and 2031. The worker population forecasts are based on the *Yarra Spatial Economic and Employment Strategy 2018* (SEES) prepared by SGS Economics and Planning which forecasts an increase in Yarra’s worker population by about 47 per cent between 2016 and 2031.

These resident and worker populations are referred to collectively in this report as the “new population”. These population changes are illustrated in Figure 5.

Figure 5 Components of population change



Source: Council Part A submission (Document 22) [44]

(iii) Evidence and submissions

Both forecasts were prepared prior to the impact of COVID19. Dr Eagleson prepared a memorandum canvassing the potential impacts of COVID19. On her assessment, the population growth for Yarra will still be met, albeit most likely three or four years later than forecast due to COVID19 impacts. This issue is discussed further in Chapter 3.4.

Some submissions questioned the accuracy of the data used and contended that the data was out of date referencing, in particular, the YOSS being based on data from the Council's Housing Strategy and the SEES both of which were produced using 2016 census figures.

The forecast changes in resident and worker populations were prepared at the municipality level and broken down at the precinct level used in the YOSS. The details of the forecast changes and implications on open space planning are explained in detail in Chapter 4 of the Technical Report (Document 15). The Housing Industry Association (HIA) questioned the accuracy of Council's significant resident population growth projection of 41 per cent over the period 2016 to 2031 in the context of its own economic modelling and the Victoria in Future forecasts, a falling dwelling completion rate based on its analysis, the COVID19 pandemic and the projections of transport modelling to 2036 on Melbourne's population growth. HIA submitted that its economic modelling forecasts that Yarra's resident population will grow by 33.9 per cent (31,802 people) over the period 2016 to 2031 and that the Victoria in Future forecast at 35.5 per cent (32,962 people) growth is closer to the HIA forecast.

Council rejected HIA's submissions that the new population forecasts used in the YOSS were not accurate. In oral submissions, Ms Brennan asserted that no better information than the forecasts prepared by .id Consulting are available and are as accurate as can be, given the impacts of COVID19.

Ms Kay noted in her evidence for Council that the population data cover the period 2016 to 2031, both of which are census years. She stated that census years are preferred because it is easier to go back to a census year to determine the accuracy of the original forecasts and thus the appropriateness of the open space program being implemented. Ms Kay expressed a high level of confidence in using data developed for the same time period, being 2016 to 2031, and viewed as significant the fact that the resident and worker population forecasts were prepared at the same time and using the same urban planning framework. She stated that:

I would have less confidence in the public open space contribution rate if data from different time periods were to now be substituted in the calculation, for example, the use of data prepared in both 2018 and 2021, or for different population forecast periods. I would view this as potentially being an "apples and oranges" situation. I note that the rate calculation directly results from the residential and worker forecasts, and from the 2020 Strategy needs assessment.⁸

Ms Thompson commented in oral evidence that the new population forecasts are linked to census years.

(iv) Discussion

Aside from the HIA which cited lower population forecasts, no other parties questioned the new population projections used by Yarra in preparing the YOSS. The HIA did not provide details of its economic modelling.

⁸ Document 24, [66].

The Panel notes that the .id Consulting resident population forecasts and the SEES employment forecasts are over the same timeframe as the YOSS, and are tied to census years which, as noted by Ms Kay, is an important factor in allowing ease of reference back to a census year to confirm the accuracy of the forecasts.

The Panel has no concern as to the accuracy and currency of the data used in the forecasting work which was done in 2018 based on 2016 census data, the most current and comprehensive data available at the time. The Technical Report sets out in some detail the analysis done to determine the new population forecasts and the Panel is satisfied that this analysis is robust and is the best available forecasting for the City of Yarra at the municipality level.

The impacts of COVID19 will most likely affect the timelines as to when the projected population levels will be met but in the Panel's view, this does not fundamentally call into question the quantum of the new population growth projections.

(v) Conclusion

The Panel concludes the projections of new resident and future worker populations are appropriate.

3.2 Quantum and distribution of proposed open space

(i) The issues

The issues are:

- whether the quantum of proposed open space is appropriate to the needs of the existing and new populations
- whether the open space proposed is appropriate given the open space hierarchy
- whether the treatment of barriers to accessing open space is appropriate
- whether the accessibility of existing open space in adjoining municipalities is appropriately allowed for
- whether the distribution of proposed open space is appropriate to the needs of existing and new populations.

(ii) Evidence and submissions

Ms Thompson gave expert evidence for Council on open space planning as the principal author of the YOSS and the Technical Report. Her evidence was that open space is important for a range of reasons including physical health, fitness and wellbeing, mental health and wellbeing, social connectedness, urban heat island effect (UHIE) mitigation, biodiversity, cultural heritage and character, and events and arts. On many occasions during her evidence and cross examination, Ms Thompson referred to the provision of open space that is easily accessible to all within the municipality as being one of the key underlying objectives of the YOSS.

She described the magnitude of forecast change of an extra 77,000 new population forecast in Yarra from 2016 to 2031 as 'substantial'.⁹

She stated that the overall directions that guide the detailed precinct analysis and actions that implement the YOSS over the next 15 years are to:

⁹ Document 25, [3.1.6].

- improve the quality of existing open spaces including the type of facilities and the overall character and condition
- provide open space within easy walking distance of where everyone lives and works to address the gaps in the existing network with priority given to locations where higher levels of growth is forecast to occur
- assist to mitigate urban heat island effect with a well distributed open space network through high density precincts that contain natural features which absorb moisture
- improve community health and wellbeing with a linked and accessible open space network that people can easily walk to
- increase urban greening.¹⁰

Ms Thompson explained that the methodology for the open space needs assessment that informed the YOSS included:

- visiting all existing open space reserves in the City of Yarra and documented their quality
- reviewing background documentation
- working with her in-house team to map and quantify the existing open space (Section 3 of the Technical Report)
- allocating the open space hierarchy and the walking catchment applicable to each existing open space to produce the Open Space Gap Analysis map (Figure 3F in the Technical Report)
- using the dwelling and population forecast data sourced and assembled by Ms Kay, assessed (with Ms Kay) the influence of the forecast change on open space needs, including population growth, increased urban densities, climate emergency and increased levels of use on the open space planning (Section 4 of the Technical Report)
- developing the open space hierarchy and criteria for open space based on her research (including a community engagement process) and applied this to the precincts as part of a precinct-based open space needs assessment
- preparing individual prioritised 'Actions' (or projects) for each precinct to address the open space needs identified
- preparing the YOSS POPC (which is described in Chapter 1.3).¹¹

To assess the needs of the existing population,¹² Ms Thompson relied on a range of factors including the outcomes of a community engagement process undertaken by Council (using questions and a survey prepared by Ms Thompson's firm). Ms Thompson stated the survey results were used in a more qualitative than statistical way and she took note of existing levels of use and satisfaction with the open space as expressed in the surveys.

To assess the needs of the new residential population, Ms Thompson relied on the projected population and its distribution within Yarra, as provided by .id Consulting, together with the projected spatial distribution of the residential population in the *Yarra Housing Strategy 2018* (Figure 4A in the Technical Report). For the new employment population, she relied on Tables 4, 5 and 6 of the SEES, in particular the spatial distribution of Employment and Retail Precincts (Figure 4B in the Technical Report).

¹⁰ Document 25, [3.1.7].

¹¹ Document 25, [2.1].

¹² Although the YOSS includes projects addressing the needs of both existing and forecast populations, Ms Thompson's evidence clarified that where the forecast population is not creating the need for a project, the project would not be eligible for a contribution. Document 25, [3.1.2].

Ms Thompson considered a range of factors in assessing the needs of the new population including:

- future population densities
- spatial distribution of existing open space
- the hierarchy, character and condition of the existing open space
- the proposed urban form. In locations where higher densities and concentrations of the new resident and worker population are proposed as shown in the Yarra Housing Strategy and the SEES. It is assumed there will be a greater demand placed on open space in the immediate vicinity of the new population. The increased number of residents and workers using existing open space creates additional demand for facilities such as seating areas, fitness equipment, picnic facilities, paths and playgrounds etc.
- urban layout including presence of any physical barriers to safe pedestrian access to open space.¹³

These factors were also used in the apportionment of costs between existing and new populations and are addressed further in Chapter 4.3.

Ms Thompson reviewed and assessed the above information and analysis and assessed the additional works that would be required for the new population beyond catering for the existing population for each precinct. These became the developed 'Actions' (or projects) which were then costed in the YOSS POPC.

Ms Kay gave expert planning evidence for Council on the strategic underpinnings of the YOSS and related documentation. She referred to the following aspects of Plan Melbourne as being particularly relevant:

- The 20-minute neighbourhood: Ms Kay noted that a *"key feature of the YOSS is to provide access to safely walkable public open space"*¹⁴
- Delivering local parks and green neighbourhoods: After referring to the need to ensure that open space across the municipality is of sufficient size and quality to support an appropriate mix of activities, to improve the environment and habitat, and to provide urban cooling, Ms Kay stated that *"This principle is further enhanced with Policy 5.4.1 to develop a network of accessible, high-quality, local open spaces that includes access for all members of the community"*.¹⁵

Ms Kay stated that *Open Space for Everyone* shifts focus from its predecessor strategy *"from regional parks to work toward more equitable access to open space across metropolitan Melbourne"* and that the themes of *Open Space for Everyone* had already been incorporated in the YOSS including *"strategy recommendations to deliver safe and walkable accessibility to open space; promote community health and well-being; maintain and enhance a healthy biodiversity; and address climate change resilience and sustainability"*.¹⁶

Council submitted that the YOSS meets the requirements of PPN70 and that despite challenges to specific aspects of the YOSS, the vast majority of the work undertaken for the YOSS had not been challenged.

¹³ Document 25, [3.3.3]. The Contributions Report states at p. 3: *"Major roads and other physical features can form 5 to safe and easy walking access to public open space, which is a key consideration in the open space needs analysis."*

¹⁴ Document 24, [27].

¹⁵ Document 24, [30].

¹⁶ Document 24, [34] & [35].

Mr Milner gave evidence that the Amendment “*should be recognised as generally sound strategic open space planning*”¹⁷ for a range of reasons. These included that it systematically documents Yarra’s existing current open space provision and identifies existing gaps, analyses expected open space demand having regard to population projections and socio-economic analyses and systematically identifies anticipated open space needs on a sub-precinct basis. However, he criticised the weight given to open space in adjoining municipalities (discussed further below) and the needs assessment’s failure to account for a wider range of open spaces such as streetscapes, school grounds and privately owned business open space. Under cross examination, Mr Milner stated that providing open space within safe and easy walking distance has strong strategic support.

Mr Black in evidence for Piedimonte, stated that the YOSS has been prepared generally in accordance with PPN70 and “*is in a form that is generally consistent with other public open space strategies that have been prepared for municipalities in the inner and middle ring municipalities of Melbourne*”.¹⁸ Under cross examination, Mr Black said that the planning underlying the YOSS was broken but then retracted that statement and said that the gap analysis was flawed.

Overall, the PPP group of clients submitted that Council’s needs assessment and the substantiation of the projects (the Actions in the POPC) was not satisfactorily undertaken. After acknowledging that Ms Thompson’s needs assessment had been informed by a variety of relevant factors, Mr Gobbo for the PPP group of clients submitted that the YOSS lacks an objective justification for *how* the open space projects said to be needed have been determined including:

- whether any given open space project is needed in a particular location or form
- which population is producing the need
- what type of open space within the open space hierarchy is justified.

Mr Shipp criticised Ms Thompson’s open space needs assessment:

While there is no doubt that the additional population and employment projected for the municipality will generate additional demand for open space, in my view it is difficult to determine from the exhibited material exactly how the quantum of projected growth has been translated into an estimate of open space need, and subsequently whether the recommended actions are needed by the existing or future populations, and in what proportions.¹⁹

Mr Shipp stated that the Actions specified for each precinct are “*as much designed to address existing gaps in provision [of open space] as they are to provide new open space for projected growth*” (noting that Mr Shipp also took issue with the apportionment of costs as between existing and forecast populations, which is discussed in Chapter 4.3).²⁰

Reliance on open space in adjoining municipalities

Mr Milner stated that it is unclear what weight had been given to Yarra’s access to open space on nearby land in adjoining municipalities in the open space needs assessment and the accounting for open space in adjoining municipalities had not been clearly or consistently applied. He provided examples where adjoining open space was considered in the precinct needs assessments and others where it was not.

¹⁷ Document 29, [9].

¹⁸ Document 31, [12] to [13].

¹⁹ Document 28, [85].

²⁰ Document 28, [145b].

Mr Milner concluded:

... greater weight should be given to the City's extraordinarily good access to a choice of substantial parks and river corridors of metropolitan significance located proximate in the adjoining municipalities. These open space assets, at the fringe of the municipality, enable integrated access through expansive parklands and extended trails without equal in many outer and middle-distance suburbs.

C286 accordingly lacks the balance and justification to levy what would be one of the highest open space contribution rates in the State to deliver public opens space potentially well exceeding the City's reasonable open space requirements.²¹

Mr Gobbo questioned whether the need for Action 7.8A-2, a \$37,000,000 new Local Open Space in Fitzroy B, to the immediate east of the Carlton Gardens, had been adequately justified or whether a Small Local Open Space in the realm of \$7,000,000 would be sufficient. He submitted that Ms Thompson had given no recognition to the proximity of the Carlton Gardens, which he submitted is readily accessible across Nicholson Street.

Along similar lines, Piedimonte submitted that the YOSS overstates the need for open space, with one reason for this being the failure to consider existing public open space which is close to the municipal boundary. Mr Black stated that this failure "*sets unrealistic pressures on the open space needs within the municipality, and results in an inaccurate gap analysis*".²² He gave as an example the suburbs of Central Richmond and Cremorne which have large areas of open space adjacent to Yarra on the western side of Punt Road, yet the YOSS showed these areas as having large gaps in the provision of existing open space.

In its closing submission, Council rejected suggestions that the YOSS had not appropriately considered access to and use of open spaces outside the municipality and pointed to examples of where the Technical Report referred to adjoining and nearby open spaces such as Yarra Park, Princes Park, Northcote Park, Gosch's Paddock, Como Park, Hardy Gallagher Reserve, Fitzroy Gardens, Carlton Gardens and the Royal Botanic Gardens. Council also pointed to Figure 5A of the Technical Report, the 'Schematic plan illustrating the type and location of proposed new open space', which it submitted clearly showed adjoining open space and had been misinterpreted by Mr Black and the PPP group submission.

Crossing roads

Piedimonte submitted that the open space needs of Fitzroy North in particular but also more generally across Yarra are overstated because roads do not constrain access to open space as much as has been assumed in the YOSS, giving as an example the need for the new Fitzroy North small local park on the basis that crossing Brunswick Street would be a barrier. Mr Black gave evidence that roads do not constrain access to open space as much as indicated in the YOSS, although he did acknowledge that for some people crossing a main road can be a physical barrier to accessing open space.

Specific Actions

Action 7.5A-6 in Collingwood

The PPP group of clients questioned why a Small Neighbourhood Open Space rather than a Local Open Space was needed for Action 7.5A-6 in Collingwood C, submitting that the relevant

²¹ Document 29, [121] to [122].

²² Document 31, [172].

explanation in the POPC suggests that the population that justifies the larger open space is expected to come after 2031 and therefore outside the YOSS.

Under cross examination by Mr Gobbo on whether the Small Neighbourhood Open Space was justified by the population growth to 2031, Ms Thompson gave evidence that the strategy was to deliver a smaller area during the timeframe of the YOSS rather than waiting for the whole area to be delivered at a later date. She referred to the relevant population forecasts and confirmed that she had not applied a different methodology to this needs assessment. Council submitted that Ms Thompson had responded to cross examination on this point that the open space could be provided in a staged way. However, it submitted that if the Panel is not satisfied that a Small Neighbourhood Open Space is justified for the 2031 population, the Panel could recommend that this action (and related costs) be adjusted accordingly which would reduce the costs from \$59,000,000 to \$30,000,000 to be apportioned between the existing and new population on a 50:50 basis.

Action 7.8A-2 in Fitzroy B

As noted above, the PPP client submission questioned Action 7.8A-2 in Fitzroy B on the basis that insufficient account had been taken of access to Carlton Gardens.

Action 7.9A-1 in Fitzroy North

Piedimonte questioned the need for the proposed new Small Local Open Space in Fitzroy North B, using this as an example to illustrate its submission that the need for new open space has been overstated.

Ms Thompson gave evidence that there is an existing need for this open space and that Edinburgh Gardens is becoming overused. She said it would also be required for the new population and to take pressure off Edinburgh Gardens. Mr Black did not give evidence on this matter.

Action 7.5B-4 in Fairfield

Action 7.5B-4 is to “continue to implement the [Fairfield] masterplan including a major upgrade to the playground and picnic facilities at the park ... for both the existing and forecast populations”.²³ Porta submitted that there had been no explanation of the need for a full upgrade of the playground and picnic facilities, part of the Fairfield Masterplan, particularly where the increase in residential population in Fairfield is forecast to be only 57 people and the number of children in this forecast population would be considerably less. Furthermore, there had been no need for further improvement to the existing open space network for the existing population in Fairfield identified in the survey results.

Ms Thompson noted that there is no land acquisition proposed in Fairfield and the contribution required was to cover upgrades which would be targeted at neighbourhood use. Under cross examination, Ms Thompson would not agree that Fairfield and the area around the Porta site was overendowed with open space, but she did accept that it abuts public open space that even in 2041 would be over three times the standard aspired to by the Amendment. Council submitted that Porta did not challenge the Action *per se*, but merely the apportionment.

²³ Technical Report, p. 295.

(iii) Discussion

At the outset, the Panel notes the expert evidence of Mr Milner that the Amendment and supporting documentation should be recognised as generally sound strategic open space planning. All experts appeared to agree that the Amendment is generally in accordance with the statutory framework and PPN70. The Panel notes the evidence of Mr Black given under cross-examination by Ms Brennan that the planning underlying the YOSS was broken, and which was later retracted and confined to criticism of the gap analysis (8 February 2022). The Panel considers that Mr Black's evidence was not convincing in this regards.

The Panel notes that submitters did not question the open space hierarchy itself or the factors that Ms Thompson considered in the needs assessment, but instead focussed their criticism on how that assessment translated into specific Actions, or projects, including the particular open space type in the hierarchy was said to be required, and that it allegedly lacked an objective basis. The Panel has interpreted this as being an objection to the weight given to the various factors in the needs assessment and application of the methodology by Ms Thompson, including whether Ms Thompson should have quantified the relevant factors. Indeed, much of the disagreement between experts, Mr Shipp and Ms Thompson in particular, appeared to be a difference of approach: Mr Shipp clearly prefers a quantitative approach while Ms Thompson's approach is unashamedly qualitative. However, the statutory framework and PPN70 do not mandate, or even prefer, one approach over another. The YOSS and the open space needs assessment cannot fail on this point alone.

The Panel agrees that, in terms of the needs assessment and the resulting recommended Actions, a great deal rests on the qualitative judgement of one person, Ms Thompson. Her role in this respect is addressed further in Chapters 4.3 and 8. However, the Panel notes that while other experts questioned Ms Thompson's application of the YOSS methodology, there was no serious questioning of her expertise as an open space planner and her experience in the field. Further, the Panel also notes that Mr Milner and Mr Black, while planners, both agreed under cross examination that they were not expert open space planners. The Panel agrees that it may have been better to have a more thorough (peer) review built into the process and the Panel would recommend this to other planning authorities embarking on this exercise in the future. However, the Panel does not consider that this is fatal in terms of the needs assessment and the YOSS overall. The Panel discusses the role of a peer review in relation to the apportionment exercise in Chapters 4.3 and 8 below.

The Panel has carefully reviewed the way in which the Technical Report treats the issue of access to and use of adjoining open spaces in other municipalities and agrees with Council's submission that the issue was specifically considered as part of the needs assessment. The Panel takes note of the evidence of Ms Thompson that one of the key drivers of the YOSS was the desire to provide open space to all within the municipality and that it should be easily accessible to people of all ages and abilities. In many instances, use of open space in adjoining municipalities would require crossing of major roads. The Panel considers the weight given to this factor to be clearly justified by reference to the strategic direction for open space as set out in *Open Space for Everyone*. As a result, the Panel does not agree that the YOSS suffers from an over statement of the barriers of roads. The fact that Council has no control over the condition or continued existence of open spaces outside its municipality is important and that an over-reliance by Council on open spaces existing in adjoining municipalities would be open to the criticism that the strategy is 'undercooked'.

As a result, the Panel considers that there has been appropriate weight given to open space in adjoining municipalities.

In terms of the particular Actions that were questioned, the Panel makes the following comments:

- Action 7.5A-6 in Collingwood C: The Panel has reviewed the justification for the need for a Small Neighbourhood Open Space in this location rather than a Local Open Space and considered the evidence given by Ms Thompson under cross examination by Mr Gobbo on this point. Although the Panel considers that under cross examination Ms Thompson did not adequately clarify that the Small Neighbourhood Open Space was required by the forecast population up to 2031, that is the population to be considered within the YOSS timeframe, rather than being driven by later population growth (that is the population forecast between 2031 and 2041), the justification given in the Technical Report for the recommendation for a Small Neighbourhood Open Space in Collingwood C is clearly confined to the 2031 forecast population. The Technical Report notes that this open space will need to be increased in size between 2031 and 2041 to add a new Local Open Space and *“it is recommended that this be considered in the siting of this new Small Neighbourhood open space”*.²⁴
- Action 7.8A-2 in Fitzroy B: The Panel notes that one of the key reasons given by the PPP client submission for disputing the size of the proposed open space was that the gap analysis contained *no* recognition of the Carlton Gardens. As discussed above, the Panel considers that the needs assessment has properly considered adjoining open space in other municipalities.²⁵ A further reason given was that the Carlton Gardens is readily accessible across Nicholson Street. The Panel has considered the evidence given by Ms Thompson in response to cross examination by Mr Gobbo. The Panel acknowledges that there are several pedestrian crossings on Nicholson Street, an arterial road, that could be used to access the Carlton Gardens. However, the Panel has already noted above that it considers it appropriate that the YOSS and background documentation are premised on the strategy that open space must be accessible to all, regardless of ability, and that there has not been an overstatement of the barriers presented by roads. On this basis, the Panel considers that there is no compelling evidence to overturn the existing recommendation for a new Local Open Space in Fitzroy B.
- Action 7.9A-1 in Fitzroy North: The Technical Report states that Action 7.9A-1 is to be provided to address a gap in the existing open space network in the southern part of Fitzroy North B and so that the community living and working in Fitzroy North B can easily walk to open space nearby without crossing a major road. As noted above, given the clear strategic justification for making open space easily accessible to people of all ages and abilities, the Panel considers that appropriate weight has been given to the issue of crossing roads. More generally, the Technical Report states that new (and expanded) areas of open space in Fitzroy North will aim to cater to the local open space needs as suitable alternatives to Edinburgh Gardens, *“given the high levels of use and activity at the Gardens”*.²⁶ The Technical Report also identifies that in Fitzroy North the forecast new population will lead to pressures on existing open space and the risk of

²⁴ Technical Report, p. 254.(original emphasis)

²⁵ In relation to the Carlton Gardens, the Panel notes in particular that the Technical Report recognises that “Carlton Gardens in the adjoining City of Melbourne is valued and forms part of the open space network that is used by the community” (at p. 310).

²⁶ Technical Report, p. 332.

overcrowding. The Panel accepts the evidence of Ms Thompson that the Edinburgh Gardens is reaching its capacity, a proposition that was not generally challenged at the Hearing, and that a smaller area of open space in this area is required to take the pressure off Edinburgh Gardens and to provide an alternative, easily accessed area of open space in the southern part of Fitzroy North B.

- Action 7.5B-4 in Fairfield: The Panel notes that the open space and future need description for Fairfield in the Technical Report identifies the need to continue to implement the existing masterplan for Fairfield Park but does not provide any identifiable reason for the proposed major upgrade to the playground and picnic facilities at the park. Cross examination of Ms Thompson did not reveal any real justification for the major upgrade. The Panel has considered both the Fairfield Park Master Plan 2010 and the Fairfield Park Masterplan Summary Report 2010 (Documents 37 and 38) and considers that they shed no further light on why the upgrade is said to be needed. The Panel does not accept Council's submission that Porta did not challenge the need for the upgrade and considers that Porta challenged both the need for the Action and the apportionment.

The Panel notes that the above objections to the above specific Actions were given by submitters as examples of the YOSS having overstated the open space needs of the municipality, or in particular precincts or locations. The Panel considers that the specific Actions are strategically justified in all instances except Action 7.5B-4 in Fairfield. As detailed above, the overall methodology and factors considered by Ms Thompson in the needs assessment to be appropriate, including the weight given to open space in adjoining municipalities and the desire to provide open space that is accessible to all.

While the Panel would have preferred to have seen some kind of (peer) review of Ms Thompson's needs assessment and translation into specific Actions, on balance the Panel is of the view that the lack of peer review is not fatal on this point, and the quantum and distribution of proposed open space is appropriate to the needs of existing and new populations and is appropriate to the open space hierarchy proposed.

(iv) Conclusion

The Panel concludes that the YOSS and the Actions identified in the POPC are sound and strategically justified except that there is no strategic justification for Action 7.5B-4 in Fairfield and this item should be removed from the YOSS POPC.

3.3 Open space needs of new residents and workers

(i) The issues

The issues are:

- whether the open space needs of new residents and workers are appropriately assessed
- whether the open space needs of residents and workers should be regarded as equivalent for the purpose of calculating total future open space provision.

(ii) Evidence and submissions

As noted in Chapter 3.2, surveys and other forms of community engagement were used to understand what people value about open space and the current patterns of use of existing open space by residents and workers. The resident survey was a self-selecting survey with 1274

completed surveys received (out of 92,894 residents). The worker survey was an intercept survey in four different employment precincts in Yarra with 498 worker surveys completed. The survey findings are detailed in the Technical Report (Appendix B).

Ms Thompson stated that the research work done for the YOSS confirmed that workers use open space as well as residents and:

Based on the outcomes of the worker surveys and the aim of creating attractive and sustainable high density employment precincts in Yarra, I am of the opinion that addressing the local open space needs of the worker population is of equal importance to the resident population in the City of Yarra.²⁷

In oral evidence, Mr Milner stated that it was difficult to reconcile the resident and worker surveys and one cannot draw the link that the need for open space for workers and residents is the same. He noted that 25 per cent of residents worked in Yarra and a significant per centage worked and lived in the same precinct which in his view could amount to 'double counting'.

Mr Black noted in his evidence that the open space strategies of other councils do not appear to consider worker population growth to the same extent as has Yarra and while the impact of worker growth is considered in other strategies, "*this is not treated as equal to resident population growth in the context of calculating the need for new open space*".²⁸ He concluded that the approach taken to treat residential and worker population growth separately results in an overestimation of demand for public open space. He added that approximately 9-10 per cent of residents also work in Yarra thus resulting in double counting. In oral evidence Mr Black expressed strong reservations about treating the need for open space of workers as the same as for residents.

Council submitted that:

... the research undertaken as part of the development of the YOSS indicates that there is no meaningful distinction between the demand for and use of public open space by residents v workers. Council notes that no contrary evidence has been filed that provides an empirical basis to refute the conclusions reached by Ms Thompson in this regard.²⁹

It added that the empirical evidence indicates that there has been a substantial change in workers' use of open space since 2006 (when workers needs were not accounted for) such that there is no longer a material distinction between the need for and use of open space between residents and workers and the frequency of use by each group is not materially different.

In closing submissions, Council argued that those experts who challenged the equivalence between residents and workers in the YOSS had approached the question in the wrong way by erroneously focussing on the differential usage of open space between residents and workers rather than asking whether the need for, or importance of, open space to residents is different to that of workers. Council submitted that the Panel was effectively being asked by these experts to treat the open space needs of residents and workers differently based on different usage and that this is not consistent with community focussed approach sought by *Open Space for Everyone* and the YOSS. Council also urged the Panel:

... not to fall into the trap of assuming particular patterns of usage in its assessment of the YOSS and resolving the question of 'equivalence' by reference to the language and conceptualisation of 'demand units'.³⁰

²⁷ Document 25, [3.6.4].

²⁸ Document 31, [198].

²⁹ Document 34, [154].

³⁰ Document 134, [39] to [42].

Council pointed out that there had been no challenge to the collective assessment of the needs of residents, nor a suggestion that the residential needs assessment should be discounted because some individuals use open space for shorter periods than others, that residents visit open space at different times, or that there is a difference in the type and duration of use between residents but this was what was being done in the context of worker's use of open space.

Council observed that no alternative assessment of equivalence had been put to the Panel by any of the experts and only Mr Shipp provided numbers by reference to the Precinct Structure Planning Guidelines which recommend public open space provision of 10 per cent for residential areas and 2 per cent for employment/economic activity areas, a differential rate of 5:1. Council noted that Mr Shipp did not suggest that this rate should be adopted for workers and residents in Yarra. Council submitted that the land areas associated with open space for precinct structure planning are not good proxies for resident and worker open space needs in a mixed use, established inner city municipality like Yarra.

While noting that the Development Contribution Plan (DCP) approach is not directly comparable to, and not appropriate for, a public open space contribution rate under Clause 53.01, Council drew the Panel's attention to the Arden draft DCP³¹ which contemplates the provision of open space using an equivalence ratio of 71 per cent between residential and commercial land uses. Council observed that the apparent basis for the 71 per cent ratio is that commercial uses are limited to business days, that is, only 5 out of 7 days per week. Council submitted that the Arden DCP example confirms that there is no set approach to worker and resident demand for open space and that it is not a suitable approach for this Amendment having regard to the different values based approach to open space used in the YOSS and the worker profile in Yarra.

Mr Gobbo submitted that Council had not established that workers make the same use of open space as residents or have an equal need for public open space. On this basis and that of common sense, he submitted, the Panel should reject the 1:1 assumption used in the YOSS. He noted that no in-workplace surveys were conducted and suggested that other data such as mobile phone data to verify the home location of park users could have been obtained and put before the Panel, but was not. He noted that Ms Thompson mistakenly assumed that the survey data suggested that more than 60 per cent workers visited open space daily whereas the survey said they visited open space at least once per week. Mr Gobbo submitted that Ms Thompson's conclusions therefore proceeded on an erroneous basis.

Mr Walker for Piedimonte also submitted that treating demand generated by a new worker as equal to one new resident is not justified and supported the submissions made by Mr Gobbo on behalf of the PPP group of clients.

In relation to the 'double counting' issue raised by Mr Milner and Mr Black, Council noted that while there are a proportion of workers who are also residents of Yarra, that is not say those people live and work in the same precinct such that there is no distinction between the times or reasons for using open space by those people or that they use the same open space when working or otherwise. It submitted:

Further, there is a distinction to be drawn between a 'residential' use for those people, such as walking the dog in the evening, and a 'worker' use such as eating lunch in a park, and those uses can reasonably be considered separate and distinct uses – those uses are for different purposes, may be in entirely different parts of the municipality, and in the Council's

³¹ Amendment C407 (Arden Structure Plan) to the Melbourne Planning Scheme.

submission, can both equally be considered as part of the needs assessment, and in considering equity between residents and workers.³²

Council submitted that it would be impossible to account for the disparate needs of all people that are both workers and residents, an assessment at that level of granularity would be impractical and unnecessarily complicated. It added that any risk of 'double dipping':

... is not a material issue which has any significant implications for the POSC. It is a fringe issue that can be discounted by the Panel.³³

Mr Walker, noting the estimate of Mr Black that around 9-10 per cent of residents also work in Yarra, submitted that adjusting for this in the apportionment of costs would result in a "significant reduction" in the overall cost and the resulting public open space contribution rate.³⁴

(iii) Discussion

Evidence that clearly establishes whether there is a significant difference in the level of use of open space between workers and residents was not presented to the Panel. The Panel considers that a strong point was made that the worker use survey did not establish that workers' use of open space is equivalent to that of residents and the Panel is inclined to agree with Mr Gobbo that common sense suggests that the use of open space by workers will be of a different nature and probably less than that of residents.

However, it is unclear to the Panel whether any lesser use by workers would be significant and if so, how it would translate into the calculation of the overall future open space needs of workers. The Panel notes Council's submission that just because workers may use open space less often than residents, workers' need for open space is not of less importance than the need of residents and should be given equal weight. The Panel accepts the distinction between the use of and need for open space and agrees with Council that adopting need is the appropriate metric in calculating future of open space provisions. Adopting equal need and giving equal importance to the open space needs of all within the municipality underpins Council's approach and is consistent with the community focus sought by *Open Space for Everyone*.

Other methods to take into account worker use of open space versus that of residents were canvassed during the Hearing, for example, the ratio adopted in the precinct structure planning for outer Melbourne and that proposed in the Arden DCP. Neither of these methods is appropriate for Yarra, it being an established, mixed use municipality rather than a 'green fields' area or a clearly delineated urban renewal area.

With regard to the issue of 'double dipping', the Panel notes that undoubtedly, some people live and work in Yarra and perhaps even in the same suburb or precinct. However, an analysis to determine the potential overestimation of the need for future open space on this account would be difficult and in the Panel's view unnecessary. It would not be as straight forward as simply reducing the amount of future open space by the percentage of people who live and work in Yarra. For example, how would one calculate the need for open space for a worker who also lives in Yarra and uses open space during both work hours and after work and at weekends? It could be argued that that person would place more demand on open space than if they only worked in Yarra and lived elsewhere, but would that higher demand be twice the demand of a worker not residing in Yarra, 50 per cent higher, or some other amount? What if their workplace was at one end of Yarra

³² Document 76, [32].

³³ Document 135, [49].

³⁴ Document 127, [43].

and their home at the other? In any event, the Panel considers that 'double dipping' in so far as it may occur would be inconsequential and would not materially change the amount of additional open space that should be provided to meet the needs of the new population of Yarra.

(iv) Conclusions

The Panel concludes:

- the open space needs of new residents and workers are calculated appropriately
- the open space needs of new residents and workers can be considered as equivalent for the purpose of calculating future open space provision.

3.4 Proposed commencement and end dates for implementation of the Strategy

(i) The issues

The issues are:

- whether the proposed commencement date of 2016 and end date of 2031 for the strategy are appropriate
- whether the population growth impacts of the COVID19 pandemic are such that the proposed end date of the strategy is still appropriate.

This issue arose because with the Hearing being held in late 2021 and early 2022, if the Amendment was approved by mid-2022 (say), by that time six years of the 15-year time frame of the YOSS would have elapsed. Further, it is recognised that Melbourne's population growth (in at least the short term) has been negatively impacted by the COVID19 pandemic and that should be considered in terms of any impact on the timeframe for the YOSS.

(ii) Evidence and submissions

Council submitted that the vagaries of the Victorian planning system are such that Amendments such as this can take a number of years to prepare. It further submitted that while the data sets used should be the latest available at the time of preparation of an Amendment, even at the commencement of a project they can already be some years old.

Council, supported by the evidence of Ms Thompson, submitted that this was not a significant issue. It explained that the key target metric that underpins YOSS is not the projected end date but rather the forecast increase of 77,000 new residents and workers between 2016 and 2031. Ms Thompson emphasised that the list of projects proposed under YOSS were geared to providing open space for an increase in new population of 77,000, not necessarily what would be required at a particular point in time. At the time of preparation of YOSS that increase was expected to be reached by 2031.

Under cross examination and questions from the Panel, Ms Thompson explained that the 15-year implementation period of YOSS needed to be understood in the context of a continuum, of growing need for open space as the population increases and revenue that will be collected before the commencement date and after the end date for the implementation of YOSS. She explained that the start and end dates need to be viewed in the context of that continuum.

Council further acknowledged that a key impact of the approval of the Amendment about six years after the nominal commencement date was that the anticipated revenue of \$25.5 million per year

from 2016 to 2022 resulting from a levy rate of 10.1 per cent would not be met because during this period the existing levy of 4.5 per cent had been charged.

Mr Gobbo rejected any contention that the start and end dates of YOSS are ‘fuzzy’. He was critical of the use of census years to define the start and end dates contending that *“the sanctity of the data and the maths should not be thrown out the window because it becomes too hard”*.³⁵ He submitted the end date should not be pushed out because the start date has already been pushed out. He submitted that the data used, and the contribution rate were for a defined 15-year period.

Mr Gobbo further submitted that five years of the strategy period have now passed and that contributions at the proposed higher rate have not been collected from subdivisions during that time. He suggested to account for this, adjustments should be made including adding a further five years of developable land to the denominator used in the contribution rate calculation. With no adjustment to the numerator this would have the impact of reducing the contribution rate.

In calling evidence from Ms Kay, Ms Brennan questioned her on the commencement date of the YOSS. In response, Ms Kay stated that she saw no need to deduct unspent funds collected for the implementation of the 2006 strategy from the total project costs for YOSS and that any unimplemented projects remaining from the 2006 strategy, if carried forward, would likely be in a different form because of the higher growth expected since the 2006 strategy was adopted.

In cross examination, Ms Pepler put to Ms Kay that since 2016 some of the projected new residents had become existing residents. In response, Ms Kay emphasised the rolling nature of the time period and the analysis undertaken.

Impact of the COVID19 pandemic

Prior to the Hearing, the Panel directed that Council address the likely impacts of the COVID19 pandemic on the forecasts of new populations upon which the implementation of YOSS was based. Dr Eagleson attached a memo prepared at the request of Council to her expert evidence dealing with this issue (Document 26).

In her memo, Dr Eagleson considered a range of resident population forecasts, not all of which were specific to Yarra, more recent than the forecasts underpinning the YOSS prepared by .id Consulting. She acknowledged that the rapid slowdown in international migration was likely to slow Yarra’s population growth in the short term, but its medium-term impact was less certain.

With respect to the future growth in non-residential floor space, Dr Eagleson stated that the pace of growth has been faster than projected in 2018 in the SEES and relied on in the YOSS, and that there is currently a considerable development pipeline. In her view it was not possible to know with any certainty how this would affect worker population forecasts to 2031.

Dr Eagleson concluded that her best estimate of the impacts of COVID19 was that the forecast increase of 38,500 new residents and 38,000 new workers might not be met until 2034 or 2035.

In her evidence, Ms Thompson outlined what she observed as a possible impact of the COVID19 pandemic on the demand for and use of open space, in particular that working from home had had an impact on the way open space is used.

³⁵ Document 88, [166].

(iii) Discussion

The Panel makes three observations at the outset. Firstly, many strategies and revenue raising mechanisms such as DCPs in the urban planning context start from scratch and are not a successor to a previous strategy as is the case here. Secondly, there is often a time lag between development of the strategy and approval and implementation, but six years from the base data point to implementation as is likely to be the case with this strategy is unusual. Thirdly, most strategies have a clearly defined end date and don't necessarily have any implied continuation of actions beyond that end date as is the case here.

In this instance, each of these factors have understandably caused some uncertainty and confusion amongst submitters.

While an end date of 2031, a census year, was specified in YOSS, the Panel understands and accepts that it is equally valid to specify that the YOSS is geared towards a population increase of about 77,000, rather than a particular year. While this was not made explicit in YOSS, it is quite understandable why this was not the case. Apart from being a census year, there is nothing inherently significant about a planned end date of 2031.

The Panel accepts that it is appropriate to view YOSS as a strategy set in a context of continuing population growth and therefore open space needs, a continuing revenue stream and a rolling but updated program of open space projects to meet growing needs. Viewed in this context, the YOSS does pose some challenges for clear accountability for revenue collection and expenditure but these are not insurmountable.

The Panel further accepts that some projects may be updated versions of unimplemented projects from the 2006 strategy and that there may also be unspent funds both from developer contributions and from Council sources that may be carried forward and expended during the implementation of YOSS. The Panel sees no compelling argument for adjustments to be made for either of these circumstances.

The Panel does not accept Mr Gobbo's argument that the start and end dates of the YOSS are not 'fuzzy'. Where there is a continuum of growth and therefore a continually growing need for open space together with a system whereby the approved levy continues past a strategy end date, in the Panel's opinion there will inevitably be some 'fuzziness' as a result of these continuums.

The work of Dr Eagleson which indicated that projected new populations might not be met until 2034 or 2035 was not seriously challenged by submitters and the Panel accepts this is as good an estimate as can currently be obtained.

(iv) Conclusions

The Panel concludes:

- the start and end dates proposed for the life of YOSS are appropriate
- viewing YOSS and the income and expenditure from contributions in the context of a rolling set of strategies is appropriate
- the adjustments to the likely timeframe for reaching population forecasts made because of the likely impact of COVID19 on future population and worker projections are appropriate.

3.5 Conclusions and recommendations

The Panel concludes that subject to other conclusions in this report that the *Yarra Open Space Strategy 2020* and the accompanying *Yarra Open Space Strategy 2020 Technical Report* are appropriate to be introduced into the Yarra Planning Scheme as background documents in the Table in at Clause 1 of the Schedule to Clause 72.08

The Panel recommends:

Delete Action 7.5B-4 in Fairfield from the *Yarra Open Space Strategy 2020*, the *Yarra OpenSpace Strategy Technical Report 2020*, and from Preliminary Opinion of Probable Costs.

Amend the Schedule to Clause 72.08 of the Yarra Planning Scheme to insert the following documents into the table at Clause 1.0:

- ***Yarra Open Space Strategy 2020* Thompson Berrill Landscape Design Pty Ltd in association with Environment & Land Management Pty Ltd**
- ***Yarra Open Space Strategy 2020 Technical Report* Thompson Berrill Landscape Design Pty Ltd in association with Environment & Land Management Pty Ltd (Technical Report).**

4 Open space contribution rate

The open space contribution rate which is proposed to be included in the Schedule to Clause 53.01 to the Planning Scheme is calculated using the following formula:

$$\text{Contribution rate} = \frac{\text{Total allocation of open space project costs to the forecast population}}{\text{Total site value of the estimated land to accommodate the population increase}} \text{ multiplied by } 100$$

This Chapter examines the appropriateness of the data used in calculating both the numerator and denominator in this formula. Chapters 4.1 to 4.3 address issues relevant to the numerator and Chapter 4.4 addresses issues relevant to the calculation of the denominator in the equation above.

4.1 Value of land to be developed for open space

(i) The issues

The issues are:

- whether the methodology used to value the land that will be acquired for open space is appropriate
- whether the values attributed to the land to be acquired are appropriate
- whether the 30 per cent allowance added to the value of land to cover Council's costs is appropriate.

(ii) Evidence and submissions

The value of land to be acquired to provide new or expanded open space is significant and as Mr Shipp stated in his evidence, it comprises 86 per cent of the cost of implementing YOSS. Based on the YOSS POPC (Document 6), Mr Shipp stated the total land acquisition cost as \$486.9 million.

Council submitted that the POPC was the metric commonly used in open space planning and is comprised of the sum of the land cost associated with new or expanded open space plus the capital costs associated with improvements to the land to provide appropriate open space facilities. The issues associated with the second of these are addressed in Chapter 4.2. The apportionment of these costs between existing and new populations is addressed in Chapter 4.3.

Calculation of land acquisition costs

The exhibited *Public Open Space Contributions* report (Contributions Report) describes the calculation of the land values as:

The cost of the land for proposed new open spaces is based on the average land area size for the hierarchy of open space. For example, a new Local open space has a minimum land area of 0.1 hectares and a maximum of 0.5 hectares. The average land area for a new Local open space is 0.3 hectares. This average land area is multiplied by the average (land) value for the sub-precinct in which the open space is proposed.³⁶

The average Capital Improved Value (CIV) of the relevant land was used as it was considered to be the measure that most appropriately reflects the market cost of acquiring land. CIV information was extracted from the Council rate data base by Dr Eagleson specifically for this purpose and assembled on a sub-precinct basis.

³⁶ *Yarra Open Space Strategy 2020: Public Open Space Contributions*, y Environment & Land Management Pty Ltd in association with Thompson Berrill Landscape Design Pty Ltd, 10 December 2020, p. 9.

In his evidence, Mr Shipp stated that it is not possible to undertake a detailed assessment of the reported cost of purchasing land for open space because all the information required was not available. Some of that information was provided by Council after Mr Shipp prepared his written evidence.

Mr Gobbo submitted that using average CIV on a sub-precinct basis overstates the actual cost of acquiring land for open space for three reasons. Firstly, the average for a precinct will include properties already developed to their highest and best use and which are not likely to be purchased for use as open space. Such properties will have a relatively high unit value and including them in the calculation of the average inflates that average figure.

Secondly, Clause 21.12 indicates that public open space is intended to be located away from main or secondary roads. Mr Gobbo submitted that activity centre properties, which are located mostly on main roads and already developed or have high development potential, and therefore higher unit land values, are also included in the average CIV calculations. He contended that this has the effect of further inflating the average CIV. He submitted:

A more nuanced exercise of determining the likely sub-area for purchase, or even a list of potential sites or areas within a precinct, would be justified, however the current approach is not.³⁷

The third reason given by Mr Gobbo for the overstatement of the total cost of acquiring land was that Council's approach ignores the repurposing of public land to open space use and assumes for the purposes of the cost calculation that all required land will be acquired on the open market. Mr Shipp pointed out that YOSS indicates that the land required for open space will be acquired through a number of methods including the conversion of land currently owned by Council or other government agencies. Mr Shipp stated:

The [YOSS] favours strategic, cost-effective acquisitions which are more practical to implement than large scale acquisition of developed sites – the latter option is effectively considered a 'last resort' by the Strategy, although it does note that a combination of several approaches may be necessary³⁸

To emphasise the potential to repurpose public land, Mr Gobbo identified a number of sites in proximity to the indicative location of open space projects. For example, Project 7.5A-4 in the Collingwood precinct is near the former Victoria Police workshop in Stanley Street and Project 7.5A-6 is located near Collingwood College. He cited a further example in Cremorne.

Council responded, submitting:

Council acknowledges that land acquisition will be a key strategy for delivery of the YOSS program of new open space. If there are other opportunities available, whether land contributions or conversion of publicly owned land, Council will act on those opportunities, as suggested in the Technical Report. However, there are obvious challenges in obtaining sufficient land to cater to the needs of the forecast populations and providing all of the projects recommend in the YOSS, whether from land contributions, or land conversions. As such, in order for Council to deliver the YOSS program, it will need to purchase land. The costings for the program have been undertaken on that basis.³⁹

Further, Council submitted that the evidence of Ms Thompson indicated that the 'low-hanging fruit' had already been picked and that opportunities for the conversion of public land are

³⁷ Document 88, [178].

³⁸ Document 28, [93].

³⁹ Document 76, [46].

becoming harder to find. Ms Thompson identified six projects proposed in the 2006 Strategy that had been implemented by repurposing public land.

Cost to Council of acquiring land

The Contributions Report further states that on the advice of the Council Property Office an amount was added to the average CIV to cover *“independent valuations, legal fees and other costs to Council”*. To cover these costs, a 30 per cent allowance was added to the land values.

As pointed out in the evidence of Mr Shipp, the amount of the allowance was not disclosed initially. The quantum of 30 per cent was only made clear in the evidence of Ms Thompson. Under cross examination, Dr Eagleson acknowledged that an amount had been added to the average CIV data she provided but that she was not involved in its calculation. Ms Kay stated under cross examination that the 30 per cent allowance had been added at the request of Council officers but that she had not been involved. She further stated that she was unable to comment on whether this had been the practice in other similar projects because she was usually given a land value figure and was not aware of what amounts may have been added to cover Council costs.

At the Hearing, Council produced a memo from the Property Services section of Council which indicated that the proposed add-on included an allowance to reflect the difference between CIV and market value (Document 64). Council also sought to table information in support which set out the difference between market value and CIV for a small selection of properties in Yarra (Document 65). Mr Gobbo strenuously objected to this information being provided so late in the proceedings but acknowledged that the Panel had initially quite correctly identified this as an issue and had requested further information from Council before the Hearing.

Mr Gobbo submitted that the Panel should reject the 30 per cent allowance and that the Council’s justification for the allowance gave rise to significant concerns about procedural fairness. He indicated that the 30 per cent allowance is significant and that if it was removed the open space contribution rate would fall from 10.1 per cent to 7.5 per cent. He submitted that:

The actual 30% isn’t justified in any or proper manner – whether it represents an administrative allowance, or some other broad kind of ‘add-on’ to the purchase costs. If the 30% is an administrative allowance, it is quite clearly manifestly excessive. \$146M of administrative costs to purchase 31 properties amounts to an administrative cost of \$4.7M per project. This would be very difficult to justify by way of evidence, and there is no evidence to support this amount before the Panel. But also, if the 30% is some kind of add-on to the purchase price, it isn’t justified. As a matter of principle, it isn’t appropriate to simply ‘add’ 30% to the estimated average Capital Improved Values (CIVs) of the projects. The clear intent was to use average CIVs, based on the rationale that this represented an appropriate valuation. Average CIVs represent the ‘highest’ valuation method for contribution calculations that we are aware of. To add 30% on top of this to purportedly reflect ‘real market value’ is unprecedented.⁴⁰

Mr Gobbo noted that the sales ratio table put forward by Council (Document 65) does not appear to justify the 30 per cent allowance and added that ratios in the table show that *“for all the listed properties bar three, adding an allowance of 30% to CIV would result in more than the actual recent market value of the property”*.⁴¹

⁴⁰ Document 88, [150] to [153].

⁴¹ Document 88, [155]. Original emphasis.

After the submission of Mr Gobbo, the Panel requested that Council provide more detail on how the 30 per cent allowance had been calculated. Council subsequently advised that the officer who requested the 30 per cent allowance was no longer with the Council and that it was considering an alternative appropriate per centage allowance. The Panel issued a Direction on 20 December 2021 (Document 102) that this information be provided and that a revised contribution rate be calculated based on the revised per centage allowance. Further, the Panel directed that a sensitivity analysis be provided for a range of alternative allowances to cover costs to Council of acquiring land. The Panel also directed that Council provide an explanation as to how and why the 22 properties in the sales ratio table (Document 65) were chosen.

In response, Council tabled a letter from Westlink Consulting (Document 119) which stated that the criteria used to identify properties in the sales ratio table were:

- sales were selected from the 'commercial industrial retail' sector, from a total of 521 sales for the 2018 Council general revaluation
- the sales were chosen because they represented a broad geographic, property size and underlying zoning spread with the 'commercial industrial retail' sector chosen primarily as it satisfied the above criteria and included residential land (General Residential and Mixed Use)
- a focus on the areas of Yarra where most development is underway because those areas will have the greatest need for open space
- sales ratios ranged from 0.47 to 1.06 with most between 0.8 and 0.9 and were not chosen to fit the preferred Valuer General Victoria's preferred range (0.85 to 1.00) but rather to provide an actual reflection of the sale ratios generated.

Council also tabled a sensitivity analysis of applying revised percentage allowances (Document 117) and what the open space contribution rate would be for a '20 per cent allowance' and '10 per cent allowance' which showed rates of 9.35 per cent and 8.67 per cent respectively (Document 118).

In closing submissions, Ms Brennan submitted that an allowance above CIV should be included to reflect the costs that Council will actually incur in acquiring land on the open market. She stated that the allowance above CIV was always intended to capture property market values in addition to the administrative costs involved in buying property but Council now "*accepted that there is not sufficient justification for an allowance of 30% above CIV for the land acquisition component of the POSC rate calculation*".⁴² Ms Brennan submitted, however, that there is legitimate justification for a 20 per cent allowance above CIV and this became Council's final position on this issue.

Piedimonte submitted in response to the memo and spreadsheet prepared by Westlink Consulting (Document 119):

The vast majority of properties set out in the spreadsheet were within a Commercial or Mixed use zone. These are properties with higher development potential and hence likely to have a higher market value. They are not likely to be representative of the average cost to purchase land for public open space.⁴³

(iii) Discussion

With respect to using average CIVs in calculating the costs of land to be acquired for open space projects, the Panel accepts that this is an appropriate, albeit imperfect, metric to use as a basis for

⁴² Document 135, [83].

⁴³ Document 131, at [6c].

calculations. The Panel does not accept that a measure based on average CIVs in small defined areas where it is proposed to provide new open space is a practical approach, both because of the difficulty of defining such areas in any useful way and the possible and unforeseen impacts on property values of closely identifying defined areas or even specific properties at an early stage.

In accepting average CIVs as the base for this calculation, the Panel acknowledges the submission of Mr Gobbo that the inclusion of already developed properties and higher value properties in activity centres are likely to have some, probably fairly small but difficult to assess, impact on the averages calculated. The Panel believes that for these reasons it is likely that the average CIVs calculated are probably on the high side but not by a significant amount.

Further, the Panel accepts that it is possible that some of the proposed open space projects may utilise, in full or part, repurposed public land. In this respect it accepts the submission of Mr Gobbo and the evidence of Mr Shipp. However, in saying this the Panel acknowledges the evidence of Ms Thompson and the submission of Council that the 'low hanging fruit' has to an unknown degree already been harvested in implementing the 2006 strategy.

The Panel notes the examples of public land in Yarra that might be available for public open space in the future as identified by Mr Gobbo. Two of these are education facilities that are in areas identified for significant growth and the Panel considers it highly unlikely that the relevant agencies would responsibly agree to proposals to give over part of these sites to public open space or to sell the land to Council at substantially less than market value. The Panel acknowledges that some shared space used by schools and the public have been developed and innovative approaches such as this should form part of the broader menu of approaches. It is not the Panel's role to provide detailed commentary on the best use of surplus public land.

The Panel acknowledges that any repurposing of Council-owned land will reduce the total land acquisition costs of the YOSS. However, the Panel accepts that the Council's approach in not assuming further repurposing of Council-owned land in preparing its cost estimates is prudent. If it did make such an assumption, it would leave itself open to the accusation of not properly funding the YOSS. In some respects, Council is in a no-win situation here. The Panel notes that the YOSS acknowledges that further repurposing of public land is an important part of the land acquisition mix and will be pursued when possible.

With respect to the allowance to cover Council's costs of acquiring land, the Panel considers that Council has not operated with full transparency. To include a 30 per cent allowance recommended by an officer no longer with Council without subjecting it to scrutiny is not acceptable. To have got to the Hearing without a clear, transparent and defensible justification for the inclusion of such a significant amount is at best difficult to understand. To have believed that such a significant cost element would not come under considerable scrutiny appears naïve.

The Panel agrees with Mr Gobbo that there is not sufficient evidence before it to justify 30 per cent as originally sought by Council, nor indeed the 20 per cent allowance that Council is now advocating. Such a higher allowance could only be reached if an uplift in the average CIV to match market values was considered an appropriate approach. However, some properties sell above their CIV but equally others sell below. The Panel considers that the 'best' and most transparent way to determine the cost of acquiring land for this purpose is to use CIV (averaged) and not to attempt to reflect what is purported to be 'market value' by adding on a selected allowance which has not in the Panel's view been justified.

The Panel accepts that there will be material administrative, conveyancing and other costs which will add to the cost of purchasing land and that these costs will vary depending on the method used. For example, direct purchase in a public auction will likely incur different costs to a compulsory acquisition as a result of applying a Public Acquisition Overlay (PAO). No evidence on the range of costs the Council is likely to incur was led by any party, so the Panel has little to guide it on the quantum of an appropriate allowance. In the absence of such information the Panel has opted to recommend 10 per cent allowance be added to CIV to cover Council's administrative and acquisition costs. In the Panel's view, such an allowance is likely to be generous.

(iv) Conclusions

The Panel concludes:

- on balance, the methodology used to value the land to be acquired for public open space is appropriate
- the values applied to the land to be acquired are appropriate overall
- an allowance of 10 per cent applied to the average CIV to reflect Council's administrative and land acquisition costs is appropriate.

4.2 Capital value of proposed open space projects

(i) The issues

The issues are:

- whether the methodology used to cost open space projects is appropriate
- whether the costings proposed are appropriate
- whether the 30 per cent uplift on the capital cost estimate of the open space projects is appropriate.

(ii) Evidence and submissions

The capital cost of the proposed open space projects is based on a methodology used by the landscape architectural profession to estimate the determine the POPC without a quantity surveyor. The YOSS POPC is the total cost of the projects listed in the Technical Report and includes the cost of capital works to build new, or upgrade existing, open space plus the cost of acquiring land for new open space. The land cost component is discussed in Chapter 4.1.

An explanation of the YOSS POPC methodology is set out in a memorandum prepared by Ms Thompson dated 17 November 2021 (Document 7). The POPC includes an allocation of costs to existing and future populations. This aspect of the POPC is discussed in Chapter 4.3.

In her evidence (Document 25), Ms Thompson stated she prepared the YOSS POPC based on draft average park costings for each level in the hierarchy of open space and that the Yarra Open Space Planning team provided input to these average park costings consistent with Council's typical park design and construction costs. She elaborated in oral evidence that not every park was costed but instead the average cost for each category of park was used to determine the POPC.

Mr Shipp did not question the methodology used to estimate the open space project costs. He considered the methodology to be sound but that some of the inputs lacked justification and clarity. In particular, details of the average park POPC, such as cost per square metre and components, were not made available and in his view, *"it is not possible to make a full assessment*

of all the quantitative information underpinning the Amendment in the absence of this information".⁴⁴ In oral evidence, Mr Shipp noted that the information he considered missing had subsequently been provided but he had not had sufficient time to determine that the POPC costs were appropriate although he could see how the costs flowed through to the calculation of the proposed open space contribution rate.

In cross examination by Ms Brennan, Mr Black acknowledged that he had no criticisms with the YOSS with respect to the costings of the proposed Actions.

As to the 30 per cent uplift, Ms Thompson stated it was standard practice for the landscape architectural industry when preparing POPCs to include a 10 per cent contingency for design, 10 per cent for construction and 10 per cent for survey (Document 80).

In response to a question from the Panel, Mr Macintosh commented that a 30 per cent contingency was typical for government projects but property developers would typically use a 5 per cent cost contingency once a project was 80 per cent documented.

In answering a question from the Panel, Mr Shipp considered that an allowance of 10 per cent each for survey and design and a 10 per cent construction contingency – in total 30 per cent – was not unreasonable.

Council stated in a memorandum dated 13 December 2021 (Document 81) that a 30 per cent contingency for high level planning is appropriate. Ms Brennan submitted that a 30 per cent contingency on capital costs was standard. She added that the 30 per cent contingency had been arrived at independently by Ms Thompson and subsequently confirmed by Council officers.

Mr Gobbo stated in oral submissions that a contingency in the order of 30 per cent was not opposed by the PPP group of clients.

(iii) Discussion

Leaving aside the cost of acquiring land for the open space projects (which is discussed in Chapter 4.1), the methodology for determining the capital cost of projects included in the POPC was not called into question in any substantive way by submitters or expert witnesses. Nor was the estimated capital cost of each project as described in the YOSS disputed.

There was also general agreement that the 30 per cent uplift applied to the project costs to allow for survey and design work and a contingency for construction costs was reasonable. The Panel considers that the 30 per cent uplift in capital project costs is appropriate, noting that this 30 per cent uplift is separate to the 30 per cent allowance applied to the CIV of the cost of land to be acquired for the open space projects.

The Panel is satisfied that the methodology used to determine the capital cost and the proposed capital costings are appropriate as one input for the purpose of calculating the proposed open space contribution rate.

(iv) Conclusions

The Panel concludes:

- the methodology used to cost the open space projects and the proposed costing for these projects are appropriate

⁴⁴ Document 28, [89].

- the 30 per cent uplift to the capital cost of the projects to allow for survey and design work and a contingency for construction costs is reasonable and appropriate.

4.3 Apportionment between existing and new populations

(i) The issues

The issues are:

- whether the apportionment methodology proposed is appropriate
- whether the apportionment between existing and new populations is appropriate
- whether there are particular precincts in which the apportionment proposed is inappropriate.

(ii) Evidence and submissions

Apportionment of the costs associated with new and enhanced open space projects between existing and new populations was a highly contested issue because the outcome has a significant impact on the quantum of the open space contribution rate eventually paid by developers.

In closing, Council submitted:

It is first appropriate for Council to acknowledge that the apportionment exercise undertaken by Ms Thompson has clearly not been an easy one for the Panel to understand.⁴⁵

The apportionment in the YOSS was undertaken by Mr Thompson. In her evidence, she identified eight factors which influence the need for open space by new (or future) populations. These are:

- future population densities
- spatial distribution of existing open space
- the hierarchy, character and condition of the existing open space
- proposed urban form
- urban layout including presence of any physical barriers to safe pedestrian access to open space
- the location and magnitude of forecast future resident and worker population growth
- the existing open space within the precinct
- the existing level of use and satisfaction with the open space.⁴⁶

Ms Thompson stated that the allocation of the total costs for each project involved a qualitative assessment based on each of these eight factors. At the direction of the Panel, as part of her evidence Ms Thompson provided a detailed description of the apportionment of project costs for the following three projects:

- 7.6A-2 Small local open space in the north-west part of Cremorne
- 7.6A-3 Small local open space in the south-west part of Cremorne
- 7.3B-9 Minor upgrade to the existing Quarries Park in Clifton Hill.

As indicated in Chapter 1.5, as a result of cross examination of Ms Thompson and submissions made by Mr Gobbo, the Panel requested further information on the apportionment methodology

⁴⁵ Document 135, [88].

⁴⁶ Document 25, [3.3.3 and 3.3.4]. This information was repeated in the information on apportionment requested by the Panel (Document 121).

used by Ms Thompson. Ms Thompson’s response details the four-step process she used in determining open space needs and subsequently the apportionment of costs:

Step 1 Assess and understand the existing open space network including how it functions for the existing population who live and work there, and what changes are required to meet the needs of the existing population. This involves research, site visits and review of the community surveys (worker and resident surveys) to understand the existing patterns of use.

Step 2 Assess and understand the type and scale of the forecast change, to determine what open space needs will be generated by this change. Part of this assessment includes considering the impact of this change on the existing open space network. This includes a review of the population forecasts, analysis of the spatial distribution of the forecasts relative to the open space network, site assessments to understand the scale of the proposed change on the open space and a review of relevant background documents about the forecast change.

Step 3 Make recommendations about what changes are required to address the open space needs of the existing and the forecast population. This includes the Actions to provide new open space and also upgrades to the existing open space network, which are included in the YOSS POPC. Part of determining the actions includes site assessments to identify what is feasible to implement in the context of the existing development and urban layout. It is important to note that the Strategy also includes recommendations and actions for changes that are not included in the contribution rate but will benefit the existing and forecast population including changes to the Municipal open space network and guidelines regarding the future design and management of open space.

Step 4 For each eligible recommendation assess and determine the appropriate proportion of cost attributable to the existing and forecast population based on the assessment in steps 1 to 3.⁴⁷

Ms Thompson also provided a table which describes the relative importance of the eight factors in determining the apportionments. See Table 5.

Table 5 Apportionment ratios

Apportionment	Reasons for the apportionment
10/90	<ul style="list-style-type: none"> • the need for the project is primarily driven by one group (i.e. either existing or forecast) of the population with some benefit (as distinct from the need) as a result of the project being delivered to the other group. • typically this apportionment ratio applies where: <ul style="list-style-type: none"> - in the case of 10 (existing) / 90 (forecast) the existing open space network adequately meets the open space needs of the existing population and the magnitude of forecast change of more than 350 people creates a high demand for new open space or major upgrades to existing open space. - in the case of 90 (existing) / 10 (forecast) the existing population creates a high demand for new open space or major upgrades to existing open space and the forecast change is less than 350 people.
20/80	<ul style="list-style-type: none"> • the need for the project is high for one group of the population with the other group having a low need for the project. • typically this apportionment ratio applies: <ul style="list-style-type: none"> - in the case of 20 (existing) / 80 (forecast) there is a low need for improvement to the open space network for the existing population and the magnitude of forecast change of more than 350 people

⁴⁷ Document 121, [2.1].

Apportionment	Reasons for the apportionment
	<p>creates a high demand for new open space or major upgrades to existing open space.</p> <ul style="list-style-type: none"> - in the case of 80 (existing) / 20 (forecast) the existing population creates a high demand for new open space or major upgrades to existing open space and the forecast change is less than 350 people.
30/70	<ul style="list-style-type: none"> • the need for the project is high for one group of the population with the other group having a moderate need for the project. • typically this apportionment ratio applies: <ul style="list-style-type: none"> - in the case of 30 (existing) / 70 (forecast) there is a moderate need for improvement to the existing open space network for the existing population and the magnitude of forecast change of more than 350 people creates a high demand for new open space or major upgrades to existing open space. - in the case of 70 (existing) / 30 (forecast) the existing community creates a high demand for new open space or major upgrades to existing open space and the magnitude of forecast change is less than 350 people with other factors having an influence on the need beyond the magnitude of the forecast change within that precinct. For example the need for the upgrade to larger open space reserves is created by the forecast change in adjoining precincts where there is a lack of larger open space reserves.
40/60	<ul style="list-style-type: none"> • the need for the project is high for both the existing and forecast population but with other factors resulting in a difference. • typically this apportionment ratio applies where the existing open space network requires major improvements to meet the needs of both the existing and forecast population, with additional factors also being relevant such as the magnitude of the change (i.e. substantially more than 350 people) or the implications of the change in urban densities.
50/50	<ul style="list-style-type: none"> • the need for the project is high for both the existing and forecast population. • typically this apportionment ratio applies where the existing open space requires major upgrade or where new open space is needed for both the both the existing and forecast population; or • alternatively, this apportionment ratio applies where the existing open space network is adequate with capacity for additional use and the forecast change is less than 350 people and can be accommodated in the existing open space network but will require consequential upgrades to the existing open space facilities.
95/5	<ul style="list-style-type: none"> • the need for the project is high for one group and will deliver a minor benefit to the other group. • typically this apportionment ratio applies where the need for the project is primarily driven by the existing population and a minor benefit will be provided to the forecast population. This may include the forecast population in adjoining precincts.

Source: Memorandum from Ms Thompson dated 31 January 2022, Table 1 (Document 121).

The Panel questioned Ms Thompson on how, in practical terms, a distinction could be made between say a 90/10 apportionment and an 80/20 apportionment. She explained this by reference to the relative importance of the eight factors listed above.

Further, Ms Thompson provided a detailed description of how, using the descriptors set out in Table 5, she arrived at the apportionment of costs for eight projects nominated in advance by the Panel.⁴⁸ These projects were selected to allow the Panel to better understand the apportionment used for similar types of projects within one precinct and similar types of projects between precincts. For each of these projects, Ms Thompson identified the relative importance of each of the eight factors set out above, by designating them as 'very important', 'high level', 'important', 'less important' and so on.

Questions from the Panel to Ms Thompson when she reappeared at the Hearing to present the further information requested by the Panel revealed the following:

- Ms Thompson has previously used this apportionment methodology in 10 to 12 open space strategies
- Ms Thompson acted alone in undertaking the apportionment exercise for the YOSS
- there was no peer review, or review by Council officers, of the apportionment outcomes
- Ms Thompson prepared the information set out in Table 5 for the express purpose of answering the Panel's questions and it had not been used in previous apportionment exercises undertaken by her
- the apportionment exercise was an iterative process with checks back on the apportionments allocated.

Ms Thompson stated that the *"relative proportion of the overall existing and future population did not have a key role in determining the proposed apportionment of cost"*.⁴⁹

In describing the apportionment method, Ms Thompson stated:

For each individual open space project an estimate of the proportion of the total cost of the project that is attributable to the forecast development is made. The Yarra Open Space Strategy 2020 provides the basis for this estimate. The balance of the cost is attributed to the existing population.⁵⁰

The Panel questioned Ms Thompson on the logic of this statement, and she acknowledged that in making an estimate of the allocation to future population an allocation to existing population is a necessary part of that assessment.

Mr Gobbo submitted that the new population would make up 30.5 per cent of the total population in 2031 but is to be apportioned 67 per cent of the cost of delivering the YOSS. He described this situation - where approximately one-third of the 2031 population was being asked to pay for two-thirds of the costs of new open space - as a 'flip' and submitted that Council had not justified the flip. Mr Walker supported Mr Gobbo in this assessment.

With regard to the apportionment of costs, Mr Gobbo submitted:

⁴⁸ The eight projects were: Project 7.5A-1: Small local open space between Wellington and Smith Streets; Project 7.5A-5: Increase the size of the Peel and Cambridge Street reserves; Project 7.5A-6: Small neighbourhood open space in Collingwood sub-precinct C; Project 7.5A-7: New local open space between Gipps and Victoria Streets; Project 7.5B-2: Overlaps with project 7.5A-5; Project 7.5B-3: Major upgrade the McNamara Reserve in longer term; Project 7.6A-1: Small neighbourhood open space in Cremorne; and Project 7.6A-3: Small local open space in the western part of Cremorne.

⁴⁹ Document 121, [1.4].

⁵⁰ Document 121, [3.1].

- a very significant question for this Amendment is whether the proportional allocations have been undertaken in a credible manner
- the Submitters have serious concerns about how the proportional allocations have been designated, and say, most forcefully, that they have not been allocated appropriately
- those concerns have not been allayed by the evidence
- at the outset, it must be said that it is here nigh impossible to determine why the proportional allocation for any particular project has been set as it has, in the Strategy POPC
- despite Ms Thompson being directly asked by the Panel to address this question, and multiple attempts to explain the allocations in evidence in chief, and cross-examination, the methodology and allocations have become no clearer through the hearing process.⁵¹

Mr Gobbo described Ms Thompson's approach to apportionment as something of a 'black box', a claim repeated by Ms Pepler in response to the further information provided by Council. He acknowledged the use of the qualitative factors used by Ms Thompson but submitted that it was impossible to understand how each had influenced the apportionment. He pointed out that this is not a minor concern and that even a minor shift in the relative apportionments would have a material impact on the contribution rate.

Mr Gobbo submitted that an alternative approach of apportioning costs based on the proportions that existing and new populations comprise at 2031, the end date of the YOSS, would be a simpler approach and readily understandable. Mr Gobbo was supported in this position by the evidence of Mr Shipp who endorsed an approach based on the proportions of existing and new populations. Under cross examination by Ms Brennan, Mr Shipp acknowledged that his experience was mainly in the preparation and assessment of DCPs rather than open space, but he argued that many of the same principles applied. He further accepted that factors other than the relative proportions of the existing and new population could be relevant to the apportionment exercise.

In his expert evidence, Mr Milner offered no direct criticism of the specific factors influencing the apportionment exercise identified by Ms Thompson. While acknowledging the role played by these factors, Mr Milner set out the proportions of the existing and new populations would comprise the total at the end of the planning period.

Other than the evidence of Mr Shipp, who acknowledged that he is not an open space planner, no evidence was called to question the methodology used by Ms Thompson, nor did any submitter suggest an alternative. Mr Gobbo submitted:

The question is not whether the Submitters can put forward a more suitable alternative, or different numbers, or different solutions. This is not their role. The question is whether the Council has substantiated that the proposal *it* puts forward is justified.⁵²

In addressing the issue of apportionment of costs, Mr Walker cited the Eddie Barron principles as a starting point and submitted that they suggested that a fair and equitable apportionment was required. He submitted that the starting point was the proportions of the existing and new population in 2031 (adopting Mr Gobbo's 'flip' terminology) and that to deviate from those required an evidentiary base which, he submitted, was not provided by the evidence of Ms Thompson. He submitted that the departure from an apportionment based on populations proposed here was so significant that sound justification was needed.

⁵¹ Document 88, [55] to [59].

⁵² Document 88, [31].(original emphasis)

In terms of the factors which influenced the apportionment of costs, in cross examination Mr Gobbo pursued Ms Thompson in detail on the importance of two factors which he submitted appear to have had a disproportionate influence on the apportionment of costs. The first of these was the nature of future residential stock compared with existing residential stock. Mr Gobbo contended that Ms Thompson had relied on the assumption that new housing stock would have less private open space than existing housing stock and therefore would place greater reliance on public open space. Ms Thompson, while defending this as a legitimate and important factor in the apportionment, acknowledged that no analysis of access to private open space of existing residents had been undertaken.

The second factor is the impact of UHIE (urban heat island effect). Mr Gobbo pointed out that there were few references to UHIE in the POPC document as revised (Document 61). He submitted that while not being an expert in this area, Ms Thompson had used this factor, arising from the increased intensification of development likely in the future, to allocate a disproportionate cost burden to new populations compared with existing populations.

In arguing that an inappropriate apportionment of costs had occurred, submitters and Mr Shipp identified a small number of projects where they argued that the apportionment proposed was inappropriate. These included:

- Project 7.3A-1 where 50 per cent of the cost of land acquisition is apportioned to the new population but the Technical Report identifies it as a project to address an existing gap.⁵³
- Project 7.5A-6 which is a Small Neighbourhood open space in Collingwood with 50 per cent apportioned to new development. The Technical Report identifies this as an area of limited residential population increase but substantial worker increase, and that the main driver of demand is growth beyond the planning horizon.⁵⁴
- Project 7.9A-1 which is a Small Local open space with 60 per cent of costs allocated to the new population but is in an area designated for minimal and incremental change. Mr Walker submitted there was an existing need and but somewhat contradictorily an area well served by existing open space.⁵⁵
- Project 7.5B-4 which is a major upgrade to facilities in a playground in Fairfield Park. Mr Pitt noted the 30 per cent allocation to new residents who he said totalled 57 persons in 47 households and an expenditure of \$750,736. He submitted that if 47 households comprised only one adult that there could be only 10 children in the precinct resulting in an expenditure of more than \$75,000 per child.⁵⁶

The response by submitters to the further information provided by Council addressed specific apportionment in respect of projects 7.5A-5, 7.5A-7, 7.5A-1 and 7.5A-6⁵⁷ and 7.9A-1⁵⁸. In each case the submitters pointed out perceived inconsistencies between the criteria given for the apportionment as reproduced in Table 5, and reference to existing needs and existing gaps in provision in the relevant section of the Technical Report.

It is noted that no expert open space planning evidence was called to substantiate these claims nor was any alternative apportionment proposed.

⁵³ Document 28, [104].

⁵⁴ Document 28, [104].

⁵⁵ Document 88, [85e] and Document Mr Walker submitted 127, [35].

⁵⁶ Document 129, [9.12] to [9.1].

⁵⁷ Document 133, [7h].

⁵⁸ Document 131, [2b].

In closing, Council submitted:

Council accepts that the Panel is, to an extent, being asked to trust Ms Thompson's professional judgement, but the trust that the Panel is asked to have is based on Ms Thompson's acknowledged expertise and experience in open space planning, and on the detailed testing and examination of the methodology, and of Ms Thompson directly, by Council, the parties, and the Panel through this process.⁵⁹

Council further explained that:

- all actions described in the YOSS POPC (Doc 61) to meet the needs of the "existing and forecast" population are in the range 30:70, 40:60, 50:50; and
- all actions described in the YOSS POPC (Doc 61) to meet "primarily future" or "forecast" needs are in the range 30:70, 20:80, 10:90.⁶⁰

Council provided an Appendix B to its closing submission (Document 137) which presented information from exhibited and other previously tabled documents for all projects with apportionments of 90/10 or 10/90 (existing populations/ new populations) and 40/60 and 60/40 populations. This was intended to assist the Panel in better understanding the apportionments.

Further, Council submitted in closing that if the Panel had residual concerns about apportionment, two options available to the Panel were for it to:

- request further documentation
- request Council to engage a consultant to undertake a peer review.

(iii) Discussion

The further information on cost apportionment requested by the Panel and provided by Council, together with the information provided in Appendix B to the Council's closing submission, has informed the discussion here. In using that information, the Panel has been cognisant of the submission by Rigby Cooke that the further information provided by Council should not include any new information and explanation justification but should be limited to an explanation of what Ms Thompson considered in the original apportionment undertaken and as exhibited. The Panel notes that Ms Thompson acknowledged the information in Table 5 was prepared in fulfilling the Panel's request, but the Panel does not interpret it as new information and explanation as such.

At the outset, the Panel acknowledges:

- Ms Thompson has extensive experience in cost allocation in open space planning settings and this expertise was not questioned by any expert or submitter; nor is it questioned by the Panel
- the broad methodology used by Ms Thompson has been used in a number of other open space contribution settings in recent years
- the cost allocation methodology used by Ms Thompson has been used in other like amendments without, to the Panel's knowledge, extensive questioning of it or adverse comment by other panels
- no contrary evidence by open space planning experts was called to question the methodology used by Ms Thomson to allocate costs between existing and new open space users
- evidence which did question aspects of the methodology and outcomes of cost apportionment was given by witnesses with primarily DCP expertise

⁵⁹ Document 135, [96].

⁶⁰ Document 135, [100].

- the approach used by Ms Thompson in using professional qualitative judgment rather than a purely quantitative approach was not seriously challenged.

The Panel acknowledges the undoubted expertise and experience that Ms Thompson brings to this matter and that is born out through, in her estimate, the approach having been used around a dozen times in recent years in both Yarra and other municipalities.

The Panel first addresses the methodology used in apportioning costs between existing and future populations and secondly addresses the application of that methodology.

The Panel does not question the broad qualitative approach used. It considers that attempting quantification of relevant factors would most likely create more problems than it would solve. Hence the Panel rejects any suggestion that a quantitative approach is preferable or indeed possible. The Panel acknowledges the temptation to apply aspects of the DCP methodology to this issue but considers that such an approach is not appropriate.

Nor does the Panel question the eight factors listed above as being relevant to the apportionment exercise. While the interpretation of, and weight given to, some of the eight factors were questioned, the eight factors themselves were not seriously challenged. The impact that the nature of development and UHIE has on cost apportionment was questioned and is addressed separately below.

The Panel notes that the apportionment methodology appears, by Ms Thompson's own acknowledgment, to rest on her professional judgment alone. As stated above, her professional judgment is not questioned by the Panel. The Panel acknowledges that it does not possess specific expertise in this area.

However, the Panel understands the 'black box' label applied to the apportionment exercise by Mr Gobbo and Ms Pepler, and notes that neither it nor submitters are able to readily validate the apportionments made for particular projects. The apportionments made by Ms Thompson were, by her own acknowledgment, not reviewed either within her own firm or by Council officers. Further, the Panel is a little surprised that criteria for the apportionment between existing and new populations as used by Ms Thompson and reproduced at Table 5 were not already documented, in one form or another. It had assumed that there would be a rigorous and clearly documented set of guidelines or protocols underpinning such a qualitative exercise. The Panel notes the concession made by Council in its closing submission that the Panel is being asked 'to an extent' to take Ms Thompson's professional judgment on trust.

In light of this, the Panel has concerns about the professional judgment of one person, however expert and experienced, being used to apportion costs as part of the calculation of a levy intended to raise in the order of half a billion dollars over the planning period. Based on the revised POPC calculation tabled at the Hearing (Document 61), the overall apportionment to the new population was calculated at 67.1 per cent, that is \$379,973,479 of projects apportioned to new populations as per centage of the total cost of \$566,079,822.

For sake of argument, if the apportionment to new populations was reduced to 57.1 per cent, the total cost to new populations would be \$323,231,578, some \$56 million less, a significant amount.

The Panel is not suggesting that the methodology should not rely on the expertise and experience of one person. However, given the quantum of revenue to be collected it considers that there should be a transparent review process that ensures validation of the outcomes reached and a degree of transparency for external parties. That review process should be based on an

independent peer review. It is not the Panel's role to suggest an appropriate apportionment methodology.

In making these comments on Ms Thompson's methodology, the Panel is acutely aware that previous panels have either endorsed, or at least made no comment about, the methodology. The Panel recognises that in this respect it is departing from the outcomes reported by at least some previous panels. In doing this, the Panel comments that it is basing its observations on material before it and cannot know the full extent of material or submissions put before previous panels. The Panel notes that in this case the contribution rate proposed is an order of magnitude higher than any other existing open space levy in Victoria, and as such has attracted a level of scrutiny that may not have been applied before. The scrutiny is appropriate given the quantum of the contribution rate and the likely revenue it would generate.

The Panel now turns to the application of the apportionment methodology.

Both Mr Gobbo and Mr Walker placed emphasis on the so-called 'flip', that is approximately one-third of the new population being apportioned approximately two-thirds of the total costs. The Panel places little weight on this because the one-third and two-thirds ratios have emerged from the methodology used and are essentially coincidental. However, the broad point of apportionment of costs deviating significantly from the ratio of new to existing populations is relevant.

The Panel notes Ms Thompson's statement that relative proportions of existing and new populations did not have a significant influence on the apportionment between these two groups. The Panel finds this comment somewhat puzzling as the open space is provided to meet the needs of these populations. Ms Thompson acknowledged that her point could have been better stated.

The Panel considers that the fundamental problem is that neither it, nor submitters, are able to validate the apportionments made and therefore cannot have comfort that the apportionment of costs is appropriate.

The Panel notes that in applying the eight factors, Ms Thompson allocated an order of importance to each in the further information she provided to the Panel (Document 121). However, it is not clear to the Panel what weight was given to each factor in the apportionment of costs in each of the case studies provided. In the Panel's view, the indicators of 'very important', 'high level', 'important', 'less important' and so on were not used consistently and the distinction between 'very important' and 'high level' is not clear to the Panel. Despite further explanation by Ms Thompson, the Panel is still not clear what the relative weights applied to each of the factors was or their impact on particular apportionment outcomes.

With respect to the apportionment categories set out in Table 5, the Panel notes Ms Thompson's explanation of how an apportionment might be made by her at the margins. Despite this, the Panel considers that an external user (and indeed the parties to this Hearing or the Panel) have little in terms of practical guidance that allows validation of a particular apportionment.

In considering the nature of development and the impact of UHIE which Mr Gobbo submitted each had a disproportionate impact on the apportionment of costs to new populations, the Panel does not address these in any great detail. The reason for this is that despite extensive cross examination of Ms Thompson by Mr Gobbo, the Panel is not able to be certain of the weight given to each in the cost apportionment exercise. The Panel accepts that UHIE is relevant and is addressed in local policy. The Panel was presented with no convincing evidence as to its impact or the extent to which it has influenced particular apportionments. Further, it is not clear to the

Panel that the existing population has been allocated a fair share of the costs of this relatively recent factor in influencing the need for open space and greater tree canopy cover in particular. As an example of this, the Panel notes that for Project 7.8A-6 which has a 90 per cent apportionment to the new population, the description in the POPC (Document 61) includes reference to mitigating the UHIE. It is unclear to the Panel why the existing population should not be making a greater contribution in this respect.

Only a small number of projects were identified for which apportionments were questioned and proposed by experts and submitters as inappropriate. Mr Pitt set out in numerical terms how a particular apportionment in Fairfield resulted in an outcome that makes little logical sense in terms of the data which was presented in the exhibited documents. In the responses to the further information provided by Council and Ms Thompson, further projects were listed above where submitters perceived a bias towards over apportionment to new populations. The Panel accepts that despite its comments above that it is difficult to validate the apportionments proposed, it can understand the possible inconsistencies identified with respect to at least some projects.

No alternative apportionments were proposed in any instance. From this small number of examples, the Panel is unable to draw any firm conclusion on the appropriateness or otherwise of the apportionments. However, it acknowledges that some apportionments to new populations do appear to be higher than might be expected based on the information provided. The Panel is not in a position to suggest appropriate apportionments and submitters have not attempted this.

The different way the apportionment exercise was explained in Appendix B to the Council's closing submission has not added a great deal of clarity to the Panel's understanding of the apportionments made.

In attempting to understand particular apportionments, the Panel has asked itself whether it can be confident that the apportionment should not be one category or apportionment ratio (from Table 5) in either direction from that selected by Ms Thompson. In many cases, the way the apportionments are explained does not provide the Panel the comfort it would like. Where there is doubt, it seems to the Panel that there could be an over apportionment to new populations.

On this basis, the Panel cannot confidently conclude that the apportionments are justified. The Panel draws this conclusion somewhat reluctantly and despite two requests for information which it had hoped would add a greater level of transparency to the outcomes proposed.

The Panel is, however, surprised that the apportionment to new populations deviates to the extent it does from the proportion they comprise of the total population at the end of the planning period. Having said this, the Panel accepts that apportionment based on the proportion of new and existing populations is too simplistic and that other factors have legitimately been taken into account. It notes that the overall apportionment proposed (67.1 per cent to the new populations) has a significant impact on the comparatively high open space levy that is proposed.

In drawing these conclusions, the Panel acknowledges that given the qualitative methodology used it is not likely that a non-expert Panel or submitters would be able to comfortably validate outcomes. However, because of the magnitude of revenue involved, the Panel considers that validation of the apportionment outcomes through a suitably structured peer review is required.

(iv) Conclusions

The Panel concludes:

- a qualitative, as opposed to quantitative, methodology to apportion costs between existing and future populations is appropriate
- the basis of and factors influencing the qualitative approach used to apportion costs are appropriate
- the apportionment of costs should be the subject of a suitably structured peer review.

4.4 Value of land required to accommodate future residents and workers

(i) Issues

The issues are:

- whether the methodology used to calculate the value of land required to accommodate the new population is appropriate
- whether that methodology has been appropriately applied in calculating the value of land required to accommodate the new population.

(ii) Evidence and submissions

The value of land required to accommodate the new population is the denominator in the contribution rate calculation equation. The Contributions Report describes how the denominator was established:

The resident and worker population forecasts and the dwelling and non- residential floor space forecasts were apportioned spatially to the open space planning precincts based on the City of Yarra's forecast data. This provided the starting point for determining how much land would be needed to accommodate the forecast increases. The value of land estimated to redevelop was determined using site values based on Council's property rate valuations, as the public open space contribution rate is applied to site value only.⁶¹

Dr Eagleson, an expert in spatial modelling and author of the technical document titled 'Data for Residential and Non-residential Development to assist calculation of the Public Open Space Contribution Rate' (Document 8), gave evidence for Council on the methodology that she applied to determine the denominator. This involved:

- developing a model to estimate the land area required to support residential and employment growth in the City of Yarra small areas 2016 – 2031; and
- sourcing land valuations data from the City of Yarra and aggregating this data within a Geographical Information System (GIS) into the required spatial units to support the City of Yarra Open Space Strategy.⁶²

Dr Eagleson's evidence considered the impact of COVID19 on each of the inputs to the denominator calculation. She stated that the key impact of the pandemic was that development would likely be slowed in the short term (2022-2023) after which forecast growth is likely to resume, with the result that population forecasts for 2031 would be more likely to be achieved by 2034 or 2035. She said that for a range of other inputs, it was too early to predict what the longer-

⁶¹ Contributions Report, p. 10.

⁶² Document 26, p. 5.

term impact would be. The impact of the pandemic on the denominator calculation was not raised as a key issue at the Hearing and is dealt with more generally in Chapter 3.4.

The PPP group of clients took issue with two aspects of how Dr Eagleson had applied the methodology:

- how the population forecasts had been apportioned spatially to the open space planning precincts
- the use of 2016 median site values.

On the first point, Mr Gobbo submitted that there was a mismatch between where Ms Thompson assumed populations would go, according to strategic documents, and where Dr Eagleson assumed they would go, according to her predictions of market forces and land values. Dr Eagleson stated under cross examination that in terms of the spatial mapping exercise, she had looked at sites where development (or growth) would occur based on capacity and market forces rather than where proposed open space would occur based on relevant strategic planning documents.

On the second point, Mr Gobbo submitted that the costs in the denominator had been undervalued because median site values, assessed according to 2016 values, for the most undeveloped sites within Yarra had been used. He argued that the site values on which the contribution amount will be calculated when subdivision occurs will be higher than the 2016 values used in the calculation not only due to the passage of time, but also because site values of these undeveloped sites will go up once purchased for redevelopment, rise again when developed, and rise further when a subdivision permit is granted and a valuation done for the purposes of the subdivision contribution. Undervaluing site values in this way, he submitted, reduces the denominator, which in turn increases the overall contribution rate. He stated that an allowance could have been made for this undervaluing using, for example, evidence from an expert valuer.

Under cross examination and re-examination, Dr Eagleson gave evidence that the 2016 median site values had been used because:

- median values are more reliable (than average values)
- the 2016 values had been formally adopted and were the most authoritative available, as opposed to the 2018 values which were only pending and had not been formally adopted by Council at the time (and which she acknowledged would generally be higher than the 2016 values) and matched the census figures.

Under cross examination, Dr Eagleson generally agreed that the site value of land being developed would generally rise over time and as it was developed.

This part of the Mr Gobbo's submissions was supported and adopted by Piedimonte.

(iii) Discussion

The Panel notes that the overall methodology used to calculate the total site value of the land forecast to be developed (the denominator) itself was not seriously challenged at the Hearing. Rather, the key issues raised were about the application of the methodology.

It is not clear to the Panel what impact the suggested spatial 'mismatching' of forecast populations to precincts would have on the relevant site values and the denominator calculation. This was not drawn out in any of the submissions and in the Panel's view, no compelling argument was advanced to overturn Dr Eagleson's calculations.

In terms of the use of 2016 median values, the Panel acknowledges the arguments advanced by Mr Gobbo that at the time any given contribution is actually calculated, the site valuations will be higher than the 2016 median values used to calculate the rate. It is also accepted that it would be possible for the Council to have made an appropriate adjustment to the denominator on this basis. However, if such an adjustment exercise were to be undertaken, a similar exercise would need to be undertaken for other inputs to the rate calculation. If this had occurred, the Panel considers that each of these variations would most likely have been challenged and various competing adjustment methods or amounts put forward by relevant experts. There would also be the question of exactly what date the adjustment should be made up to and any date chosen would have an element of arbitrariness. On the basis that the majority of data informing the rate calculation has been taken as at 2016 (based on the most recent census data available at the time the relevant work was undertaken), the Panel is satisfied that the 2016 data set for site values is appropriate.

The Panel accepts Dr Eagleson's evidence that the use of the median values is most appropriate and notes that the use of the median (as opposed to the average, for example) is a common approach in this type of exercise.

(iv) Conclusion

The Panel concludes that the methodology used to calculate the value of land required to accommodate future residents and workers is appropriate and has been appropriately applied.

4.5 Recommendation

The Panel recommends:

Replace the 30 per cent allowance added to Capital Improved Value of land with 10 per cent, in calculating the cost of land to be acquired for future open space, in the calculation of the open space contribution rate.

5 Issues arising in calculating and applying the open space contribution

5.1 Proposed approach to acquiring land

(i) The issues

The issues are:

- whether the proposed approach to acquiring land required for open space is realistic
- whether the heavy reliance on acquiring land required for open space on the open market is appropriate
- whether the potential conversion to open space of publicly owned land has been given sufficient weight in the approach to acquiring land
- the role of PAOs in acquiring land for open space.

(ii) Evidence and submissions

The Technical Report states that the land required to deliver the YOSS will be acquired through a range of mechanisms:

- as a land contribution as part of future subdivision of land for large development sites
- conversion of Council-owned land from its existing use to open space
- conversion of land owned by another government agency to open space
- purchase of undeveloped land
- purchase of developed sites where no other opportunities are available.

Council submitted that its reliance on land acquisition on the open market as a key strategy for delivery of the YOSS is entirely appropriate because insufficient land will become available to deliver the YOSS from land contributions and land conversions. The Contributions Report refers to the experience of councils in inner and middle ring suburbs needing to purchase private land at market rates to meet the open space needs of forecast populations due to the limited number of redevelopment sites large enough to provide usable land contributions and that there are limited opportunities for Council-owned sites to be converted due their limited availability, size and location.

The evidence and submissions relating to repurposing of public land has been discussed in Chapter 4.1.

The Contributions Report states that Council is not proposing to use the PAO to purchase property to deliver the YOSS. Ms Thompson's evidence was that the PAO could be used by Council to acquire land for open space, but only after Council had undertaken a more detailed assessment at a sub-precinct level to identify potential land that meets the criteria for new open space (Table 5-2 in the Technical Report). Once this had been done, Council could prepare an action plan for each sub-precinct which would include various options including introducing a PAO over relevant land. Ms Thompson said that Council would be able to acquire the new open space in the sub-precincts identified to deliver the YOSS and that the timing of the acquisition and establishment of new open spaces would become clearer once the detailed assessment had been undertaken. She explained that the reliance on purchase on the open market is *"based on the understanding that*

*there are only a limited number of redevelopment sites are large enough for the land contribution deliver suitable land contributions as open space”.*⁶³

Mr Milner stated:

The identification of land at an early stage assists the affected landowners and others in the vicinity to make informed decisions about the use and development of their land.

Early ‘reservation’ also enables control of the use and development of land that will eventually be acquired, including insofar as all further use, development, or subdivision of the land will generally require a planning permit and permit applications must be referred to the acquiring authority.⁶⁴

Council submitted that delaying the imposition of PAOs until it had more clarity or certainty around which properties would be purchased would avoid “*significant uncertainty and angst for landowners and the community*”, particularly when PAOs are in place for long periods of time.⁶⁵ In contrast, Mr Gobbo submitted that uncertainty would be created by the existence of the YOSS (and associated documentation) itself because it generally identified the areas where open space would be delivered and properties acquired.

Mr Shipp stated that the lack of the use of PAOs in the YOSS was a factor in his view that the YOSS is ‘speculative’. In his opinion, the acquisition strategy of the YOSS was not guaranteed to be successful, and even if successful, would take a long time to achieve which could push acquisitions outside the timeframe of the YOSS. Mr Shipp said this was inequitable because developers were being asked to pay for open space that may never be delivered or would be delivered outside the timeframe of the YOSS.

Mr Shipp also considered that there is a ‘mis-alignment’ between the YOSS’s heavy reliance on the acquisition of ‘improved’ properties and the stated strategy for land acquisition which places acquisition of developed properties on the open market as the last option. In his opinion, the other methods identified in the YOSS are more practical to implement. Under cross examination by Ms Brennan, Mr Shipp stated that he accepted that land acquisition would be required to deliver the YOSS.

(iii) Discussion

The Panel considers that Council has taken a realistic and measured approach to the way in which it intends to acquire land to deliver the commitments of the YOSS. The Panel agrees that the Council will face considerable difficulties in acquiring suitable areas of open space using land contributions and repurposing of either Council-owned or other public land. As noted in Chapter 4.1, the Panel acknowledges the evidence of Ms Thompson and the submission of Council that the ‘low hanging fruit’ with respect to repurposing of public land has to an unknown degree been harvested in implementing the 2006 strategy and that it would not be appropriate for Council to rely too much on this method of acquiring land for open space. It considers that most larger development sites in Yarra have already been developed. For these reasons, the Panel considers that the acquisition of developed land on the open market, as the final method proposed by Council if other opportunities are not available, is appropriate and that the Council will need to rely heavily on purchasing privately held land on the open market to deliver the YOSS.

⁶³ Document 25, at [3.7.6].

⁶⁴ Document 29, at [28]-[29].

⁶⁵ Document 75, at [52].

The Panel notes the concerns of submitters about the challenges facing Council in acquiring and delivering open space on the scale contemplated by the YOSS. In this regard, the Panel notes the exhortation in *Open Space for Everyone* to be bold in planning for open space across metropolitan Melbourne.

The Panel supports Council's approach of not applying the PAO to land until it has properly assessed all potential land that meets the criteria for new open space in each precinct and whether a PAO is the most appropriate option. However, if a PAO is to be used, it should be applied as early as possible once that decision is made to ensure that the land is not further developed in a manner contrary to its future use as open space and potentially thereby increasing the compensation payable under the compulsory acquisition process.

(iv) Conclusions

The Panel concludes:

- the proposed approach to acquiring land for open space is measured and realistic
- the heavy reliance on acquiring land for open space on the open market is appropriate
- the potential conversion and use of publicly owned land has been given appropriate consideration
- it is appropriate for the Council to wait until it has identified properties for acquisition before applying PAOs to land.

5.2 Municipal-wide contribution rate

(i) The issues

The issues are:

- whether the appropriate principles have been applied in choosing to apply a single, municipal-wide rate
- whether a differential open space contribution rate can and should be applied
- whether the use of a single, municipal-wide contribution rate is appropriate.

(ii) Evidence and submissions

The Contributions Report states that the proposed uniform rate provides "*municipality consistency, policy neutrality and perceived equity*".⁶⁶ Further:

The single public open space contribution rate is considered to meet the equity principle because a uniform rate provides an even benchmark, with clarity and simplicity about what the rate will be. All subdivisions are treated equally, the principles of need, nexus, accountability and equity having been established in the setting of the rate.

As the public open space contribution is determined as a per centage of the land or a per centage of the site value of such land, the actual land or cash contribution will vary, depending on the circumstances of the site.⁶⁷

Ms Kay gave evidence that applying a uniform rate across the municipality as a per centage of land value is fair. She said that it results in differing amounts paid by developers where a higher site value is likely to result from a higher density development. In addition, Ms Kay stated that a uniform rate is equitable because:

⁶⁶ Contributions Report, p. 5.

⁶⁷ Contributions Report, pp. 5-6.

Everyone will benefit from the new open space reserves as well as the improvements to existing reserves. Even precincts with a smaller number of open space projects will benefit from the public open space expansions and improvements in other parts of the city. There is less likely to be cross over demand from precincts where there is a large population increase if their local open space needs can be met within their own precinct.⁶⁸

In Ms Kay's view, equity in the rate also includes consideration of making open space accessible to everyone in the municipality and that there is equity in distributing costs across the municipality in an even-handed way. She noted that *Open Space for Everyone* has a focus on "more equitable access to open space across metropolitan Melbourne".⁶⁹

In her written evidence, Ms Kay provided a table which set out the results of her re-calculation of the rate on a precinct basis (reproduced here as Table 6).

Table 6 Open space contribution rate by precinct

Precinct	Total costs	SV of land to be developed	Open space contribution rate
Abbotsford	\$7,855,198	\$286,757,014	2.7%
Carlton North - Princess Hill	\$523,066	\$23,588,482	2.2%
Central Richmond	\$28,448,433	\$500,779,083	5.7%
Clifton Hill	\$1,024,000	\$68,930,172	1.5%
Collingwood	\$98,738,008	\$815,247,821	12.1%
Cremorne, Richmond South, Burnley	\$117,244,876	\$635,975,223	18.4%
Fairfield - Alphington	\$3,385,294	\$22,555,590	15.0%
Fitzroy	\$49,041,076	\$717,813,963	6.8%
Fitzroy North	\$11,123,980	\$158,903,603	7.0%
North Richmond	\$65,151,838	\$558,687,669	11.7%
City of Yarra	\$382,535,769	\$3,789,238,620	10.1%

Source: Expert evidence of Ms Kay, Document 24, [86]

Ms Kay opined that the differential in the highest and lowest rates, 1.5 per cent in Clifton Hill to 18.4 per cent in the Cremorne, Richmond South and Burnley precinct, would raise new equity issues and cancel out the benefits of a municipal-wide rate.

When cross-examined about a precinct-based rate, Ms Kay accepted that under a precinct-based rate, an area with a lower need would have a lower contribution rate but pointed out that, in her opinion, the context for the two-rate approach in *Melbourne C209*⁷⁰ (which was based on different levels of forecast growth) was very different to that in Yarra, because Melbourne has well defined very high growth areas and other areas with very limited change expected and this is not the case in Yarra. She did not agree with Mr Walker's proposition that there was a similar difference in Yarra between high growth areas and low growth areas that could justify two (or possibly three) different rates. Her evidence was that Yarra's expected growth across the municipality does not

⁶⁸ Document 24, [124].

⁶⁹ Document 24, [34].

⁷⁰ Melbourne C209 [2014] PPV 116.

have enough differential in terms of land use development and level of transformation for such an approach, and Yarra has a very different planning framework to that in Melbourne.

Mr Milner stated that the YOSS methodology, did not support a uniform, municipal-wide rate.

Mr Shipp stated that he did not support a single, municipal-wide rate, but his reasons focussed on whether the rate should be applied to both residential and non-residential land uses alike. Under cross examination, Mr Shipp stated that he did not believe that equity required a split rate between high growth and low growth areas.

Mr Black's evidence was that that a municipal-wide flat rate had not been adequately justified by the YOSS and was inequitable. In his opinion, a uniform rate is simple, but that does not necessarily mean that it is equitable. Mr Black took issue with the result of applying a flat rate, being that:

... developments in areas with abundant open space will be left paying disproportionately for open space in other parts of the municipality, [and] which its future residents or workers are likely to receive little to no benefit.⁷¹

He pointed out that about 80 per cent of forecast dwellings will be in Alphington/Fairfield, Richmond, Collingwood, Cremorne/Burnley and Abbotsford but that other suburbs with significantly less growth will end up paying more to reduce the amount paid by the higher growth suburbs. He said different rates should be applied to different precincts to reflect the public open space needs of each precinct more accurately and questioned why the detailed work in assessing the anticipated growth and open space needs on a precinct basis in the background documents to the YOSS had not flowed through to the rate.

Mr Black stated that it is not unusual to have a rate that varies, with different rates attaching to different circumstances including different levels of projected growth. He described the flat rate as a 'blunt instrument' and gave evidence that the background work undertaken by the Council supported a differential, or precinct-based, rate.

However, when cross-examined by Ms Brennan, Mr Black accepted that a precinct-based analysis does not necessarily result in a precinct-based rate. His evidence was that while he supported a 7 per cent rate for Fitzroy North, as set out in Table 6, he did not support a consequential rate of 18.5 per cent for Cremorne, 15 per cent for Fairfield, 12.1 per cent for Collingwood or 11.7 per cent for Richmond. He did not expect the rate in Clifton Hill to be 1.5 per cent. When Ms Brennan put to Mr Black that despite his expert witness statement saying so, he did not actually support a precinct-based approach, Mr Black replied that the planning for these areas was wrong. However, Mr Black retracted this when Ms Brennan pointed out that he had previously agreed that he had no criticism of the Actions, costings and apportionment in the YOSS and associated documents. Mr Black then stated that the gap analysis was incorrect.

When questioned by the Panel, Mr Black clarified that his evidence was that the methodology of the YOSS is sound, but its application went awry in the application of the methodology in the gap analysis. He added that, in his opinion, Yarra's planning framework provides clear statements about the differences between different areas within the municipality and applying a differential rate in a similar manner to Stonnington would produce a fair result. He acknowledged that a lot of the background work had been done by Council but thought Council could undertake further work to distinguish areas where growth is encouraged and where it is not (and potentially areas of

⁷¹ Document 31, [17].

medium growth), based on the work already undertaken, which could then be used as the basis for the application of differential rates.

Council submitted that Mr Black's evidence in this regard was "*simply untenable*"⁷²:

He cannot, on the one hand, advocate for a 7% rate for his client's precinct, on the basis of the precinct-based approach founded on the work done for the YOSS; and on the other hand, refuse to accept that it is consequently appropriate to accept much higher rates than 10.1% in the precincts that generate the most demand for new open spaces.⁷³

Council submitted that the Panel should give no weight to this aspect of Mr Black's evidence.

Council submitted that the adoption of a flat rate is equitable:

because all subdivisions captured by the Schedule to Clause 53.01 pay the same rate (whether in cash or land) regardless of location, and regardless of whether that location is or is not already well served by open space.⁷⁴

Council argued that this approach avoids the *inequitable* outcome where a development in a precinct where there is less need for new open space than others obtains an economic advantage through having to pay a lower contribution while still contributing to the population growth in the area. Council accepted that imposition of a single, municipal-wide rate would result in some cross-subsidisation within precincts and across the municipality. In its closing submission, Council also referred to several parts of *Open Space for Everyone* to argue that open space planning must encompass and be accessible to everyone. Council highlighted that in relation to funding models, *Open Space for Everyone* recognises the need to update funding and financing models and that the strategy states that "*funding arrangements must result in equitable access to quality open space for all Melburnians*".⁷⁵

Council relied on previous Panel reports including *Monash C148*⁷⁶ in which the Panel accepted that a council can validly adopt a single planning unit for the purposes of collecting a contribution under Clause 53.01:

The effect of a single planning unit is that future development in areas with adequate existing provision [for open space] may subsidise expenditure in areas where provision is poor.

...

The Panel notes that the concept of cross-subsidy is effectively built into the provisions of Clause 53.01 because it provides no direction on where the funds collected should be spent [and the] ... Panel agrees that, notwithstanding higher growth is expected in some areas of the municipality over other areas, the allocation of funds raised through an open space contribution is a matter for Council through its budget process.⁷⁷

In this respect it also relied on *Melbourne C209*⁷⁸ in which the Panel stated:

... the Panel considers that to ... conclude that because the Amendment may be inequitable to specific properties means that the Amendment must fail on equity grounds is overly simplistic and fails to accord any weight to the strategic view being taken by Council in the [Open Space Strategy].⁷⁹

⁷² Document 135, [117].

⁷³ Document 135, [118].

⁷⁴ Document 34, [125].

⁷⁵ Document 135, [20].

⁷⁶ *Monash C148* [2020] PPV 23.

⁷⁷ *Monash C148* [2020] PPV 23, p. 24 of 40. Refer to Document 34, [65].

⁷⁸ *Melbourne C209* [2014] PPV 116.

⁷⁹ [2014] PPV 116, pp. 44 - 45 of 68.

In oral submissions, Ms Brennan took the Panel to a range of provisions of the Planning Scheme which direct and encourage growth in various parts of the municipality. Council submitted that, unlike the City of Melbourne, Yarra does not have a clear delineation between areas for urban renewal and stable residential areas, but rather has some established areas with growth areas scattered throughout the municipality. For this reason, it was submitted, the Melbourne approach is not appropriate in Yarra.

Overall, Council submitted that a municipal-wide rate was justified given the following two factors:

- the significant benefits of a simple, clear, and easily applied flat rate approach; and
- the significant implications for development in areas with high growth and minimal (or no) existing open space of taking a precinct-specific approach where the contributions rates would be far more than 10 per cent.

Mr Walker submitted that a uniform contribution rate across the whole municipality would be inequitable, giving the following example:

Fitzroy North is already well served by open space and it is unreasonable to impose a relatively high contribution requirement to offset public open space upgrades for other areas within the municipality that are poorly served by public open space and that require significant upgrades. The amendment should provide a more sophisticated demand assessment for areas within the municipality where public open space upgrades are required, and adopt a suburb / precinct approach to contribution rates.⁸⁰

Along similar lines, Urban Development Institute of Australia (Victoria) (UDIA) submitted that the contribution rate should not apply as a 'blanket rate' to the entire municipality but should instead *"be varied for individual areas within the municipality, having regard to the open space available and the specific and projected needs of the future population in such areas"*.⁸¹ It argued that in this sense there should be a nexus between the areas that require public open space and those who pay for it, and recommended to the Panel the approach taken in Stonnington where broad areas were allocated differing rates reflecting the open space needs in those different areas. When questioned by the Panel, Mr Vorchheimer for the UDIA appeared hesitant to accept the high rates that a precinct-based approach (based on Table 6) would entail and suggested that the Council should cast the net differently to smooth out the results (as in Stonnington).

Mr Pitt submitted that while there will be a level of cross-subsidy as a result of applying a uniform rate, it is a matter of degree and where the divergence in outcomes becomes too great a flat contribution rate across the municipality is *"simply unfair and inequitable"*.⁸² He also contended that the argument about avoiding over burdening development in shortfall areas applies equally to well-provisioned areas if the contribution rate is uniform. He submitted that a flat rate is not simple, clear or easily applied as asserted by the Council because site values are assessed on the basis of differing facilities, location, topography and built form context within 12 months of statement of compliance under the *Subdivision Act 1988* and that just because a rate is equal does not mean that it is equitable. Porta's concluding position was that Fairfield should be excluded from the Amendment and continue to be subject to the current contribution rate of 4.5 per cent.

In response, Council submitted that to exclude Fairfield from the new, municipal-wide rate would result in an inequity for the balance of the municipality. In its closing submission, Council provided a table that set out the proportions of the total expenditure proposed by the YOSS POPC for each

⁸⁰ Document 127, p. 1

⁸¹ Document 53, [3.1].

⁸² Document 129, [9.70].

precinct (as a per centage of the total, and as a per centage of the apportionments to each of the new and existing populations). Council submitted that the table demonstrated that the expenditure proposed for Fairfield is only 1.19 per cent of the total cost of the YOSS, and only 0.96 per cent of the total cost apportioned to the new population. It submitted:

The point that Council seeks to make is that the YOSS does not overprovide for upgraded open space in Fairfield. The provision for Fairfield is less than 1% of the total costs apportioned to the new population. The vast majority of the costs of the YOSS relate to precincts that are underserved by open space, and where most development is expected to occur. In Council's submission it is entirely appropriate for the POSC to be levied at the municipal level so that the load is shared across the whole municipality, rather than disproportionately charging those precincts that, by contrast to Fairfield, do not benefit from substantial provision of open space, by accident of history.⁸³

The Housing Industry Association submitted that to apply a flat rate *"regardless of the differences in 'need' within the municipality would set an undesirable precedent"*.⁸⁴

A number of submissions asserted that the municipal-wide, flat rate was not justified. DCF Developing Group Pty Ltd and JCL Prime Development Pty Ltd submitted that a blanket contribution rate is unjustifiable because *"it overlooks significant site-specific contextual factors, such as easements and other site constraints that may affect yield of development"* and raised concerns about equity issues.⁸⁵

(iii) Discussion

The Panel considers that, while a consideration, the benefits of a simple, clear, and easily applied municipal-wide rate approach only take the matter so far.

The Panel has given considerable thought to whether a precinct-based approach would be more appropriate. However, the Panel is concerned that if differential, precinct-based rates were used, such as those in Table 6, there would be too high a burden on development taking place in some areas. While some experts and submitters were willing to accept a precinct-based approach for precincts where the rate would be in the middle of the rate range, there was little acceptance that the higher (or lower) rates were reasonable. The Panel is concerned that the level of disparity in contribution rates resulting from a precinct-based approach may have unintended consequences such as pushing development into other areas, preventing development of the areas with the highest rates or other impacts which have not been fully debated before the Panel and are not considered in the background reports.

The Panel has carefully considered whether a middle ground could be found as suggested by some submitters (for example, UDIA). It notes that the Stonnington approach recommended to the Panel applied a two-tiered approach, where a 5 per cent contribution rate was applied to areas in the east of Stonnington which had significantly greater areas of existing open space and 8 per cent applied to the three remaining suburbs (in the west) where the open space needs were greater and the highest population growth was set to occur.⁸⁶ The Panel considers that there is insufficient evidence before it that there is a similarly clear distinction between suburbs or

⁸³ Document 135, [126]. Council also submitted that since the calculations in the YOSS, Porta had lodged a planning permit application that would potentially bring more than 500 residents, and an additional number of workers to Fairfield, if approved, and which is far in excess of the 57 new residents on which the YOSS assessment is made: Document 135, at [135].

⁸⁴ Document 50, [12].

⁸⁵ DCF Developing Group Pty Ltd submission, p. 3. JCL Prime Development Pty Ltd submission, p. 3.

⁸⁶ *Stonnington C186 (PSA) [2015] PPV 9* referred to in Document 53, [3.6].

precincts in Yarra to support a two-tiered approach such as in *Stonnington C186* (or *Melbourne C209*). Instead, the Panel found the case presented by Council, backed by Ms Kay's evidence, that the growth areas in Yarra cannot be easily separated but instead are dispersed within suburbs and precincts, to be convincing. This is particularly so when considering the location of Major Activity Centres and Neighbourhood Activity Centres together with projected spatial distribution of the residential population in the *Yarra Housing Strategy 2018*. In this respect, the Panel notes Mr Black's evidence that under the Yarra Housing Strategy, approximately 80 per cent of the total planned dwellings forecast will be in the suburbs of Alphington/Fairfield, Richmond, Collingwood, Cremorne/Burnley and Abbotsford. However, this point takes no account of where worker populations will be accommodated.

The Panel considers that while not like Melbourne with its large, spatially discrete areas of new urban development and the balance of the municipality being largely minimal change (with some exceptions), there are, nonetheless, notable differences between precincts in Yarra in terms of how well they are currently provisioned for open space and where population growth is expected to occur. These differences do result in some inequity when applying a single, municipal-wide rate, not just on a property-by-property basis, but more generally at the precinct level. The Panel considers however, as did the Panel in *Melbourne C209*, some inequity to specific landowners and properties will not be fatal to the application of a uniform rate and that it is acceptable that there be some cross-subsidisation between areas or precincts.

Therefore, on balance, and mindful of the potential disadvantages of a precinct-based approach and the absence of a better model before it, the Panel considers that it is appropriate to take a municipal-wide, strategic approach to the setting of a contribution rate.

Unlike the existing open space contribution rate which only applies to residential development, the Amendment applies the uniform rate to both residential and non-residential development. The appropriateness of this was not seriously contested. Mr Shipp commented on it, as did Mr Milner but in the context of residential and non-residential resulting in different patterns of usage. The Panel accepts that the uniform rate should apply to both residential and non-residential land. It also notes that to an extent, this conclusion follows from the Panel's acceptance of an equal ratio for residential and worker needs, as discussed in Chapter 3.3.

(iv) Conclusions

The Panel concludes:

- the appropriate principles have been applied in choosing to apply a single, municipal-wide rate
- a differential open space contribution rate is not appropriate for Yarra
- the use of a single, municipal-wide contribution rate is appropriate
- the single contribution rate should apply to both residential and non-residential land.

5.3 Transitional provisions

(i) The issue

The issue is:

- whether the Amendment should provide for transitional provisions for development which is part way through the approval and development process at the time of approval of the Amendment.

(ii) Evidence and submissions

With respect to transitional provisions, Council submitted that:

... in the event there is an approved subdivision permit or an existing planning scheme provision (e.g. DPO) that contains a condition or provision specifying an open space requirement or per centage provision, that condition or provision will prevail, and the revised contribution rate of 10.1% would not apply⁸⁷

With respect to the reference to existing DPOs, Council tabled an updated version of the Schedule to Clause 53.01 (Document 60) at the Hearing and subsequently provided a further updated version (Document 139). This is discussed in Chapter 7.1.

Council submitted that for any existing permit for subdivision, the open space levy would be applied at the current rate of 4.5 per cent. No other transitional provision would be made.

Mr Gobbo submitted that a number of his clients had purchased land based on assumptions relating to costs likely to be incurred, including contributions to open space at the existing rate. Supporting this, he quoted the evidence of Mr Mackintosh who stated that in situations where development costs increase there would be downward pressure on land values. Where land has already been purchased, there is no opportunity for this to occur and, Mr Gobbo submitted, market pressures are such that the sale price of completed units cannot be increased to absorb increased costs. Mr Gobbo argued that in such circumstances transitional provisions should be applied and he suggested wording that could be added to the Schedule to Clause 53.01 to achieve this. He argued that the situation that these submitters find themselves is fundamentally unfair.

Mr Milner supported the inclusion of transitional provisions exempting any development that held a planning or subdivision permit at the time of approval of the Amendment, citing the case of the residential zones when a minimum garden area was introduced as an example of where this has occurred.

Similarly, Mr Black supported transitional provisions for development approved before the gazettal of this Amendment. He stated that it would have been unreasonable for Piedimonte to allow for a contribution rate of 10.1 per cent at the time the planning permit was considered by Council on 21 May 2020.

Mr Gobbo further submitted that special provision should be made for the Harry the Hirer site, for which DPO15 has been approved with a 4.5 per cent contribution, but for which no development plan had yet been approved. Mr Gobbo submitted that the Panel which considered DPO15 had effectively deferred the rate at which the open space contribution should be made to this Panel. It is currently proposed that the Harry the Hirer site contribute land as its contribution. The Panel was provided with an image that depicted proposed open space. Mr Gobbo submitted that if this Panel is so minded not to recommend a transitional rate, the Panel should recommend that any further contribution above the 4.5 per cent land contribution should be made by way of cash.

Mr Walker submitted that Piedimonte had obtained a planning permit while the Amendment was under preparation and that it was not fair or equitable to impose a 'retrospective development contribution.' He supported this on the basis that Piedimonte had applied for permit and undertaken project feasibility on the basis of a 4.5 per cent contribution for open space. He argued that the proposal was contrary to the principle that planning scheme amendments do not

⁸⁷ Document 34, [213]

affect existing development rights and cited Victorian Civil and Administrative Tribunal (VCAT) cases in support.

In its closing submission, Council submitted that the grant of a planning permit to Piedimonte does not give an accrued right to subdivide the property or to be issued with a statement of compliance. As a result, there is no sense in which the change to the contribution rate is being applied retrospectively.

Other submitters raising the issue of lack of transitional provisions were DPG Management Pty Ltd, Duke Ventures Pty Ltd, Zero Nine, and Fenwick 84 Pty Ltd, most commonly raising the unfairness of the lack of such provisions.

(iii) Discussion

The Panel notes that some changes to planning provisions are accompanied by transitional provisions but in other cases, including DCPs, transitional provisions are uncommon. The Panel acknowledges that this is a difficult position and understands the fairness argument where land has been acquired and costings undertaken based on a particular set of assumptions.

Three factors have influenced the Panel's consideration of this issue. Firstly, wherever the 'line' that separates development paying levies at a new, higher rate is drawn there will be perceptions of unfairness depending on which side of the line a particular development falls.

Secondly, choosing for example an approved planning permit as the cut-off for a levy at the existing rate, while superficially appealing, introduces complexities around amendments to that permit where they are later sought.

Thirdly, this Amendment, or at least the strategy which it implements, has been in preparation for a number of years and while the proposed rate may not have been known until relatively recently, prudent developers would have recognised that a significantly increased levy was likely and planned accordingly.

For these reasons, the Panel does not support providing transitional provisions other than those already provided for in the amended Schedule to Clause 53.01 (Document 139).

The Panel accepts the position of Council that there is no accrued right to subdivide implied by the grant of a planning permit and that as such there is no retrospectivity in applying the open space contribution rate in place at the time of subdivision.

With respect to the Harry the Hirer site, the Panel accepts Mr Gobbo's contention that the Panel considering DPO15 effectively deferred consideration of the appropriate rate at which open space is to be provided to this Panel. The Panel notes that the Yarra C223 Panel stated:

It would, however, be reasonable to tie the provision of public open space for this site to the controls at the point at which the site is redeveloped, so that if the Planning Scheme rate was to increase, the Proponent would be liable for a higher contribution.⁸⁸

The Panel sees no reason why the open space contribution rate in place at the time of subdivision should not apply to the Harry the Hirer site. However, the Panel accepts that at this stage of development it would be unnecessarily disruptive to require any provision above that provided for in development plans to be provided by way of extra land. For this reason, the Panel accepts Mr Gobbo's submission that any extra contribution should be made by way of a cash payment.

⁸⁸ Panel Report for Amendment C223 to the Yarra Planning Scheme, p. 48.

(iv) Conclusions

The Panel concludes:

- not including transitional provisions, other than those provided for, is appropriate
- any additional requirement above the open space provided for as a land contribution on the Harry the Hirer site should be made by way of a cash contribution.

5.4 Offsets for the provision of communal open space

(i) The issues

The issues are:

- whether the Amendment has adequately considered the contribution of privately held, communal open space
- whether there should be a discount, offset or credit for provision of communal open space in new developments.

(ii) Evidence and submissions

Porta submitted that private communal open space in new developments should be taken into account in the Amendment. It argued that if assumptions about the forecast population having a greater need for public open space than the existing population (for example, because the existing population is more likely to have a backyard than the forecast population) were valid, then an allowance for private or communal open spaces must be made.

Mr Gobbo submitted that communal open space for apartments, now a requirement of the Better Apartment Design Standards (BADS), should be factored into the consideration of the open space needs assessment and in particular, the apportionment between existing and future populations.

Piedimonte submitted that the Amendment should make provision for the public open space contribution to be offset, or a credit provided, if a 'very high standard' of on-site communal open space is supplied. It submitted that this could be built into the Schedule to Clause 53.01.

Mr Black stated that:

There should be provision to reduce the required rate where it can be demonstrated that the open space provided within a development will reduce the reliance on public open space (i.e. substantial communal open space)⁸⁹

Mr Black referred to the 217 square metre communal roof top garden that his client was proposing to deliver as part of the redevelopment of the Piedimonte site in North Fitzroy as an example of such a situation.

Under cross examination by Ms Brennan, Mr Black stated in relation to the proposed Piedimonte development:

- the development would lead to close to 150 new residents in addition to an increase in workers from the commercial part of the development
- to access the communal rooftop open space, some residents would have to take a lift down to Level 6, then walk along a corridor and take a second lift to the roof. Similarly, others would have to take a lift up to Level 6 and take a second lift to the roof. Residents

⁸⁹ Document 31, [221].

of the townhouses would need to enter the apartment building to access lifts to the rooftop⁹⁰

- the communal rooftop space would not be open the public, but Mr Black was not sure if it would be accessible to the workers in the commercial tenancies
- there was nothing to stop the rooftop open space being changed and there was no certainty or perpetuity (unless a legal agreement was in place to protect it) but changing the rooftop space would be unlikely because it would impact on the planning permit.

The UDIA submitted that the Amendment fails to adequately consider “... *the extent of restricted public open space or communally accessible private open space that would serve the open space needs of residents or workers in student accommodation, apartment, commercial, industrial or mixed-use developments*”.⁹¹

Relying on the evidence of Ms Thompson, Council submitted that there should be no discount, offset or credit for the provision of communal open space in developments. Ms Thompson stated that private open space can complement public open space but does not replace the need for public open space for the following reasons:

- Council has no influence over the protection and retention of the private open space on individual sites into the future. Over time, the private open space can be changed and redeveloped without consideration for the resultant impact this change may have on the public open space network. The private landowner can also restrict, change or place conditions on public access to private open space at any time. The purpose of the public open space is that the land is zoned for the purposes of public park and recreation and it is secured as a public asset into the future.
- Public open space has a range of important functions and roles that are articulated in the Strategy on pages 3 and 4. Many of these functions and roles are not achieved on private open space and public open space is an important part of the fabric of sustainable, social communities into the future. The City of Yarra encourages the provision and use of public open space as a place that is accessible to everyone irrespective of income level, cultural background, age, health and ability. The provision of open space and/or recreation facilities on private land does not necessarily provide for everyone.⁹²

Her evidence was that as a result, there should be no offset for private communal open space.

Under cross examination, Ms Thompson stated that communal rooftop areas were considered in her assessment, but not at a micro level, and more generally that it was fair to take into account the provision of communal spaces that would be available to workers and residents. She also accepted that communal areas can provide opportunities for the kind of activities associated with open space and make a contribution to the health and wellness of the workforce. However, Ms Thompson was firm in her evidence that communal open space that is open to the public does not replace the need for public open space because there is no certainty as to its availability to all of the public all of the time, and over the long term, or its condition over time. She gave an example of the possibility that the public may need to purchase a coffee in order to access the space and as a result the space might not be accessible to all. She confirmed that there had been no offsets for communal open space in this project.

⁹⁰ Council referred to *Piedimonte Properties Pty Ltd v Yarra CC* [2021] VCAT 428 which stated that Piedimonte had acknowledged that for 11 apartments out of 66, a resident would have to use three lifts to access the communal roof space, at [148].

⁹¹ Document 53, [8.1(e)].

⁹² Document 25, [4.3.1].

Council submitted that there is a qualitative difference in the type of open space provided in communal open spaces in private developments as compared the space in the public open space network. It submitted that communal open spaces on private land play a limited role in meeting some open space needs at certain times but are not guaranteed in perpetuity and are not *“an equivalent alternative to, and do not obviate the need for, new public open spaces as provided for in the YOSS”*.⁹³

Council submitted that the communal areas being required in multi-unit developments are relatively small and only required where there at least 10 dwellings⁹⁴ with the result that residents would still need to access public open spaces for activities such as walking the dog. Taking the proposed Piedimonte development as an example, Council submitted that the nature of the communal space with hard surfaces, no canopy trees, and noise from air-conditioning units which would be positioned there, meant that they were not a substitute for public open space and provide no assistance in combatting UHIE.

Council also submitted that communal open spaces in workplaces do not meet worker needs in terms of being away from work, do not provide areas for exercise and there is no canopy planting. Council submitted that such spaces are not enjoyed in perpetuity and provide no assistance in combatting UHIE. The limited benefits they do provide do not justify a discount or lower rate.

Porta challenged the position that communal open spaces would not provide canopy planting and assist to combat UHIE, referring to Clause 58 requirements for solar access, deep soil planting and setbacks that would apply. Mr Milner stated that the maximum amount of communal open space required under Clause 58.03 is smaller than the average size of a small local park and there is no certainty that such spaces would allow for the planting of canopy trees. He said that while an appropriately designed communal open space could contribute to managing urban heat island effect, there was no guarantee that it would do so.

In its closing submissions, Council rejected Piedimonte’s submission that a credit should be applied if a ‘very high standard’ of communal open space was provided in a development as being unworkable and too subjective, questioning how ‘very high standard’ would be assessed. It submitted that such an approach would place an unreasonable burden on Council in its application and would lead to significant challenges. It also questioned what would happen if a credit were given for a high quality communal open space which degraded over time due to lack of upkeep, given Council would have no ability to upgrade that open space or to require the owner to upgrade it, and no mechanism to require the owner to pay back the credit. Council also submitted that such an approach does not find any support in the Subdivision Act, the Planning Scheme, or PPN70.

(iii) Discussion

The Panel accepts that while communal open space is now required for certain developments, there is no certainty as to the quality, form and benefits that such communal open space will provide either to the development’s residents and/or workers, or to the wider-public (if any). There is also no guarantee that the open space will be maintained and Council has no way of monitoring or controlling this. Council could require the developer to enter into a legally binding

⁹³ Document 75 [68].

⁹⁴ The Panel notes that Clause 58.03-2 currently requires between 30 and 220 square metres depending on the number of dwellings, 30 square metres of which is required to be outdoors.

agreement, including a section 173 agreement, to secure the communal open space but no argument that this should be required for every communal open space was advanced by submitters (or at least for communal open space that would receive a 'credit'). Accordingly, it would be inappropriate for Council to rely on communal open space as a permanent part of its open space network.

Further, the type of communal open space provided in multi-unit developments generally is of a different nature to that sought to be provided in the public open space network. Importantly, communal open space is not provided based on it being easily accessible by all in the sense required under *Open Space for Everyone*. The Panel considers that the proposed Piedimonte communal open space is a good example of this as it will not be open to the public and it was unclear whether workers from the commercial tenancies would have access. Considering the indirect routes for many residents to the rooftop (three lifts for some), there may be barriers to it being accessed even by the residents of the development itself.

Clause 58.03-2 currently requires at least 30 square metres of communal open space to be outdoors but also Mr Milner's evidence that communal open spaces are not required to be such as to allow for the planting of canopy trees. While tree planting, including canopy tree planting, is possible, the Panel does not believe that communal open spaces provide the same opportunities for tree planting (in terms of number of trees and size of trees, for example) as the open space network. This, together with the likelihood that many communal open spaces will have hard surfaces rather than grass and could be fully or partly covered (such as in office building atriums or laneways), leads the Panel to the conclusion that while communal open spaces could provide some assistance against UHIE, in general they will not provide very much assistance in this regard, and it is not guaranteed.

The Panel considers that the range of activities in such areas is more limited than in the open space network.

Therefore, the Panel agrees with Council's submission that there is a qualitative difference in the type of open space provided in communal areas and accepts the evidence of Ms Thompson that these types of spaces do not replace or obviate the need for public open space.

The Panel also accepts Council's submission that the idea of an 'offset', 'credit' or 'discount' for communal open space of a 'very high standard' would be very hard to administer and place an unreasonable administrative burden on it. The Panel has no doubt that it would provide fertile ground for challenges. The Panel agrees that the concept of 'very high standard' is too subjective without any further guidance on the criteria according to which this test would be assessed and notes that no such criteria were advanced by submitters. The Panel notes the difficulties in assessing how much 'credit' or 'discount' would be given and that no evidence or submissions were received on this particular point or more generally on how the offsetting or credit would actually work in practice. As a result, the Panel does not accept the suggestion for an offset, credit or discount for the provision of communal open space.

(iv) Conclusions

The Panel concludes:

- the Amendment has adequately considered the contribution of communal open space
- it would be inappropriate for Council to rely on communal open space in new developments as a permanent part of its open space network

- there should not be a discount, offset or credit for provision of communal open space in new developments.

6 Impacts of the proposed open space contribution rate

6.1 Economic viability of projects and impact on housing affordability

(i) The issues

The issues are:

- whether the proposed contribution rate will have an unacceptable impact on the economic viability of proposed development projects
- whether the proposed open space contribution rate will lead to unacceptable impacts on housing affordability.

Because of the way submissions have been presented the two issues of project viability and impacts of housing affordability are addressed together.

(ii) Evidence and submissions

Council and the group of submitters represented by Mr Gobbo have approached these related issues from different perspectives: Council from the perspective of housing affordability and Mr Gobbo, drawing on Mr Mackintosh's evidence, on the impact of the increased levy on project viability and consequently its impact on housing affordability.

Council acknowledged that the increased open space contribution rate may have an economic impact on some developments in Yarra, where the land is already owned by the developer.

In his evidence, Mr Macintosh stated that there are three key variables in the development financial equation, being:

- the price which is paid for a development site
- the minimum margin that the developer requires for the project to be financially viable
- the price which the finished product will attract in the current market.

Mr Mackintosh stated that a developer will not proceed with a project with a development margin of less than 15 per cent, this being the level below which potential project financiers will not lend. Further, he stated that there is little upwards flexibility in the price for which a product can be sold due to the inherently highly competitive property market. He concluded that any increase in the open space levy would therefore flow through to a lower price being paid by the developer for a development site. Mr Mackintosh acknowledged under cross examination that one of the impacts of an increased open space contribution and downward pressure prices could be that some land holders would withhold development sites from the market.

Mr Gobbo submitted that a number of Mr Mackintosh's assumptions were questionable. Under cross examination by Mr Gobbo on the assumptions that he had made in the two case studies on which his expert evidence was based, Mr Mackintosh acknowledged that these assumptions vary from developer to developer and therefore impact the financial outcomes that might be achieved. They included costs such as insurance, the selling commission that might be paid, a range of other fees which might be applicable, and the development margin expected by the developer. He stated that he had taken a valuer's perspective and developers would take a range of different

approaches and use different assumptions. He stated that his assumptions were commonly used by valuers to ensure consistency in valuation approach. Mr Mackintosh confirmed under cross examination that a development margin of 15 per cent was a minimum needed to get finance but acknowledged that some developers would seek a higher margin where higher risks were involved.

Based on the evidence of Mr Mackintosh, Mr Gobbo contended:

If the projects don't happen, or landowners hold and don't sell, then supply goes down and prices go up.

In this way, there is a 'cost' to housing affordability by reason of the contribution.⁹⁵

UDIA submitted that the proposed increased open space contribution rate would impact housing affordability in Yarra. Based on an example development, it submitted that the proposed levy together with the recently approved DCP could add almost \$20,000 to the cost of an apartment.

The Housing Industry Association similarly submitted the increased contribution would have a significant impact on housing affordability. It cited indicative case studies sourced from the National Housing Finance and Investment Corporation which purport to show that developer contributions (including open space contributions) can add \$37,000 to \$77,000 to the cost of a dwelling in Victoria. This was not a Yarra specific example.

A number of other submitters listed the impact of the proposed increase in the open space levy on development costs and therefore impacting housing affordability as a reason for opposing the Amendment in their written submissions. These include: Millieu Property Pty Ltd, Outline JV Smith Pty Ltd, Nijon Nominees Pty Ltd, Dare Property Group Pty Ltd, Beulah International Holdings Pty Ltd, Salta Properties Pty Ltd, Goldfields Richmond Pty Ltd, Aheron Investments Pty Ltd, ACC Smith Pty Ltd.

Relying on the evidence of Mr Mackintosh, Council submitted:

Council does not, however, agree with submissions that the Amendment will have a significant adverse effect on housing affordability in Yarra. In Council's submission, the likely economic effect of the Amendment will not be to materially increase housing prices for the end purchaser by passing on the cost of the additional contribution rate or to reduce development margins for developers; the more likely outcome will be to reduce residual land values.⁹⁶

Further, Council quoted from the Panel Report for Amendment C137 to the Maribyrnong Planning Scheme which stated:

The Panel notes Mr Montebello's submission in reply in relation to housing affordability. The Panel agrees there is no evidence before the Panel of a substantive effect, and this it is difficult to conclude that the Amendment should be changed or abandoned on this basis. The submission does not fairly acknowledge that even if open space contributions do worsen housing affordability to some extent, again a point not proven to the Panel, then this should be offset over the life of a development or dwelling by improved quantity and quality of open space and its consequent positive effects on liveability.⁹⁷

A significant number of other submitters cited the negative impact of the proposed contribution rate increase on housing affordability as an issue of concern in their written submissions. These included the DJC Property Group Pty Ltd, Fortis Pty Ltd, Dare property Group Pty Ltd, Beulah International Holdings Pty Ltd, Vicinity Centres Ltd, JCL Prime Development Pty Ltd.

⁹⁵ Document 88 [207 and 208]

⁹⁶ Document 34 [166]

⁹⁷ Document 34, [84].

(iii) Discussion

Council and Mr Mackintosh both acknowledged that a development can be placed in a difficult position where land is already in the hands of the developer and there is no possibility of reducing the price paid for the development site. The Panel accepts this possibility and acknowledges that the financial viability of some developments currently underway may be adversely impacted by an increase in the contribution rate. There are a number of possible outcomes that could arise, but as they are not material to the Panel's conclusions they are not explored here.

Based on the information provided in Appendix A to Mr Gobbo's submission (Document 88), a significant number of the 22 sites covered by the submission have been held by the current owner for more than four years, and many, more than a decade. While the current owner may not be the developer and the arrangements between the developer and owner are unknown, it appears that not all current owners of land will be impacted in a way such that financial viability of the relevant project will be threatened. The Panel makes this observation based on the assumption that while the owner may have incurred significant holding costs, the increase in land values over significant periods in at least some cases, perhaps many, will exceed holding costs.

The Panel acknowledges that the project feasibility facing many developers is likely to be more complex than Mr Mackintosh's land valuation focussed case studies, a fact acknowledged by him.

It would be unwise for the Panel to conclude that the financial viability of some projects will not be under significant pressure if the open space contribution rate as proposed is approved. However, no evidence was presented to the Panel to convince it that this pressure will be such that a significant increase in the open space contribution rate cannot be supported.

With respect to housing affordability, the Panel acknowledges at the outset that this is a very significant, complex and on-going societal issue. Further, there is no agreement on the role of supply side and demand side contributors to the issue and therefore possible solutions. Nor is it this Panel's role to canvass those wider issues.

While accepting the broad thrust of Mr Mackintosh's evidence that an increase in the open space contribution is likely to put some downward pressure on the price paid for development sites, the Panel accepts that at least some of this increase may find its way into higher prices being paid for the finished product. How much is not known and likely to vary considerably given the complex financial calculations and risk assessment that accompanies development financing.

Consequently, the Panel accepts that there may be some negative impact on housing affordability, but how large is unknown. The Panel agrees with the conclusion drawn by the Maribyrnong C137 Panel that any negative impact on housing affordability must be offset against the undoubted increased liveability of the area resulting from increased or enhanced provision of open space.

No evidence was presented to the Panel that convinces it that any affordability impact is such that a significant increase in the open space contribution cannot be supported.

(iv) Conclusions

The Panel concludes:

- there may be some, but difficult to quantify, impacts on the financial viability of some projects where the land has been acquired recently
- there may be some, but difficult to quantify, impact on housing affordability

- neither of these impacts is demonstrably significant enough not to proceed with an increase to the open space contribution rate.

7 Statutory planning issues

7.1 Proposed changes to the Schedule to Clause 53.01

(i) Submissions and discussion

In addition to the proposed open space contribution rate, the revised Schedule to Clause 53.01 proposes contribution rates lower than the proposed rate for three sites as follows:

- Former Channel 9 site in Bendigo Street, Richmond (4.5 per cent)
- Former Amcor site in Heidelberg Road, Alphington (4.58 per cent)
- Former Fitzroy Gasworks site in Smith Street, Fitzroy (minimum of 8 per cent).

The Panel understands that these exceptions are the subject of agreements already in place under section 173 of the PE Act.

In the case of the Channel 9 and Amcor sites, some impacted landholders made written submissions to the Amendment but on the receipt of an updated Schedule (Document 60), each indicated that they were satisfied with the outcome, with some further minor change agreed by the Council. Consequently, these submitters indicated that they no longer wished to be heard by the Panel. The Panel accepts that the agreements in place are appropriate and makes no further comment in this regard.

In its closing submission, Council noted a further amendment to the Schedule to Clause 53.01 was required to ensure that the revised contribution rate applied to 'all other land'.

(ii) Conclusion

The Panel concludes that the exemptions to the proposed interim open space contributions rate set out in the Panel recommended version of the Schedule to Clause 53.01 at Appendix D are appropriate.

7.2 Public Open Space Contribution policy

(i) Submissions and discussion

It is proposed to replace the existing policy at Clause 22.12 with a new Clause 22.12 reflecting the YOSS. A number of submissions were made about the specific content of Clause 22.12, but these were generally in relation to broader issues associated with aspects of the YOSS or assumptions made in the calculation of the proposed open space contribution rate. These have been addressed in other sections of this report. As part of its Part B submission, Council tabled a revised version of its proposed Clause 22.12 to align its text with the evidence of Ms Kay and Ms Thompson (Document 45). No submissions were made making specific requests or recommendations to the wording of Clause 22.12 and the parties at the Hearing made no objection to the amendments suggested by Council. The Panel accepts Clause 22.12 as set out in Document 45.

(ii) Conclusion

The Panel concludes that Clause 22.12 should be adopted as set out in Document 45.

7.3 Recommendation

The Panel recommends to:

Replace the exhibited Clause 22.12 with the version at Appendix E

8 Interim open space contribution rate

As indicated in Chapter 4.3, the Panel has reservations about the apportionment of costs of open space projects between existing and new populations. These reservations are, however, held in the context of the YOSS not seriously being contested by submitters and which, in the Panel's view, is a generally sound open space strategy for Yarra. Further, all parties appeared broadly to acknowledge that Yarra's current open space contribution rate of 4.5 per cent and which applies to residential subdivision only, is inadequate to meet documented open space needs. The Panel believes that it has an obligation to keep the process moving towards a new and more appropriate open space contribution rate.

The Panel has considered two options:

- adjourn the Hearing indefinitely while further work recommended by it is undertaken and leave the existing open space contribution rate of 4.5 per cent in place
- accept the majority of the proposed Amendment, require some further work and recommend an interim open space contribution rate.

The Panel considers that concluding the Amendment as exhibited, subject to minor changes, is appropriate, and that an interim contribution rate (lower than that proposed) be set through a separate Planning Scheme Amendment, is the most appropriate way forward because it will generate at least some of the required revenue while further work is being undertaken. In recommending this path, the Panel notes that Mr Gobbo suggested that an option available to the Panel was to set an interim rate and recommend the Council do more work to justify a higher rate. Further, Council countenanced this possibility in its closing submission.

In Chapter 4.3, the Panel concluded that a peer review of the apportionment of costs between existing and future populations should be undertaken before a final open space contribution rate can be calculated and approved as part of this Amendment.

For these reasons, the Panel considers this to be an interim report on exhibited Amendment C286yara pending the completion of that extra work. A final report will be prepared after that work has been undertaken.

This Chapter sets out the rationale for an interim open space contribution rate proposed by the Panel, the process to be followed from here and the broad parameters for a peer review of the open space contribution rate calculation.

8.1 Process for setting an interim contribution rate

The Panel understands that an interim open space contribution rate can be introduced into the Yarra Planning Scheme, through a separate planning scheme amendment for which Ministerial approval can be sought under section 20 of the PE Act. This would be based on the interim rate recommended below and the Panel's conclusions that the YOSS and the large majority of the work undertaken in preparing it are sound.

After a peer review of the apportionment of open space project costs between existing and future populations, the Hearing for this Amendment will reconvene and finalise Amendment C286, with a recommended final open space contribution rate. This rate will be based on conclusions in this interim report and a recalculated contribution rate based on the reviewed apportionment of costs.

The Panel acknowledges that Council has the option of adopting the recommended interim open space contribution rate as the final rate without undertaking the peer review and ask the Panel to close the Hearing. In those circumstances the Panel would produce a brief final report acknowledging this.

8.2 Interim contribution rate

In previous Chapters, the Panel has considered factors which may have an impact on the quantum of the open space levy to be applied through the Schedule to Clause 53.01. Based on submissions and evidence, the Panel has identified only two factors which it considers should be varied significantly from that exhibited. Set out below are the Panel's conclusions on each of these as they input into the Panel's consideration of an interim open space contribution rate.

(i) Value of land to be developed for open space projects

As indicated in Chapter 4.1, the Panel does not accept that the allowance added to the average CIV in each precinct proposed by Council to cover the cost to it of acquiring land for new open space is justified. The Panel considers a 10 per cent allowance to be a fair amount to compensate Council.

Using a 10 per cent allowance, the total project cost across the municipality falls from \$566,079,822 to \$491,111,053.⁹⁸ In recalculating these costs, the Panel has not taken into account its recommendation in Chapter 3.3 that Action 7.5B-4 in Fairfield be deleted. This is because the deletion of this project is not likely to significantly impact the calculations and because the Panel regards these calculations as indicative only, in drawing a conclusion on the interim contribution rate.

(ii) Apportionment between new and existing populations

In Chapter 4.3, the Panel concludes that there is some indication that there may have been a higher than justifiable apportionment to new populations but is unable to conclusively determine that this was the case or what the level of over apportionment to new populations might be. It also concludes that it is not confident that apportionments might not be in the next lower apportionment category from that proposed, that is a 90/10 apportionment might be justified as an 80/20 apportionment for example. The Panel uses this as the basis to reduce the apportionment of costs to the new population for an interim open space contribution rate by 10 per cent.

In the revised POPC calculation tabled at the Hearing (Document 61), the overall apportionment to the new population was calculated at 67.1 per cent (\$379,973,479 divided by a total cost of \$566,079,822). The Panel reduces the apportionment to the new population by 10 per cent to 57.1 per cent.

The Panel acknowledges that there is no science behind this approach and that it is based purely on a pragmatic judgment by it to arrive at what it considers to be a fair and reasonable interim rate. The Panel leaves open that it may be convinced that a higher rate than the interim rate is a fair and reasonable final open space contribution rate. In coming to an apportionment of 57.1 per cent to new populations, the Panel has not attempted to reduce the apportionment on a project-by-project basis. To do so would risk attributing a higher level of science to this outcome than is

⁹⁸ See Document 117, Scenario 2 summary table on p. 17.

intended by the Panel. In saying this, the Panel acknowledges that it feels obliged to explain the basis of the interim rate it is proposing.

If 57.1 per cent of the reduced total project cost of \$491,111,053 is applied to the total value of the property that is to be developed for open space of \$3,789,238,620 (that is \$329,653,383 / \$3,789,238,620), an interim open space contribution rate of 7.4 per cent is generated.

8.3 Peer review

The Panel does not consider its role is to tightly specify the terms of a peer review of the apportionment exercise undertaken by Ms Thompson but does consider it appropriate to indicate some of the parameters of that review so that its expectations are met when the outcome of that review (if undertaken) is considered by the Panel.

The suggested parameters for the peer review are:

- The review should be undertaken by at least one suitably qualified person with open space planning experience.
- The review should be restricted to the apportionment of project-by-project costs between existing and new populations. Population forecasts and project costs should not be the subject of review.
- The qualitative methodology used in the apportionment of costs is acceptable and should not be the subject of review.
- The Panel concludes that the eight factors influencing the apportionment of costs listed in paragraphs 3.3.3 and 3.3.4 of Ms Thompson's expert witness statement (Document 25) and reproduced in Chapter 4.3 are acceptable and should not be the subject of review, although commentary on them and their relative importance could be considered.
- The extensive field work undertaken by Ms Thompson need not be repeated provided relevant records can be provided to the reviewer.
- Where the reviewer finds that the apportionment of costs is different to that proposed by Ms Thompson, the reviewer's recommended apportionment should be provided together with a clear rationale for the recommended change.

8.4 Conclusions

The Panel concludes:

- Council should prepare a new Planning Scheme Amendment which adopts the exhibited Amendment C286yara except for:
 - the application of an interim open space contribution rate of 7.4 per cent
 - the minor changes as set out in Appendices D and E
- Council should use an appropriate mechanism to submit this new Planning Scheme Amendment to the Minister for Planning for approval
- if the Council wishes to achieve a higher final contribution rate, Council should commission a peer review of the apportionment of costs between existing and new populations and subsequently request the Panel to reconvene the Hearing for Amendment C286 to allow the Amendment to be finalised.
- Council should use an appropriate mechanism to submit this interim position as a separate planning scheme amendment to the Minister for Planning for approval

- if the Council wishes to achieve a higher final contribution rate, Council should commission a peer review of the apportionment of costs between existing and new populations and subsequently request the Panel to reconvene the Hearing for Amendment C286 to allow the Amendment to be finalised.

8.5 Recommendations

The Panel recommends to:

Prepare and seek Ministerial approval under the *Planning and Environment Act 1987* for a new Planning Scheme Amendment which:

- a) includes an open space contribution rate of 7.4 per cent in the Schedule to Clause 53.01.**
- b) includes exemptions in the Schedule to Clause 53.01 as set out in the version of the Schedule at Appendix D.**

Commission a peer review of the apportionment of open space Action costs between existing and new resident and worker users of open space for the purpose of justifying a higher contribution rate than the interim rate recommended by the Panel.

Appendix A Submitters to the Amendment

No.	Submitter	No.	Submitter
1	Alison Clarke	30	Streets Alive Yarra Inc
2	Nicole Eckersley	31	Lendlease Apartments Pty Ltd as trustee for the Lendlease RL Richmond No. 2 Trust
3	Roisin Murphy	32	Milieu Property Pty Ltd
4	James Hanlon	33	UDIA
5	Angeline Sparks	34	Fortis
6	Candyce Presland	35	Glenville Developments
7	Amy Henson	36	Astrodome
8	Sam York	37	Piedimonte Properties Pty Ltd
9	Beth Anderson	38	Paul Cusmano
10	Aimee Mensink	39	Outline JV Smith Pty Ltd
11	Liam Skoblar	40	Nijon Nominees Pty Ltd
12	David Jorm	41	Dare Property Group Pty Ltd
13	Joel Wells	42	Caydon Property Group Pty Ltd
14	Leneen Forde	42(a)	Caydon Property supplementary submission
15	Sam Bailey	43	UEM Sunrise (Collingwood Development) Pty Ltd
16	Emmanuel Murphy	44	Porta Investments Pty Ltd (
17	Katerina Nemcova	45	Beulah International Holdings Pty Ltd
18	Dr Malachy Feeney	46	Salta Properties Pty Ltd
19	Xavier O'Shannessy	47	Zero Nine
20	Oliver Ramsay	48	Goldfields Richmond Pty Ltd
21	Daniel Inchincoli	49	288 Johnston Street Abbotsford Pty Ltd
22	Shawn Ashkanasy	50	Gurner TM
23	City of Darebin	51	Vicinity
24	Duke Ventures Pty Ltd	52	LPC 10 Nominee Pty Ltd
25	Alison Wirtz	53	Fenwick 84 Pty Ltd
26	Jane Brownrigg	54	JCL Prime Development Pty Ltd
27	Meredith Kefford	55	JCL Prime Development Pty Ltd
28	DPG Management P/L, Delpar Development Investments P/L	56	Aheron Investments Pty Ltd
29	DJC Property Group	57	Salta Properties

58	Development Victoria	65	Consulting Surveyors Victoria
59	Eva Fabian	66	David Balding
60	Alycia Ashcroft	67	DCF Developing Group Pty Ltd
61	Mary Keyser	68	U-Home Oceania Pty Ltd
62	ACC Smith Street Pty Ltd	69	The Marble House
63	Housing Industry Association Inc	70	Time and Place
64	Piccolo Investment Group Pty Ltd	71	Riverlee

Appendix B Parties to the Panel Hearing

Submitter	Represented by
Yarra City Council	Susan Brennan SC and Jordan Wright of Counsel instructed by Briana Eastaugh, solicitor of Maddocks Lawyers who called expert evidence on: <ul style="list-style-type: none"> - Open space planning from Joanna Thompson of Thompson Berrill Landscape Design - Public open space contribution framework from Esther Kay of Environment and Land Management Pty Ltd - Residential and non-residential development data from Dr Serryn Eagleson of EdgResearch - Development feasibility from Luke Mackintosh of EY Australia
Urban Development Institute of Australia	David Vorchheimer of HWL Ebsworth
Association of Consulting Surveyors	Gerry Shone
Housing Industry Association	Roger Cooper
David Balding	
Salta Properties Pty Ltd, Gurner, Milieu Property Pty Ltd, Goldfields (Richmond) Pty Ltd, Nijon Nominees Pty Ltd, UEM Sunrise (Collingwood Development) Pty Ltd, Napier Street Developments Pty Ltd, Aheron Investments Ltd, ACC Smith Street Pty Ltd, Piccolo Investment Group Pty Ltd, Riverlee, Outline JV Smith, DPG Hawthorn Pty Ltd	Jeremy Gobbo QC and Emma Pepler of Counsel instructed by Mark Naughton of Planning and Property Partners who called expert evidence on: <ul style="list-style-type: none"> - Town planning from Rob Milner and /or Alison Milner of Kinetica - Urban economics from Paul Shipp of Urban Enterprise
Piedimonte Properties Pty Ltd	Andrew Walker of Counsel instructed by Tamara Brezzi, solicitor of Norton Rose Fulbright who called expert evidence on: <ul style="list-style-type: none"> - Town planning from Jason Black of Insight Planning Consultants
Porta Investments Pty Ltd	Ian Pitt QC instructed by Rhodie Anderson of Rigby Cooke

Appendix C Document list

No.	Date	Description	Presented by
1	27 October 2021	Letter – Notice of Directions Hearing	Planning Panels Victoria
2	5 November 2021	Email - from Council to Panel with late submissions	Mr Kyle Everett
3	11 November 2021	Directions and Timetable	Planning Panels Victoria
4	11 November 2021	Directions Version 2	Planning Panels Victoria
5	17 November 2021	Letter – from Council to Panel responding to Directions 3 and 7.	Council
6	17 November 2021	Yarra Open Space Strategy 2020 Strategy Preliminary Opinion of Probable Cost (POPC)	Council
7	17 November 2021	Additional information regarding the Strategy POPC	Council
8	17 November 2021	Data for Residential and Non-residential Development to assist calculation of the Public Open Space Contribution Rate (Appendix B of the Yarra Open Space Strategy 2020)	Council
9	17 November 2021	Email – from Rigby Cooke Lawyers to Panel – confirmation that will not call expert witness (Direction 11)	Ms Donna Bilke, for Porta Investments Pty Ltd
10	19 November 2021	Letter – from Planning Property Partners to Panel (Direction 10)	Mr Tyrone Rath, for PPP Group of Clients
11	22 November 2021	Email – from Best Hoopers Lawyers to Panel (Direction 10)	Ms Eliza Minney, for Best Hooper Group of Clients
12	23 November 2021	Letter and Version 3 Distribution List and Version 2 Timetable	Planning Panels Victoria
13	23 November 2021	Letter – from Council to Panel responding to Direction 4 and Direction 5	Council
14	23 November 2021	Letter – from Council to Panel regarding revised Yarra Open Space Strategy 2020 Technical Report	Council
15	23 November 2021	Yarra Open Space Strategy 2020 Technical Report revised mapping issues	Council
16	23 November 2021	Yarra Open Space Strategy 2020 Technical Report Appendix A	Council
17	23 November 2021	Yarra Open Space Strategy 2020 Technical Report Appendices B and C	Council

No.	Date	Description	Presented by
18	24 November 2021	Email – from Norton Rose Fulbright to Panel requesting update to contacts on the distribution list.	Mr Sebastian Withers, for Piedimonte Properties Pty Ltd
19	26 November 2021	Letter – from Norton Rose Fulbright to Panel confirming expert witness.	Ms Tamara Brezzi, for Piedimonte Properties Pty Ltd
20	29 November 2021	Map of submitters in accordance with Direction 28	Council
21	29 November 2021	Letter – from Council to Panel – Council Part A submission (Direction 9)	Council
22	29 November 2021	Council Part A submission	Council
23	1 December 2021	Letter – from Council to Panel – Expert Evidence	Council
24	1 December 2021	Expert Witness Statement - Esther Kay	Council
25	1 December 2021	Expert Witness Statement – Joanna Thompson	Council
26	1 December 2021	Expert Witness Statement – Dr Serryn Eagleson	Council
27	1 December 2021	Material referred to in Councils Part A Submission and Evidence <ul style="list-style-type: none"> 00 Index 01 Clause 11.01-1S (Settlement) 02 Clause 12 (Environment and Landscape Values) 03 Clause 12.05-2S (Landscapes) 04 Clause 15.01-3S (Subdivision Design) 05 Clause 15.01-4S (Healthy Neighbourhoods) 06 Clause 19.02-6S (Open Space) 07 Clause 19.02-6R (Open Space – Metropolitan Melbourne) 08 Clause 21.02 (Municipal Profile) 09 Clause 21.04 (Land Use) 10 Clause 22.12 (Public Open Space Contribution) 11 Clause 53.01 Public Open Space Contribution and Subdivision and the Schedule to Clause 53.01 Public Open Space Contribution and Subdivision 12 Clause 72.08 Background Documents and the Schedule to Clause 72.08 Background Documents 13 Ministerial Direction No 9 Melbourne Planning Strategy 14 Ministerial Direction No 11 Strategic Assessment of Amendments 	Council

No.	Date	Description	Presented by
15		Planning Practice Note 13 Incorporated and Background Documents	
16		Planning Practice Note 70 Open Space Strategies	
17		Yarra Open Space Strategy 2006-2016	
18		19 December 2006 Council meeting agenda and minutes	
19		19 June 2007 Council meeting agenda and minutes	
20		18 September 2007 Council meeting agenda and minutes	
21		Yarra Housing Strategy Adopted 4 September 2018	
22		Yarra Economic Development Strategy 2020-2025 Background Report	
23		The Emerging Inner East, Melbourne’s Creative heart and its office market transformation	
24		Infrastructure Australian, Infrastructure beyond COVID-19, December 2020	
25		Open Space Strategy for Metropolitan Melbourne 2021, Victorian Government	
26		Melbourne Water presentation to Parliamentary Inquiry into Environmental Infrastructure, June 2021	
27		Parks Victoria submission to Parliamentary Inquiry into Environmental Infrastructure, November 2020	
28		Melbourne Planning Scheme Amendment C209 Panel Report, August 2014	
29		Eddie Barron Constructions Pty Ltd v Pakenham SC & Minister for Planning & Urban Growth [1990]	
30		Schedule 5 to the Development Plan Overlay (Yarra Planning Scheme)	
31		22 Bendigo Street, Richmond, Development Plan May 2012	
32		22 Bendigo Street, Richmond, Central and South Precinct Development Plan Rev A, August 2018	
33		Planning Permit SP13/0017, Yarra City Council	
34		Planning Permit SP18/0057, Yarra City Council	
35		Schedule 11 to the Development Plan Overlay (Yarra Planning Scheme)	
36		Alphington Paper Mill Development Plan, 2016	
37		Section 173 of the Planning and Environment Act 1987, 333 Bridge Road, Richmond, Alphington Developments Pty Ltd	
38		Schedule 16 to Clause 43.04 Development Plan Overlay, Yarra City Council	
39		Schedule 15 to Clause 43.04 Development Plan Overlay, Yarra City Council	
28	1 December 2021	Expert Witness Statement – Paul Shipp	Ms Hannah Wilson, for PPP Group of Clients

No.	Date	Description	Presented by
29	1 December 2021	Expert Witness Statement – Rob Milner	Ms Hannah Wilson
30	1 December 2021	Expert Witness Statement – Luke Mackintosh	Council
31	2 December 2021	Expert Witness Statement – Jason Black	Mr Sebastian Withers
32	2 December 2021	Letter and Version 4 Distribution List and Version 3 Timetable	Planning Panels Victoria
33	3 December 2021	Letter – from Council to Panel – Council Part B Submission (Direction 18)	Council
34	3 December 2021	Council Part B Submission	Council
35	3 December 2021	Council Part B Supporting Material	Council
36	3 December 2021	Cremorne Corporation Pty Ltd v Yarra CC [2008] VCAT 1202	Ms Rhodie Anderson, for Porta Investments Pty Ltd
37	3 December 2021	Fairfield Park Master Plan 2010	Ms Rhodie Anderson
38	3 December 2021	Fairfield Park Masterplan Summary Report 2010	Ms Rhodie Anderson
39	3 December 2021	Gesher Pty Ltd v Yarra CC [2015] VCAT 506	Ms Rhodie Anderson
40	3 December 2021	Yarra Development Contributions Plan 2017 - April 2019	Ms Rhodie Anderson
41	3 December 2021	Letter – from Council to Panel – Additional documents referred to in Shipp evidence	Council
42	3 December 2021	2018 Average CIV, average site value	Council
43	3 December 2021	City of Yarra Open Space Strategy 2019, Average Park Establishment and Upgrade, Neighbourhood Open Space	Council
44	6 December 2021	Dr Serryn Eagleson, Expert Witness Statement PowerPoint presentation	Council
45	6 December 2021	Exhibited Clause 22.12 Track Changes for Part B Submission	Council
46	6 December 2021	Architectural renders from Salta’s Church Street development	Ms Hannah Wilson
47	7 December 2021	Letter – from Norton Rose Fulbright to Panel regarding Lend Lease no longer wishing to appear before the Panel	Mr Sebastian Withers

No.	Date	Description	Presented by
48	8 December 2021	Email – from Council to Panel and Excel Spread Sheet on Median site values per square metre data Part 1	Council
49	8 December 2021	Letter – from Norton Rose Fulbright to Panel requesting documents from Council	Mr Sebastian Withers
50	8 December 2021	Letter – from Housing Industry Association to Panel - submission	Mr Roger Cooper, Housing Industry Association
51	8 December 2021	Consulting Surveyors Victoria Submission	Mr Gerry Shone, for Consulting Surveyors Victoria
52	8 December 2021	David Balding Submission	David Balding
53	8 December 2021	UDIA Submission	Grace Bramwell, for UDIA
54	8 December 2021	Excel Spread Sheet on Median site values per square metre data Part 2	Council
55	8 December 2021	City of Yarra Open Space Strategy 2019 Average park establishment and upgrade POPC Draft V1 15 Nov 18	Council
56	8 December 2021	City of Melbourne Open Space Strategy Open Space Contributions Framework, 2012	Mr Sebastian Withers
57	9 December 2021	Luke Mackintosh Track Change Expert Evidence	Council
58	9 December 2021	Luke Mackintosh Final Expert Evidence	Council
59	9 December 2021	Letter – from Council to Panel on amended Clause 53.01 Schedule 1	Council
60	9 December 2021	Clause 53.01 Schedule 1 Post Exhibition	Council
61	9 December 2021	Yarra Open Space strategy 2020 POPC Updated 8 December 2021	Council
62	9 December 2021	Revised POPC Rate 9 December 2021	Council
63	9 December 2021	Melbourne Planning Scheme Figure 1 from Clause 21.04 and Figure from Schedule to Clause 53.01	Council
64	9 December 2021	Memorandum from Council dated 8 December 2021	Council
65	9 December 2021	Attachment to Council Memorandum (Advice to Council on Sales Ratios for 2018)	Council
66	9 December 2021	Glen Eira Amendment C218 – <i>Update of the Public Open Space Contributions Program (2 November 2020)</i>	Council

No.	Date	Description	Presented by
67	13 December 2021	Clause 02.03	Council
68	13 December 2021	Clause 02.04	Council
69	13 December 2021	Design and Development Overlay Schedule 16	Council
70	13 December 2021	Design and Development Overlay Schedule 18	Council
71	13 December 2021	Design and Development Overlay Schedule 23	Council
72	13 December 2021	Design and Development Overlay Schedule 36	Council
73	13 December 2021	Clause 21.04 from the Melbourne Planning Scheme	Council
74	13 December 2021	Schedule to Clause 53.01 from the Melbourne Planning Scheme	Council
75	13 December 2021	Email – from Best Hooper to Panel regarding the Amcor Papermill Site	Ms Eliza Minney
76	13 December 2021	Council Part B Supplementary submission?	Council
77	13 December 2021	Map Strategic Framework Plan and proposed additional Open Space with Clause 02.04	Council
78	13 December 2021	Map Strategic Framework Plan and proposed additional Open Space with Housing Strategy	Council
79	13 December 2021	Precinct Ranking Table	Council
80	13 December 2021	A memorandum prepared by Joanna Thompson, 10 December 2021 about Average Park Costings POPC and open space design projects	Council
81	13 December 2021	A memorandum prepared by Council, 13 December 2021 regarding the 30% contingency for the Average Park Costings POPC and open space design projects	Council
82	13 December 2021	Table containing POS collection since FY2011	Council
83	13 December 2021	Development Plan Overlay Schedule 15	Council
84	13 December 2021	Panel Report Yarra Planning Scheme Amendment C223yara	Council

No.	Date	Description	Presented by
85	13 December 2021	Email – from Arnold Bloch Leibler to Panel regarding the Amcor Papermill Site	Mr Andrew Low for U-Home Oceania Pty Ltd
86	13 December 2021	Email – from PPV to Ms Eliza Minney, for Best Hooper Group of Clients, regarding no need for submitters to be heard regarding Amcor Papermill Site	PPV
87	14 December 2021	Email – from PPV to Mr Andrew Low, U-Home Oceania Pty Ltd, regarding no need to be heard regarding Amcor Papermill Site	PPV
88	14 December 2021	PPP group of clients Submission	Ms Hannah Wilson
89	14 December 2021	Appendix A – Summary of submitter sites	Ms Hannah Wilson
90	14 December 2021	Appendix B – Nicholson Street	Ms Hannah Wilson
91	14 December 2021	Appendix C – Workings behind the 30% allowance	Ms Hannah Wilson
92	14 December 2021	Appendix D – HO map of Yarra	Ms Hannah Wilson
93	14 December 2021	Appendix E – Harry the Hirer	Ms Hannah Wilson
94	14 December 2021	Appendix F – 26-52 Queens Parade, Fitzroy North Landscape Plan	Ms Hannah Wilson
95	14 December 2021	VPA Metropolitan Open Space Network	Council
96	15 December 2021	Memorandum prepared by Ms Thompson dated 14 December 2021	Council
97	15 December 2021	Revised precinct rankings referred to in Document 79	Council
98	15 December 2021	The workings of average and median sale figures from Document 65	Council
99	15 December 2021	Table of population breakdowns	Ms Hannah Wilson
100	16 December 2021	Email – from HIA to Panel, supplementary comment for Panel consideration	Mr Roger Cooper
101	17 December 2021	Sensitivity Calculations	Ms Hannah Wilson
102	20 December 2021	Letter – Further Directions	Planning Panels Victoria

No.	Date	Description	Presented by
103	21 December 2021	Letter – from PPP to the Panel regarding Further Directions	Ms Hannah Wilson
104	22 December 2021	Letter – from Rigby Cooke Lawyers to Panel regarding further directions	Ms Alisa Gattini, Rigby Cooke Lawyers, for Porta Investments Pty Ltd.
105	22 December 2021	Email – from Panel Panels Victoria to Rigby Cooke Lawyers regarding further directions.	Planning Panels Victoria
106	22 December 2021	Letter – From Panel to PPP regarding further directions.	Planning Panels Victoria
107	23 December 2021	Letter – from Norton Rose Fulbright to Panel regarding further directions	Mr Sebastian Withers
108	23 December 2021	Email – from Panel Panels Victoria to Norton Rose Fulbright regarding further directions.	Planning Panels Victoria
109	23 December 2021	Letter – from Council to Planning Panels Victoria regarding further directions.	Council
110	23 December 2021	Email – from Panel Panels Victoria to Council regarding further directions.	Planning Panels Victoria
111	6 January 2022	Letter – further Directions 6 January 2022	Planning Panels Victoria
112	14 January 2022	Email - from Council to Planning Panels Victoria seeking clarification on further directions issued on 6 January 2022	Council
113	14 January 2022	Email – from Planning Panels Victoria to Council clarifying further directions issued on 6 January 2022	Planning Panels Victoria
114	25 January 2022	Email – from Council to Planning Panels Victoria requesting an extension to the further directions’ timeframes	Council
115	25 January 2022	Email – from Planning Panels Victoria to Council granting extension until 31 January 2022.	Planning Panels Victoria
116	27 January 2022	Letter – from Council to Planning Panels Victoria responding to further directions 27 January 2022	Council
117	27 January 2022	Memorandum prepared by Joanna Thompson dated 18 January 2022 regarding further information requested by the Panel	Council
118	27 January 2022	Memorandum prepared by Esther Kay dated 24 January 2022 regarding further information requested by the Panel	Council
119	27 January 2022	Sale selection letter to Maddocks 27 January 2022	Council
120	31 December 2022	Letter – from Council to Planning Panels Victoria responding to further directions 31 January 2022	Council

No.	Date	Description	Presented by
121	31 December 2022	Apportionment memorandum prepared by Joanna Thompson 31 January 2022	Council
122	31 December 2022	Map with YOSS and Strategy POPC actions identified	Council
123	3 February 2022	Email – from Best Hooper Lawyers to Planning Panels Victoria regarding no longer requiring to be heard on 8 February 2022	Ms Eliza Minney
124	4 February 2022	Email – from PPV to parties advising that the Hearing will conclude at lunchtime on 8 February 2022	Planning Panels Victoria
125	4 February 2022	Letter – from Council to Planning Panels Victoria responding to item 2 in Document 49	Council
126	4 February 2022	Memo Draft Strategy POPC Joanna Thompson 3 February 2022	Council
127	7 February 2022	Piedimonte Properties Pty Ltd Submission 7 February 2022	Mr Sebastian Withers
128	7 February 2022	Piedimonte Properties Pty Ltd Attachments to Submission 7 February 2022	Mr Sebastian Withers
129	8 February 2022	Porta Investments Pty Ltd Submission 8 February 2022	Ms Donna Bilke
130	8 February 2022	Porta Investments Pty Ltd Submission Attachment Household Data 8 February 2022	Ms Donna Bilke
131	16 February 2022	Letter – from Norton Rose Fulbright to Panel responding to the Panel 20 December 2021 further directions	Mr Sebastian Withers
132	16 February 2022	Rigby Cooke Lawyers response to Document 121	Ms Donna Bilke
133	16 February 2022	PPP response to additional material filed by the Council	Ms Hannah Wilson
134	17 February 2022	Letter – from Panel to all parties 17 February 2022 regarding reconvening the Hearing on 23 February 2022	Planning Panels Victoria
135	22 February 2022	Council closing submission 22 February 2022	Council
136	22 February 2022	Appendix A – List of open space strategies reviewed, referred to in closing submission	Council
137	22 February 2022	Appendix B - Summary of Apportionment of Strategy POPC Actions	Council
138	22 February 2022	Additional material for closing submission: <ul style="list-style-type: none"> a. Clause 19_02-6R-001 b. Arden Development Contributions Plan August 2021: VPA Part A 	Council

No.	Date	Description	Presented by
		<ul style="list-style-type: none">c. Arden Precinct Expert Evidence Statement by Chris DeSilva Development, Mesh, January 2022d. Urban heat island effect documents referred to in closing submission<ul style="list-style-type: none">i. Clause 02.03 Municipal Planning Strategy, Strategic direction preferred version Part Cii. Clause 15.02-1L preferred version Part Ciii. Current Clause 15.02-1Siv. Current Clause 22.17v. Current Clause 58.03vi. Urban Forest Strategy, City of Yarrae. VCAT Amended Plans – P760-2021 Amended plans prepared by Hayballf. Applicant VCAT Ref P760-2021 Development Summary	
139	5 April 2022	Further updated version of the Schedule to Clause 53.01	Maddocks

Appendix D Panel recommended version of the Schedule to Clause 53.01

30/07/2018
VC148

SCHEDULE TO CLAUSE 53.01 PUBLIC OPEN SPACE CONTRIBUTION AND SUBDIVISION

1.0 Subdivision and public open space contribution

Proposed
C286yarr

Type or location of subdivision	Amount of contribution for public open space
Land in DPO5 (Channel Nine Site, Bendigo Street, East Richmond)	4.5%, comprising land and/or cash contribution in accordance with an approved development plan, planning permit SP13/007 issued on 12 June 2013 and planning permit SP18/0057 issued on 21 January 2019, as amended from time to time.
Land in DPO11 (Amarc Site, Heidelberg Road, Alphington)	4.58%, for the whole of the land in DPO11, comprising land in accordance with the development plan approved under DPO11, as amended from time to time, but excluding the 30 metre setback from the Yarra River required by Instrument AN278889H (agreement under section 173 of the <i>Planning and Environment Act 1987</i> registered 15 November 2016)
Land in DPO16 (111 Queens Parade and 433 Smith Street, Fitzroy North (Former Fitzroy Gasworks))	A minimum of 8%, comprising land and/or cash contribution in accordance with an approved development plan, as amended from time to time.
All other land	7.4%

Appendix E Panel recommended version of Clause 22.12

22.12 PUBLIC OPEN SPACE CONTRIBUTION

---/---
Proposed
C286yara

This policy applies to all applications for development or subdivision of land.

22.12-1 Policy Basis

---/---
Proposed
C286yara

As an established inner urban municipality, the City of Yarra is experiencing significant change and growth. The analysis of the distribution of public open space in the Yarra Open Space Strategy 2020 has identified there are areas of the City where the community does not have any adequate open space within easy walking distance of where they live or work. The Strategy has identified and prioritised a series of new open spaces, with priority given to gaps in the network and locations where higher levels of growth is forecast to occur. The need for the proposed additional open spaces is based on a range of factors including:

- . Areas where the public existing open space is experiencing high levels of use or over- use. This includes providing new open space to take the pressure off existing spaces to meet everyone's needs.
- . Where there is a gap in the provision of any public open space.
- . Medium and high density precincts where the substantial change is forecast and the new community will create a need for additional public open space.
- . In medium and high density precincts where the provision of well distributed green public open space will assist to mitigate urban heat island effect.

The forecast development over the next 15 years is significant with a 41 per cent increase in the resident population and a 47 per cent increase in the worker population. This means there will be more people visiting and using open space, thereby increasing demand on the existing space and facilities. The extent of forecast growth changes across different parts of the City. Minimal growth is forecast in Princes Hill-Carlton North and Clifton Hill, compared to high Levels in North Richmond, Collingwood, Fitzroy and Cremorne. The [residential population growth figures are based on .id Consulting forecasts of August 2018 while](#) locations for where forecast residential growth will occur is based on the *Yarra Housing Strategy 2018*. The forecast employment growth and change is based on the *Yarra Spatial Economic and Employment Strategy 2018*.

A total of 85 per cent of Yarra's population live in medium and high density dwellings compared to 33 per cent in Greater Melbourne. This means that residents have less private open space available to them which increases their reliance on public open space. Typically, this adds to the amount of people using public open space and increases the diversity of reasons why they use it.

Many of the areas in the City that are forecast to change are [the activity centres and](#) former industrial and manufacturing areas. These areas are being redeveloped to mixed use precincts with a combination of residential, commercial and business use. Historically, the industrial areas did not have public open space. With the proposed changes, these areas are being redeveloped with increased building heights and a change to a predominantly office-based professional workforce. The Strategy found that more than 80 per cent of workers visit public open space during the day. With increased numbers of people working and living in the former industrial precincts there is a need to provide new areas of public open space.

As urban densities increase in the future this Strategy has identified opportunities to increase the local open space network to support and sustainably meet the open space needs of the existing and future community.

Public open space contributions from developers are one of a number of potential sources of funding towards the acquisition of land for public open space and improvement of existing facilities. Because public open space contributions can only be imposed at the subdivision stage,

it is important for developers to ascertain at the site analysis stage of the design process whether any part of the site might be required for public open space purposes where the site:

- is in an area where a land contribution may be required under Strategies in clause 22.12-3 or on Map 1.
- fits the selection criteria for public open space in clause 22.12-4.

This will ensure that public open space requirements are identified and allowed for at the earliest possible time.

22.12-2 Objectives

Proposed
C286yara

- To fund a fair proportion of the open space projects contained in the Strategy that will meet the needs of the forecast residential commercial and business population.
- To contribute to improvements to existing public open space and provide new public open space on behalf of the forecast population.
- To expand the public open space network to accommodate the growth in population predominantly in medium to high density urban development located across the municipality.

22.12-3 Policy

Proposed
C286yara

22.12-4 Policy Guidelines

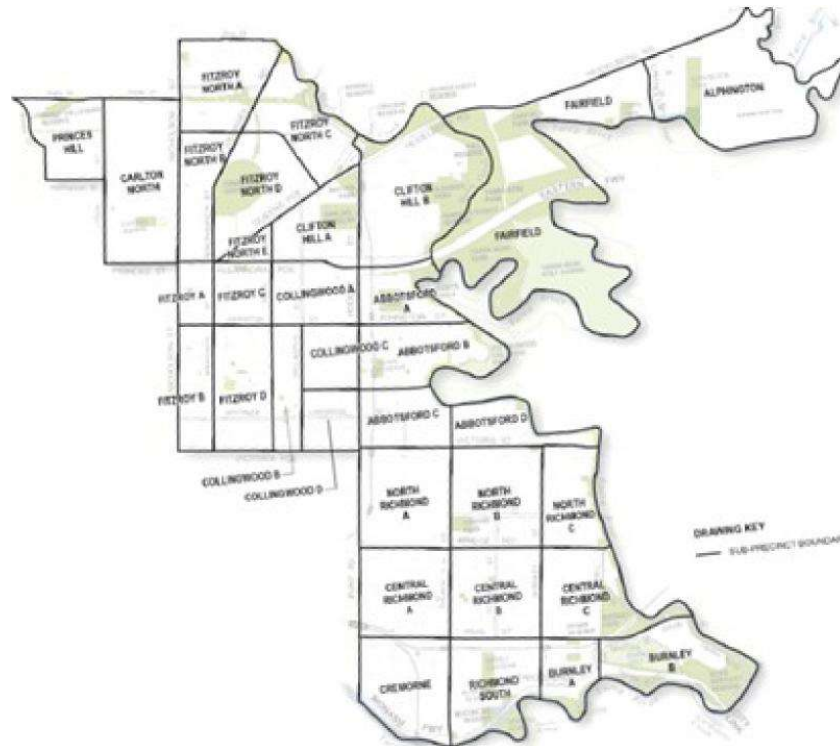
Proposed
C286yara

Consider as relevant:

- The suitability of land to be contributed as public open space at the time of the subdivision of the land or building, should be consistent with the requirements of the Yarra Open Space Strategy 2020 including the following selection criteria:
 - Land to be contributed:
 - Should be of a shape and size that will be adequate for the proposed [use and its position in the public open space hierarchy](#) having regard to the nature of [the public open space](#) ~~in an inner city environment~~ or be able to meaningfully contribute to the assembly of a parcel of land with these attributes.
 - Should be free of structures and protrusions, such as balconies or other building projections that may encroach into the public open space reserve, except for historic buildings or structures relating to the designated public open space use.
 - Should be located or be capable of being designed to provide a high degree of casual surveillance.
 - Should be physically suitable for use as public open space including that there are no inherent issues such as contamination and significant financial or safety implications, including the land being open to the sky.
 - Should contribute to the connectivity and accessibility of the open space network. This includes consideration of the other strategic planning projects including linear open space corridors, and local links to improve accessibility within the local street network and links and connections to improve accessibility into existing or proposed future open space.
 - Should be free of services and easements that affects or encumbers the development and use of the land as public open space. This includes roadways, overhead structures, underground structures (e.g. underground car parking), water supply, power supply, gas supply, telecommunications, flood mitigation and drainage.
 - Must be accessible to people of all abilities.

- Should be visible from adjacent thoroughfares with at least two access points, local access streets to at least two sides and be provided on natural ground (not elevated or roofed structures).
 - Must have no additional overshadowing beyond any 9 metre built form height between 10am and 3pm on June 21.
 - Should be located away from major or secondary arterial roads.
 - [Should make a positive contribution to the urban context, character and attractiveness of the precinct.](#)
 - [Should contribute to the cultural values of the community, protect biodiversity values and contribute to urban cooling and greening.](#)
 - [Must be capable of being transferred to the City of Yarra and rezoned for public open space.](#)
- Whether any building on land adjacent to public open space set aside under this clause has been designed to accommodate public open space in a manner that meets the majority of the above selection criteria.

Open Space Contribution Plan (Yarra Open Space Strategy 2020 sub-precincts)



Policy references

Yarra Open Space Strategy 2020 Thompson Berrill Landscape Design Pty Ltd in association with Environment & Land Management Pty Ltd

Yarra Open Space Strategy 2020 Technical Report Thompson Berrill Landscape Design Pty Ltd in association with Environment & Land Management Pty Ltd

Yarra Open Space Strategy 2020 Public Open Space Contributions, Thompson Berrill Landscape Design Pty Ltd in association with Environment & Land Management Pty Ltd

22.12-5 Strategies

Proposed
C286yara

Many of the areas in the City that are forecast to change are the activity centres and former industrial and manufacturing areas. These areas are being redeveloped to mixed use precincts with a combination of residential, commercial and business use. Historically, the industrial areas did not have public open space. With the proposed changes, these areas are being redeveloped with increased building heights and a change to a predominantly office-based professional workforce.

The Yarra Open Space Strategy 2020 has identified the need for new public open space and land contributions for public open space ~~will~~ [may](#) be preferred over cash contributions in the following areas shown in the City of Yarra Open Space Sub-precincts plan to this clause.

- . Alphington
- . Abbotsford C and D
- . [Carlton North](#)
- . Central Richmond A and B
- . Collingwood A, B, C and D
- . Cremorne
- . Fitzroy A, B, C and D
- . Fitzroy North B and E
- . Richmond North A and C

In all other areas of the municipality, a cash contribution equal to the amount specified in Clause 53.01 is required.

In locations where a preference for a land contribution has been identified, set aside land for public open space early in the planning of a development or subdivision.

Design buildings adjacent to any public open space set aside under this clause and any existing open space to facilitate high quality and accessible public open space



Planning today for the communities of tomorrow

**Peer Review of
Amendment C286yarra
Open Space Project Cost
Apportionment**

Prepared by Robert Panozzo

Final Report

Prepared on behalf of Yarra City Council

August 2nd, 2023

Table of Contents

1. INTRODUCTION 3

1.1 PURPOSE OF REVIEW..... 3

 1.2 PANEL INTERIM REPORT FINDINGS AND RECOMMENDATIONS..... 3

 1.3 OVERVIEW OF MY PEER REVIEW METHODOLOGY 5

2. PEER REVIEW ANALYSIS 6

 2.1 OVERVIEW OF MATERIAL REVIEWED..... 6

 2.2 MY INTERPRETATION OF JOANNA THOMPSON’S PUBLIC OPEN SPACE CONTRIBUTIONS APPORTIONMENT
METHODOLOGY..... 7

 2.3 MY OPINION OF THE OPEN SPACE STRATEGY APPORTIONMENT METHODOLOGIES 13

 2.4 THE CONTRAST BETWEEN GREENFIELD AND INNER URBAN RENEWAL OPEN SPACE PLANNING 14

 2.5 PRECINCT STRUCTURE PLANNING GUIDELINES: NEW COMMUNITIES IN VICTORIA (OCTOBER 2021) 15

 2.6 PUBLIC OPEN SPACE CONTRIBUTIONS MECHANISMS 18

 2.7 CITY OF YARRA PUBLIC OPEN SPACE SUPPLY LEVELS COMPARED TO THE PSP GUIDELINES PUBLIC OPEN SPACE
PROVISION TARGET 19

 2.8 AN ALTERNATIVE APPORTIONMENT METHODOLOGY 21

3. CONCLUSIONS 35

ATTACHMENTS 37

List of Tables

Table 1 - Project Apportionment Costs by Precinct Using Proportion of New Residential and Worker Population Growth Only ...	9
Table 2 - Project Apportionment Costs by Precinct (based on 10% CIV Allowance Scenario).....	11
Table 3 – Joanna Thompson’s Apportionment Ratios	12
Table 4 – Key Elements of the PSP Guidelines Relevant to Open Space Planning	16
Table 5 – Proportion of Public Open Space as a Percentage of NDA by Precinct.....	20
Table 6 – Proposed Residential Population Density Weightings by Precinct	27
Table 7 – Proposed Worker Population Density Weightings by Precinct.....	30
Table 8 - Summary of Total Weightings by Precinct	32
Table 9 – Revised Public Open Space Contribution Rate Based 10% CIV Scenario for Land Acquisition Costs	33
Table 10 - Existing and New Residential and Worker Population Proportions by 2031.....	40
Table 11 - City of Yarra Net Developable Area Estimates x Precinct.....	42

1. Introduction

1.1 Purpose of Review

I was engaged by Maddocks, working on behalf of Yarra City Council, to review apportionment costs associated with Yarra Planning Scheme Amendment C286yara Open Space Contributions. I understand the amendment proposed to increase the public open space contribution rate in the schedule to clause 53.01 from 4.5% to 10.1% to collect funds to support the implementation of the Yarra Open Space Strategy 2020.

The following report has been prepared in response to the Panel's interim report recommendation for Yarra City Council to undertake a peer review of apportionment costs associated with Council's proposed public open space contributions. An overview of the Panel's interim report findings and the details of the specific peer review apportionment recommendation are outlined below.

1.2 Panel Interim Report Findings and Recommendations

The Panel's interim report was received on 14 April 2022 and became a public document on 3 May 2022. In the Executive Summary, the Panel Report states:

The key focus of those opposed to the Amendment was that the increase in the open space contribution rate from the current 4.5 per cent of land area or site value to 10.1 per cent is excessive. The increase was opposed because:

- *some open space projects proposed were not needed;*
- *the cost of both the land and capital components of the costs of open space projects was excessive;*
- *the apportionment of total project costs between existing and new users of open space was inappropriate;*
- *there were no transitional provisions for projects part way through their approval processes;*
and
- *there would be a detrimental impact on housing affordability.*

Panel Report Peer Review Recommendation

I note that the Panel Report (16 May 2022) recommends a Peer Review of apportionment costs. I also note the following Panel report comments about the recommended Peer Review, located in Section 8.3 of the report:

The Panel does not consider its role is to tightly specify the terms of a peer review of the apportionment exercise undertaken by Ms Thompson but does consider it appropriate to indicate some of the parameters of that review so that its expectations are met when the outcome of that review (if undertaken) is considered by the Panel.

The suggested parameters for the peer review are:

- *The review should be undertaken by at least one suitably qualified person with open space planning experience.*
- *The review should be restricted to the apportionment of project-by-project costs between existing and new populations. Population forecasts and project costs should not be the subject of review.*
- *The qualitative methodology used in the apportionment of costs is acceptable and should not be the subject of review.*
- *The Panel concludes that the eight factors influencing the apportionment of costs listed in paragraphs 3.3.3 and 3.3.4 of Ms Thompson's expert witness statement (Document 25) and reproduced in Chapter 4.3 are acceptable and should not be the subject of review, although commentary on them and their relative importance could be considered.*
- *The extensive field work undertaken by Ms Thompson need not be repeated provided relevant records can be provided to the reviewer.*
- *Where the reviewer finds that the apportionment of costs is different to that proposed by Ms Thompson, the reviewer's recommended apportionment should be provided together with a clear rationale for the recommended change.*

Panel Report Conclusions

Having considered submissions and evidence, the Panel broadly concluded the following:

- *the Yarra Open Space Strategy, 2020, is strategically justified and is a sound and appropriate strategy*
- *there is a clearly established need for the existing open space contribution rate to be increased as a matter of some urgency*
- *the open space projects proposed to meet identified needs are with a minor exception, supported*
- *the proposal by Council to add 30 per cent (adjusted down to 20 per cent during the Hearing) to Capital Improved Value of land to be acquired for new open space is not supported by the Panel which regards 10 per cent as appropriate*

- *the amount of the total costs apportioned to new residents and workers has not been adequately justified and should be subject to peer review before the Amendment can be finalised*
- *the Hearing be adjourned pending the completion of this further work*
- *while this further work recommended by the Panel is being undertaken, Council should seek approval from the Minister for Planning for an interim increase in the open space contribution rate to 7.4 per cent. This would occur via the preparation of a new Planning Scheme Amendment.*

For the reasons set out in Chapter 8, the Panel considers its report to be an interim one pending the completion of the extra work recommended by the Panel. A final report will be prepared after that work has been undertaken.

1.3 Overview of My Peer Review Methodology

Based on the Panel's recommendation, my review process methodology has consisted of the following steps:

- A peer review of the reports prepared by Joanna Thompson in relation to open space provision in the City of Yarra including her methodology (including her weighting criterion) for determining a public open space contribution rate and calculating apportionment rates for the projected new residential and worker population by 2031.
- Upon gaining a detailed understanding of these reports and her methodology, I outline and discuss an alternative methodology based on the use of various targets contained within the Victorian Planning Authority's (VPA), Precinct Structure Planning Guidelines (PSP Guidelines): New Communities in Victoria (October 2021).
- My alternative methodology compares the residential and worker population density targets recommended by the PSP Guidelines and the existing and projected residential and worker population densities across the City of Yarra's ten precincts. On this basis I have developed a weighting system that focuses on two key factors: 1) the existing and projected residential population densities of each precinct relative to the target specified in PSP Guidelines (20 dwellings per NDA hectare / 62 persons per Net Developable Area hectare), and 2) the existing and projected worker population densities of each precinct relative to the target specified in PSP Guidelines (1 worker per dwelling / 20 workers per Net Developable Area hectare).

Based on my reading of the Panel Report recommendations, I do not critique several of the fundamental inputs required for calculating the public open space rate, including:

- The open space projects and costs estimated by Ms Joanna Thompson;
- Population forecasts;
- Worker forecasts; and
- The estimated value of land that will be redeveloped in the City of Yarra (2016-2031) as outlined in the report prepared by Edg Research.

2. Peer Review Analysis

2.1 Overview of Material Reviewed

This section provides my review of a number of relevant reports prepared by Joanna Thompson and her company Thompson Berrill Landscape Design Pty Ltd.

The purpose of my review was to gain an understanding of how Joanna Thompson arrived at the proposed public open space contribution rate of 10.1% and whether, in my opinion, her methodology, and more specifically her apportionment methodology, is appropriate and replicable.

The reports reviewed were:

- Yarra Open Space Strategy 2020 (September 2020).
- Yarra Open Space Strategy 2020: Technical Report (July 2020).
- Yarra Open Space Strategy 2020: Public Open Space Contributions (December 2020).
- Joanna Thompson Expert Witness Statement: Amendment C286 City of Yarra Planning Scheme Public Open Space Contributions (December 1, 2021).
- Memorandum prepared by Joanna Thompson. Yarra Planning Scheme Amendment C286 Yarra Open Space Strategy Open Space Contributions. Response to Planning Panels Victoria Direction #2 on 20 December 2021 and further Directions #1 and #2 on 6 January 2022. Apportionment (January 31, 2022).
- Summary Preliminary Opinion of Probable Cost City of Yarra Open Space Strategy, 2020 (POPC).
- Memorandum prepared by Joanna Thompson. Yarra Planning Scheme Amendment C286. Yarra Open Space Strategy Open Space Contributions: Response to Planning Panels Victoria Direction #3 on 20 December 2021 - Alternative scenarios regarding the cost allowance on CIV land acquisition costs (January 18, 2022).

Peer Review of Amendment C286yarra Open Space Project Cost Apportionment

- Memorandum prepared by Esther Kay. Municipal public open space contribution rate with 10% and 20% allowances added to Capital Improved Value for land purchase (January 24, 2022).
- Planning Panels Victoria, Yarra Planning Scheme Amendment C286yara. Open Space Contributions. Correction to the Interim Panel Report (May 16, 2022).
- Victorian Planning Authority, Precinct Structure Planning Guidelines: New Communities in Victoria (October 2021)

2.2 My Interpretation of Joanna Thompson’s Public Open Space Contributions Apportionment Methodology

2.2.1 Overview of the Public Open Space Calculation Equation

It is worth summarising the overall public open space contribution calculation equation to understand how the issue of apportionment fits in and why it is important.

I am aware that the total dollar value of open space projects allocated for new population was originally based on the use of the 30% Capital Improved Valuation (CIV) for land acquisition costs. However, the Panel Report does not support the use of this CIV scenario and has recommended that “...an allowance of 10 per cent applied to the average CIV to reflect Council’s administrative and land acquisition costs”. As a result of the Panel recommendation, I have adopted the 10% CIV scenario costs (refer to Attachment 1 for more details of the 10% CIV calculations) for the purposes of my alternative apportionment methodology presented in Section 2.8¹.

Joanna Thompson states that the public open space contribution rate for the purposes of Clause 53.01 has been calculated using the following equation:

**“Total value of the allocation of costs to the forecast population” divided by “Total site value of the
estimated land area to be developed” to accommodate the forecast population**

She states that “the first part of the equation equates to the averaged opinion of costs (or equivalent value) of open space projects included in the Strategy that will be paid through public open space contributions on behalf of the forecast increase in residents and workers”.

¹ I am also aware that a public open space contribution rate was calculated for the 20% CIV scenario which produced a contribution rate of 9.35% and a 10% CIV scenario which produced a contribution rate of 8.67%.

She then states that “the second part of the equation assigns forecast dwellings and non-residential floor space to the estimated area of land that will be developed based on likely densities with respect to zones, overlays and market trends. The site value of this land is then determined and used in the equation”.

She notes that “in developing the data to populate the equation, both parts of the equation have used the same geographic area, population data and time period to ensure that there is a clear relationship between future plans for the open space network – referenced in the first part of the equation – and the rate to be levied on future subdivisions of land and buildings – referenced in the second part of the equation”.

The public open space rate arrived at by the Open Space Strategy (using the 30% CIV scenario) is identified as follows:

Part A		Part B		Part C
Total dollar value of open space projects allocated for new residential and worker population using the 30% CIV Scenario		Estimated Capital Improved Value of New Land Development		Public Open Space Contribution Rate Using the 30% CIV Scenario
\$382,535,769	Divided by	\$3,789,238,620	=	10.1%

The focus of my review is on Part A of this equation: total dollar value of open space projects allocated to the proportion of the new residential and worker population by 2031.

Although the Part A dollar value estimate refers to value of open space projects allocated for the projected new residential and worker population, Joanna Thompson’s method of arriving at this figure relies far more heavily on a complex array of other qualitative considerations than purely new population forecasts.

I have attempted to illustrate how these two approaches deliver vastly different outcomes both in terms of the value of projects allocated to the proportion of new residential and worker population by 2031, and the public open space contribution rate. I refer to these as Method 1 (Forecast New Residential and Worker Population Method) and Method 2 (Eight Factor Apportionment Method) which represents the method used by Joanna Thompson.

2.2.2 Method 1 – Forecast Residential and Worker Population Method Only

New Residential and Worker Population Assessment

I prepared my own calculations to first understand what the public open space rate would be if only the proportion of new residential and worker population by 2031 were considered (refer to Attachment 2 for more details).

As shown in Table 1 below, if the proportion of new residential and worker population by 2031 for each precinct within the City of Yarra was the only variable used to apportion costs, the resulting total dollar value of open space projects allocated to the proportion of new residential and worker population by 2031 would be \$191,516,192. The public open space rate achieved using this method is 5.1%, significantly less than the 10.1% proposed by the Open Space Strategy.

Table 1 - Project Apportionment Costs by Precinct Using Proportion of New Residential and Worker Population Growth Only

Precinct	Total dollar value of proposed open space projects ²	Proportion existing residential and worker population by 2031	Proportion new residential and worker population by 2031	Total dollar value of proposed open space projects allocated to existing population	Total dollar value of proposed open space projects allocated to new population
Abbotsford	\$15,910,482	73%	27%	\$11,614,652	\$4,295,830
Carlton North - Princes Hill	\$10,461,318	100%	0%	\$10,461,318	\$0
Central Richmond	\$53,299,684	79%	21%	\$42,106,750	\$11,192,934
Clifton Hill	\$5,120,000	89%	11%	\$4,556,800	\$563,200
Collingwood	\$147,856,471	61%	39%	\$90,192,447	\$57,664,024
Cremona - Burnley - Richmond South	\$157,614,101	60%	40%	\$94,568,461	\$63,045,640
Fairfield - Alphington	\$6,266,108	32%	68%	\$2,005,155	\$4,260,953
Fitzroy	\$78,681,285	69%	31%	\$54,290,087	\$24,391,198
Fitzroy North	\$17,926,385	82%	18%	\$14,699,636	\$3,226,749
North Richmond	\$76,252,211	70%	30%	\$53,376,548	\$22,875,663
Total City of Yarra	\$569,388,045			\$377,871,853	\$191,516,192
Public Open Space Contribution Rate Achieved					5.1%

² Note: Costs based on the 30% CIV scenario for land acquisition costs.

2.2.3 Method 2 – Eight Factor Apportionment Method

The details of Method 2 used by Joanna Thompson is outlined in her memorandum document (Memorandum. Yarra Planning Scheme Amendment C286 Yarra Open Space Strategy Open Space Contributions, January 31, 2022). At section 1.4 of the memorandum, I note she diverges from the Method 1 approach. She states that “the relative proportion of the overall existing and future population did not have a key role in determining the proposed apportionment of cost. While the quantum of population is relevant, the apportionment is based on consideration of all the factors that generate the need for open space and the impacts on the open space network in a particular area, from both the existing and forecast populations.”

In the memorandum document she outlines a more qualitative approach to determining the public open space contribution rate and apportionment methodology. The following eight factors are taken into account in apportioning open space project costs between the existing and new residential and worker population:

1. Existing open space within the precinct;
2. Spatial distribution of existing open space;
3. Hierarchy, character and condition of the existing open space;
4. Existing level of use and satisfaction with open space;
5. Existing urban layout;
6. Location and magnitude of forecast future resident and worker population growth;
7. Future population densities; and
8. Proposed urban form.

She states “*there are four broad steps in this process which determine the scale and type of projects and also the basis of the apportionment. The steps are:*

- **Step 1** Assess and understand the existing open space network including how it functions for the existing population who live and work there, and what changes are required to meet the needs of the existing population. This involves research, site visits and review of the community surveys (worker and resident surveys) to understand the existing patterns of use.
- **Step 2** Assess and understand the type and scale of the forecast change, to determine what open space needs will be generated by this change. Part of this assessment includes considering the impact of this change on the existing open space network. This includes a review of the population forecasts, analysis of the spatial distribution of the forecasts relative to the open space network, site assessments to understand the scale of the proposed change on the open space and a review of relevant background documents about the forecast change.
- **Step 3** Make recommendations about what changes are required to address the open space needs of the existing and the forecast population. This includes the Actions to provide new open space and also upgrades to the existing open space network, which are included in the Strategy POPC. Part of determining the actions

includes site assessments to identify what is feasible to implement in the context of the existing development and urban layout. It is important to note that the Strategy also includes recommendations and actions for changes that are not included in the contribution rate but will benefit the existing and forecast population including changes to the Municipal open space network and guidelines regarding the future design and management of open space.

- **Step 4** For each eligible recommendation assess and determine the appropriate proportion of cost attributable to the existing and forecast population based on the assessment in steps 1 to 3. The method for undertaking the apportionment is explained further in Sections 3 and 4 of this Memorandum”.

The financial calculations arrived at by Joanna Thompson using this method is presented in the “Summary Preliminary Opinion of Probable Cost City of Yarra Open Space Strategy 2020” document which I have included in Attachment 1 (using allowance scenario 2 based on 10% capital improved value – “CIV” - for land acquisition costs). While I believe the qualitative considerations embedded into these apportionment ratios are valid, the systematic and consistent application of this method is problematic given the high level of subjective judgement required to determine which apportionment ratio to use for particular factors and what weighting to apply to these factors. The resulting project apportionment costs by precinct are summarised in Table 2 below.

Her apportionment for each project is based on considering the relevant qualitative factors using the eight key factors identified above. The apportionment of the total cost between existing and forecast development is expressed as a percentage. These are expressed in the form of six apportionment ratios (structured in 10 per cent increments) which are summarised in Table 3 on the following page.

Table 2 - Project Apportionment Costs by Precinct (based on 10% CIV Allowance Scenario)

City of Yarra Precinct	Total dollar value of proposed open space projects\$	Total dollar value of proposed open space projects allocated to existing residential and worker population \$	Total dollar value of open space projects allocated to new residential and worker population \$
Abbotsford	\$15,136,176	\$7,822,992	\$7,313,184
Carlton North - Princes Hill	\$9,303,720	\$8,838,534	\$465,186
Central Richmond	\$46,360,440	\$21,412,109	\$24,948,331
Clifton Hill	\$5,120,000	\$4,096,000	\$1,024,000
Collingwood	\$126,915,054	\$42,175,825	\$84,739,230
Cremorne - Burnley - Richmond South	\$135,230,839	\$34,641,802	\$100,589,038
Fairfield - Alphington	\$6,266,108	\$2,880,814	\$3,385,294
Fitzroy	\$68,787,084	\$26,063,069	\$42,724,016
Fitzroy North	\$13,300,170	\$4,951,919	\$8,348,251
North Richmond	\$64,691,460	\$9,789,043	\$54,902,418
City of Yarra	\$491,111,053	\$162,672,106	\$328,438,946

Table 3 – Joanna Thompson’s Apportionment Ratios

Apportionment	Reasons for the apportionment
10 / 90	<ul style="list-style-type: none"> • The need for the project is primarily driven by one group (i.e. either existing or forecast) of the population with some benefit (as distinct from the need) as a result of the project being delivered to the other group. • Typically this apportionment ratio applies where: <ul style="list-style-type: none"> ○ In the case of 10 (existing) / 90 (forecast) the existing open space network adequately meets the open space needs of the existing population and the magnitude of forecast change of more than 350 people creates a high demand for new open space or major upgrades to existing open space. ○ In the case of 90 (existing) / 10 (forecast) the existing population creates a high demand for new open space or major upgrades to existing open space and the forecast change is less than 350 people.
20 / 80	<ul style="list-style-type: none"> • The need for the project is high for one group of the population with the other group having a low need for the project. • Typically this apportionment ratio applies: <ul style="list-style-type: none"> ○ In the case of 20 (existing) / 80 (forecast) there is a low need for improvement to the open space network for the existing population and the magnitude of forecast change of more than 350 people creates a high demand for new open space or major upgrades to existing open space. ○ In the case of 80 (existing) / 20 (forecast) the existing population creates a high demand for new open space or major upgrades to existing open space and the forecast change is less than 350 people.
30 / 70	<ul style="list-style-type: none"> • The need for the project is high for one group of the population with the other group having a moderate need for the project. • Typically this apportionment ratio applies: <ul style="list-style-type: none"> ○ In the case of 30 (existing) / 70 (forecast) there is a moderate need for improvement to the existing open space network for the existing population and the magnitude of forecast change of more than 350 people creates a high demand for new open space or major upgrades to existing open space. ○ In the case of 70 (existing) / 30 (forecast) the existing community creates a high demand for new open space or major upgrades to existing open space and the magnitude of forecast change is less than 350 people with other factors having an influence on the need beyond the magnitude of the forecast change within that precinct. For example the need for the upgrade to larger open space reserves is created by the forecast change in adjoining precincts where there is a lack of larger open space reserves.

Table 3 continued

Apportionment	Reasons for the apportionment
40 / 60	<ul style="list-style-type: none"> • The need for the project is high for both the existing and forecast population but with other factors resulting in a difference. • Typically this apportionment ratio applies where the existing open space network requires major improvements to meet the needs of both the existing and forecast population, with additional factors also being relevant such as the magnitude of the change (i.e. substantially more than 350 people) or the implications of the change in urban densities.
50 / 50	<ul style="list-style-type: none"> • The need for the project is high for both the existing and forecast population. • Typically this apportionment ratio applies where the existing open space requires major upgrade or where new open space is needed for both the both the existing and forecast population; or • Alternatively, this apportionment ratio applies where the existing open space network is adequate with capacity for additional use and the forecast change is less than 350 people and can be accommodated in the existing open space network but will require consequential upgrades to the existing open space facilities.
95 / 5	<ul style="list-style-type: none"> • The need for the project is high for one group and will deliver a minor benefit to the other group. • Typically this apportionment ratio applies where the need for the project is primarily driven by the existing population and a minor benefit will be provided to the forecast population. This may include the forecast population in adjoining precincts.

The details of how Joanna Thompson applies these ratios to each open space project is presented in Attachment 1 (Summary Preliminary Opinion of Probable Cost City of Yarra Open Space Strategy 2020) using the 10% capital CIV allowance scenario (Scenario 2).

I find the use of these apportionments problematic because they do not reflect the projected residential and worker population growth estimates in any consistent mathematical way.

2.3 My Opinion of the Open Space Strategy Apportionment Methodologies

In my opinion Method 1 is a far simpler and more replicable apportionment methodology than Method 2. For this reason, it is also a far simpler approach to apply to other Local Government settings. However, the great weakness of this method is that it fails to reflect the genuine and complex open space needs of high density inner suburban municipalities such as the City of Yarra and fails to provide sufficient financial resources to implement important open space measures that many locations within the City of Yarra desperately need.

In my opinion Method 2 is a far more subjective and difficult apportionment methodology to replicate with any great consistency across different Local Government settings. For example, it would appear difficult for any two open space planners to agree on which of the six apportionment ratios to apply to any particular project. However, I do acknowledge the more nuanced and complex understanding of local open space needs that this method allows for.

For the reasons outlined above, I believe an alternative apportionment methodology is required to establish a fair and reasonable public open space contribution rate, the details of which I explain in Section 2.8.

2.4 The Contrast between Greenfield and Inner Urban Renewal Open Space Planning

I have conducted numerous community infrastructure assessments (which includes analysing open space needs) over the past 20 years across both greenfield growth areas and infill / urban renewal locations in established areas. Planning open space in a PSP area that will accommodate 20,000 people is far easier than planning open space for 20,000 people in an inner urban renewal location. PSP's largely provide a 'blank canvas' to work with which makes the task of determining the quantity, type and distribution of open space to provide for (including achieving high quality co-location outcomes such as placing open space beside a school or a community centre) relatively straightforward.

However, one of the more significant differences between the two settings has been the statutory mechanisms and planning guidelines which apply to the open space planning process.

Open space outcomes in greenfield PSP locations, typically overseen by the Victorian Planning Authority (VPA), are generally the product of two driving factors: 1) Precinct Structure Plan Guidelines (PSP Guidelines) which dictate the amount, type, size and distribution of unencumbered public open space, and 2) the unique physical and environmental characteristics of the Precinct Structure Plan area (e.g. waterways, drainage reserves, conservation areas and utility easements) which typically results in the delivery of encumbered³ open space.

In established areas public open space contributions are largely a function of the application of the Subdivision Act and the Schedule to Clause 53.01 of the Victorian Planning Provisions.

³ Defined as land that is constrained for development purposes. Includes easements for power/transmission lines, sewers, gas, waterways/drainage; retarding basins/wetlands; landfill; conservation and heritage areas. This land may be used for a range of activities (e.g. walking trails, sports fields). This is not provided as a credit against public open space requirements. However, regard is taken to the availability of encumbered land when determining the open space requirement.

2.5 Precinct Structure Planning Guidelines: New Communities in Victoria (October 2021)

The Precinct Structure Planning Guidelines: New Communities in Victoria (the PSP Guidelines) are a Victorian Government initiative to ensure the VPA and other planning authorities prepare plans for places that enable best practice, liveable new communities for Victoria.

The purpose of the PSP Guidelines is to provide the framework for preparing PSPs that guarantees quality outcomes while also being flexible, responsive and supportive of innovation by setting aspirational goals for our future communities. The approach provides a transitional model enabling 20-minute neighbourhoods to evolve over time and achieve the objectives as the area matures. The Guidelines are based on planning for 20-minute neighbourhoods, a principle in Plan Melbourne 2017-2050 (Plan Melbourne) that advocates for living locally to ensure accessible, safe and attractive local communities. There is a key section within the PSP Guidelines that is specifically relevant to open space planning but labelled under the term 'public realm'. Part 3 (Constructing a PSP) includes public realm section which aims to:

- **Offer High-Quality Public Realm**
 - Offer high-quality public realm and open space
 - The public realm and open space network are crucial to creating the identity of a neighbourhood, and can have a significant impact on liveability, social cohesiveness, sense of place, the community's health and wellbeing, and the urban heat island effect.

Table 4 on the following page provides a summary of the key public realm (open space) principles, the application of these principles to the PSP process and key PSP targets. Most significantly, the PSP Guidelines enshrine the provision of an area based unencumbered public open space target. Target 11 (T11) of the PSP Guidelines states that the open space network should seek to meet the following minimum targets:

- Within residential areas (including activity centres):
 - 10% of net developable area (NDA)⁴ for local parks and sports field reserves
 - 3-5% of NDA set aside for local parks
 - 5-7% of NDA set aside for sports field reserves.
- Within dedicated employment and/ or economic activity areas, 2% of the net developable area for local parks.

⁴ Net Developable Area (NDA) is defined as land within a precinct available for development. This excludes encumbered land, arterial roads, railway corridors, schools and community facilities and public open space. It includes lots, local streets and connector streets. It may be expressed in terms of hectare units.

Peer Review of Amendment C286yarra Open Space Project Cost Apportionment

Table 4 – Key Elements of the PSP Guidelines Relevant to Open Space Planning

PSP Feature & General Principles	How to Apply to PSP	PSP / Performance Targets
Offer High-Quality Public Realm		
F 10. Local recreational spaces and facilities Networks of open space and facilities that optimise the use of available land and provide equitable access to sport and recreation, leisure, environmental benefits, cultural benefits and visual amenity.		
<p>F 10.1 The open space network should include local parks that:</p> <ul style="list-style-type: none"> • have a variety of sizes and proportions, generally ranging from 0.1 to 3 hectares • are located to enable access by local residents without having to cross significant barriers such as arterial roads, railways or waterways • provide a diversity of amenity experiences – both internal to the park and external interfaces that will provide an amenity context for development. <p>Relevant VPP: Clause 56.05-2</p>	<ul style="list-style-type: none"> • A Public Realm & Water Plan should be developed. The plan may demonstrate a diverse range of open space typologies that respond to place (for example, linear open space, waterway corridors, biodiversity areas and the productive use of encumbered land). The plan should show park sizes, preferred interfaces and walkable catchments (adjusted for significant barriers). 	<p>T11 The open space network should seek to meet the following minimum targets:</p> <ul style="list-style-type: none"> • Within residential areas (including activity centres): <ul style="list-style-type: none"> - 10% of net developable area for local parks and sports field reserves - 3-5% of net developable area set aside for local parks - 5-7% of net developable area set aside for sports field reserves. • Within dedicated employment and/ or economic activity areas, 2% of the net developable area for local parks. <p>Relevant VPP: Clause 19.02-6S, 53.01</p> <p>T12 Open space and sports reserves should be located to meet the following distribution targets:</p> <ul style="list-style-type: none"> • A sports reserve or open space larger than 1 hectare within an 800m safe walkable distance of each dwelling • A local park within a 400m safe walkable distance of each dwelling. <p>Relevant VPP: Clause 56.05-2</p> <p>Note: Includes sports reserves and public land that is encumbered by other uses but is capable of being utilised for open space purposes.</p>
<p>F 10.2 Proposed sporting reserves should be located, designed and configured to be:</p> <ul style="list-style-type: none"> • targeted to forecast community needs, including design, landscaping and functionality accessible • appropriately meeting their purpose, having regard to shared use opportunities • able to take advantage of opportunities for alternative water supply (including co-location with stormwater harvesting and treatment facilities) • distinctive and responsive to local character and surrounding land use. 	<ul style="list-style-type: none"> • A community needs analysis should be undertaken to inform the plan at preparation stage. • A Public Realm & Water Plan should show sporting reserve size, purpose and walkable catchments. • Typography should be considered when determining the appropriate location of sport reserves. 	

Peer Review of Amendment C286yarra Open Space Project Cost Apportionment

PSP Feature & General Principles	How to Apply to PSP	PSP / Performance Targets
<p>F 10.3 A network of diverse open space should be provided across the precinct that connects (via open space or major pedestrian/cycle links) to metropolitan or regional open space networks.</p>	<ul style="list-style-type: none"> • A Public Realm & Water Plan should show linkages and connections, any barriers to connectivity, and measures to overcome barriers. 	
<p>F 10.4 The location and scale of open space should respond to and optimise integration with the existing topography, waterway features, landscape features, biodiversity conservation areas and cultural heritage values.</p>	<ul style="list-style-type: none"> • A Public Realm & Water Plan should detail the features the open space network is responding to. • A PSP may include any relevant cross section/s of existing or proposed features. For example, waterway, conservation area, Water Sensitive Urban Design (WSUD) element with the surrounding urban form to clearly show expected development interface outcomes. 	
<p>F 10.5 The public realm network should be located, configured and designed to enhance and optimise the role of encumbered or restricted public land (for example, waterways, conservation, utility easements, schools) for multifunctional spaces and cater for a broad range of local users and visitors.</p> <p>Where possible, the provision of open space should be integrated with and/or link with waterways and Water Sensitive Urban Design (WSUD) elements. The public realm network should account for provision of multifunctional water management assets.</p> <p>Relevant VPP: Clause 56.05-2, 19.03-3S</p>	<ul style="list-style-type: none"> • The community needs analysis should identify possible functions of each space. This could also include the potential role and function of school sports fields, waterways and/or floodways in contributing to the network. • Place-specific guidance should express expectations with regard to landscaping outcomes in open spaces and the public realm. 	

2.6 Public Open Space Contributions Mechanisms

2.6.1 Overview of Mechanisms

In Victoria, local government has a number of legal mechanisms (or tools) available to it to obtain public open space contributions from developers, these being:

- For **open space projects** - Subdivision Act s18-20 and Schedule to Clause 53.01 of the Victorian Planning Provisions;
- For any type of **capital works project** - Development Contributions Plan Overlay via Part 3b of the Planning and Environment Act; and
- For any **legal and negotiated matter** – Voluntary Legal Agreements via s173 of the Planning and Environment Act.

The legislation (and where provided, guidelines and directions) specify how the tools can be used and in what circumstances. For the purposes of my review, I will briefly focus on the Subdivision Act and the Schedule to Clause 53.01 of the Victorian Planning Provisions.

2.6.2 Open Space Projects via the Subdivision Act

The Subdivision Act enables councils to seek a contribution for open space from subdivision proponents. The contribution amount is up to 5% of land area or cash value of the site value or a combination of both, if it can be justified, based on an assessment of need.

Some subdivisions are exempt from this requirement, including two lot subdivisions that are unlikely to be further subdivided and land and buildings that have made the contribution (or deemed to have made the contribution) previously.

On this basis councils can impose a condition of between **0% to 5%** open space contribution on subdivisions that are assessed as not exempt from the contribution. This can be applied to residential, commercial and industrial subdivisions and seek a particular method of contribution, such as land or cash or a combination of the two.

2.6.3 Open Space Projects via Schedule to Clause 53.01 of the Victoria Planning Provisions

Clause 53.01 of the VPPs expressly recognises the power of councils to obtain open space contributions under the Subdivision Act, and provides a mechanism for councils to amend the provisions to suit local circumstances.

The Schedule to Clause 53.01 enables a council to **set its own contribution rate(s)** subject to strategic justification. This can exceed the 5% limit of the Subdivision Act. The percent contribution can be tailored to meet the specific needs of areas and sub-areas, subdivision types (i.e. residential, commercial and industrial) and method of contribution (i.e. cash, land or both). Details of liability can be more clearly defined to suit local conditions.

Schedule 53.01 of the Yarra Planning Scheme currently specifies a public open space contribution rate of 4.5% applied to land or buildings intended to be used for residential purposes.

2.7 City of Yarra Public Open Space Supply Levels Compared to the PSP Guidelines Public Open Space Provision Target

Although there are many considerations associated with open space planning, the issue of supply is without a doubt the first and highest priority. For contextual purposes only, I have attempted to demonstrate how the City of Yarra's public open space supply levels compare to the public open space Provision target contained within the PSP Guidelines. Two key steps were required in order to compare the City of Yarra's public open space supply levels on a like-for-like basis. These were:

1. Calculating the amount of public open space in each precinct, but excluding all public open space classified as Regional and State, which is consistent with the PSP Guidelines and PSP planning practice more broadly⁵;
2. Calculating the Net Developable Area (NDA) of each of the City of Yarra's ten precincts using the land use zoning data supplied by the City of Yarra⁶.

Although my analysis of the City of Yarra's public open space supply levels does not form part of my alternative methodology for calculating a public open space contribution rate, it does highlight the magnitude of the

⁵ Note: Although PSP's can include state or regional open space, developers are exempt from paying land acquisition and development costs associated with the delivery of these open spaces. State and regional open spaces, by their very definition, service a much larger population catchment than that population generated by the typical PSP.

⁶ Note: The NDA of each precinct was calculated using total precinct site area and zoning data supplied by the City of Yarra and subtracting all land zoned Public Use Zone, Public Recreation and Resource Zone, Public Park and Recreation Zone, Urban Floodway Zone and Transport Zone 1 and 2. Refer to Attachment 2 for the City of Yarra Land Use Budget showing details of the NDA of each precinct.

problem confronting the City of Yarra in its efforts to provide its future residential and worker populations with access to a good network of well supplied, diverse, high quality and well-distributed public open space.

Thompson Berrill Landscape Design (TBLD) have been responsible for the preparation of the Yarra Open Space Strategy, and many other open space strategies in the inner Melbourne region (Port Phillip, Stonnington, Maribyrnong, Moonee Valley and Melbourne). Fortunately for this exercise, TBLD have a comprehensive and consistent method of classifying and measuring open space provision. In order to compare the level of difference between the 10% of NDA as unencumbered public open space target set by the PSP Guidelines and current public open space supply levels in the City of Yarra, I have used TBLD's excellent open space data and classification system to recalculate the proportion of public open space available in each of Yarra's precincts, excluding public open space classified as State and Regional. Table 5 below summarises the results of this recalculation. It clearly reveals the significant level of undersupply in many precincts within the municipality, in particular those locations projected to have significant residential and worker population growth such as Abbotsford, Collingwood, Fitzroy and North Richmond. Only four of the ten precincts exceed the 10% of NDA public open space provision target.

Table 5 – Proportion of Public Open Space as a Percentage of NDA by Precinct

Precinct	Total open space 2016 Hectares (minus State / Regional open space)*	Total NDA of Precinct#	Public Open Space as a % of NDA
Abbotsford	6.20	136.1	4.6%
Carlton North - Princes Hill	6.23	127.8	4.9%
Central Richmond	16.59	161.1	10.3%
Clifton Hill	22.44	99.6	22.5%
Collingwood	0.34	114.8	0.3%
Cremorne, Richmond South and Burnley	22.23 ⁷	113.2	19.6%
Fairfield - Alphington	7.63	142.3	5.4%
Fitzroy	2.25	125.3	1.8%
Fitzroy North	24.69	174.3	14.2%
North Richmond	4.99	170.1	2.9%
City of Yarra	39.56	136.1	8.3%

Sources: *City of Yarra Open Space Strategy and #Yarra City Council.

⁷ Note: The City of Open Space Strategy identifies the Cremorne, Richmond South and Burnley precinct as having 39.59 hectares of regional open space on Table 7.6.1. However, based on the figures shown in Table 7.6.2 I believe this regional open space figure is an error and should be reduced to 22.75. The Open Space Strategy appears to have included the Burnley Golf Course in its calculations of regional open space. However, because it is classified a "restricted open space" I do not believe the Golf Course should be included in the supply of public open space.

2.8 An Alternative Apportionment Methodology

2.8.1 Overview of Key Factors

In this section I outline an alternative methodology which, in my opinion, provides a more robust and quantitative methodology using only two of the eight factors Joanna Thompson takes into account in apportioning open space project costs between existing and new residential and worker populations. These two factors are:

- Factor 6 - Location and magnitude of forecast future resident and worker population growth; and
- Factor 7 - Future residential population and worker population densities.

I note that at Part 3.3(iii) (on page 32-33) of the Interim Panel Report, the Panel discusses the open space needs of new residents and workers, stating:

Evidence that clearly establishes whether there is a significant difference in the level of use of open space between workers and residents was not presented to the Panel. The Panel considers that a strong point was made that the worker use survey did not establish that workers' use of open space is equivalent to that of residents and the Panel is inclined to agree with Mr Gobbo that common sense suggests that the use of open space by workers will be of a different nature and probably less than that of residents.

However, it is unclear to the Panel whether any lesser use by workers would be significant and if so, how it would translate into the calculation of the overall future open space needs of workers. The Panel notes Council's submission that just because workers may use open space less often than residents, workers' need for open space is not of less importance than the need of residents and should be given equal weight. The Panel accepts the distinction between the use of and need for open space and agrees with Council that adopting need is the appropriate metric in calculating future of open space provisions. Adopting equal need and giving equal importance to the open space needs of all within the municipality underpins Council's approach and is consistent with the community focus sought by Open Space for Everyone.

Other methods to take into account worker use of open space versus that of residents were canvassed during the Hearing, for example, the ratio adopted in the precinct structure planning for outer Melbourne and that proposed in the Arden DCP. Neither of these methods is appropriate for Yarra, it

being an established, mixed use municipality rather than a 'green fields' area or a clearly delineated urban renewal area.

With regard to the issue of 'double dipping', the Panel notes that undoubtedly, some people live and work in Yarra and perhaps even in the same suburb or precinct. However, an analysis to determine the potential overestimation of the need for future open space on this account would be difficult and in the Panel's view unnecessary. It would not be as straight forward as simply reducing the amount of future open space by the percentage of people who live and work in Yarra. For example, how would one calculate the need for open space for a worker who also lives in Yarra and uses open space during both work hours and after work and at weekends? It could be argued that that person would place more demand on open space than if they only worked in Yarra and lived elsewhere, but would that higher demand be twice the demand of a worker not residing in Yarra, 50 per cent higher, or some other amount? What if their workplace was at one end of Yarra and their home at the other? In any event, the Panel considers that 'double dipping' in so far as it may occur would be inconsequential and would not materially change the amount of additional open space that should be provided to meet the needs of the new population of Yarra.

The Panel goes on to conclude that (on page 33)

- *the open space needs of new residents and workers are calculated appropriately;*
- *the open space needs of new residents and workers can be considered as equivalent for the purpose of calculating future open space provision.*

A summary of the rationale for this methodology and how it relates to the two factors I have selected from Joanna Thompson's apportionment methodology is outlined below.

Factor	Description of Rationale and Approach
Factor 6 - Location and magnitude of forecast future resident and worker population growth.	My alternative methodology uses the existing (2016) and forecast resident and worker population (2031) estimates provided in the City of Yarra of Open Space Strategy. I have not altered or amended these figures in any way. As per Joanna Thompson's methodology, I use the differential between the 2016 and 2031 resident population and worker populations (expressed as the percentage of new residential and worker population and existing residential and worker population by 2031) as the basis for apportioning cost estimates using my proposed weighting model.

Factor	Description of Rationale and Approach
<p>Factor 7 – Part A. Future residential population densities.</p>	<p>The City of Yarra of Open Space Strategy rightfully emphasises the pressure placed on the municipality’s open space system due to much higher residential and worker populations and densities compared to the rest of Melbourne and in particular PSP locations. My alternative methodology proposes a residential density weighting system for each of Yarra’s precincts using the VPA’s PSP Guidelines as a baseline benchmark. The PSP Guidelines currently recommend the provision of 20 dwellings per NDA hectare in PSP locations, which equates to 62 people per NDA (based on 3.1 persons per dwelling – a figure typically adopted by the VPA’s in its development and population assumptions). In my view, it is reasonable to assert that if 62 persons per NDA hectare in our less dense urban locations (i.e. PSP areas) are expected to be supplied with 10% of each NDA hectare as unencumbered local public open space, then so should our most dense urban locations like the City of Yarra. My residential density weighting calculations are based on comparing the differential between the VPA PSP density estimate (62 people per NDA hectare) and the residential density estimates for each of Yarra’s precincts. These estimates were calculated by subtracting the 2016 residential density estimate from the 2031 residential density estimate. Where a precinct exceeds the VPA PSP density estimate (62 persons per hectare) by 2031, the differential estimate between 2016 and 2031 was used as the basis for determining a weighting for that precinct.</p>
<p>Factor 7. Part B – Future worker population densities.</p>	<p>My alternative methodology proposes a job/worker density weighting system for each of Yarra’s precincts using the VPA’s PSP Guidelines as a baseline benchmark. The PSP Guidelines currently recommends the provision of 1 job (or worker) per dwelling (or 20 jobs/workers per NDA hectare based on 20 dwellings per NDA hectare). My worker population density weighting calculations are based on comparing the differential between the VPA PSP density estimate (20 jobs/workers per NDA hectare) and the job / worker per dwelling estimates for each of Yarra’s precincts. These estimates were calculated by subtracting the 2016 worker density estimate from the 2031 worker density estimate. Where a precinct exceeds the VPA PSP density estimate (20 jobs/workers per NDA hectare) by 2031, the differential estimate between 2016 and 2031 was used as the basis for determining a worker population weighting for that precinct.</p> <p>I then reduced the new worker population density weighting to 20% of the total weighting to align with the PSP Guidelines which allocates only 2% of NDA employment land hectares for public open space (which is 20% of that allocated to NDA residential land hectares – i.e. 10% of NDA residential land hectares).</p>

With these two main factors considered, I outline below a more detailed description of my alternative methodology.

2.8.2 Summary of the Steps Used to Calculate an Alternative Apportionment Methodology

My alternative methodology builds on the VPA's PSP Guidelines, including the VPA's methodology for determining the NDA of a PSP area, and proposes a weighting model that can be applied to inner urban localities such as the City of Yarra which generally have higher residential and worker population densities than PSP locations. The weighting model described below proposes two weightings which are added together in the final steps of my alternative methodology. The first is a residential population density weighting, and the second is a worker population density weighting. The need for both weightings is necessary to account for the demand both population groups place on the public open space network. But it also allows me to treat the demand for public open space generated by the worker population differently from the residential population. In this regard I differ from the Panel's view on treating the demand for public open space equally between residential and worker populations. As discussed above in Section 2.8.1, I feel this is necessary in order to ensure my model is consistent with the PSP Guidelines.

My alternative methodology for calculating an appropriate public open space contribution rate for the City of Yarra requires a number of key steps be undertaken in order to establish alignment with the VPA's PSP Guidelines. Broadly speaking, these can be described as:

Calculating the Amount of Net Developable Area (NDA) of Each Precinct

1. This step calculates the Net Developable Area (NDA) of each of the City of Yarra's ten precincts as per VPA PSP practice. Refer to Attachment 3 for more details.

New Residential Population Weighting

2. Calculating the 2016 and 2031 residential population densities for each of the City of Yarra's precincts and expressing these figures as the number of persons (resident population) per NDA hectare.
3. Calculating a new residential population density weighting for each precinct which exceeds the PSP Guideline target specifying that PSPs aim to deliver a minimum of 20 dwellings per NDA hectare (equating to 62 persons per NDA hectare).

New Worker Population Weighting

4. Calculating the 2016 and 2031 worker population densities for each of the City of Yarra's precincts and expressing these figures as the number of workers per NDA hectare.
5. Calculating a new worker population density weighting for each precinct which exceeds the PSP Guideline target specifying that PSPs aim to deliver 1 job/worker per residential dwelling (equating to 20 jobs/workers per NDA hectare).
6. The new worker population density weighting is then reduced to 20% of the total weighting to align with the PSP Guidelines which allocates only 2% of NDA employment land hectares for public open space (which is 20% of that allocated to NDA residential land hectares – i.e. 10% of NDA residential land hectares).

Calculating a Total Weighting

7. The total weighting for each precinct is calculated by adding together the new residential population weighting and new worker population weighting.

Final Combined Public Open Space Contribution Rate

8. Applying the total weighting figure for each precinct to the estimated cost of public open space projects identified in the City of Yarra Open Space Strategy apportioned to the new residential and worker population using the 10% CIV land acquisition cost scenario (scenario 2).

2.8.3 The Residential Population Density Weighting

2.8.3.1 PSP Guidelines (2021): Dwelling/Population Densities

As previously mentioned, the first component of my weighting system refers to the application of a residential population density weighting to each precinct using the VPA's PSP Guidelines as a baseline benchmark (62 persons per NDA hectare).

Part 3 of the PSP Guidelines contains the following performance target relating to dwelling and population densities sought for PSP locations:

- **Viable Densities.** Target 2 – “The PSP should facilitate increased densities with an average of 20 dwellings or more per NDHA across the entire PSP area.” (page 39).

My residential density weighting calculations are based on comparing the differential between the VPA PSP density estimate and the residential density estimates for each of Yarra's precincts. These estimates were calculated by subtracting the 2016 residential density estimate from the 2031 residential density estimate. Where a precinct exceeds the VPA PSP density estimate (62 persons per hectare) by 2031, the differential estimate between 2016 and 2031 was used as the basis for determining a weighting for that precinct.

In my view, it is reasonable to assert that if 62 persons per NDA hectare in our less dense urban locations (i.e. PSP areas) are expected to be supplied with 10% of each NDA hectare as unencumbered local public open space, then so should our most dense urban locations like those located in the City of Yarra. Table 6 on the following page provides a summary of the proposed residential population density weighting score for each precinct. The precincts which score the highest weightings are Collingwood (0.73), North Richmond (0.70), Fitzroy (0.56) and Abbotsford (0.45).

Peer Review of Amendment C286yarra Open Space Project Cost Apportionment

Table 6 – Proposed Residential Population Density Weightings by Precinct

Steps	Notes	Unit	Abbotsford	Carlton North-Princess Hill	Central Richmond	Clifton Hill	Collingwood	Cremorne, Richmond South and Burnley	Fairfield - Alphington	Fitzroy	Fitzroy North	North Richmond
Step 1 - Calculate Yarra Net Developable Area as Per VPA Methodology												
Step 1.1	Calculate total area of precinct. Figures supplied by the City of Yarra.	Total Area of Precinct (hectares)	178.7	140.6	196.0	166.6	129.2	233.1	347.2	140.3	231.5	192.1
Step 1.2	Calculate Net Developable Area (NDA) as per VPA PSP Guidelines. Figures supplied by the City of Yarra.	Total Net Developable Area (NDA) - hectares	136.1	127.8	161.1	99.6	114.8	113.2	142.3	125.3	174.3	170.1
Step 2 – Calculate VPA PSP Residential Population Density Benchmark												
Step 2.1	The VPA PSP Guidelines require PSPs to achieve a density target of 20 dwellings per NDA hectare. Based on an average household size of 3.1 persons per household this target delivers a population yield of 62 people per NDA hectares (20 x 3.1). This provides the basis for comparing the differences in population density levels in each of Yarra’s precincts compared to the VPA PSP Guidelines.	PSP residential population density benchmark	62.00	62.00	62.00	62.00	62.00	62.00	62.00	62.00	62.00	62.00
Step 3 - Calculate Yarra 2016 Residential Population Density The purpose of this step is to calculate the residential population density of Yarra precincts in 2016												
Step 3.1	Derived from Yarra Open Space Strategy	2016 residential population	8,849	9,010	13,888	6,792	9,141	4,622	2,894	11,465	12,357	14,335
Step 3.2	Formula: Step 3.1 ÷ Step 1.2	2016 residential population density per NDA hectare	65.00	70.50	86.21	68.20	79.66	40.85	20.34	91.53	70.89	84.27
Step 3.3	Formula: Step 3.2 ÷ Step 2.1	2016 residential population density weighting	1.05	1.14	1.39	1.10	1.28	0.66	0.33	1.48	1.14	1.36
Step 4 - Calculate Yarra 2031 Residential Population Density The purpose of this step is to calculate the residential population density of Yarra precincts by 2031												
Step 4.1	Derived from Yarra Open Space Strategy	Projected residential	12,671.00	8,843.00	17,269.00	7,432.00	14,347.00	9,539.00	9,099.00	15,798.00	15,112.00	21,754.00

Peer Review of Amendment C286yarra Open Space Project Cost Apportionment

Steps	Notes	Unit	Abbotsford	Carlton North-Princess Hill	Central Richmond	Clifton Hill	Collingwood	Cremorne, Richmond South and Burnley	Fairfield - Alphington	Fitzroy	Fitzroy North	North Richmond
		population by 2031										
Step 4.2	Formula: Step 4.1 ÷ Step 1.2	Projected residential population density by 2031 per NDA hectare	93.07	69.20	107.19	74.62	125.03	84.30	63.96	126.13	86.70	127.89
Step 4.3	Formula: Step 4.2 ÷ Step 2.1	Projected residential population density weighting	1.50	1.12	1.73	1.20	2.02	1.36	1.03	2.03	1.40	2.06
Step 5 - Calculate New Residential Population Density Weighting												
This step calculates the residential population density change between 2016 and 2031. Weighting is applied only if 2031 residential population density exceeds VPA benchmark												
Step 5.1	Formula Step 4.3 – Step 3.3	New residential population weighting	0.45	Not applicable	0.34	0.10	0.73	0.36	0.03	0.56	0.25	0.70

2.8.4 Proposed Worker Population Density Weightings by Precinct

2.8.4.1 PSP Guidelines (2021): Jobs and Employment Land Open Space Targets

Part 3 of the PSP Guidelines contains two relevant performance targets relating to job generation and open space allocation in employment land locations. These are:

- **Connect People to Jobs & Higher Order Services.** Feature 8 (F 8). Well connected to public transport, jobs & services within the region, target 10 – “The provision of land for local employment and economic activity should be capable of accommodating the minimum job density target of one job per dwelling located within the wider growth corridor” (page 67).
- **Offer High-Quality Public Realm.** Feature 10 (F 10). Local recreation spaces and facilities, target 11 - “The open space network should seek to meet the following minimum targets: ... dedicated employment land within dedicated employment and/ or economic activity areas, 2% of the net developable area for local parks” (page 74).

In relation to F 10 - target 11, it is important to note that the 2% open space target for dedicated employment land in PSP locations is more difficult to apply in the City of Yarra which has a high proportion of land uses with a “mixed use” zoning function. In PSP locations, employment land uses appear to be more clearly separated from other land uses.

For the purposes of my alternative methodology, my worker population density weighting has been reduced to 20% of the total calculation in order to align with the PSP Guidelines (2% of NDA employment land hectares for public open space equates to 20% of that allocated for NDA residential land – i.e. 10% of NDA residential land hectares for public open space).

2.8.4.2 Job Density

I have used the job density target of 1 job per dwelling (which equates to 20 jobs/workers per NDA hectare) as a baseline benchmark against which to compare both the 2016 and 2031 job density figures for the City of Yarra using the worker figures presented in the City of Yarra Open Space Strategy. As shown in Table 7 on the following page, six of the ten City of Yarra precincts had job/worker density levels far exceeding the PSP Guideline target 1 job per dwelling (20 jobs/workers per NDA hectare). Most notable among these precincts were Collingwood (0.90), Cremorne, Richmond South and Burnley (0.81), Fitzroy (0.65) and Abbotsford (0.29).

Peer Review of Amendment C286yarra Open Space Project Cost Apportionment

Table 7 – Proposed Worker Population Density Weightings by Precinct

Steps	Notes	Unit	Abbotsford	Carlton North-Princess Hill	Central Richmond	Clifton Hill	Collingwood	Cremorne, Richmond South and Burnley	Fairfield - Alphington	Fitzroy	Fitzroy North	North Richmond
Step 1 - Calculate Yarra Net Developable Area as Per VPA Methodology												
Step 1.1	Calculate total area of precinct. Figures supplied by the City of Yarra.	Total Area of Precinct (hectares)	178.7	140.6	196.0	166.6	129.2	233.1	347.2	140.3	231.5	192.1
Step 1.2	Calculate Net Developable Area (NDA) as per VPA PSP Guidelines. Figures supplied by the City of Yarra.	Total Net Developable Area (NDA) - hectares	136.1	127.8	161.1	99.6	114.8	113.2	142.3	125.3	174.3	170.1
Step 2 – Calculate VPA PSP Worker Population Density Benchmarks												
Step 2.2	The VPA PSP Guidelines require PSPs to achieve a jobs density target of 1 job per dwelling. This target delivers a job yield of 20 jobs per NDA hectare (20 x 1). This provides the basis for comparing the differences in population density levels in each of Yarra’s precincts compared to the VPA PSP Guidelines.	PSP worker population density benchmark	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
Step 6 - Calculate Yarra 2016 Worker Population Density The purpose of this step is to calculate the worker population density of Yarra precincts in 2016												
Step 6.1	Derived from Yarra Open Space Strategy	2016 worker population	12,057	0	10,140	921	14,810	16,704	0	17,014	0	13,179
Step 6.2	Formula: Step 6.1 ÷ Step 1.2	2016 worker population density per NDA hectare	88.56	0.00	62.94	9.25	129.06	147.62	0.00	135.84	0.00	77.48
Step 6.3	Formula: Step 6.2 ÷ Step 2.2	2016 worker population density weighting	4.43	0.00	3.15	0.46	6.45	7.38	0.00	6.79	0.00	3.87
Step 7 - Calculate Yarra 2031 Worker Population Density The purpose of this step is to calculate the worker population density of Yarra precincts by 2031												
Step 7.1	Derived from Yarra Open Space Strategy	Projected Worker Population by 2031	15,972	0	13,176	1,266	25,168	25,865	0	25,216	0	17,444
Step 7.2	Formula: Step 7.1 ÷ Step 1.2	Projected Worker Population by 2031 per NDA hectare	117.32	0.00	81.79	12.71	219.32	228.58	0.00	201.32	0.00	102.55
Step 7.3	Formula: Step 7.2 ÷ Step 2.1	Yarra Precinct 2031 Worker Density Weighting	5.87	0.00	4.09	0.64	10.97	11.43	0.00	10.07	0.00	5.13

Peer Review of Amendment C286yarra Open Space Project Cost Apportionment

Steps	Notes	Unit	Abbotsford	Carlton North-Princess Hill	Central Richmond	Clifton Hill	Collingwood	Cremorne, Richmond South and Burnley	Fairfield - Alphington	Fitzroy	Fitzroy North	North Richmond
Step 8 - Calculate New Worker Population Density Weighting This step calculates the worker population density change between 2016 and 2031. Weighting is applied only if 2031 worker population density exceeds VPA benchmark												
Step 8.1	Formula: Step 7.3 – Step 6.3	New worker population weighting	1.44	Not applicable	0.94	Not applicable	4.51	4.05	Not applicable	3.27	Not applicable	1.25
Step 8.2	Formula: Step 8.1 * 0.20	Application of 20% of new worker population weighting for new worker population open space demand (refer to Section 2.8.4.1 of this report for more details)	0.29	Not applicable	0.19	Not applicable	0.90	0.81	Not applicable	0.65	Not applicable	0.25

2.8.5 Total Weightings by Precinct

The total weighting for each precinct is calculated by adding together the new residential population weighting and new worker population weighting. As previously stated, the need for both weightings is necessary to account for the demand both population groups place on the public open space network. But it also allows me to treat the demand for public open space generated by the worker population differently from the residential population. Table 8 below summarises the total weighting score for each precinct. The precincts with the highest weightings are Collingwood (1.63), Fitzroy (1.21), Cremorne - Burnley - Richmond South (1.17) and North Richmond (0.95).

Table 8 - Summary of Total Weightings by Precinct

Precinct	Residential Population Weighting	Worker Population Weighting	Total Weighting
Abbotsford	0.45	0.29	0.74
Carlton North - Princes Hill	Not applicable	Not applicable	Not applicable
Central Richmond	0.34	0.19	0.53
Clifton Hill	0.10	Not applicable	0.10
Collingwood	0.73	0.90	1.63
Cremorne - Burnley - Richmond South	0.36	0.81	1.17
Fairfield - Alphington	0.03	Not applicable	0.03
Fitzroy	0.56	0.65	1.21
Fitzroy North	0.25	Not applicable	0.25
North Richmond	0.70	0.25	0.95

2.8.5 Final Public Open Space Contribution Rate

The final stage of my methodology applies the total weighting scores shown above in Table 8 to the costs apportioned to the proportion of new residential and worker population by 2031 using the 10% CIV scenario for land acquisition costs. Table 9 on the following page summarises the total revised dollar value of proposed open space project costs allocated to the new residential and worker population after the application of the total weighting scores for each precinct. After the application of the weighting scores the resulting total dollar value of open space projects allocated to the new residential and worker population is \$357,895,416. It is then possible to calculate the public open space contribution rate by dividing this revised cost by the total estimated value of the land to redevelop in the City of Yarra (\$3,789,238,623). As shown in the formula below, this results in a public open space contribution rate of 9.4%.

$$\$357,895,416 \div \$3,789,238,623 = 9.4\%$$

Peer Review of Amendment C286yarra Open Space Project Cost Apportionment

Table 9 – Revised Public Open Space Contribution Rate Based 10% CIV Scenario for Land Acquisition Costs

Steps	Notes	Unit	Abbotsford	Carlton North-Princess Hill	Central Richmond	Clifton Hill	Collingwood	Cremorne, Richmond South and Burnley	Fairfield - Alphington	Fitzroy	Fitzroy North	North Richmond	Total
Step 9 - Calculate Total New Residential & Worker Population Weighting													
Step 9 adds the two weightings, where they apply, to each precinct to determine a total weighting figure.													
Step 9.1	Formula: Step 8.2 + Step 5.1	Total Weighting Score	0.74	Not applicable	0.53	0.10	1.63	1.17	0.03	1.21	0.25	0.95	
Step 10 - Apply Total Weighting to POS Costs apportioned to new residential and worker population only													
Step 10 applies the total precinct weighting to costs apportioned to new residential and worker population by 2031 only. Costs are those derived from the City of Yarra Open Space Strategy based on the 10% Capital Improved Value (CIV) estimates.													
Step 10.1	Derived from City of Yarra Public Open Space Strategy	Total dollar value of proposed open space projects	\$15,136,176	\$9,303,720	\$46,360,440	\$5,120,000	\$126,915,054	\$135,230,839	\$6,266,108	\$68,787,084	\$13,300,170	\$64,691,460	\$491,111,053
Step 10.2	Revised Calculation	Total dollar value of proposed open space projects allocated to existing residential and worker population	\$11,047,617	\$9,303,720	\$36,588,887	\$4,540,189	\$76,926,293	\$81,457,826	\$1,992,979	\$47,763,870	\$10,875,476	\$45,408,460	\$325,905,317
Step 10.3	Revised Calculation	Total dollar value of proposed open space projects allocated to new residential and worker population	\$4,088,559	\$0	\$9,771,553	\$579,811	\$49,988,761	\$53,773,013	\$4,273,129	\$21,023,214	\$2,424,694	\$19,283,000	\$165,205,734
Step 10.4	Revised Calculation	Proportion existing residential and worker population by 2031	73%	100%	79%	89%	61%	60%	32%	69%	82%	70%	
Step 10.5	Revised Calculation	Proportion new residential and worker population by 2031	27%	0%	21%	11%	39%	40%	68%	31%	18%	30%	

Peer Review of Amendment C286yarra Open Space Project Cost Apportionment

Steps	Notes	Unit	Abbotsford	Carlton North-Princess Hill	Central Richmond	Clifton Hill	Collingwood	Cremorne, Richmond South and Burnley	Fairfield - Alphington	Fitzroy	Fitzroy North	North Richmond	Total
Step 10.6	Formula: Step 10.3 + (Step 10.3 x Step 9.1)	Revised apportionment cost to new residential and worker population based on total weighting	\$7,115,648	\$0	\$14,920,661	\$639,905	\$126,915,054 ⁸	\$116,649,630	\$4,408,483	\$46,519,949	\$3,042,811	\$37,683,276	\$357,895,416
Step 10.7	Derived from City of Yarra Public Open Space Strategy	Estimated value of the land to redevelop	\$286,757,015	\$23,588,482	\$500,779,083	\$68,930,173	\$815,247,821	\$635,975,223	\$22,555,590	\$717,813,964	\$158,903,603	\$558,687,669	\$3,789,238,623
Step 11 - Calculate POS Contribution Rate for the City of Yarra	City of Yarra Column only. Formula: Step 10.6 ÷ Step 10.7												9.4%

⁸ Note: The cost apportioned to new residential and worker population in the Collingwood precinct has been capped at the total project of \$126,915,054 as the application of the Collingwood weighting score exceeds this figure.

3. Conclusions

Based on the material reviewed in this report I conclude the following:

1. In my opinion the apportionment method used by Joanna Thompson is far too subjective and difficult to replicate with any great consistency. For example, it would appear difficult for any two open space planners to agree on which of her six apportionment ratios should apply to any particular project. However, as I have demonstrated, I believe the construction and application of some form of more quantifiable and replicable weighting system that can be applied to the apportionment process is both possible and valid.
2. The more traditional apportionment method of using only residential and worker population forecasts to determine the public open space contribution rate fails to reflect the complex and costly challenge of satisfying open space needs in high density inner suburban municipalities such as the City of Yarra and fails to provide sufficient financial resources to implement important open space measures that many locations within the City of Yarra desperately need.
3. I have highlighted there is currently a significant disparity between the actual supply of local public open space in the majority of Council's 10 precincts, and the target specified in the VPA's PSP Guidelines (10% of NDA be provided in the form of local unencumbered public open space), and clearly shown to what extent each of Council's 10 precincts exceed the residential and worker population densities anticipated in PSP locations.
4. My alternative methodology builds on the VPA's PSP Guidelines and proposes a weighting model that can be applied to inner urban localities such as the City of Yarra which generally have higher residential and worker population densities than PSP locations.
5. My weighting model proposes two weightings which are added together in the final steps of my alternative methodology. The first is a residential population density weighting, and the second is a worker population density weighting. I have explained the need for two weightings in my report.
6. The two weightings are focused on determining the following: 1) the projected residential population densities of each precinct relative to the target specified in the PSP Guidelines (20 dwellings per NDA hectare / 62 persons per NDA hectare), and 2) the projected worker population densities of each precinct relative to the target specified in the PSP Guidelines (1 job/worker per dwelling or 20 jobs / workers per NDA hectare).
7. I have also proposed that the new worker population density weighting be reduced to 20% of the total weighting score to align with the PSP Guidelines which allocates only 2% of NDA employment land hectares for public open space (which is 20% of that allocated to NDA residential land hectares – i.e. 10% of NDA residential land hectares).

8. I regard my alternative methodology as a fair and equitable weighting system as it properly acknowledges the enormously complex and costly process Council confronts in its efforts to improve open space amenity in the face of significant urban renewal and residential and worker population densities that far exceed the residential and worker density targets expected in PSP locations.
9. The application my weighting system to the estimated cost of public open space projects identified in the City of Yarra Open Space Strategy for each precinct and apportioned to new residential and worker populations by 2031 using the 10% CIV land acquisition cost scenario (scenario 2) produces a public open space contribution rate of 9.4%.

Attachments

**Attachment 1. Summary Preliminary Opinion of Probable Cost City of Yarra Open Space
Strategy 2020**

Scenario 2: 10% Allowance Scenario on CIV Land Acquisition Costs.

*Source: Memorandum Prepared by Joanna Thompson dated 18 January 2022. Response to
Planning Panels Victoria Direction #3 on 20 December 2021: Alternative scenarios
regarding the cost allowance on CIV land acquisition costs.*

Summary Preliminary Opinion of Probable Cost			
City of Yarra Open Space Strategy 2020			
10% Allowance Scenario on CIV land acquisition costs			
[COLUMN A]	[COLUMN B]	[COLUMN C]	[COLUMN D]
PRECINCT	Total dollar value	Total dollar value for existing population	Total dollar value for new population
Abbotsford	\$15,136,176	\$7,822,992	\$7,313,184
Carlton North - Princes Hill	\$9,303,720	\$8,838,534	\$465,186
Central Richmond	\$46,360,440	\$21,412,109	\$24,948,331
Clifton Hill	\$5,120,000	\$4,096,000	\$1,024,000
Collingwood	\$126,915,054	\$42,175,825	\$84,739,230
Cremorne - Burnley - Richmond South	\$135,230,839	\$34,641,802	\$100,589,038
Fairfield - Alphington	\$6,266,108	\$2,880,814	\$3,385,294
Fitzroy	\$68,787,084	\$26,063,069	\$42,724,016
Fitzroy North	\$13,300,170	\$4,951,919	\$8,348,251
North Richmond	\$64,691,460	\$9,789,043	\$54,902,418
Total	\$491,111,053	\$162,672,106	\$328,438,946

Attachment 2 Attachment 2 - Review of Open Space Project Cost Apportionment for Amendment C286yarra
Robert Panozzo

YOSS 2020 STRATEGY POPC -10% ALLOWANCE SCENARIO ON CIV LAND ACQUISITION COSTS

SHEET 2 OF 12

Abbotsford						
Strategy Action No.	ACTION	Priority	Responsibility	Total Cost	Proportion of cost for existing population	Proportion of cost for new population
ADDITIONAL OPEN SPACE						
7.1A-1	Provide an additional Small Local open space in the south west part of open space sub-precinct Abbotsford C for both the existing and forecast population. The new open space is to be located south of Langridge Street between the railway and Nicholson Street.	High	YCC			
	Land acquisition			\$4,258,678	30%	70%
	Capital works for construction of new open space			\$575,450	30%	70%
7.1A-2	Provide an additional Neighbourhood open space if the large scale industrial uses are redeveloped. This would primarily be for the forecast population.	High and Ongoing	YCC Developer			
	Land acquisition			\$0	0%	0%
	Capital works for construction of new open space			\$0	0%	0%
	Subtotal for additional open space			\$4,834,128		
EXISTING OPEN SPACE						
7.1B-1	Bath Street Reserve Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.1B-2	Brearley Reserve Undertake a major upgrade to protect and interpret the existing Red Gum including expanding the size of the reserve utilising part of the road reserve to create more space around the Red Gum. Future design to provide facilities for the local community to use this reserve when major sporting events are held at Victoria Park. This is for both the existing and forecast population.	Low	YCC	\$1,224,707	50%	50%
7.1B-3	Browns Reserve Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.1B-4	Clarke Street Reserve Undertake a major upgrade to this open space to provide seating and picnic area with views over the Yarra River and the Abbotsford Convent site and indigenous revegetation to improve the biodiversity values and potentially include interpretive signage regarding the natural and cultural values of the site.	High	YCC	\$1,224,707	80%	20%
7.1B-5	Collingwood Childrens Farm Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.1B-6	Dights Falls Continue to maintain.	Ongoing	YCC, PV, MW	\$0	80%	20%
7.1B-7	Eddy Court Reserve Undertake a major upgrade to this linking space including investigating providing addition active unstructured recreation facilities to encourage greater use of this open space adjacent to the railway reserve.	Low	YCC, PTV	\$345,270	80%	20%
7.1B-8	Flockhart Reserve Continue to maintain in the short term. In the future when the additional linear open space along the Yarra River is secured, then undertake a major upgrade to improve the visitor facilities at Flockhart Reserve.	Low	YCC, MW	\$2,502,455	50%	50%
7.1B-9	Gahan Reserve Undertake major upgrades to this open space in the longer term primarily to meet the needs of the forecast population. This is to include investigating appropriate uses for the Maternal Child and Health facility that will complement the open space.	Low	YCC	\$2,502,455	80%	20%
7.1B-10	Maugle Street Reserve Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.1B-11	Saint Phillip's Reserve Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.1B-12	Studley Street Reserve Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.1B-13	Victoria Park Prepare and implement a new Masterplan to improve the structured and unstructured sport and recreation use in the context of forecast growth and change.	Medium	YCC	\$2,502,455	50%	50%
7.1B-14	Yarra River Trail – Abbot St to Turner St (Land is not zoned PPRZ) Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.1B-15	Yarra River Trail – Acacia PI to Victoria St Continue to maintain.	Ongoing	YCC, PV MW	\$0	0%	0%
7.1B-16	Yarra River Trail – Johnston St to Clarke St Continue to maintain.	Ongoing	YCC, PV MW	\$0	0%	0%
7.1B-17	Yarra River Trail – Turner St to Johnston St Continue to maintain.	Ongoing	YCC, PV MW	\$0	0%	0%
7.1B-18	Yarra River Trail – Walmer St to Acacia PI Continue to maintain.	Ongoing	YCC, PV MW	\$0	0%	0%
	Subtotal for existing open space			\$10,302,048		
	TOTAL FOR ABBOTSFORD			\$15,136,176		

YARRA PLANNING SCHEME AMENDMENT C286 - RESPONSE TO PLANNING PANELS VICTORIA DIRECTION #3 ON 20/12/21
 ALTERNATIVE SCENARIOS REGARDING COST ALLOWANCE ON CIV LAND ACQUISITION COST PREPARED BY TBLD P/L 18/01/22

PAGE 18

Attachment 2 Attachment 2 - Review of Open Space Project Cost Apportionment for Amendment C286yarra
Robert Panozzo

Carlton North Princes Hill						
Strategy Action No.	ACTION	Priority	Responsibility	Total Cost	Proportion of cost for existing population	Proportion of cost for new population
ADDITIONAL OPEN SPACE						
7.2A-1	Provide a new Small Local open space in Carlton North to address the gap area for the existing population.	Medium	YCC			
	Land acquisition			\$6,366,786	95%	5%
	Capital works for construction of new open space			\$575,450	95%	5%
	Subtotal for additional open space			\$6,942,236		
EXISTING OPEN SPACE						
7.2B-1	Canning Street Median Continue to protect and manage the mature trees.	Ongoing	YCC	\$0	95%	5%
7.2B-2	Curtain Square Minor upgrade to Curtain Square including an upgrade to the existing playground.	High	YCC	\$834,152	95%	5%
7.2B-3	Hardy Gallagher Reserve Undertake a minor upgrade to the reserve including review of the existing path network, upgrade of unstructured recreation facilities and signage regarding the proposed new urban agricultural facility at the neighbourhood house.	Medium	YCC	\$834,152	95%	5%
7.2B-4	Nicholson Street Reserve Minor upgrade to improve the overstorey canopy trees, path and seats.	Medium	YCC DHHS	\$115,090	95%	5%
7.2B-5	Park Street Reserve (Inner Circle Railway Parklands) Review the Linear Park Masterplan and function of this site within the network and undertake minor upgrades including review of lighting.	Low	YCC	\$347,911	95%	5%
7.2B-6	Pigdon Street Median Continue to protect and manage the mature trees and upgrade to include seating and associated park infrastructure including drinking fountain.	High and Ongoing	YCC	\$115,090	95%	5%
7.2B-7	Shakespeare Reserve Undertake a minor upgrade to improve the seating opportunities in this reserve.	Medium	YCC	\$115,090	95%	5%
	Subtotal for existing open space			\$2,361,484		
	TOTAL FOR CARLTON NORTH - PRINCES HILL			\$9,303,720		

Attachment 2 Attachment 2 - Review of Open Space Project Cost Apportionment for Amendment C286yarra Robert Panozzo

YOSS 2020 STRATEGY POPC -10% ALLOWANCE SCENARIO ON CIV LAND ACQUISITION COSTS

SHEET 4 OF 12

Central Richmond						
Strategy Action No.	ACTION	Priority	Responsibility	Total Cost	Proportion of cost for existing population	Proportion of cost for new population
ADDITIONAL OPEN SPACE						
7.3A-1	Provide a new Local open space in the north west of Central Richmond A as shown in Figure 7.3F for both the existing and forecast new population. The new Local open space will need to include the provision of space and facilities for unstructured active recreational uses given these are not currently well provided for in Central Richmond.	Very High	YCC Developer			
	Land acquisition			\$27,180,363	50%	50%
	Capital works for construction of new open space			\$1,739,556	50%	50%
7.3A-2	Provide either one new Small Local open space in the north east part of Central Richmond B as shown in Figure 7.3F for both the existing and future population. The location is to be accessible via the local street network and preferably improve east-west connectivity.	Very High	YCC Developer			
	Land acquisition			\$5,283,190	50%	50%
	Capital works for construction of new open space			\$575,450	50%	50%
7.3A-3	Provide a new Small Local open space in the south east part of Central Richmond B as shown in Figure 7.3F for both the existing and future population.	Very High	YCC Developer			
	Land acquisition			\$5,283,190	50%	50%
	Capital works for construction of new open space			\$575,450	50%	50%
7.3A-4	Investigate options to expand the size of Dame Nellie Melba Park in the longer term to increase the capacity of the open space to accommodate increased levels of use as a result of forecast growth.	Low	YCC Developer			
	Land acquisition			\$2,438,395	10%	90%
	Capital works for construction of new open space			\$575,450	10%	90%
	Subtotal for additional open space			\$43,651,044		
EXISTING OPEN SPACE						
7.3B-1	Ben Alexander Reserve Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.3B-2	Burnley Park Prepare a revised Landscape Masterplan that incorporates the recommendations from the 2007 CMP, investigates viable future uses of the cottage and responds to the heritage and historical values of the park. The design will need to cater to the forecast new population needs including increasing the capacity of the facilities to the accommodate the increased levels of use. This is primarily for the forecast new population.	Medium	YCC	\$834,152	20%	80%
7.3B-3	Cairns Reserve Undertake minor upgrades to adapt and cater to increased levels of use from the forecast population. This includes investigating the provision of a barbecue and picnic facility along facilities that encourage active unstructured recreation.	Medium	YCC	\$347,911	20%	80%
7.3B-4	Circus Site Undertake minor improvements to protect and appropriately interpret the cultural heritage and natural values of the site. Continue to manage this reserve for hosting major events with improved management guidelines to adequately protect the site from damage.	Ongoing	YCC	\$834,152	50%	50%
7.3B-5	Dame Nellie Melba Park Undertake minor upgrades to adapt and cater to increase levels of use from the forecast population. Facilities to promote informal use of this reserve including barbecue and picnic facilities to complement the facilities provided in Cairns Reserve, which is nearby. Refer to the Action 7.3A-5 regarding the longer term aim to investigate opportunities to expand the size of the open space to improve its function and use primarily for the forecast population.	Low	YCC	\$347,911	20%	80%
7.3B-6	Peppercorn Park Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.3B-7	Richmond Terrace Park Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.3B-8	Wangaratta Street Park Prepare a Concept Plan to guide the future expansion and upgrade of Wangaratta Street Park. This includes: •Investigating additional road closure to expand the size of the open space. •Increase the urban greening and cooling character of this open space including additional moisture absorbing surfaces, garden beds, trees and turf.	High	YCC	\$345,270	20%	80%
7.3B-9	Yarra River Trail – Bridge Rd to Swan St Continue to undertake improvements as required to the natural biodiversity values and linear path consistent with the cultural and natural values of the river corridor.	Ongoing	YCC	\$0	0%	0%
	Subtotal for existing open space			\$2,709,396		
	TOTAL FOR CENTRAL RICHMOND			\$46,360,440		

YARRA PLANNING SCHEME AMENDMENT C286 - RESPONSE TO PLANNING PANELS VICTORIA DIRECTION #3 ON 20/12/21
ALTERNATIVE SCENARIOS REGARDING COST ALLOWANCE ON CIV LAND ACQUISITION COST PREPARED BY TBLD P/L 18/01/22

PAGE 20

**Attachment 2 Attachment 2 - Review of Open Space Project Cost Apportionment for Amendment C286yarra
Robert Panozzo**

Clifton Hill						
Strategy Action No.	ACTION	Priority	Respon- sibility	Total Cost	Proportion of cost for existing population	Proportion of cost for new population
ADDITIONAL OPEN SPACE						
7.4A-1	If substantial change occurs in the future between Hoddle Street and the Railway there is potential that a new Small Local open space may be required subject to an open space needs assessment. This would only be required if there is a change to the forecast growth and is not included in the contribution rate calculation and is not included on Figure 7.4F.	N/A	YCC			
	Land acquisition			\$0	0%	0%
	Capital works for construction of new open space			\$0	0%	0%
	Subtotal for additional open space			\$0		
EXISTING OPEN SPACE						
7.4B-1	Clifton Street Reserve Undertake minor upgrade to improve the design of this space including paths, social meeting areas and improved greening. This is primarily for the existing population.	Low	YCC	\$115,090	80%	20%
7.4B-2	Coulson Reserve Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.4B-3	Darling Gardens Continue to implement the Darling Gardens Masterplan, with priority given to the protection and care of the mature canopy trees and improving the quality and condition of the open grassed areas.	High	YCC	\$2,502,455	80%	20%
7.4B-4	George Knott Reserve Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.4B-5	Hall Reserve Undertake minor upgrade to Hall Reserve to provide additional picnic areas within the reserve given its size to enjoy the expansive views over the creek corridor and the create social spaces for the people to meet and spend time in the reserve. This includes retaining the existing sports training facilities. The upgrades will cater to both the forecast increased workers and residents and the existing population.	Medium	YCC	\$834,152	80%	20%
7.4B-6	Mayors Park In the short term continue to maintain. In the longer term update the Landscape Masterplan and identify opportunities to improve its level of use and complement the facilities and character of the nearby Darling Gardens. This will cater to both the forecast and existing population.	Low	YCC	\$834,152	80%	20%
7.4B-7	Merri Creek Shared Trail (Railway to Heidelberg Rd) Continue to improve the biodiversity values.	Ongoing	YCC	\$0	0%	0%
7.4B-8	Merri Creek Shared Trail (Heidelberg Road to Eastern Freeway) Continue to improve the biodiversity values.	Ongoing	YCC	\$0	0%	0%
7.4B-9	Quarries Park Undertake minor upgrades to improve the passive surveillance along with the condition of the playground and picnic area. This will cater to both the forecast and existing population.	High	YCC	\$834,152	80%	20%
7.4B-10	Ramsden Street Reserve Continue to maintain.	Ongoing	YCC	\$0	0%	0%
	Subtotal for existing open space			\$5,120,000		
	TOTAL FOR CLIFTON HILL			\$5,120,000		

Attachment 2 Attachment 2 - Review of Open Space Project Cost Apportionment for Amendment C286yarra
Robert Panozzo

Collingwood						
Strategy Action No.	ACTION	Priority	Responsibility	Total Cost	Proportion of cost for existing population	Proportion of cost for new population
ADDITIONAL OPEN SPACE						
7.5A-1	Provide a new Small Local open space between Smith and Wellington Streets in open space precinct Collingwood A to cater to the existing and forecast population.	Very High	YCC Developer			
	Land acquisition			\$4,502,853	40%	60%
	Capital works for construction of new open space			\$575,450	40%	60%
7.5A-2	Investigate options to expand the size of McNamara Reserve to increase it to a Local open space size to provide space to include diversity of facilities that appeal to both the existing and forecast community.	Medium	YCC Developer			
	Land acquisition			\$4,502,853	40%	60%
	Capital works for construction of new open space			\$1,020,589	40%	60%
7.5A-3	Investigate options to expand the size of Alexander Street Reserve in Collingwood A to make it more accessible and useable. Alternatively provide a new Small Local open space for both the existing and forecast population in a more accessible and visible location in Collingwood A sub-precinct. This can either be in addition to Alexandra Reserve, or to replace it.	Medium	YCC			
	Land acquisition			\$4,502,853	40%	60%
	Capital works for construction of new open space			\$575,450	40%	60%
7.5A-4	Provide a new Local open space in the northern part of open space precinct Collingwood B in the vicinity of the Former Victoria Police Workshop on Stanley Street. This is to cater primarily for the forecast new population.	Very High	YCC Developer			
	Land acquisition			\$25,449,326	10%	90%
	Capital works for construction of new open space			\$1,739,556	10%	90%
7.5A-5	Increase the size of Peel Street Park and Cambridge Street Reserve to accommodate additional facilities and people, given both these open spaces are experiencing signs of over-development.	Very High	YCC Developer			
	Land acquisition			\$5,514,021	10%	90%
	Capital works for construction of new open space			\$575,450	10%	90%
7.5A-6	Provide a new Small Neighbourhood open space in Collingwood C. The future open space will need to be accessible to the moderate change area associated with Johnson Street to the north and any future change to the social housing estate. This can be staged so that it firstly provides a Local open space and can be expanded later to a Small Neighbourhood to cater to the 2041 forecast population.	High	YCC Developer			
	Land acquisition			\$50,055,181	50%	50%
	Capital works for construction of new open space			\$2,135,235	50%	50%
7.5A-7	Provide a new Local open space between Gipps and Victoria Streets for both the existing and forecast worker population in Collingwood D.	High	YCC Developer			
	Land acquisition			\$17,312,919	30%	70%
	Capital works for construction of new open space			\$1,739,556	30%	70%
7.5A-8	Provide a new Small Local open space in Collingwood B south of Johnston Street within the moderate change area identified in the <i>Yarra Housing Strategy 2018</i> . This is primarily for the forecast population.	Very High	YCC Developer			
	Land acquisition			\$5,514,021	10%	90%
	Capital works for construction of new open space			\$575,450	10%	90%
	Subtotal for additional open space			\$126,290,762		
EXISTING OPEN SPACE						
7.5B-1	Alexander Street Reserve Refer to Action 7.5A-3 regarding investigating the potential option to expand the size and suitable alternative more accessible locations for a new open space. Once the size, location and whether the existing open space is to be retained, undertake capital works improvements to establish a new open space or upgrade the existing.	Medium	YCC	Refer to Action 7.5A-3	30%	70%
7.5B-2	Cambridge Street Reserve Investigate opportunities to increase the size of Cambridge Street Reserve including options of utilising part of the adjoining road reserve. This will increase the area and also sunlight access, particularly in winter.	High	YCC	Refer to Action 7.5A-5	20%	80%
7.5B-3	McNamara Reserve In the short to medium term continue to maintain. As part of the future expansion to the reserve in the long term, undertake a major upgrade to include facilities appropriate to the existing and forecast new community. Refer to Action 7.5A-2 regarding the increase of its size.	Low	YCC	\$312,146	30%	70%
7.5B-4	Oxford Street Park Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.5B-5	Peel Street Park In the short term, undertake a minor upgrade to this open space to provide additional trees, shade, improve seating and improve the layout and condition of the open grassed area primarily for the new population due to increased levels of use. In the longer term, undertake a major upgrade to incorporate the expanded area of open space. Refer to Action 7.5A-5.	Medium	YCC	\$312,146	20%	80%
	Subtotal for existing open space			\$624,292		
	TOTAL FOR COLLINGWOOD			\$126,915,054		

Attachment 2 Attachment 2 - Review of Open Space Project Cost Apportionment for Amendment C286yarra
Robert Panozzo

Cremerne - Burnley - Richmond South						
Strategy Action No.	ACTION	Priority	Responsibility	Total Cost	Proportion of cost for existing population	Proportion of cost for new population
ADDITIONAL OPEN SPACE						
7.6A-1	Provide a new Small Neighbourhood open space in Cremerne in the vicinity of the Kangan TAFE site. There is potential to investigate locating this on the car park and improving east-west connectivity as well. This new open space is primarily for the new population and also for the existing population.	Very High	YCC Developer			
	Land acquisition			\$68,336,822	20%	80%
	Capital works for construction of new open space			\$2,135,235	20%	80%
7.6A-2	Provide a new Small Local open space in the north-west area of Cremerne between Punt Road and Cremerne Street as shown in Figure 7.6F. This is to cater for both the forecast new and the existing population north of Kelso Street.	Very High	YCC Developer			
	Land acquisition			\$5,922,525	50%	50%
	Capital works for construction of new open space			\$575,450	50%	50%
7.6A-3	Provide a new Small Local open space in the south-west part of Cremerne in close proximity to the High Change Area shown in the <i>Yarra Housing Strategy 2018</i> . This is primarily to cater to the forecast new resident and worker population.	Very High	YCC Developer			
	Land acquisition			\$5,922,525	20%	80%
	Capital works for construction of new open space			\$575,450	20%	80%
7.6A-4	Provide a new Small Local open space between Cremerne Street and the railway, south of Balmain Street, as shown in Figure 7.6F. This will primarily be for the forecast new population.	Very High	YCC Developer			
	Land acquisition			\$5,922,525	20%	80%
	Capital works for construction of new open space			\$575,450	20%	80%
7.6A-5	Provide a new Local open space between the railway and Church Street and north of Balmain Street. This will complement the existing White Street Reserve, which is already well used, and cater to the forecast substantial increase in the worker and resident population. Options for future open space include the car park near East Richmond Station and the on the Bryant and May Site. The future open space will preferably be large enough to provide for unstructured active recreation including multi-use court, half courts, exercise equipment combined with urban greening and picnic and barbecue facilities.	Very High	YCC Developer			
	Land acquisition			\$27,334,729	30%	70%
	Capital works for construction of new open space			\$1,739,556	30%	70%
7.6A-6	Provide a new Small Local open space in the employment precinct south of Balmain Street and between the railway and Church Street. There is an opportunity to investigate changing the configuration of Dale Street to create a public open space and/or the configuration of the square on Electric Street. This will cater to both the existing and forecast worker population.	Very High	YCC Developer			
	Land acquisition			\$5,922,525	50%	50%
	Capital works for construction of new open space			\$575,450	50%	50%
7.6A-7	Provide a new Small Local open space north or south of East Richmond Station for the forecast population in the Swan Street Precinct.	Very High	YCC Developer			
	Land acquisition			\$5,922,525	30%	70%
	Capital works for construction of new open space			\$575,450	30%	70%
	Subtotal for additional open space			\$132,036,215		
EXISTING OPEN SPACE						
7.6B-1	Alan Bain Reserve Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.6B-2	Athol J Brown Reserve Continue to maintain.	Medium	YCC	\$0	0%	0%
7.6B-3	Barkly Gardens Undertake minor upgrades to the playground and other unstructured recreation facilities to cater to increased levels of use for forecast population.	Medium	YCC	\$834,152	20%	80%
7.6B-4	Burnley Golf Course Undertake a major review of the future use of this public open space to investigate options to increase the diversity of golfing options at the Burnley Golf Course in the short to medium term. In the longer term, investigate the feasibility to provide a diversity of sporting options provided for a the site, activities offered at this site. This is investigation only, no amount is allocated for works, as the space is intended to continue to be used for structured sporting uses.	Very High	YCC	\$0	0%	0%
7.6B-5	Charles Evans Reserve Undertake minor upgrades including investigating improving the picnic and play facilities.	High	YCC	\$115,090	30%	70%
7.6B-6	Church Street Park Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.6B-7	Golden Square Park Undertake a major upgrade to better cater to the needs of the existing and forecast population including: •Improve the quality and design of the open grassed area. •Increase the variety of unstructured recreation facilities in the open space to appeal to a more diverse age group. •Activate the interface between the park and the adjoining commercial use to the west of the reserve.	High	YCC	\$1,281,141	30%	70%

Attachment 2 Attachment 2 - Review of Open Space Project Cost Apportionment for Amendment C286yarra Robert Panozzo

Cremorne - Burnley - Richmond South						
Strategy Action No.	ACTION	Priority	Responsibility	Total Cost	Proportion of cost for existing population	Proportion of cost for new population
ADDITIONAL OPEN SPACE						
7.6B-8	Herring Island Support investigating options to improve access to Herring Island and its contribution to the biodiversity values of the Yarra River Corridor, consistent with the <i>Yarra Strategic Plan</i> .	Ongoing	PV	\$0	0%	0%
7.6B-9	Kevin Bartlett Reserve Investigate options to upgrade the sporting facilities to better cater for a broader and more inclusive participation base including females, LGBTQI+ and people with mobility challenges. As part of the future upgrade improve the passive and informal facilities provided at the reserve primarily for the forecast population as part of the future increased levels of use.	High	YCC	\$834,152	20%	80%
7.6B-10	Loys Paddock Continue to improve the natural biodiversity values with appropriate indigenous revegetation while maintaining appropriate access for the Main Yarra Trail.	Ongoing	YCC	\$0	0%	0%
7.6B-11	McConchie Reserve Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.6B-12	Ryans Reserve Undertake minor upgrade to the informal facilities to complement the recent major upgrade to the netball facilities. This is to improve the casual use of the reserve outside of sports training and match play.	High	YCC	\$0	0%	0%
7.6B-13	Stephenson Street Reserve Undertake minor upgrade to improve seating opportunities and landscape character with additional planting.	Ongoing	YCC	\$15,000	20%	80%
7.6B-14	Survey Paddock Trail PV to continue to maintain.	Ongoing	PV	\$0	0%	0%
7.6B-15	White Street Reserve Undertake a minor upgrade including provision of improved picnic facilities and review of the play facility and options to improve the seating and other uses. If opportunities arise in the future, investigate expanding the size of this open space to improve its function and use.	Medium	YCC	\$115,090	20%	80%
7.6B-16	Yarra River Trail – Church St to Railway Continue to maintain.	Ongoing	PV (YCC)	\$0	0%	0%
7.6B-17	Yarra River Trail – Loyala Gv to McConchie Reserve Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.6B-18	Yarra River Trail – McConchie Reserve to Church St PV to continue to maintain and YCC continues to support the importance of accessibility through this section of trail.	Ongoing	PV (YCC)	\$0	0%	0%
7.6B-19	Yarra River Trail – Railway to Loyala Gr Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.6B-20	Yarra River Trail – Railway to Punt Rd PV to continue to maintain.	Ongoing	PV (YCC)	\$0	0%	0%
7.6B-21	Yarra River Trail – Swan St to Railway PV to continue to maintain and YCC continues to support the importance of accessibility through this section of trail.	Ongoing	PV (YCC)	\$0	0%	0%
Subtotal for existing open space				\$3,194,624		
TOTAL FOR CREMORNE - RICHMOND SOUTH - BURNLEY				\$135,230,839		

Attachment 2 Attachment 2 - Review of Open Space Project Cost Apportionment for Amendment C286yarra Robert Panozzo

Fairfield - Alphington						
Strategy Action No.	ACTION	Priority	Responsibility	Total Cost	Proportion of cost for existing population	Proportion of cost for new population
ADDITIONAL OPEN SPACE						
7.5A-1	The Alphington Paper Mills Development Plan 2016 has identified the provision of 1 new Small Local open space in the north of the precinct.	High	Developer			
	Land acquisition			\$0	0%	0%
	Capital works for construction of new open space			\$0	0%	0%
7.5A-2	The Alphington Paper Mills Development Plan 2016 has identified the provision of 3 new Local open spaces on the site including the linking space to the 30 metre wide reserve along the Yarra River corridor.	High	Developer			
	Land acquisition			\$0	0%	0%
	Capital works for construction of new open space			\$0	0%	0%
7.5A-3	Continue to advocate to Parks Victoria to provide a shared trail link to the Darebin Creek Shared Trail from Alphington. Note that no costs have been included for this project as it is the responsibility of the Victorian government to provide access onto the trail.	High	PV (YCC)			
	Land acquisition			\$0	0%	0%
	Capital works for construction of new open space			\$0	0%	0%
7.5A-4	Continue to investigate options to secure public access along the Yarra River between Coate Park and Rudder Grange.	High	YCC (MWC) Adjoining Land Holder			
	Land acquisition			\$0	0%	0%
	Capital works for construction of new open space			\$0	0%	0%
	Subtotal for additional open space			\$0		
EXISTING OPEN SPACE						
7.5B-1	Alphington Park Undertake a major upgrade of the playground and picnic facilities in Alphington Park to primarily cater to the forecast population.	High	YCC	\$2,502,455	30%	70%
7.5B-2	Alphington Park Wetland Continue to maintain and recognise the biodiversity values of the wetland. This includes advocating for ongoing protection for part of the wetland located on adjoining private land.	Ongoing	YCC (Adjoining land holder)	\$0	0%	0%
7.5B-3	Coate Park Undertake minor upgrade with additional seating, improve the condition of the open grassed areas and continue to improve the biodiversity values of the reserve consistent with the existing masterplan.	High	YCC	\$834,152	30%	70%
7.5B-4	Fairfield Park Continue to implement the masterplan including a major upgrade to the playground and picnic facilities at the park. Future upgrades are for both the existing and forecast population.	High	YCC	\$2,502,455	70%	30%
7.5B-5	Rudder Grange Undertake a minor upgrade including a bridge or formalised safe path link between Coate Park and Rudder Grange, along with additional seats and continue to improve the biodiversity values.	Medium	YCC	\$427,047	30%	70%
7.5B-6	Yarra Bend Park (all precincts) Continue to participate in the future planning and design for Yarra Bend Park to advocate for provision of additional structured sporting facilities where feasible and required in the context of limited additional space being available to cater to the sporting needs of the forecast population in the City of Yarra.	High and Ongoing	PV (YCC)	\$0	0%	0%
	Subtotal for existing open space			\$6,266,108		
	TOTAL FOR FAIRFIELD - ALPHINGTON			\$6,266,108		

Attachment 2 Attachment 2 - Review of Open Space Project Cost Apportionment for Amendment C286yarra Robert Panozzo

Fitzroy						
Strategy Action No.	ACTION	Priority	Responsibility	Total Cost	Proportion of cost for existing population	Proportion of cost for new population
ADDITIONAL OPEN SPACE						
7.8A-1	Provide a new Small Local open space in the southern part of open space sub-precinct Fitzroy A. This open space will primarily provide for the forecast future population that will be living and working this southern part of the precinct. The open space will have a role in mitigating urban heat island effect and provide facilities that meet the needs of the forecast future residents and workers and complement those provided in Garryowen Park.	Medium	YCC Developer			
	Land acquisition			\$6,055,728	20%	80%
	Capital works for construction of new open space			\$575,450	20%	80%
7.8A-2	Provide a new Local open space between Hanover and Gertrude Streets in open space sub-precinct Fitzroy B. This open space will be for both the existing and forecast population and the design will complement King William Reserve and assist to mitigate urban heat island effect as the urban density increases in this area.	High	YCC Developer			
	Land acquisition			\$31,306,903	50%	50%
	Capital works for construction of new open space			\$1,739,556	50%	50%
7.8A-3	Investigate options to increase the size of King William Reserve to increase the capacity of this existing open space to cater to the forecast population.	Medium	YCC Developer			
	Land acquisition			\$3,130,690	20%	80%
	Capital works for construction of new open space			\$312,146	20%	80%
7.8A-4	Provide a new Small Local open space in the southern part of open space sub-precinct Fitzroy C primarily for the forecast resident and worker population and also for the existing population.	High	YCC Developer			
	Land acquisition			\$6,059,712	30%	70%
	Capital works for construction of new open space			\$575,450	30%	70%
7.8A-5	Provide a new Small Local open space south of Gertrude Street in sub-precinct Fitzroy D. This is for both the existing and forecast population and to mitigate urban heat island effect.	Medium	YCC Developer			
	Land acquisition			\$7,133,826	40%	60%
	Capital works for construction of new open space			\$575,450	40%	60%
7.8A-6	Investigate options to expand the size of Greeves Street Reserve in sub-precinct Fitzroy D. This is primarily for the forecast population and to improve its role in mitigating urban heat island effect.	Medium	YCC Developer			
	Land acquisition			\$7,133,826	10%	90%
	Capital works for construction of new open space			\$575,450	10%	90%
	Subtotal for additional open space			\$65,174,186		
EXISTING OPEN SPACE						
7.8B-1	Atherton Reserve Undertake a minor upgrade to install fitness equipment/outdated table tennis or other facilities adjacent to the path to increase the diversity of recreation facilities that encourage fitness and use of this open space. This will be for the both the existing and forecast population given the scale of forecast growth.	Ongoing	YCC	\$834,152	50%	50%
7.8B-2	Condell Street Reserve Undertake a major upgrade to significantly expand the unstructured recreation and social facilities including the playground, picnic and barbecue facilities, paths and open grassed area. This will be for the both the existing and forecast population given the scale of forecast growth and complement the facilities at Atherton Reserve.	High	YCC	\$1,020,589	50%	50%
7.8B-3	Frank King Park Investigate options to increase the size of the park by expanding it into the existing road reserve, primarily to cater to the forecast community.	High	YCC	\$575,450	20%	80%
7.8B-4	Garryowen Park Continue to maintain.	Medium	YCC	\$0	0%	0%
7.8B-5	George Street Reserve Undertake a minor upgrade to increase planting and seating to improve the function and use of this reserve.	Medium	YCC DHHS	\$115,090	90%	10%
7.8B-6	Greeves Street Reserve Investigate options to expand the size of this open space to increase its function and use in the context of forecast population growth. Refer to Action 7.8A-6.	Ongoing	YCC	Refer to Action 7.8A-6	10%	90%
7.8B-7	King William Reserve Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.8B-8	Smith Reserve Prepare and implement a masterplan for this reserve to improve the interface to Alexandra Parade, upgrade the play and picnic facility to cater to the increased levels of use anticipated in the future along with potential expansion of the overall size. This will be for the both the existing and forecast population.	Medium	YCC	\$1,067,618	50%	50%
7.8B-9	Whitlam Place Continue to maintain.	Ongoing	YCC	\$0	0%	0%
	Subtotal for existing open space			\$3,612,898		
	TOTAL FOR FITZROY			\$68,787,084		

Attachment 2 Attachment 2 - Review of Open Space Project Cost Apportionment for Amendment C286yarra Robert Panozzo

Fitzroy North						
Strategy Action No.	ACTION	Priority	Responsibility	Total Cost	Proportion of cost for existing population	Proportion of cost for new population
ADDITIONAL OPEN SPACE						
7.9A-1	Provide a new Small Local open space in sub-precinct North Fitzroy B to provide a new open space to address the gap in open space provision in the southern part of the sub-precinct for both the existing and forecast population.	Medium	YCC			
	Land acquisition			\$5,669,992	40%	60%
	Capital works for construction of new open space			\$575,450	40%	60%
7.9A-2	Investigate options to expand the size of Edwards Place by converting some of the existing road reserves to open space if feasible. Refer also to Action 7.9B-6.	Medium	YCC			
	Land acquisition			\$0	0%	0%
	Capital works for construction of new open space			\$0	0%	0%
	Subtotal for additional open space			\$6,245,442		
EXISTING OPEN SPACE						
7.9B-1	Batman Street Reserve Undertake a major upgrade to this reserve including investigating options to irrigate the open grassed area and include unstructured recreation facilities appropriate to the needs of the existing and forecast community.	High	YCC	\$312,146	50%	50%
7.9B-2	Batson Reserve Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.9B-3	Brookes Crescent Reserve Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.9B-4	Bundara Street Reserve Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.9B-5	Edinburgh Gardens Continue to implement the recommendations of the CMP for the northern precinct. Undertake and implement an updated masterplan, particularly in the context of anticipated increased levels of use from the substantial forecast population in the City of Yarra.	High	YCC	\$2,502,455	20%	80%
7.9B-6	Edwards Place Identify opportunities to increase the size of this open space converting existing road reserves to increase the function and use of this open space for the community when Edinburgh Gardens is being used for major events. This includes a major upgrade to expand the facilities.	Medium	YCC	\$1,224,707	20%	80%
7.9B-7	Holden Byrne Reserve Undertake a major upgrade to expand the size and improve the quality of the playground and picnic facilities to increase the capacity of the reserve in the context of forecast growth.	Medium	YCC	\$1,020,589	20%	80%
7.9B-8	Janet Millman Reserve (Inner Circle Railway Linear Parklands) Undertake a minor upgrade to improve seating and picnic facilities.	Medium	YCC	\$115,090	80%	20%
7.9B-9	Langdon Reserve Undertake a major upgrade including review of the scale and location of the playground and inclusion of picnic facility, additional seating and larger open grassed area.	Low	YCC	\$1,020,589	80%	20%
7.9B-10	Liverpool Street Park Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.9B-11	Mark Street Linear Park Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.9B-12	Merri Creek Shared Trail –Upstream of St Georges Road Investigate options to improve condition and definition of the shared trail and the secondary walking trails in this location.	Ongoing	YCC	\$0	0%	0%
7.9B-13	Ottery Reserve Minor upgrade to improve access and upgrade seating to take advantage of the views down over the Merri Creek corridor.	High	YCC	\$25,000	90%	10%
7.9B-14	Piedmontes Corner Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.9B-15	Porter Street Reserve Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.9B-16	Raines Reserve Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.9B-17	Rushall Reserve Minor upgrade including for additional seating, drinking fountain and planting to make it more accessible for the local community.	Ongoing	YCC	\$834,152	50%	50%
7.9B-18	Thomas Kidney Reserve Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.9B-19	Triangle Park Continue to maintain this open space including protecting the existing mature trees in this space which is encumbered by traffic movement and noise.	Ongoing	YCC	\$0	0%	0%
	Subtotal for existing open space			\$7,054,727		
	TOTAL FOR FITZROY NORTH			\$13,300,170		

Attachment 2 Attachment 2 - Review of Open Space Project Cost Apportionment for Amendment C286yarra Robert Panozzo

North Richmond						
Strategy Action No.	ACTION	Priority	Responsibility	Total Cost	Proportion of cost for existing population	Proportion of cost for new population
ADDITIONAL OPEN SPACE						
7.10A-1	Provide a new Neighbourhood open space in Sub-precinct North Richmond A. There is potential to provide this on the DHHS land, central to the sub-precinct and accessible to the existing and forecast new population.	Very High	YCC DHHS Developer			
	Land acquisition			\$0	0%	0%
	Capital works for construction of new open space			\$4,170,758	50%	50%
7.10A-2	Provide a new Small Local open space in the sub-precinct North Richmond A, in the Bosisto/Cameron Street area north of Bridge Road as shown in Figure 7.10.F. This is to cater primarily to the forecast new population in the high change area in the south east portion of the sub-precinct.	Very High	YCC Developer			
	Land acquisition			\$4,738,741	20%	80%
	Capital works for construction of new open space			\$575,450	20%	80%
7.10A-3	Provide a Small Neighbourhood open space in sub-precinct North Richmond C primarily for the forecast population. This is to be located in the south east area of the sub-precinct in the vicinity of Murphy Street and improve the north south pedestrian connectivity between Bridge Road Murphy Street if feasible.	Very High	YCC Developer			
	Land acquisition			\$43,849,703	10%	90%
	Capital works for construction of new open space			\$2,135,235	10%	90%
7.10A-4	Provide a new Small Local open space in sub-precinct North Richmond C primarily for the future population. This is to be located in the northern part of the sub-precinct in the vicinity of Doonside Street/Victoria Gardens.	Very High	YCC Developer			
	Land acquisition			\$3,800,308	20%	80%
	Capital works for construction of new open space			\$575,450	20%	80%
	Subtotal for additional open space			\$59,845,645		
EXISTING OPEN SPACE						
7.10B-1	Annettes Place Continue to maintain in the short term. In the longer term, undertake a major upgrade to substantially improve the useability and character of this open space to better cater to a diversity of users given the forecast increase in the resident population in the immediate catchment of this reserve.	Low	YCC	\$2,085,379	20%	80%
7.10B-2	Butler Street Park Minor upgrade to improve planting.	Ongoing	YCC	\$15,000	20%	80%
7.10B-3	Citizens Park Undertake major upgrades including to the playground and other unstructured recreation facilities, incorporate stormwater harvesting project to improve the sustainable water re-use and management of this reserve to cater to the increased levels of use that this park will receive in the future and assist to mitigate urban heat island effect.	Medium	YCC	\$2,085,379	20%	80%
7.10B-4	Egan Place Park Investigate opportunities to expand the size of this open space primarily to cater to the forecast future population. Review and revise the open space design, maximising opportunities to integrate sustainable water re-use to increase the greening and the urban cooling role of this open space.	Medium	YCC	\$312,146	50%	50%
7.10B-5	O'Connell Reserve Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.10B-6	Urban Art Square Continue to maintain.	Ongoing	YCC	\$0	0%	0%
7.10B-7	Williams Reserve Continue to maintain. In the medium term review the options to increase sustainable water re-use in the reserve.	Low	YCC	\$347,911	50%	50%
7.10B-8	Yarra River Trail – River St to Bridge Rd Continue to undertake improvements where required to the natural biodiversity values, bank stabilisation and linear path connection.	Ongoing	YCC	\$0	0%	0%
	Subtotal for existing open space			\$4,845,815		
	TOTAL FOR NORTH RICHMOND			\$64,691,460		

Attachment 2. Proportion of Existing and New Residential and Worker Populations by 2031

Peer Review of Amendment C286yarra Open Space Project Cost Apportionment

Table 10 - Existing and New Residential and Worker Population Proportions by 2031

Precinct	Existing and New Worker Population Proportions by 2031				Existing and New Residential Population Proportions by 2031				Existing and New Residential and Worker Population Proportions by 2031			
	Estimated Worker Population 2016	Estimated Worker Population by 2031	Proportion Existing Workers by 2031	Proportion New Workers by 2031	Estimated Residential Population 2016	Estimated Residential Population by 2031	Proportion Existing Residential Population by 2031	Proportion New Residential Population by 2031	Estimated Residential and Worker Population 2016	Estimated Residential and Worker Population by 2031	Proportion Existing Residential and Worker Population by 2031	Proportion New Residential and Worker Population by 2031
Abbotsford	12,057	15,972	75%	25%	8,849	12,671	70%	30%	20,906	28,643	73%	27%
Carlton North - Princes Hill	0	0	0%	0%	9,010	8,843	100%	0%	9,010	8,843	100%	0%
Central Richmond	10,140	13,176	77%	23%	13,888	17,269	80%	20%	24,028	30,445	79%	21%
Clifton Hill	921	1,266	73%	27%	6,792	7,432	91%	9%	7,713	8,698	89%	11%
Collingwood	14,810	25,168	59%	41%	9,141	14,347	64%	36%	23,951	39,515	61%	39%
Cremorne - Burnley - Richmond South	16,704	25,865	65%	35%	4,622	9,539	48%	52%	21,326	35,404	60%	40%
Fairfield - Alphington	0	0	0%	0%	2,894	9,099	32%	68%	2,894	9,099	32%	68%
Fitzroy	17,014	25,216	67%	33%	11,465	15,798	73%	27%	28,479	41,014	69%	31%
Fitzroy North	0	0	0%	0%	12,357	15,112	82%	18%	12,357	15,112	82%	18%
North Richmond	13,179	17,444	76%	24%	14,335	21,754	66%	34%	27,514	39,198	70%	30%

Peer Review of Amendment C286yarra Open Space Project Cost Apportionment

Attachment 3. City of Yarra Net Developable Area Estimates

Excludes all land zoned Public Use Zone, Public Recreation and Resource Zone, Public Park and Recreation Zone, Urban Floodway Zone and Transport Zone 1 and 2.

Peer Review of Amendment C286yarra Open Space Project Cost Apportionment

Table 11 - City of Yarra Net Developable Area Estimates x Precinct

Zone	Abbotsford (m2)	Carlton North - Princess Hill (m2)	Central Richmond (m2)	Clifton Hill (m2)	Collingwood (m2)	Cremorne, Richmond South and Burnley (m2)	Fairfield – Alphington (m2)	Fitzroy (m2)	Fitzroy North (m2)	North Richmond (m2)	City of Yarra Total (m2)
COMMERCIAL 1 ZONE	192,846	46,773	164,369	28,980	243,679	162,393	43,609	346,782	72,617	186,507	1,488,554
COMMERCIAL 2 ZONE	172,992	0	25,153	51,421	296,123	441,084	19,826	19,496	14,322	63,227	1,103,645
COMPREHENSIVE DEVELOPMENT ZONE - SCHEDULE 1		0								127,184	127,184
COMPREHENSIVE DEVELOPMENT ZONE - SCHEDULE 2		0				8,452					8,452
COMPREHENSIVE DEVELOPMENT ZONE - SCHEDULE 3		0				12,790					12,790
GENERAL RESIDENTIAL ZONE - SCHEDULE 1	4,365	128	2,289	344	7,184	2,717		6,629	7,185	4,173	35,013
GENERAL RESIDENTIAL ZONE - SCHEDULE 2	133,344	36,110	614,495	30,485	52,229	122,340		37,861	87,985	540,815	1,655,664
GENERAL RESIDENTIAL ZONE - SCHEDULE 3		12,855	11,831	15,193	107,882	6,289		85,517	82,501	223,862	545,930
GENERAL RESIDENTIAL ZONE - SCHEDULE 4		0	48,788	6,930		6,166		6,850		21,114	89,848
INDUSTRIAL 1 ZONE	269,095	0								102,085	371,181
INDUSTRIAL 3 ZONE	62,915	0				103,276				15,216	181,407
MIXED USE ZONE	33,864	1,630	90,024	56,529	192,320	5,988	188,740	199,811	121,508	146,197	1,036,612
NEIGHBOURHOOD RESIDENTIAL ZONE - SCHEDULE 1	376,378	1,180,449	654,067	806,085	239,196	260,046		549,597	1,356,957	248,902	5,671,678
NEIGHBOURHOOD RESIDENTIAL ZONE - SCHEDULE 2		0					635,924				635,924
NEIGHBOURHOOD RESIDENTIAL ZONE - SCHEDULE 3		0					3,850				3,850

Attachment 2 Attachment 2 - Review of Open Space Project Cost Apportionment for Amendment C286yarra Robert Panozzo

Peer Review of Amendment C286yarra Open Space Project Cost Apportionment

Zone	Abbotsford (m2)	Carlton North - Princess Hill (m2)	Central Richmond (m2)	Clifton Hill (m2)	Collingwood (m2)	Cremorne, Richmond South and Burnley (m2)	Fairfield – Alphington (m2)	Fitzroy (m2)	Fitzroy North (m2)	North Richmond (m2)	City of Yarra Total (m2)
PRIORITY DEVELOPMENT ZONE - SCHEDULE 1	31,419	0									31,419
SPECIAL USE ZONE - SCHEDULE 1		0					500,673				500,673
SPECIAL USE ZONE - SCHEDULE 2	11,670	0									11,670
SPECIAL USE ZONE - SCHEDULE 3		0					29,899				29,899
SPECIAL USE ZONE - SCHEDULE 4	72,509	0									72,509
SPECIAL USE ZONE - SCHEDULE 5		0								21,696	21,696
SPECIAL USE ZONE - SCHEDULE 6		0			8,912						8,912
Total Net Developable Area (m2)	1,361,397	1,277,945	1,611,016	995,967	1,147,524	1,131,541	1,422,521	1,252,543	1,743,075	1,700,979	13,644,508
Total Net Developable Area (hectares)	136.1	127.8	161.1	99.6	114.8	113.2	142.3	125.3	174.3	170.1	1,364
Total Site Area (hectares)	178.7	140.6	196.0	166.6	129.2	233.1	347.2	140.3	231.5	192.1	1,955.2

7.3 Proposed Discontinuance of portion of Road abutting 111 Best Street, Fitzroy North.

Reference	D23/269359
Author	Bill Graham - Coordinator Valuations
Authoriser	General Manager Corporate Services and Transformation
Disclosure	The authoriser, having made enquiries with members of staff involved in the preparation of this report, asserts that they are not aware of any general or material conflicts of interest in relation to the matters presented.

Purpose

1. This report seeks Council's authority to:
 - (a) remove the road abutting 111 Best Street, Fitzroy North, being the land shown highlighted red (part of Road 2122) on the site plan attached as Attachment 1 to this report (**Road**) from Council's Register of Public Roads pursuant to section 17(4) of the Road Management Act 2004 (**RMA**); and
 - (b) commence the statutory procedures pursuant to the Local Government Act 1989 (**Act**) to consider discontinuing the Road.

Critical analysis

History and background

2. The Road is part of the land contained in certificate of title volume 653 folio 457 and is shown as the 18.3 square metre parcel marked '1' on the title plan attached as Attachment 2 to this report.
3. The Applicants are the registered proprietors of the adjoining property being the whole of the land contained in certificate of title volume 2347 folio 265, known as 111 Best Street, Fitzroy North shown delineated blue on the site plan attached as Attachment 1 (**Site Plan**) to this report (**Adjoining Property**).
4. The Applicants have requested that Council discontinue and sell the Road to them (**Proposal**).
5. The Applicants have agreed to pay Council's costs and disbursements associated with the proposed discontinuance of the Road, together with the market value of the for the transfer of the discontinued Road to the Applicants.

Discussion

Road

6. The Road is:
 - (a) part of the land remaining in certificate of title volume 653 folio 457;
 - (b) is shown as a 'road' on title; and
 - (c) is listed on Council's register of Public Roads as part of Road 2122.
7. As the Road is a 'Road' for the purposes of the Act, Council has the power to consider discontinuing the Road, if discontinued the Road will vest in Council.
8. A copy of the manual search of the Road is attached as Attachment 3.

Adjoining Owners

9. As the Adjoining Property is the only property which directly abuts the Road, the Applicants will not be required by Council to seek the consent of any adjoining landowners to the proposal.

Site Inspection

10. A site inspection of the Road was conducted by Land Dimensions on 5 March 2023. The site inspection report notes:
- (a) the Road is not constructed as a road or available for use by the public;
 - (b) there is no evidence of the Road being used;
 - (c) the Road has a fence constructed on it over the northern boundary and is encroached over by part of the dwelling located on the Adjoining Property.
 - (d) is entirely fenced within the physical boundaries of the Adjoining Property; and
 - (e) is not required for public access on the basis that it is not currently being used by the general public and entirely occupied by the Applicant as part of their residence.
11. A copy of the site inspection report is attached as Attachment 4 to this report.

Removal of Road from Council's Register of Public Roads

12. It is considered that the Road is no longer reasonably required for general public use pursuant to section 17(4) of the RMA as:
- (a) the Road is enclosed within the physical boundaries of the Adjoining Property; and
 - (b) the balance of the Road is a dead end and does not connect as a throughfare to any other public roads.

Statutory/Public Authorities

13. The following public/statutory authorities have been advised of the Proposal and have been asked to respond to the question of whether they have any existing assets in the Road which should be saved under section 207C of the Act; Greater Western Water, Melbourne Water, CitiPower, United Energy, Multinet Gas, Telstra, Optus, APA Gas, Ausnet Services and Yarra City Council.
14. Council, Melbourne Water, CitiPower, United Energy, Multinet Gas, APA Gas and Greater Western Water have advised that they have no assets in or above the Road and no objection to the proposal.
15. Optus has advised that it has no assets in or above the Road.
16. Telstra advised that it has no assets located within or above the Road and no objection to the proposal, provided that the Applicant:
- (a) calls 'dial before you dig' prior to any construction activities in the vicinity of Telstra's communication plant; and
 - (b) upon receipt of plans, obtains a Telstra accredited Asset Plant Locator to confirm the location of the plant.

Public Notice

17. Before proceeding with the discontinuance, Council must give public notice of the Proposal in accordance with section 223 of the Act. The Act provides that a person may, within 28 days of the date of public notice, lodge a written submission regarding the Proposal.
18. Where a person has made a written submission to Council requesting that he or she be heard in support of the written submission, Council must permit that person to be heard before a meeting of Council or the Committee of Council which has delegated authority to hear those submissions, giving reasonable notice of the day, time, and place of the meeting.

19. After hearing submissions made, Council must determine whether, the Road is not reasonably required as a Road for public use, in order to decide whether the Road should be discontinued.

Options

20. Council has the option to discontinue the Road or not to discontinue the Road.

Community and stakeholder engagement

21. The Public Notice of the proposal will be published pursuant to the requirements of section 223 of the Act.

Policy analysis

Alignment to Community Vision and Council Plan

22. This report aligns to strategy objective 6 in the 2021-25 Council Plan – manage our financial responsibility and improve long-term financial management planning.
23. Council's 'Management Policy in relation to laneways, passageways and rights of way in Yarra' adopted by Council in December 2019, states, laneways and passageways that are not reasonably required for public use are likely to include:
- (a) laneways and passageways that only provide access to adjacent properties and have no through connection (unless stormwater drainage function or identified legitimate community needs); and
 - (b) disused laneways and passageways.

Climate emergency and sustainability implications

24. There are no climate emergency and sustainability implications.

Community and social implications

25. There are no community or social implications.

Economic development implications

26. There are no Economic development implications.

Human rights and gender equality implications

27. There are no human rights and gender equality implications.

Operational analysis

Financial and resource impacts

28. The Applicant has agreed to acquire the road for its market value (plus GST) as determined by the Act.
29. In addition to the market value (plus GST), the Applicant has agreed to pay Council's costs and disbursements associated with the proposal.
30. There are no resource impacts.

Legal Implications

31. If the Road is discontinued and sold to the Applicant, Council will require the Applicant to consolidate the title to the former Road with the title to the adjoining Property, within 6 months of the date of transfer of the Road to the Applicants.

Conclusion

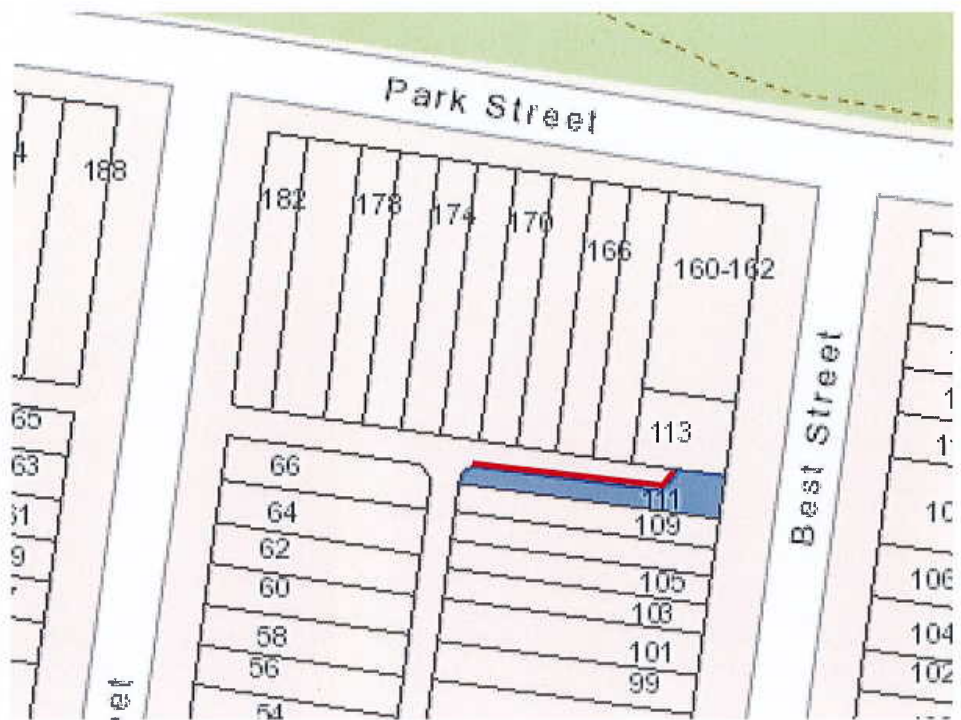
32. It is proposed that Council should commence the statutory procedures pursuant to clause 3 of Schedule 10 of the Act to discontinue the Road and transfer the discontinued Road to the Applicants.

RECOMMENDATION

1. That Council:
 - (a) acting under section 17(4) of the Road Management Act 2004, resolves that the road abutting 111 Best Street, Fitzroy North, being part of the land in certificate of title volume 8258 folio 156 (and shown as the 18.3 square metre parcel on the plan attached as **Attachment Two**), be removed from Council's Register of Public Roads on the basis that the Road is no longer required for general public use for the reasons set out in the body of this report.
 - (b) acting under clause 3 of schedule 10 of the Local Government Act 1989 (Act):
 - (i) resolves that the required statutory procedures be commenced to discontinue the Road;
 - (ii) directs that, under sections 207A and 223 of the Act, public notice of the proposed discontinuance be given in "The Age" newspaper;
 - (iii) resolves that the public notice required to be given under sections 207A and 223 of the Act should state that if the Road is discontinued, Council proposes to sell the Road to the adjoining owner for market value (plus GST); and
 - (iv) authorises the Valuations Coordinator to undertake the administrative procedures necessary to enable Council to carry out its functions under section 223 of the Act in respect of this matter.

Attachments

- 1 [↓](#) Attachment 1 - Site Plan
- 2 [↓](#) Attachment 2 - Title Plan
- 3 [↓](#) Attachment 3 - Original Title
- 4 [↓](#) Attachment 4 - Site Inspection Report



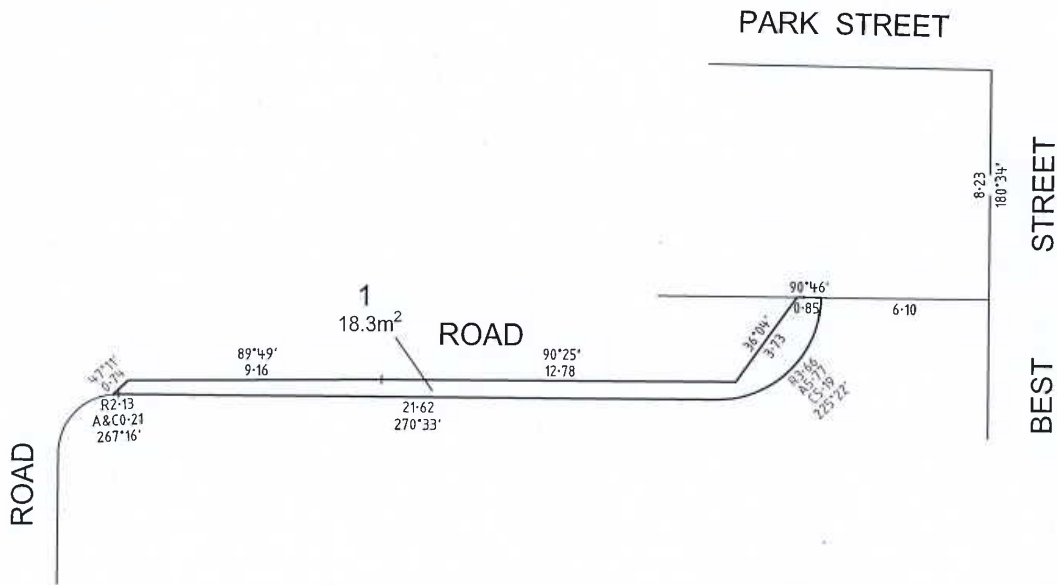
[9112242:37217635_1]

TITLE PLAN

LOCATION OF LAND

PARISH: WARRANDYTE
 TOWNSHIP: NORTH FITZROY
 SECTION: 39
 CROWN ALLOTMENT: 14 (PART)
 CROWN PORTION: -
 LAST PLAN REFERENCE: LAND REMAINING UNTRANSFERRED
 IN C/T VOL. 456 FOL. 045
 DERIVED FROM: VOL 653 FOL 457
 DEPTH LIMITATION: NIL

NOTATIONS:



PRELIMINARY
 FOR DISCUSSION PURPOSES ONLY

ORIGINAL SHEET SIZE: A1		CERTIFICATION BY LICENSED SURVEYOR	SHEET 1 OF 1 SHEETS
SCALE 1:150	 LENGTHS ARE IN METRES		
A3	SURVEYORS FILE REFERENCE NUMBER: 22186TP		
LAND DIMENSIONS A.C.N. 129 548 054 Level 1 Suite 2 327 Police Road, Mulgrave Tel: (03) 9790 0399 www.landdimensions.net.au		LICENSED SURVEYOR: JAY BARFOOT VERSION A	

Copyright State of Victoria. No part of this publication may be reproduced except as permitted by the Copyright Act 1968 (Cth), to comply with a statutory requirement or pursuant to a written agreement. The information is only valid at the time and in the form obtained from the LANDATA REGD TM System. None of the State of Victoria, its agents or contractors, accepts responsibility for any subsequent publication or reproduction of the information.

The Victorian Government acknowledges the Traditional Owners of Victoria and pays respects to their ongoing connection to their Country, History and Culture. The Victorian Government extends this respect to their Elders, past, present and emerging.

REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 00653 FOLIO 457

Security no : 124102072113E
Produced 22/11/2022 04:30 PM

LAND DESCRIPTION

Lot 1 on Title Plan 894758J.
Being the land remaining untransferred in this folio.
PARENT TITLE Volume 00456 Folio 045
Created by instrument 0035750 22/12/1873

REGISTERED PROPRIETOR

Estate Fee Simple
Sole Proprietor
MARK MOSS of 100 BOURKE STREET MELBOURNE
0035750 22/12/1873

ENCUMBRANCES, CAVEATS AND NOTICES

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE DIAGRAM ON IMAGED FOLIO VOLUME 653 FOLIO 457 FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

DOCUMENT END

Delivered from the LANDATA® System by InfoTrack Pty Ltd.

The information supplied by Feigl & Newell Pty. Ltd. has been obtained from InfoTrack Pty Limited by agreement between them. The information supplied has been obtained by InfoTrack Pty Limited who is licensed by the State of Victoria to provide this information via LANDATA® System.

Ref: MAN:CORL:9112242

Maddocks
Lawyers
Collins Square, Tower Two
Level 25, 727 Collins Street
MELBOURNE 3000

**Yarra City Council
Proposed discontinuance and sale of road abutting 111 Best Street, Fitzroy North**

DATE OF INSPECTION: 5/3/2023

PHOTOGRAPHS OF THE ROAD: Attached at Annexure A

IS THE ROAD OPEN AND AVAILABLE FOR USE BY THE PUBLIC? Yes No

WHAT OBSTRUCTIONS ARE OVER OR IN THE ROAD?

Fencing Yes No Vegetation* Yes No
Rubbish Yes No Services*# Yes No
Other* Yes No (# Including fire hydrants/plugs.)

* Provide Details: EXISTING RESIDENCE

THE MATERIAL WITH WHICH THE ROAD IS CONSTRUCTED:

Nil Bitumen
 Bluestone Other _____

EVIDENCE OF THE ROAD BEING USED:

Nil Gates opening onto the road
 Tyre marks Garages opening onto the road
 Worn grass Other _____

TYPE OF TRAFFIC:

Pedestrian Vehicular Animal Nil

WHAT IS THE ROAD PROVIDING ACCESS TO?

Adjoining properties @ Reserve/Park
 Main Road Shops NIL

[9112242:36117536_1]

AERIAL IMAGE (October 12 2009)

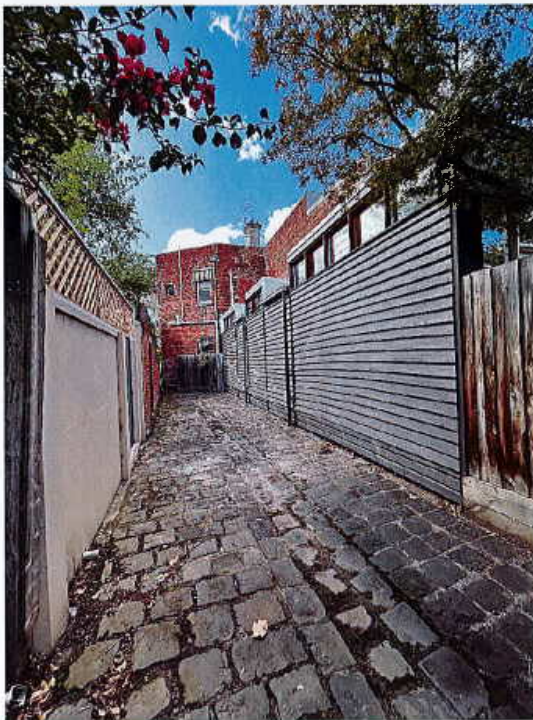


AERIAL IMAGE (April 24 2023)



PHOTOS OF ABUTTING BLUESTONE LANEWAY







PHOTOS IN BACKYARD OF 111 BEST STREET



7.4 C1644 - Burnley Golf Course Redesign and Risk Mitigation Work

Reference	D23/277011
Author	Frankie Hocking - Recreation Facilities and Contracts Officer
Authoriser	General Manager Infrastructure and Environment
Disclosure	The authoriser, having made enquiries with members of staff involved in the preparation of this report, asserts that they are not aware of any general or material conflicts of interest in relation to the matters presented.

Purpose

1. To award the contract C1644 for the Burnley Golf Course (BGC) Redesign and Risk Mitigation Works.

Background

2. It had been acknowledged that since March 2020 adjustments to BGC would be required to reduce the risks associated with golf balls breaching existing boundary fences, particularly along Madden Grove and CityLink.
3. Initial consultation for the course re-design works began in 2020, with the understanding a risk mitigation plan would be needed. The timeframe from initial discussions and consultations have been necessary to ensure the most beneficial and economical solutions for Council and the community could be found.
4. Golf Course Architect, Crafter and Mogford, was engaged to complete a re-design brief to mitigate the identified risks and present to Council. The project will redesign holes 1, 3, 6 and 7, which will mitigate the risk of golf balls breaching boundary fences, along with improvements to drainage to holes 2, 4 and 5.

Tender Process

Pre-Tender Panel Review Meeting

5. A pre-tender review panel meeting was held to discuss process milestones, review of the tender documentation and assignment of evaluation criteria and weightings.
6. An invitation to tender for the services was advertised on Saturday 17 June 2023 in The Age newspaper inviting suitably qualified contractors to submit a response to the Tender.

Tender Evaluation Panel ("Panel")

7. The panel consisted of the following personnel:
 - (a) Senior Procurement Officer;
 - (b) Manager Property and Leisure Services;
 - (c) Coordinator Burnley Golf Course;
 - (d) Recreation Development and Planning Officer; and
 - (e) Recreation Facilities and Contracts Officer.

Tenders Received

8. Tenders closed on Friday 7 July 2023 and one tender submission was received.

Tender Evaluation Criteria and Quantitative Assessment

9. The tender evaluation criteria and quantitative assessment are outlined in **Confidential Attachment One**. The panel considered the tenderer's submission for conformance to the tender document and deemed the tender to be conforming.

10. The panel conducted an assessment of the responses to qualitative criteria, and this is outlined in **Confidential Attachment One**.

Financial Assessment

11. Financial credit checks were sought from Corporate Scorecard Pty Ltd for the tenderer and the financial check for the contractor is considered in **Confidential Attachment One**.

Probity

12. In accordance with Council's Procurement Policy, there was no requirement for the engagement of a Probity Auditor as the total expenditure for this project is below \$10 million.

Occupational Health and Safety requirements

13. The recommended contractor has an occupational health and safety management system that complies with the requirements of the Occupational Health and Safety Act 2004, and this has been implemented throughout the organisation.
14. The tender document contained occupational health and safety conditions, which require the following prior to commencement:
- (a) A Risk Assessment (includes requirement for a Job Safety Analysis (JSA));
 - (b) A Health and Safety Plan (includes induction and safety training, safe work practices and procedures, occupational health and safety consultation, emergency procedures, incident reporting and investigation and occupational health and safety performance monitoring; and
 - (c) Compliance with all Victorian occupational health and safety legislation (includes acts, regulations and codes of practice).
15. The panel has verified that it is satisfied with the contractor's previous history in respect of occupational health and safety claims or incidents. The contract will be managed by a Council Officer who will ensure compliance with the Health and Safety Plan monitoring of monthly performance, and JSA reports.

Financial Implications

16. The endorsed 2023/2024 annual budget for the contract component of the BGC Redesign and Risk Mitigation works is \$2,431,700.00 (exclusive of GST).
17. The car park line marking and parking meter installation works will be carried out concurrently and will be completed in time for the course reopening.

Economic Implications

18. There are no economic implications.

Stakeholder Consultation

19. Due to golf balls breaching existing boundary fences, a course re-design has been imperative to mitigate the risk arising from BGC.
20. Initial community consultations began in 2020. After multiple designs ideas, Council endorsed the Crafter and Mogford designs in February 2023.
21. Two community engagement sessions were held at BGC on 27 April and 29 April 2023 following the endorsement of the designs. The sessions provided golf club members and the general public the opportunity to ask questions and understand the value of the risk mitigation re-design.

Sustainability Implications

22. Tenderers were asked to provide accredited certificate of Environmental Management Systems and this was satisfactorily supplied.

Social Procurement Implications

23. The recommended tenderer indicated it is willing to engage Aboriginal and Torres Strait Islander subcontractors as part of the tender.

Human Rights and Disability – Access and Inclusion Implications

24. There are no human rights and disability implications associated with this tender.

Council Plan, Strategy and Policy Implications

25. The Council Plan 2021-25 includes the following strategic objectives apply to this project:
- (a) climate and environment;
 - (b) social equity and health; and
 - (c) place and nature.

Legal Implications

26. The contract will be governed by terms and conditions based on the General Services Conditions of Contract. The recommended tenderer has identified no departures from these conditions. There are no further legal implications.

Communities with CALD Communities Implications

27. All public communications will meet CALD policy principles.

Ethical Practices

28. The successful tenderer has identified that it complies with Council's ethical standards.

Options

29. The works are essential and cannot be completed by Council staff so contractors are required to undertake the scope of works. Council may choose not to award a tender, or re-tender, but safety risks at the site will remain with both these options.

Conclusion

30. The panel considers that the recommended tenderer represents the best option to complete these works. The panel therefore recommends awarding a contract to the preferred contractor.

RECOMMENDATION

1. That Council:
 - (a) Awards Contract C1644 to _____ for the Burnley Golf Course Redesign and Risk Mitigation Works at a lump sum cost of _____ (GST exclusive).
 - (b) Authorises the officer either acting in the position of, or General Manager Infrastructure and Environment, to sign on behalf of Council all necessary documentation including any contract variations relating to Contract C1644; and
 - (c) Authorises Council officers to communicate this information to the extent necessary to give effect to the recommendation.

Attachments

- 1 Attachment 1 - C1644 Burnley Golf Course - *Confidential*

7.5 Yarra Grants Review Project Terms of Reference

Reference	D23/262633
Author	Cristina Del Frate - Senior Coordinator Equity and Inclusion
Authoriser	Manager Equity and Community Development
Disclosure	The authoriser, having made enquiries with members of staff involved in the preparation of this report, asserts that they are not aware of any general or material conflicts of interest in relation to the matters presented.

Purpose

1. To seek endorsement on the Project Terms of Reference of the Strategic Review of the Yarra Community Grants Program (CPG). The review will seek to determine whether the CPG is fit for purpose and maximises value to the Yarra community.

Critical analysis

History and background

2. Through the Community Grants Program (CGP) each year, Council provides over \$2.4M to empower individuals and organisations to work together to address common challenges and achieve shared goals. The supported areas encompass community development, arts and culture, climate action and sustainability, sports and recreation, as well as youth and family initiatives.
3. The following principles guide the CGP:
 - (a) Local benefit – projects must provide a tangible benefit to the Yarra community;
 - (b) Access and equity – the program supports a range of community members to access grant funding;
 - (c) Partnership – the program promotes working together to increase the benefit of projects and organisations;
 - (d) Responsiveness – the program is flexible to develop solutions to emerging challenges and opportunities; and
 - (e) Participation – the projects help build community engagement and citizenship.
4. The objective of the CGP is to provide opportunities for Council and community to work together on projects that:
 - (a) Direct resources to the emerging and specific needs of disadvantaged groups;
 - (b) Develop a positive approach to the resolution of local social issues;
 - (c) Support local groups, activities, and community connectedness; and
 - (d) Support community organisations to develop skills and increase participation.
5. The CGP does not fund projects considered to be the responsibility of the State or Federal Governments, businesses and other for-profit organisations.
6. The CGP is managed through SmartyGrants™. SmartyGrants is a cloud-based grants management software that automates and simplifies grant program management. It offers tools for application management, review and evaluation, grant administration, reporting and evaluation, and communication and collaboration. The platform helps organisations streamline their grant processes and ensure transparency and effectiveness in distributing grants.

7. For Council, the grants are key to advancing the Community Vision and Council Plan. Each grant round and specific stream has its own guidelines, updated regularly, and published on the Council website. Drawing on these preeminent strategies (and adopted, topic-specific strategies or plans where relevant), the various guidelines specify program objectives, funding priorities, eligible initiatives, and recipients. In their applications, organisations (and individuals) must demonstrate how their project addresses the specified initiatives and strategies of the Council Plan.
8. Grant applications are assessed on the information provided in the application using the following process:
 - (a) Eligibility: Council officers examine applications to confirm that the applicant and project are eligible for funding. Ineligible applications do not progress;
 - (b) Review: Council officers review applications against the advertised criteria and this commentary is collated and provided to assessors, along with the original applications;
 - (c) Assessment: Through an expression of interest process or direct invitation where necessary, Council officers identify suitable community members to become external assessors. External assessors review all applications, convene, and determine which applications will be recommended for funding. Applications are assessed by at least two external assessors or through an external assessment panel comprising of at least three assessors, known as a Community Panel. These deliberations are documented, including the names of any panel members and relevant experience; and
 - (d) Decision-making: Council officers record the outcomes of panel assessments within the grants administration system (currently Smarty Grants™) and prepare a report listing the recommended applications which are presented to Council for consideration. Following the Council meeting, the successful and unsuccessful applicants are notified in writing as soon as is practicable. Letters to successful applicants will include the assessment comments. Unsuccessful applicants are given the contact details of an officer who can provide verbal feedback.
9. The CGP has developed iteratively over many years. There are currently ten sub-programs, with and without themed streams (e.g., arts, sustainability, etc.), a mix of delivery timeframes (e.g., over one or several years), most are competitive, and several are by invitation only.
10. The current grant programs are as follows:
 - (a) The town hall subsidy for community events (provided as required);
 - (b) Grants with annual rounds and a one-year delivery timeframe include Annual Grants (with six streams); Small Project Grants (eligible projects include Community Projects, Arts and Culture and Climate action); and Room to Create Responsive Grants. The Annual Grants are competitive with funded projects and initiatives timed to be delivered within the financial year. The Small Project Grants and Room to Create Grants are open until funds are exhausted;
 - (c) Creative and Engage Yarra is a competitive grant with funded projects and initiatives currently delivered over two calendar years;
 - (d) Investing in Community Grants is a competitive grant with funded projects and initiatives to be delivered over three calendar years;
 - (e) Relating to collaborative efforts with the Victorian Government to identify and address the needs of 8- to 21-year-olds who live in the Richmond and/or Collingwood Housing Estates, the Richmond and Collingwood Youth Grants are competitive grants with funded projects and initiatives timed to be delivered over three calendar years;
 - (f) The Fitzroy Adventure Playground Program Grant was established to provide up to three years of funding subsidy to a not-for-profit organisation towards the operation of the Fitzroy Adventure Playground and management of the site;

- (g) The Celebrate Yarra Grants are non-competitive and offered to three community organisations for the delivery of three prominent street-based festivals: Johnston Street Fiesta, Victoria Street Lunar Festival and Gertrude Street Projection Festival; and
- (h) The Community Partnership Grants support programs that promote partnerships between Council and community organisations that are “important, unique and enduring”. These grants are non-competitive and by invitation, with programs funded for four years.

11. The following table outlines grant rounds with funding allocations, delivery periods and timings. Initiation reports provide more extensive detail. It is important to note that there have been temporary changes to the CGP to accommodate the upcoming review.

Grant Sub Program	Type	Previous funding per year	Next Round (maximum amount where applicable)	Future period of project/initiative delivery	Last period of project/initiative delivery
Richmond & Collingwood Estate Youth Grants	Competitive 3 years	\$195,640	Extended by one year (mid-2024) with the previous recipient (i.e., Drummond Street Services) awarded funds	2023-24	2020-21, 2021-22, 2022-23 FY
Fitzroy Adventure Playground	Competitive 3 years	\$150,000	Opened March and closed April 2023	2023-24, 2024-25, 2025-26	2019-20, 2020-21, 2021-22,
Celebrate Yarra	By invitation 3 years	\$135,000	Extended until mid-2024. The funded festivals are Victoria Street Lunar Festival, Johnston Street Fiesta, and Gertrude Street Projection Festival	TBC	2019-20, 2020-21, 2021-22, 2022-23,
Investing in Community Grants*	Competitive 3 years	\$314,236	Not available in 2023. Funds were diverted to the Annual Grants as a temporary stream called "Major Community projects" (maximum \$50,000 per annum)	TBC	2021, 2022, 2023 CY
Community Partnership Grants**	By invitation 4 years	\$467,144	If continued, the next round would be in early 2025. (no maximum, highest funded \$90,000)	2025-26, 2026-27, 2027-28, 2028-29 FY	2021-22, 2022-23, 2023-24, 2024-25 FY
Creative Yarra	Competitive 2 years	\$135,000	Not available in 2023. Funds diverted to a second round for Arts and Culture in the Annual Grants (see below) (maximums: organisations \$30,000; individuals \$15,000)	TBC	2022, 2023 CY
Engage Yarra	Competitive 2 years	\$100,000	Not available in 2023. Funds diverted to a second round for Arts and Culture in the Annual Grants (see below) (maximums: organisations \$30,000; individuals \$15,000)	TBC	2022, 2023 CY
Major Community projects	Temporarily in Annual Grants	\$314,236	Funds are drawn from Investing in Community Grants (maximum \$50,000)	2024 CY	NA

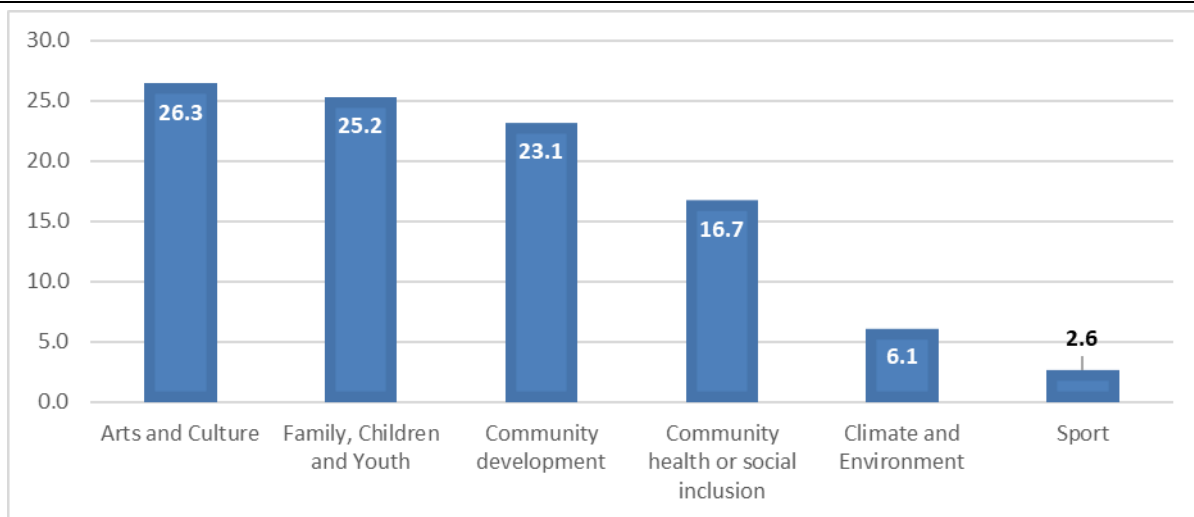
Council Meeting Agenda – 15 August 2023

Community Development Stream	Annual Grants	\$378,510	(maximum \$4,000)	2024 CY	2023 CY
Family, Children and Youth Stream	Annual Grants	\$166,870	(maximum \$10,000)	2024 CY	2023 CY
Climate Action and Environment	Annual Grants	\$130,240	(maximums: Tier 1 \$5,000; Tier 2 \$10,000)	2024 CY	2023 CY
Sports	Annual Grants	\$65,975	(maximum \$5,000)	2024 CY	2023 CY
Arts and Culture Rd1	Annual Grants	\$202,000	Reduced by \$55,000 to meet the resolution at the 19 June Council Meeting (maximums: organisations \$20,000; individuals \$10,000)	2024 CY	2023 CY
Arts and Culture Rd2	Temporary Annual Grants	\$255,333	(maximums: organisations \$20,000; individuals \$10,000)	NA	NA
Community Housing	Annual Grants	\$55,608	(maximum \$55,608)	2024 CY	2023 CY
Support for rental tenancies	Temporary in Annual Grants	\$100,000 0	Moved by resolution as per resolution at the 19 June Council Meeting. The Grant Guidelines are in development.	NA	NA
Small Project Grants	Until exhausted	\$102,456	Includes \$25,000 from Arts for one year (maximums: community projects: \$1,000); Arts and Culture: \$2,000; Climate and Environment: \$2,000; Youth-Led: \$3,000)	2024 CY	2023 CY
Room to Create (venue acoustic attenuation)	Until exhausted	\$25,375	(maximums: capped at \$2,000 for a standalone grant or at \$5,000 for a matching grant)	2024 CY	2023 CY
Sustainability Arts Grants	Until exhausted	\$10,000	(maximum \$1,000)	2024 CY	2023 CY
Arts Fellowship	Until exhausted	\$10,000	(single grant of \$10,000)	2024 CY	2023 CY

* Projects and initiatives funded in the last round in late 2020 included Yarra Multicultural Services Network, Second Chance Cycles (VACRO), Let's Keep Cooking (Cultivating Community), Beyond the Bars (3CR), Early and Middle Years Engagement at Connie Benn (BSL), Yarra Blue Light (VicPol), ACU Sport Programs for Middle Years, Cohesive Community Health by The Wellington, Disability Day Radio (3CR), Future Proofing Fitzroy Lions (Welcoming Australia), Skills2Connect (FLN) and Convent Kids (Abbotsford Convent Foundation).

** Yarra Drug and Health Forum (auspiced by cohealth), Billabong BBQ by cohealth, Free evening legal advice by Fitzroy Legal Service, Community Involvement Project by the Princes Hill Community Centre Inc., Young Farmers Program by the Collingwood Children's Farm, First Nations Pathways Program by Launch Housing, Aboriginal Access and Engagement by cohealth, Rebuild Community by the Richmond Toy Library, Nurturing children and community through play by the Collingwood Toy Library, Fitzroy Toy Library by the Collingwood Toy Library.

12. The diagram below thematically summarises the projects and initiatives being funded out of the \$2.4M CGP annually by percentage.



13. Beyond the CGP, Council also provides financial support through funding agreements, with examples including:
 - (a) Nine local Neighbourhood Houses receive a total of \$755,000 per annum through individual, multi-year funding agreements as part of a network Memorandum of Understanding. The current Funding Agreements with the nine Neighbourhood Houses span from 2020-2021 to 2023-2024;
 - (b) To support Council's goal of carbon neutrality in the City of Yarra, Council established the Yarra Energy Foundation in 2010 and is the sole shareholder. Council has a Funding Agreement for 2022/23 with the Yarra Energy Foundation (YEF) with set deliverables throughout the year. The Funding Agreement for 2022-23 has a total value of \$400,000 (plus GST); and
 - (c) Since 2010, financial contributions have been made to the Victorian Heritage Restoration Fund (VHRF). Overseen by a committee of management comprising representatives of the partnering councils, the VHRF offers grants to restore eligible heritage places and objects in participating municipalities (i.e., Melbourne, Ballarat, Casey and Yarra). The initial financial contribution made by Council was \$50,000. Since 2019-20, funding has increased to \$80,000 per annum with two components: the General Restoration Fund (excluding Activity Centres) and the Activity Centre Façade Conservation Grant. The fund has received 120 applications since 2010, and 90 restoration grants have been provided across the municipality.
14. As part of the 2022-23 Internal Audit Program, the Audit and Risk Committee approved a review of the Council's Community Grants Program (CGP) Management processes to be completed by HLB Mann Judd. The objective of the internal audit was to determine whether the Council has appropriate policies, procedures, and systems in place concerning its CGP.
15. Mann Judd concluded that "... The Council has established an appropriate CGP Framework that meets the needs of the Council", while also identifying "a number of opportunities for improvement ... (So as) to enhance the relevant practices".
16. In response to the internal audit, officers have since updated the internal operations CGP manual, enhanced practice concerning conflict-of-interest declarations, added the CGP to Council's operational risk register and also developed a Grants Administration Guide – a framework that guides the actions of staff and Council in administering the CGP, while also informing the community of the criteria, process and expectations for accessing grants – which Council adopted on 20 June 2023 following public consultation and engagement.

Proposal to review the Community Grants Program

17. While the recent audit demonstrates that the CGP is performing well from a governance perspective, such audits do not consider whether the program is optimally designed or maximises the social (and sustainability) return on investment.
18. The sub-programs and streams of the CGP and the various funding allocations are products of historical circumstances. The current structure of the CGP presents challenges in responding to emerging issues, addressing the community's changing needs and reflecting the changing priorities, including those articulated in Council Plans.
19. While sub-programs have been examined in the past decade, along with the internal audit completed by Mann Judd, there has not been a holistic review of the CGP.
20. A report was submitted to Council in March 2023, proposing that officers review the CPG in the new financial year (2023-24) and report back to Council with a draft Project Terms of Reference for its consideration.

Discussion

21. In the Draft Project Terms of Reference (**see Attachment One**), the strategic review's focus can be summarised as follows:
 - (a) Evaluate the feasibility of determining and evaluating the impacts of community grants, including social return on investment and multiplier effects;
 - (b) Compare the CGP with grant programs offered by other M9 councils for benchmarking purposes;
 - (c) Assess the pros, cons, and trade-offs associated with different funding durations and the number of sub-programs and streams;
 - (d) Determine whether community services and programs should be acquired through grants or service agreements;
 - (e) Minimise the fiduciary and conflict of interest risks of those involved in the process, including Council officers, volunteers, Councillors, and the Council;
 - (f) Ensure alignment of the CGP with the strategic objectives of the four-year Council Plans and Yarra's 2036 Community Vision; and
 - (g) Investigate the accessibility of the CGP for under-resourced individuals and those facing systemic barriers and social injustice within the community.
 22. The Draft Project Terms of Reference are detailed in Attachment 1 for the unabridged version.
 23. In reviewing the CGP, the following matters are out of scope:
 - (a) Conducting a comprehensive analysis of non-cash contributions made to non-profit organisations, such as subsidised leases and licenses of properties, resulting in a loss of potential revenue; and
 - (b) Undertaking a strategic assessment of service agreements entered with non-profit organisations to deliver community programs and services to the local community.
 24. The Financial Sustainability Strategy will address matters of foregone property income, while the cost and value of service agreements will be examined through the various upcoming service reviews.
 25. The Grants Administration Guide, program-specific guidelines, coupled with a robust assessment process, has enabled transparent grant-making by Council. However, there still may be occasions where disputes arise between applicants and the Council. Currently, if a complaint or dispute arises through Council's grant-making processes, the matter is managed in accordance with Council's Customer Complaints Policy.
-

26. The Draft Project Terms of Reference includes a clause to “examine the potential of mediation or alternative dispute resolution methods and consider the establishment of an independent committee, separate from the Council, to ensure the impartial review and resolution of appeals emerging through the CGP”.

Options

27. There are no options provided.

Community and stakeholder engagement

28. There has been no community consultation in developing the Draft Project Terms of Reference. The Grants Review will, however, involve extensive engagement with both internal and external stakeholders.
29. Consultations will be undertaken using a survey, focus groups, workshops, interviews and a Your Say Yarra webpage.
30. Groups to be consulted include Council staff from areas directly interacting with the CGP, such as Family, Youth and Children’s Services, Sports and Recreation, Sustainability, Arts and Culture, and Aged and Disability Services.
31. External stakeholders include applicants and recipients of Council grants, Yarra service providers, Council-supported Advisory Committees, and the wider Yarra community.

Policy analysis

Alignment to Community Vision and Council Plan

32. The Community Grants objectives align closely with the Council Plan 2021–25 and Community Vision. Community Grants are intended to support the delivery of the Council Plan and are a key means by which its strategic objectives can be realised in partnership with the community.
33. All six strategic objectives of the Council Plan are supported through the Grants Program, either via the proposed and delivered programs or by empowering community groups and organisations to deliver them.
34. The Draft Project Terms of Reference and subsequent review directly address the question of how closely the CGP is aligned with the strategies and initiatives of the Council Plan and Community Vision (see Attachment 1).

Climate emergency and sustainability implications

35. Yarra’s Annual Grants Program has a Climate Action Stream, which aims to encourage and support projects that align with the Climate Emergency Plan. This stream will be examined as part of the broader Grants Review.
36. Within the Draft Project Terms of Reference is a clause to assess “the degree to which the CGP effectively addresses the climate change emergency by promoting practices that mitigate resource consumption, emissions, pollution, and habitat disruption”.

Community and social implications

37. Yarra’s grants program addresses numerous social and community issues/needs across areas such as arts and culture, sustainability, community development, sport and recreation, family, children, and youth.
38. The community and social implications for the grants program are substantial. Many of the not-for-profit organisations based in Yarra depend on grants for their sustainability. The grants also support Yarra’s artistic community which relies on Council’s support.

Economic development implications

39. The Grants program provides a flexible and responsive source of funds to community-based not-for-profit organisations. Funding supports projects that deliver outcomes outlined within the Council Plan and target the areas of highest need within the community. The aim is to improve the long-term outlook for local families and businesses by strengthening the local not-for-profit sector's capacity and generating economic activity.
40. There is currently no Economic Development grants stream, and investigation of this as a potential stream moving forward will be considered in the review.

Human rights and gender equality implications

41. The current grant guidelines (for all streams) align with the Victorian Charter of Human Rights and Responsibilities Act 2006 and Yarra's Social Justice Charter, actively supporting people to participate in and contribute to their community.
42. The CGP is a major way the Council supports human rights and gender equity by supporting community-led projects on addressing social issues.
43. The Draft Project Terms of Reference references human rights and social justice as lenses through which the review will be examined.

Operational analysis

Financial and resource impacts

44. There are no financial impacts on the current Grants Program being administered 2023/24, as an initiation report was endorsed at Council on 18 April 2023, allowing the Grants Program to proceed as "business as usual".

Legal Implications

45. There are no legal implications.

Conclusion

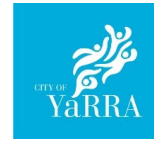
46. Council has resolved to review the grants program to determine its suitability and value to the community.
47. The Draft Project Terms of Reference have been developed to guide and set parameters for this review.

RECOMMENDATION

1. That Council endorses the project terms of reference for the strategic review of the Community Grants Program at **Attachment One**.

Attachments

- 1 [↓](#) Attachment 1 - Draft Project Terms of Reference - Strategic Review of the Yarra Community Grants Program



Strategic Review of the Yarra Community Grants Program: DRAFT Project Terms of Reference

Background

Community development is the process of building and strengthening the capacities of communities to shape their own future. Through the Yarra Community Grants Program (CGP), each year Council provides significant funding to empower organisations and individuals to work together to address common challenges and achieve shared goals. The supported areas encompass community development, arts and culture, climate action and sustainability, sports and recreation, and youth and family initiatives.

The CGP funds contribute to projects and initiatives that are locally based and provide a program, service or activity that benefits the Yarra community. Not funded are projects considered to be the responsibility of the State or Federal Governments, businesses and other for-profit organisations. To be eligible for funding, applicants must be a not-for-profit, incorporated community organisation or meet one of several specific exceptions, e.g., unincorporated community groups auspiced by an incorporated organisation, individual artists or arts-related businesses operating under an active sole trader ABN.

The CGP comprises ten sub-programs, with and without themed streams (e.g., arts, sustainability, etc.), a mix of delivery timeframes (e.g., over one or several years), most competitive and some by invitation. The sub-programs and streams of the CGP and the various funding allocations are products of historical circumstances. The CGP has developed iteratively in response to a changing community and emerging needs and issues. While some elements of grantmaking have been examined in the past decade (e.g., Community Partnership Grants in 2014 and, more recently, Arts and Culture), there has not been a holistic review of the entire CGP. The current structure of the CGP presents challenges in responding to emerging issues, addressing the community's changing needs, and reflecting the changing priorities of citizens expressed through elections and articulated in Council Plans.

As part of the 2022-23 Internal Audit Program, a review of the management of the Yarra Community Grants Program (CGP) was completed by auditors HLB Mann Judd. The internal audit examined whether Council has an appropriate framework (i.e., policies, procedures, and systems) in place for the CGP. It was concluded that the current framework meets the needs of the Council, and opportunities were identified to enhance policies and practices.

In its resolution on 14 March, the Council noted: "the proposal for a review of the Community Grants Program to be undertaken in the financial year 2023-24 and that officers will report back to Council with a draft Project Terms of Reference for its consideration". The review will identify whether the grants program is fit for purpose and maximises value to the community through the financial investment of Council.

Definition

A grant is defined as a monetary allocation, often bestowed by a government or a governing body, to an individual or organisation for a specific purpose. Grants are intended to provide financial support, particularly in the context of research, project development, community initiatives, or other defined undertakings.

Scope

In reviewing the CGP, the Council requests officers:

- 1) Drawing on available published research, develop a better understanding of whether community grants' economic, social, and environmental impacts can be readily determined and consider a practical means by which such impacts can be evaluated going forward.
- 2) Engage with a wide range of stakeholders involved in the CGP, including program administrators, grant recipients, community members, and other relevant parties.
- 3) Benchmark the CGP with those programs delivered by other member councils of the M9 Alliance (i.e., Darebin, Hobson's Bay, Maribyrnong, Melbourne, Moonee Valley, Merri-Bek, Port Phillip and Stonnington).
- 4) Consider the benefits, drawbacks, and trade-offs in different approaches to funding durations (i.e., less than a year, single year, and multi-year) and the number of sub-programs and streams within the CGP.
- 5) Determine whether there is an ongoing role for by-invitation and/or non-competitive grants in the CGP going forward and whether such benevolent activities are better obtained through service agreements with Council.
- 6) Assess whether the grants allocated by Council to the Yarra Energy Foundation and the Victorian Heritage Restoration Fund could be more effectively managed through the CGP.
- 7) Ensure alignment of the CGP with the strategic objectives of the four-year Council Plans and Yarra's 2036 Community Vision.
- 8) Minimise the fiduciary and conflict of interest risks of those involved in the process, including Council officers, volunteers, Councillors, and the Council.
- 9) Examine the potential of mediation or alternative dispute resolution methods and consider the establishment of an independent committee, separate from the Council, to ensure the impartial review and resolution of appeals emerging through the CGP.
- 10) Determine whether the current principles and objectives of the CGP are relevant and appropriate (see Attachment A).
- 11) Establish whether the CGP is accessible to those in the community who are under-resourced or have been disadvantaged by systemic barriers and social injustice, and how the CGP can strengthen community resilience.
- 12) Considering the shifting demographics of the municipality, thoroughly assess the extent to which the CGP is effectively creating avenues for meaningful engagement with the growing and changing segments of the community.
- 13) Assess the extent to which the CGP effectively addresses the climate change emergency by encouraging practices that reduce resource consumption, emissions, pollution, and habitat disruption.

In reviewing the CGP, the Council notes that the following matters are out of scope:

- 14) Conducting a comprehensive analysis of non-cash contributions made to non-profit organisations, such as subsidised leases and licenses of properties, resulting in a loss of potential revenue.
- 15) Undertaking a strategic assessment of service agreements entered with non-profit organisations to deliver community programs and services to the local community.

Methodology and Approach

In reviewing the CGP, officers are to undertake the following tasks:

- 16) Review literature and engage experts to identify practical and robust means to estimate the impact of community grants.
- 17) Collect historical qualitative and quantitative data on CGP, including the origins of particular grant programs and streams, grant distribution, funding allocations, and program outcomes where available.
- 18) Benchmark the per capita expenditure on community grants in Yarra and the current funding allocations by proportion and objective (e.g., arts and culture, families, youth and children, economic development, community development, population health, climate and environment, and sport) with those of the other member councils of the M9 Alliance.
- 19) Collect feedback, insights, and stakeholder suggestions by conducting surveys, interviews, and focus groups, employing inclusive consultation methodologies to promote participation from diverse communities and hard-to-reach groups.
- 20) Analyse the collected quantitative and qualitative data to comprehensively understand the current community grants program's impact and effectiveness.
- 21) Develop actionable recommendations to address identified weaknesses, enhance program effectiveness, improve equity and inclusion, and increase community engagement with the CGP.
- 22) Produce a comprehensive report summarising the review findings, analysis, and recommendations. The report will include an executive summary, highlighting key insights and proposed actions.

Advisory Group

In reviewing the CGP, an advisory group will be formed to provide expertise, guidance, and diverse perspectives. The advisory group will:

- 23) Consist of up to five members drawn from relevant academic institutions, non-profit organisations, or public sector bodies, and with at least one member having a direct connection to the City of Yarra.
- 24) Provide guidance on research approaches, and stakeholder engagement, and offer feedback on emerging findings and draft reports.
- 25) Not have the authority to allocate resources or modify the Terms of Reference.

Reporting and Administrative Arrangements

In reviewing the CGP, officers are to:

- 26) Make a full and faithful report and recommendations on the aforesaid subject matter of the review and transmit the same to the Yarra City Council before the conclusion of the 2023-2024 financial year.

DRAFT

Attachment A: Principles and Objectives of the CGP

Principles

- Local benefit – projects must provide a tangible benefit to the Yarra community.
- Access and equity – the program supports a range of community members to access grant funding.
- Partnership – the program promotes working together to increase the benefit of projects and organisations.
- Responsiveness – the program is flexible to develop solutions to emerging challenges and opportunities.
- Participation – the projects help build community engagement and citizenship.

Objectives

- Direct resources to the emerging and specific needs of disadvantaged groups,
- Develop a positive approach to the resolution of local social issues,
- Support local groups, activities, and community connectedness, and
- Support community organisations to develop skills and increase participation.

7.6 Neighbourhood House Partnership Framework Draft for Endorsement

Reference	D23/273059
Author	Sarah Ernst - Acting Senior Coordinator Policy and Partnerships
Authoriser	General Manager Community Strengthening
Disclosure	The authoriser, having made enquiries with members of staff involved in the preparation of this report, asserts that they are not aware of any general or material conflicts of interest in relation to the matters presented.

Purpose

1. The purpose of this report is to outline the outcomes of the public consultation period for the Yarra Neighbourhood House Partnership Framework (the Framework) and seek endorsement of the Framework, which would succeed the Yarra City Council and Neighbourhood Houses Partnership Strategy and Action Plan 2018–2021.

Critical analysis

History and background

2. The current Neighbourhood House Partnership Plan expired at the end of 2021 and was extended to 2022. The proposed Framework has been developed to replace the Plan with a longer-standing, more robust guiding document that can be updated more easily to align with each Council Plan's objectives and values without requiring a complete redevelopment every four years.
3. The proposed Framework is an evolution of the previous strategic plans. It provides a detailed articulation of the operational context, policy, and demographic environment within which Yarra's neighbourhood houses function, along with information to profile the houses, their purpose and respective community development methodologies. It is a document that can remain in place for a substantial length of time, requiring periodic review of the strategic directions and demographic information when there is a considerable change to the operational or policy environment, such as a new Council Plan or policy changes by the Victorian Government.
4. The Framework gives structure to the relationship, function and expectations between Council and the houses and sets out strategic directions based on the current Council Plan. It elevates and makes the Council's investment in and expectations of the houses visible.
5. The Framework defines and coordinates Yarra's neighbourhood houses as a network, ensuring that information and resources can be shared and leveraged between the houses, an outcome which, according to officers consulted from other municipalities, is challenging to achieve without an overarching strategic document.
6. The Framework was endorsed for public consultation at the Council meeting on 18 April 2023.
7. The public consultation period ran from 29 May 2023 to 26 June 2023.

Discussion

8. Consultation activities sought feedback on the three Strategic Directions and their related Objectives within The Framework. Three areas for feedback were asked based on the following Strategic Directions:
 - (a) Build Community and Capacity – this direction is intended to:
 - (i) build capacity for social connections and civic participation in the community; and

- (ii) build the capacity and resilience of Yarra's neighbourhood houses;
- (b) Add Value Through Partnerships and Collaboration – this direction is intended to:
 - (i) sustain and improve resources and reach of Yarra's neighbourhood houses by actively leveraging partnerships and collaborations and exploring opportunities for aggregated procurement (e.g., jointly sourced staffing and resources for shared programs); and
- (c) Communicate, Promote, and Advocate – this direction is intended to:
 - (i) improve operational conditions for neighbourhood houses through strategic advocacy that considers the funding and policy context, promotes achievements and models best practice in the sector.

9. The Community Engagement Team provided a Community Engagement Report detailing the digital interaction related to engagement activities (refer Table 1).

Table 1. Results from Community Engagement Report

Activity	Audience	Timing	Result
Your Say Yarra (YSY) page	The whole Yarra community could access this page	The page was published on 29 May and closed on 26 June 2023. It is still available but is no longer open for feedback	Page views = 378 Visitors = 222
Online YSY feedback survey	The whole Yarra community could access this survey	The survey was launched on 29 May, and closed on 26 June 2023	Contributions – 14 online surveys were completed
Posters	9 neighbourhood houses	Posters were put up on 29 May 2023, with an option to submit feedback with a paper form	15 QR code usages (across all posters) 1 paper form completed
Social media post	Social media followers	31 May 2023	The Facebook post reached 569 people with 2 reactions, and 6 people clicking through to the YSY page.
Social media post	Social media followers	13 June 2023	The Facebook post reached 464 people with 1 reaction and 4 clicks through to the YSY page.
Yarra Life – detailing consultation and linking back to the YSY page	Broad Yarra community	23 June 2023	21 clicks on the link to the consultation page

10. Of the 15 responses received, 14 respondents provided demographic data. Of these responses:
- (a) 79% lived in Yarra, 43% worked in Yarra, 21% visited Yarra, and 0% studied in Yarra;
 - (b) 57% owned a property or mortgage in Yarra, 0% rented in Yarra, and 14% percent owned a business in Yarra (noting 43% of respondents did not answer this question);
 - (c) 62% were female, and 36% were male;
 - (d) 21% were 35-49 years old, 21% were 50-59, 50% were 60-69, and 7% were 70-84;
 - (e) 14% lived in Carlton North, 7% lived in Collingwood, 29% lived in Fitzroy North, 7% lived in Princes Hill, 21% lived in Richmond, and 14% lived outside of Yarra;
 - (f) 7% identified as a person with a disability, 7% identified as LGBTIQ+, 7% identified as an Aboriginal or Torres Strait Islander person, and 79% did not identify with the options provided; and

- (g) 43% were employees or board members of Yarra’s neighbourhood houses, and 57% were not.

11. Overall, all Strategic Directions and their related objectives were supported, as evident in Table 2.

Table 2. Percentage of support towards the Framework

Do you support (strategic directions)	Yes	No	Unsure	No answer
SD 1. Build Community and Capacity	73.3%	13.3%	13.3%	0%
SD 2. Add Value Through Partnerships and Collaboration	86.7%	6.7%	0%	6.7%
SD 3. Communicate, Promote, and Advocate	86.7%	6.7%	0%	6.7%

12. Two respondents did not support the Framework in at least one of the three questions asked.
13. One respondent did not support any of the Strategic Directions and Objectives. The respondent’s feedback was not negative towards the Framework itself but instead indicated dissatisfaction with programs offered by the houses broadly and their closest house. The respondent felt that there was a deficit of programs targeted at families with children. The respondent also felt the Council’s funding for neighbourhood houses should be reduced. On investigation, officers found that activities and programs were currently available through the neighbourhood houses for this demographic. Consequently, there was no material change to the Framework. Officers have followed up and communicated the relevant information with this respondent.
14. One respondent did not support Strategic Direction 1 (Build Community and Capacity) and the associated objectives. The specific feedback did not warrant material changes to the Framework but will be used to inform future activity relating to objectives 1.3 (i.e., partner with Neighbourhood Houses Victoria to leverage research impact and better understand community needs) and 1.4 (i.e., extend outreach to underrepresented demographics using demographic data). The respondent requested:
- (a) An easy-to-follow table of Neighbourhood House program offerings (which officers will place on the Council website);
 - (b) Research to find out what people in the catchment area of each house would like to have offered or what local community members could contribute to delivering (to which officers will extend support to Neighbourhood Houses in terms of consultation and research); and
 - (c) In response to research insights, determine what practical measures can be undertaken to better align the houses’ programmed activities to the capacity and capabilities of existing and emerging volunteers and the needs and aspirations of local communities (to which officers will assist through the Council’s volunteering program and Neighbourhood House Network).
15. A thematic analysis of the open-ended feedback received (see Table 3 below) showed that Support for the Framework was the most common theme, followed by Funding and the Importance of the Houses.

Table 3. Themes from Responses towards the Framework

Themes	No. of occurrences of themes per question				Percentage of respondents indicating theme*
	Q. SD1	Q. SD2	Q. SD 3	Total	
Support for Framework	4	5	3	12	47%
Funding	3	2	7	12	40%
Importance of houses	5	0	0	5	33%
Communications	1	0	3	4	20%
Strategic Resourcing	0	3	0	3	20%
Request for specific changes in strategy	3	0	0	3	20%
Discontent with services	1	1	1	3	7%
Digital literacy/access	2	0	0	2	13%

* theme could be raised multiple times across each question

16. In response to the feedback, three minor adjustments were made to the draft Framework. These changes were:
 - (a) Adding additional information about Core Business and highlighting this section to make it more visible (see page 6 of the attached draft Framework);
 - (b) Amending the wording for Objective 1.1 (i.e., connect with community members with complex or emerging needs where practicable) and changing the responsibility from 'Neighbourhood Houses' to 'Shared' to reflect that resourcing issues may impact this objective (see page 7 of the attached draft Framework); and
 - (c) Amending the responsibility of Objective 1.5 from 'Neighbourhood Houses' alone to 'Shared' with Council to reflect that resourcing issues may impact this objective (see page 8 of the attached draft Framework).
17. Some feedback will inform future activity for specific objectives, including the following examples:
 - (a) Investigating whether Council's communications platforms can be leveraged to better share information about the house's activities and programs;
 - (b) Investigate the feasibility of developing a survey to better understand the community needs of the house's catchment areas (related to Objectives 1.3 and 1.4);
 - (c) Facilitating training opportunities for house staff and volunteers regarding communications and social marketing (related to Objective 3.5);
 - (d) Investigate how to enhance the linkage between the volunteer programs of Council and the houses (related to Objective 2.2); and
 - (e) Advocate and campaign for more funding for houses from State Government, education funders and other bodies (related to Objectives 3.2, 3.3, and 3.4).
18. Other non-specific suggestions provided were based on communications, digital literacy/access, strategic resourcing, equitable delivery of services, and increasing user groups. These suggestions align with the objectives and therefore no material change was made to the Framework.
19. The issue of funding was raised by numerous respondents. Four of six of the responses concerning funding came from neighbourhood house staff or board/committee members of the houses, calling for increased funding.

20. The desire for Council-led advocacy for increased funding from other sources was also noted, a focus already included under objectives for Strategic Direction 3.
21. Two final changes were made in finalising the draft Framework to aid readability and ensure the content is current. These were:
 - (a) Updating the Social Impact Data Snapshot, to include updated data from the Annual Neighbourhood Houses Victoria Survey; and
 - (b) Moving the position of Strategic Directions to the front of the document to make them more accessible for readers.
22. Where appropriate, officers have responded to consultation feedback to ensure accountability in the engagement process.

Options

23. There are no options provided.

Community and stakeholder engagement

24. During December 2021 and the first half of 2022, extensive consultations were carried out with each neighbourhood house manager. Officers toured the neighbourhood houses where possible (within COVID-19 restrictions) and met community members attending the houses' programs. Separate online consultations were held with the house governance committee/board members.
25. The themes were detailed and discussed after each consultation and built upon as consultations progressed, taking an iterative, inclusive approach. Regular updates on the progress of the draft Framework development were provided to the nine House managers via monthly network meetings.
26. Multiple meetings were held with the Chief Executive Officer and senior advisors from the peak body for the neighbourhood house sector, Neighbourhood Houses Victoria. The Manager of the North East Neighbourhood House Network, a peer support network for the sector in this region, was also part of the consultation process.
27. Internal consultations were undertaken with Council Officers from across Council that have contact with Neighbourhood Houses, including:
 - (a) Advocacy, Engagement and Communications;
 - (b) Aged and Disability Services;
 - (c) Arts and Culture;
 - (d) Family, Youth and Children's Services;
 - (e) Library Services;
 - (f) Social Strategy and Community Development;
 - (g) Sustainability;
 - (h) Urban Agriculture; and
 - (i) Waste management.
28. Council's Active Ageing and Disability Advisory Groups also participated in these targeted consultations, as both groups represent key user demographics for the neighbourhood houses.
29. The activities held over the public consultation period were planned in accordance with Yarra's Community Engagement Policy, with guidance from the Community Engagement Team.

30. Consultation activities sought feedback on the Strategic Directions and Objectives of The Framework. The following activities were organised:
- (a) Your Say Yarra page (shared through Yarra Communication Channels);
 - (b) 'Engagement stations' at each house, that allowed for both feedback through QR codes and with paper forms;
 - (c) One Councillor Conversation Pop-Up (17 June 2023);
 - (d) A presentation to the Yarra Multicultural Advisory Group (YMAG) on 21 June 2023. The timing was based on the group's convenor's advice on what point in the plan development process would best suit YMAG members; and
 - (e) Due to the timing of the meeting, a presentation to the Rainbow Advisory Committee was held prior to the consultation period on 8 May 2023.

Policy analysis

Alignment to Community Vision and Council Plan

31. In the Council Plan, the definition of 'what council does' articulates that community development is a crucial service, noting that neighbourhood houses are a part of this service (p. 8).
32. The Council Plan locates the houses within Strategic Objective Two: Social equity and health (p. 40). The Framework both supports and extends beyond this objective, aligning with the following Council Plan Strategic Objectives:
- (a) Climate and Environment – The houses offer activities and education to community to raise awareness and encourage sustainable practices in the everyday lives of the community;
 - (b) Social Equity and Health – The houses support community members and groups to participate in recreational, educational, and social programs that strengthen their capacity and improve wellbeing;
 - (c) Local Economy – The houses offer education and training to build capacity for disadvantaged communities which can lead to the development of small businesses; and
 - (d) Democracy and Governance – Through strategic partnerships, the houses and Council utilise resourceful service delivery methods, increase transparency, and further the reach of civic/community engagement efforts.
33. Specifically, the draft Framework aligns with the following specific strategies in the Council Plan:

Table 4. Alignment with the Council Plan

	Relevant Council Plan Strategic Objective	Related Council Plan Strategy
1	Climate and Environment	1.1, 1.2, 1.3, 1.4
2	Social equity and health	2.1, 2.2, 2.3, 2.7
3	Local Economy	3.4
6	Democracy and governance	6.1, 6.2, 6.3, 6.4

Climate emergency and sustainability implications

34. The Framework is vital in maintaining and guiding the strong partnerships between neighbourhood houses and Council's Open Space, Planning and Design, Waste Minimisation, Urban Agriculture and Sustainability Units. Through these partnerships, Council can demonstrate sustainability initiatives in situ to inform and educate the local community on how to take action to address the climate emergency. For example, North Carlton was part of the Council's 'four bins' pilot program to educate and promote the benefits to the local community. This played an important role in promoting and socialising a significant sustainability initiative.
35. All of Yarra's Houses have contributed to developing the Council's Climate Emergency Action Plan and initiatives to address climate change. For example, Holden Street was part of the pilot program to transfer to Council's 100% Renewable Electricity Contract to reduce their carbon footprint and energy bills. The program was also a springboard to educate and engage the broader community on the benefits of renewable electricity during a climate emergency and contribute to behaviour change with a focus on solutions.
36. Sustainability officers support North Carlton Railway Neighbourhood House's community garden project and Finbar Neighbourhood House's extensive community composting and recycling programs. The composting program also builds bridges between different parts of the community, as Finbar works with tenants in both public and private high-rise apartments, connecting them to the community and each other.

Community and social implications

37. Yarra's neighbourhood houses provide responsive social infrastructure for the community. Working within a capability-based community development model, the houses have in-depth local knowledge, trusting relationships and specialised community development skills and are central to how Council maintains strong connections within Yarra's local communities. The houses provide ongoing food relief, digital access, and social support to minimise isolation and its impacts on mental wellbeing in the community.
38. People experiencing vulnerability and disadvantage due to lacking personal, social, economic and financial resources have developed increasingly complex needs since the start of 2020. All houses have identified emerging and worsening socio-economic inequalities due to the COVID restrictions. The most significant impacts identified by the houses have been digital inequality, mental health, social isolation, precarious housing, and lack of sustainable food security. The effects of this period continue to resonate throughout Yarra's more disadvantaged communities.
39. The detailed demographic information in the Framework and the strategic directions that identify priority areas for neighbourhood houses provide additional tools to support, inform and guide the houses in their ongoing, high-impact social and community development work.

Economic development implications

40. Neighbourhood houses are an essential source of local employment. They provide full and part-time jobs for teachers, childcare educators, administration, project and community development workers, arts and wellbeing practitioners, and financial and IT staff. They also provide volunteer programs, alternative employment and educational pathways, and support for residents to establish new businesses and social enterprises.
41. According to calculations by Neighbourhood Houses Victoria, which are based on research from 2022, the social value delivered by Yarra's Neighbourhood Houses is equivalent to the following:
 - (a) \$2.95 for every \$1 of income;
 - (b) \$17.71 for every \$1 of Neighbourhood House Coordination Program funding; and
 - (c) > \$697.02 of value realised for every hour a neighbourhood house is in use.

Human rights and gender equality implications

42. The Framework recognises and aligns with the Charter of Human Rights and Responsibilities Act 2006 by actively supporting the Charter's substantive rights through programs and activities that support social equity. All neighbourhood house programs and activities are based on a human rights framework.
43. A Gender Impact Assessment is in development.

Operational analysis

Financial and resource impacts

44. There are no other financial impacts beyond the existing funding agreements already allocated to neighbourhood houses by Council.
45. For the 2023–24 financial year, Council allocated \$770K to Yarra's nine neighbourhood houses through the Neighbourhood House Funding Program.
46. Council has a capital responsibility as the 'landlord' to four of the houses:
 - (a) Holden Street Neighbourhood House;
 - (b) North Carlton Railway Neighbourhood House;
 - (c) Richmond Community Learning Centre (Studio 1 and Burnley Backyard); and
 - (d) Belgium Avenue Neighbourhood House (i.e., the land adjacent to the house on which a portable building is located and used to provide a range of activities).

Legal Implications

47. There are no legal implications.

Conclusion

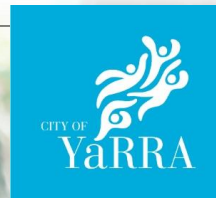
48. The Framework coordinates the neighbourhood houses to deliver essential ground-level social infrastructure for Yarra. Each house provides responsive, high-impact services specific to their local communities per the strategic objectives of the Council Plan.
49. Neighbourhood Houses differ from other community services and facilities because they are based on community development principles and operate within a social justice framework, responding to and addressing social inequity through hyper-local programs and services.
50. The Framework acknowledges the valuable relationship between Council and the houses. It creates a foundation for coordinating effective and sustainable programs and activities, enabling Yarra residents to participate fully in social and civic life and contribute to the whole municipality's wellbeing.
51. Extensive research and consultation have informed the draft Framework. It provides a complete overview of the demographic, economic, social and policy environment in which the houses operate. This information establishes a strong foundational knowledge and provides the guidance and tools needed to sustain, maintain, and improve Yarra's neighbourhood houses into the future.

RECOMMENDATION

1. That Council endorse the Yarra Neighbourhood House Partnership Framework at **Attachment One**.

Attachments

- 1 [↴](#) Attachment 1 - Draft Neighbourhood House Partnership Framework



Yarra Neighbourhood House Partnership Framework

Contents

Mayor’s Message	1
Council’s Commitment.....	1
A note on language	1
Introduction	3
Social impact data snapshot	4
Strategic Directions.....	6
Strategic Direction 1: Build Community and Capacity.....	7
Strategic Direction 2: Add Value Through Partnerships and Collaboration	8
Strategic Direction 3: Communicate, Promote and Advocate.....	9
Policy context.....	13
State government	13
Local government (Council’s role)	13
Peak bodies and peer-based networks.....	14
Neighbourhood house profiles and demographics	16
Service areas	16
About the profile data.....	17
Population.....	17
Internet access.....	17
Data sources.....	17
Yarra demographic snapshot	18
Neighbourhood House Profiles.....	19
Alphington Community Centre	19
Belgium Avenue and Collingwood Neighbourhood Houses	21
Carlton Neighbourhood Learning Centre.....	25
Finbar Neighbourhood House.....	27
Fitzroy Learning Network.....	29
Holden Street Neighbourhood House	31
North Carlton Railway Neighbourhood House	33
Richmond Community Learning Centre.....	35
Implementation and monitoring	38
Related Policies	38
Yarra Council Policies	38
Relevant Victorian Strategies and Guidelines.....	39
Relevant Legislation (in alphabetical order)	39
Methodology.....	40
Consultation.....	40

Analysis 40

References 42

Appendix 1: Impact of COVID-19 44

Appendix 2: Neighbourhood Houses Victoria’s methodology for calculating social impact value 45

Fee for service activities 50

Power Saving Bonus 50

Figures

Figure 1: Map showing the location and spread of neighbourhood houses across Yarra with an 800-metre radius around each house to demonstrate the catchment areas..... 16

Draft

Mayor's Message

To be inserted once draft approved for publication.

Council's Commitment

Neighbourhood houses build stronger communities by creating opportunities for learning and social participation. Using community development methods, Yarra's neighbourhood houses respond to community need in flexible and creative ways that encourage social equity. Council recognises the importance of neighbourhood houses in bridging the ever-increasing socio-economic divide in our society, by building capacity, increasing access to resources and promoting the benefits of diversity. Council is committed to continuing a supportive and productive relationship with the neighbourhood houses in our city. Yarra's neighbourhood houses make the city a kinder, more generous, inclusive place.

A note on language

The term 'neighbourhood houses' refers to a designated space run under a not-for-profit structure and used by people in a neighbourhood for activities and programs that build community. Sometimes this space is an actual house, but it can also be a learning centres or community centre. In this Framework we use the term to refer to all of these forms of neighbourhood house.



Introduction

Neighbourhood houses are not-for-profit organisations that respond to community need and build community capacity through learning and social opportunities. Based on community-development principles, the houses are embedded within communities to deliver responsive, locally-focused programs that aim to empower, connect and educate individuals and groups.¹ The broad range of activities, services and programs that neighbourhood houses encompass provide access to resources otherwise out of reach for many people, bridging socio-economic disparity by creating equitable opportunities for social and cultural participation and, importantly, education.

First established in Victoria in the early 1970s, the neighbourhood house model emerged out of the Women's Liberation movement to address the needs of women experiencing social marginalisation, such as isolated single mothers, and extending to people from diverse cultural backgrounds and other marginalised social groups.² Initially, most neighbourhood houses were staffed by volunteers (there is still a reliance on volunteering) with minimal government funding; however, since 1986, the Victorian state government has provided neighbourhood houses with ongoing funding for core community development activities.³ Local governments also support neighbourhood houses through a combination of financial and in-kind support (such as free or low-cost accommodation).⁴ In Yarra, all neighbourhood houses are supported by Council through annual core funding, and some are resident in Council-owned facilities.

Yarra is home to nine neighbourhood houses (including learning and community centres) in Alphington, Carlton North, Collingwood, Fitzroy, Fitzroy North and Princes Hill and Richmond.⁵ Together they form the foundation of Yarra's ground-level social infrastructure.⁶ Each house offers services specific to its immediate geographical community through programs and activities tailored to meet the needs of those residents. Neighbourhood house programs are often targeted to different life stages and cultural needs, focussing on lifelong learning through skills development, wellbeing and social connection. Programs cover a wide range of activities including gardening, cooking, arts and crafts, repair workshops, computer and language classes, and various social supports. Through the houses, people can equitably access types of assistance that fill service gaps, including flexible social support, settlement processes, life skills, employment and business incubation, and health literacy and wellbeing programs that can tangibly improve health outcomes. Houses are also spaces for informal support and connection, where people can simply drop in for a hot drink, a meal or a conversation. At the core of the houses' function is their ability to provide safe, friendly, equitable spaces that facilitate human connection. In these ways, Yarra's neighbourhood houses benefit the broader community deeply, on both a broad and granular scale.

Neighbourhood houses differ from other community services and facilities because they are deliberately based on community development principles and operate firmly within a social justice framework, responding to and addressing social inequity through hyper-local programs and services. Many of the benefits created by the houses have far-reaching and ongoing impacts that extend beyond the program participants. The houses' autonomy as not-for-profit organisations allows flexibility and capacity for detailed community involvement that simply is not possible for government-provided services to undertake. Where government services must take a broad view to

¹ Harrison et al, 2020, p. 468.

² Harrison, 2018, pp. ii-iii.

³ Neighbourhood Houses Victoria, 2022b.

⁴ Neighbourhood Houses Victoria, 2016, pp. 3-5.

⁵ Princes Hill Community Centre is primarily used as a community venue and is not programmed and managed in the same way as other centres and so has not been profiled in this Framework.

⁶ McShane & Coffey, 2022.

ensure efficiencies are maintained, neighbourhood houses have the remit to work attentively with individuals and groups in creative ways that respond directly to specific needs as they arise. This specialised focus builds a strong social foundation that raises the whole community.

Social impact data snapshot

Analysis of data from the annual Neighbourhood Houses Victoria 2022 survey demonstrated that Yarra's neighbourhood houses delivered more than \$14,660,548 of value to the community during that year.⁷

The impact the COVID-19 pandemic has had on activities and support undertaken by neighbourhood houses has seen a large increase in focusing on essential support and indicates the needs for these services are now ongoing. Comparisons to pre-pandemic levels of 2019 have been provided to highlight the change the COVID-19 pandemic has had on essential support. The methodology used for the impact calculations is explained in the methodology section and attached as appendices as excerpts from the original report by Neighbourhood Houses Victoria.

The community value delivered by Yarra's Neighbourhood Houses is equivalent to:

- **\$2.95 for every \$1** of income
- **\$17.71 for every \$1** of Neighbourhood House Coordination Program funding
- **> \$697.02** of value realised for every hour a neighbourhood house is in use

The following highlights from the data analysed put this in more tangible terms:

- **2,434** participants in programmed activities per week
- **15,756 kgs** of basic food relief provided per month (compared to 260 kgs in 2019)
- **336 hrs** of individual computer/internet use per month
- **1,660** frozen and community meals provided per month (compared to 695 kg in 2019)

The Neighbourhood Houses Victoria study found significant benefits arising from the value of community connection (i.e., social participation and reduction in social isolation created through house activities and programs). The difficulty of quantifying the many different flow-on effects that ripple out through the community means the benefits are likely underestimated.⁸

⁷ Neighbourhood Houses Victoria, 2022.

⁸ Neighbourhood Houses Victoria, 2022.

Strategic Directions



Strategic Directions⁹

Council recognises and is committed to supporting the core business of neighbourhood houses, which represent an important investment in Yarra's communities.

The overall strategic direction of this framework is ***to work in partnership with Yarra's neighbourhood houses to build and support communities at a local level.***

Through this framework, Council aims to build on neighbourhood houses' core business with strategic directions that sustain, maintain and improve our neighbourhood house network in ways that are robust and represent best-practice community development.

We will work towards this in partnership with the neighbourhood houses through three key areas:

1. Build Community and Capacity
2. Add Value Through Partnerships and Collaboration
3. Communicate, Promote and Advocate

These directions are intended to guide this valuable partnership through actions undertaken together. Neighbourhood houses are independent non-profit organisations and operate in partnership with Council and the other funding bodies. As it states earlier in the report, both the State Government and Council provide core funding for neighbourhood houses, which also generate their own income. The strategic directions should be read with this in mind.

CORE BUSINESS

As core business can be regarded as a requisite for all houses, these activities have not been included within the objectives of the strategic directions.

For the houses, core business includes programs, activities and events that aim to engage people through all stages of their life. These include education and training, employment pathways, health and wellbeing, sustainability programs, food security, support services for newly arrived communities and programs for children, families, young people and seniors. As a partner, core business for Yarra includes continuing to provide assistance in navigating council processes, to continue multi-year funding arrangements and, where applicable, lease/licence agreements to ensure security of tenure, and to continue to support Neighbourhood House Network meetings and keeping an up-to-date register of issues and opportunities for advocacy as they arise.

⁹ Each strategic direction has been matched against the corresponding strategic objective within the *Yarra City Council Plan 2021–2025*. Where there is an asterisk (*) after a strategic objective, it means that this same connection applies to the *Municipal Public Health and Wellbeing Plan* (which is embedded within the Council Plan document).



Strategic Direction 1: Build Community and Capacity

This strategic direction aims to maintain and improve Yarra’s neighbourhood houses by building capacity for social connections and civic participation in the community and building the capacity and resilience of Yarra’s neighbourhood houses.

1. Build Community and Capacity		Responsibility	Council Plan Strategic Objective
1.1	Connect with community members whose needs have emerged or become more complex, where practicable.	Shared	Social equity and health
1.2	Increase digital access and improve digital literacy for the community.	Neighbourhood houses	Social equity and health
1.3	Work with Neighbourhood Houses Victoria to make best use of research into the impact of neighbourhood houses’ programs, events and services and gain	Shared	Democracy and governance

	deeper understanding of social impact and community need.		
1.4	Extend reach to target demographics who are underrepresented in program participation by accessing and utilising demographic data and other social statistics.	Shared	Social equity and health
			Democracy and governance
1.5	Educate and empower the community about sustainability and encourage action in areas such as the climate emergency and the circular economy.	Shared	Climate and Environment
1.6	Share information between houses and Council to inform the community of local issues and resources, and to increase civic engagement.	Shared	Social equity and health
			Democracy and governance

Strategic Direction 2: Add Value Through Partnerships and Collaboration

This strategic direction focuses on sustaining and improving resources and reach of Yarra’s neighbourhood houses by actively leveraging partnerships and collaborations.

2. Add Value Through Partnerships and Collaboration		Responsibility	Council Plan Strategic Objective
2.1	Encourage partnerships to further resources and reach for programs, services and events, and to access specific expertise where needed.	Council	Social equity and health
			Local Economy
			Democracy and governance
2.2	Enhance linkage between the neighbourhood houses and Yarra’s existing volunteers’ program where appropriate.	Council	Social equity and health
			Democracy and governance

2.3	Identify opportunities for new partnerships where appropriate, including but not limited to, local businesses, educational institutions, and local organisations.	Neighbourhood houses	Local economy
			Democracy and governance
2.4	With Neighbourhood Houses Victoria and North East Neighbourhood House Network, leverage, generate and promote training and development opportunities for neighbourhood house staff, volunteers and board/committee members.	Shared	Democracy and governance
2.5	Enhance collaboration and accountability through review and update of funding agreements, network terms of reference and the Memorandum of Understanding.	Council	Democracy and governance
2.6	Develop clear, consistent program-specific partnership agreements that articulate roles and responsibilities of particular areas of the Council and of the neighbourhood houses, and hold partnership meetings where appropriate.	Council	Democracy and governance
2.7	Where appropriate, build upon and help identify opportunities to utilise economies of scale for neighbourhood houses, by collectively accessing and sharing resources.	Shared	Social equity and health
			Democracy and governance

Strategic Direction 3: Communicate, Promote and Advocate

This direction is focused on improving operational conditions for neighbourhood houses through strategic advocacy that considers the funding and policy context for neighbourhood houses, promoting achievements and best practice.

3. Communicate, Promote and Advocate		Responsibility	Council Plan Strategic Objective
3.1	Utilise Neighbourhood House’s community connections to strengthen Council’s approach to community engagement	Council	Democracy and governance

3.2	Support advocacy campaigns that promote adequate and sustainable funding for the neighbourhood house sector from the state government.	Shared	Democracy and governance
3.3	Showcase the work done by neighbourhood houses to highlight the importance of their function for local health and wellbeing outcomes and strengthen long-term resourcing and sustainability.	Shared	Social equity and health
3.4	Promote the significant role of neighbourhood houses in meeting changing service demand in the current social and mental health landscape.	Shared	Social equity and health
3.5	Build neighbourhood house staff marketing skills using common tools and social media channels.	Council	Democracy and governance

Draft

LUCY

Lucy regularly attends morning teas, excursions and seminars at her local neighbourhood house. She says the house supports her in immeasurable ways, helping her to manage difficult life circumstances.

When asked why she visits her neighbourhood house, Lucy says, 'Attending the house is a strategy for maintaining my mental health. If I don't attend, I would relapse – for me this means I would have no incentive to face life's responsibilities, which leaves me in a scary place.'

She says that she has to force herself to try to break through the 'webs of her condition' to come to the House but the impact of the positivity that she feels afterwards lasts for days.

'When I feel like I have to fight the webs of anxiety, paranoia and trauma, I remember the positive times at the House and then I can let go the sad feelings.'

The social connection her local House provides keeps her 'monsters' at bay – she isolates herself less and feels as though she has incentive to cope with life. She says other local community facilities don't help in the same way as they don't provide friendly staff or are not for people over the age of 65.



Policy context



Policy context

State government

The Victorian State Government provides the primary core funding for Victoria's neighbourhood houses and networks through the Neighbourhood House Coordination Program, managed by the Department of Families, Fairness and Housing (DFFH).¹⁰ The overall aims of the program are expressly to fund houses and community centres to use a community development model in facilitating the following social policy goals:¹¹

- community diversity and inclusion
- social and civic participation
- capacity building at an individual and group level
- life-long learning opportunities
- employment and training pathways

To do this, funding recipients must use community development processes like community consultation and co-production methods to identify community needs and issues and develop mutually agreed responses and solutions. Regarding funding calculations, it is understood that the State Government funding formula is not needs-based, instead adjusting the funding universally for a minimum amount of service hours.

The Neighbourhood House Coordination Program encourages partnerships with other organisations and funding bodies.¹² In 2018, additional sector-wide funding of \$21.8m for Victorian neighbourhood houses had been secured from the State Government (non-recurring, expiring in 2024). At the time of writing, the peak body Neighbourhood Houses Victoria (see [below](#)) was working on an advocacy campaign to make this increase permanent, which appeared to have been successful.¹³

The guidelines offer detailed information on funding, reporting, coordination and governance requirements, and importantly, provide sector-specific instruction on implementing programs using a community development model.¹⁴ It is important to note that the State Government's funding model for neighbourhood houses includes an expectation that income will be generated by charging a low fee for participation in some of the activities and through volunteer labour. Accordingly, funding recipients operate part-time with very few paid staff and a high reliance on volunteers, which limits opening hours and program capacity. Despite these limitations, Yarra's neighbourhood houses output a high level of programming and social support, with the data demonstrating that they represent a significant return on investment.¹⁵

Local government (Council's role)

Like other local government authorities across Victoria, Yarra Council provides core funding to the neighbourhood houses that service the municipality. While not the primary source of revenue for neighbourhood houses overall,¹⁶ the value that local government provides to houses in ongoing funding, project partnerships, and coupled with the contribution of Council-owned property through peppercorn lease arrangements, is substantial.

¹⁰ Department of Families, Fairness and Housing, 2021.

¹¹ Department of Families, Fairness and Housing, 2021.

¹² Department of Families, Fairness and Housing, 2021.

¹³ Neighbourhood Houses Victoria, 2022.

¹⁴ State Government of Victoria, 2016.

¹⁵ Neighbourhood Houses Victoria, 2019.

¹⁶ A 2013 survey by Neighbourhood Houses Victoria ranked funding from local government authorities as the fourth highest revenue source for houses (Neighbourhood Houses Victoria, 2016, p. 1)

Yarra Council recognises the importance and value of neighbourhood houses in building community capacity and providing tailored responses to localised issues. Operational security is provided to the houses through multi-year funding commitments. The funding comprises monetary allocations for operational support, project support, and, depending on the house's residency arrangements, support for occupancy overheads such as rental and maintenance costs. Where a house resides in a Council-owned property, a 'peppercorn'-style lease agreement is in place and the property costs are absorbed in Council's budget.

In addition to tenancy management services, Council also allocates considerable officer time to support the houses with project partnerships, community connections, professional development opportunities and to assist in navigating bureaucratic processes. Officers attend regular network meetings with the houses. Different units across the organisation maintain ongoing ties with the houses through projects in areas such as sustainability, the arts, libraries, and family, children's and youth services. Each of these areas may also allocate funds and resources through project and budget processes.

Peak bodies and peer-based networks

Neighbourhood Houses Victoria (NHV) is the peak organisation for the neighbourhood house sector. It provides strategic leadership, with a focus on coordinating state-wide advocacy and promotion, and providing research and advisory services. NHV also offer professional development opportunities for neighbourhood house managers, staff, volunteers and committee members.¹⁷

North East Neighbourhood House Network is a network of 35 neighbourhood houses in the North Eastern suburbs of Melbourne, covering the municipalities of Banyule, Darebin, Nillumbik, Whittlesea and Yarra. The network operates within a social justice framework to bring together houses in these municipalities and offer peer-based support through promotion, advocacy, professional development, and networking. The range of support provided by the network is broad and priorities are determined by its members using strength-based community development principles.¹⁸

TAMIKA

Tamika first visited her local neighbourhood house with her children, with this connection later evolving into employment at the house.

Tamika has been a resident of the Princes Hill Public Housing Estate for the last six years. During that time, her connection with the house has grown, to the extent that she now refers to it as her second home. Tamika's relationship with the house was initially through her children. All four of them participated in school holiday and after school activities, such as learning club, craft, soccer, and karate.

As time went by, Tamika gradually got to know House staff and her own connection there was strengthened. She began visiting more and more, and then late last year she was employed by the house for eight weeks to run the coffee cart and the weekly food stall. Having been out of the workforce for many years, Tamika was delighted to gain some employment and notes, 'the neighbourhood house gave me an opportunity, helped me to learn to trust people, be more sociable, and want to engage in life and work again.'

After completing her job, Tamika wanted to give back to the house and started volunteering, sharing her barista skills with VCAL students to teach them how to use a coffee machine. Tamika's dedication and great work has now resulted in regular employment as a cleaner at the house. She notes that she has experienced stigmatisation in her life, but that she 'doesn't know of any other places that are so inclusive and where people are welcomed in the same way. The house is a place you feel accepted and valued whatever your background or circumstances.'

¹⁷ Neighbourhood Houses Victoria, 2022c.

¹⁸ North East Neighbourhood House Network, 2022.

Yarra's Neighbourhood Houses



Neighbourhood house profiles and demographics

Service areas

Across Victoria, the number of neighbourhood houses in each local government area results in a service ratio of one neighbourhood house for between 11,000 and 70,000 people, depending on population density and the number of neighbourhood houses in each municipality.¹⁹ Yarra is fortunate to have one of the highest rates of neighbourhood houses to people in the state, with approximately one house per 12,500 people.²⁰ The service catchment around each house is estimated here as being 800 metres (Figure 1).

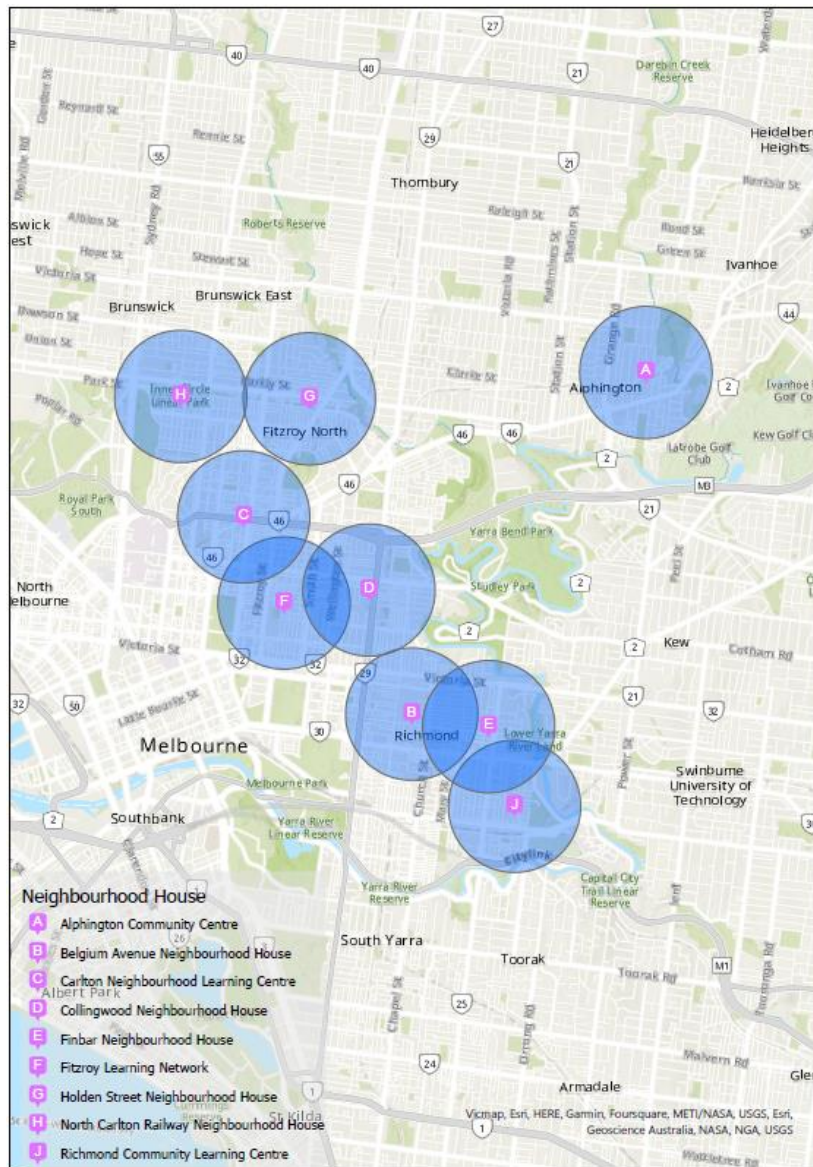


Figure 1: Map showing the location and spread of neighbourhood houses across Yarra with an 800-metre radius around each house to demonstrate the catchment areas.

¹⁹ Weston, 2021, p. 3.

²⁰ Weston, 2021, p 3.

In this section of the Framework, each of Yarra's neighbourhood houses is profiled demographically based on the 800-metre catchment radius, along with a description of the activities and services they offer specific to their surrounding communities. This 800-metre radius has been chosen to demonstrate the service catchment of Yarra's neighbourhood houses because it is considered an optimal distance for people to access a local service without driving.²¹

The map in Figure 1 clearly shows the localised focus of programs and services for the surrounding communities. The activities highlighted in these profiles provide a snapshot of the breadth and diversity of projects, services and events delivered, while the demographic profiles demonstrate the differences and similarities between the people who live within each neighbourhood. There is a demographic snapshot of the broader Yarra municipality to provide an overall context for these neighbourhood variations.

About the profile data

Population

Drawing upon ABS data and other sources, id[®] consulting estimates that as of 2023, the City of Yarra has an estimated resident population of 99,557 and 47,988 households.

Internet access

Internet access is an ongoing problem, with access to non-cellular internet that is uncapped and affordable a significant challenge. Until recently, the Australian Bureau of Statistics (ABS) included a question in the Australian Census asking whether a household had internet access at home. With internet access increasingly essential for communicating with others, interacting with services and accessing important information, whether or not the internet is available at home can be used as an indicator of disadvantage. The last measure that was taken in the 2016 Australian Census has been included in these demographic profiles for this reason.

Data sources

The data for the overall Yarra snapshot is from the most recent Australian Census, which, as noted above, was undertaken in 2021. The data used for the Neighbourhood House profiles (i.e., population demographics within the 800-metre service catchments) is drawn from population profile and forecast modelling data produced by Pitney Bowes from the 2016 Australian Census.

²¹ State of Victoria Department of Environment, Land, Water and Planning, 2017.

Yarra demographic snapshot^{22 23}

As of 2023, the City of Yarra has an estimated resident population of 99,557 and 47,988 households.

Draft

²² .id Informed Decisions (2022)

²³ Australian Government (2022) (data on government support received only current to March 2022)

Neighbourhood House Profiles²⁴

Alphington Community Centre

Alphington Community Centre is located in the heart of Alphington, supporting residents from the Cities of Yarra and Darebin. The centre began in 1982 as the Alphington Self-Help Exchange to provide activities and support services primarily for women at home with young children. Today the centre has expanded its services to provide for the whole community, with a focus on families, children and older people. Each week approximately 500 local residents access the Centre’s activities, programs and services.



Women’s Shed Program at Alphington Community Centre

The Alphington Community Centre vision is ‘*working together to build and strengthen our community*’ and through this it aims to encourage and enable individuals to lead active, creative and sustainable lives and nurture community connections. The centre provides community lunches, art and craft classes, gardening and sustainability workshops, counselling services, community choirs, music classes, book clubs, podcasts, and hosts community events and a ‘women’s shed’ program. It also has a toy library and is a venue for local families’ children’s parties.

Alphington Community Centre places great importance on partnerships, with key partners including Darebin Libraries, Yarra City Arts, Asylum Seeker Resource Centre, kinfolk and Second Bite, who support the community lunches and the all-abilities bowls program at Alphington Bowls Club. The centre relies on the dedication and skills of volunteers to run programs such as line dancing, digital literacy classes for seniors, knitting classes, with community lunches and to maintain its popular outdoor spaces.

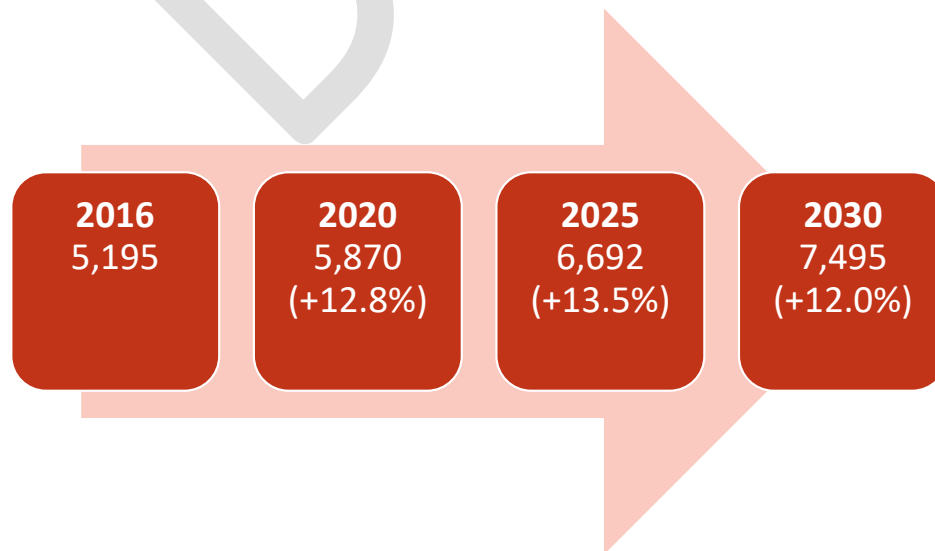
²⁴ As discussed above in the data note, these profiles have been based on SA1 level data from the 2016 Australian Census and will be updated when the 2021 data becomes available.

Alphington Community Centre catchment demographic snapshot

There are 5,195 people in the 800-metre catchment around the Alphington Community Centre.

Projected population growth around Alphington Community Centre to 2030

The population forecast of the 800 metres around Alphington Community Centre shows that the population in that catchment area is expected to increase by between 12 and 14% every 5 years. The expected population in 2030 is 7,495 people (compared to 5,195 people in 2016). It should be noted that the pending development of the former Amcor site at Yarra Bend will impact on population growth and service demand.



Belgium Avenue and Collingwood Neighbourhood Houses



A community celebration at Belgium Avenue Neighbourhood House

BANH Inc. is a community organisation which operates Belgium Avenue and Collingwood Neighbourhood Houses, located on the Collingwood and North Richmond Public Housing Estates. It takes its name from Belgium Avenue in Richmond, which runs behind the estate where one of the neighbourhood houses is located.

These popular, friendly gathering places host community events, such as music and food festivals, art exhibitions, outdoor cinema, cultural celebrations and wellbeing activities such as yoga and Tai Chi. Both houses offer a diverse range of activities, provide meals and food, and run special events throughout the year, as well as supporting local residents to produce their own events and social enterprises – including everything from roller discos, to political theatre, to cultural catering services.

The vision of BANH Inc is to *'create stronger community through shared experiences'*. The houses partner with a wide variety of locally based community organisations, such as Carringbush Adult Education and Concern Australia, with which they offer programs including English classes and after-school programs. Other partners include:

- RMIT Public Art students, for the 'Space Between Light' Festival on the Richmond Public Housing Estate
- Cultivating Communities, to engage the residents in the community garden at Collingwood estate
- Neighbourhood Justice Centre to establish a social enterprise kiosk run by students from the Centre for Adult Education (CAE) serving coffee and food prepared by local residents, providing traineeships for the students to build their skills and capacity in hospitality alongside their English language skills.

The houses make use of two additional spaces as well, 'The Factory', located at the Richmond estate, and the 'Underground Carpark', at the Collingwood estate. Both are active spaces for local residents

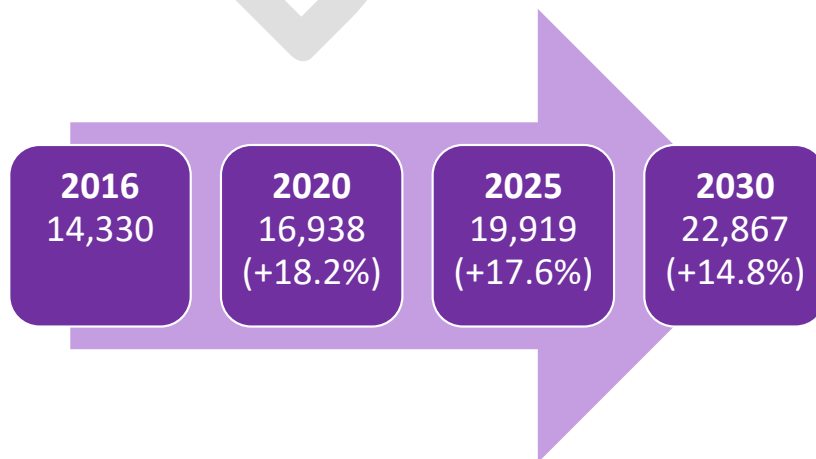
to participate in drama productions, fringe performances, craft markets, music and art events, youth activities and cultural festivals.

Belgium Avenue Neighbourhood House catchment demographic snapshot

There are 14,330 people living in the 800-metre catchment around Belgium Avenue Neighbourhood House (BANH), which takes in a portion of the Richmond public housing estate.

Projected population growth around Belgium Avenue Neighbourhood House to 2030

The population growth for the 800-metre area around Belgium Avenue Neighbourhood House in Richmond is forecast to be between 14% and 18% every five years until 2030. In 2030 it is estimated there will be 22,867 people living in that radius, an increase over time of more than 50% of the 2016 population (14,330).

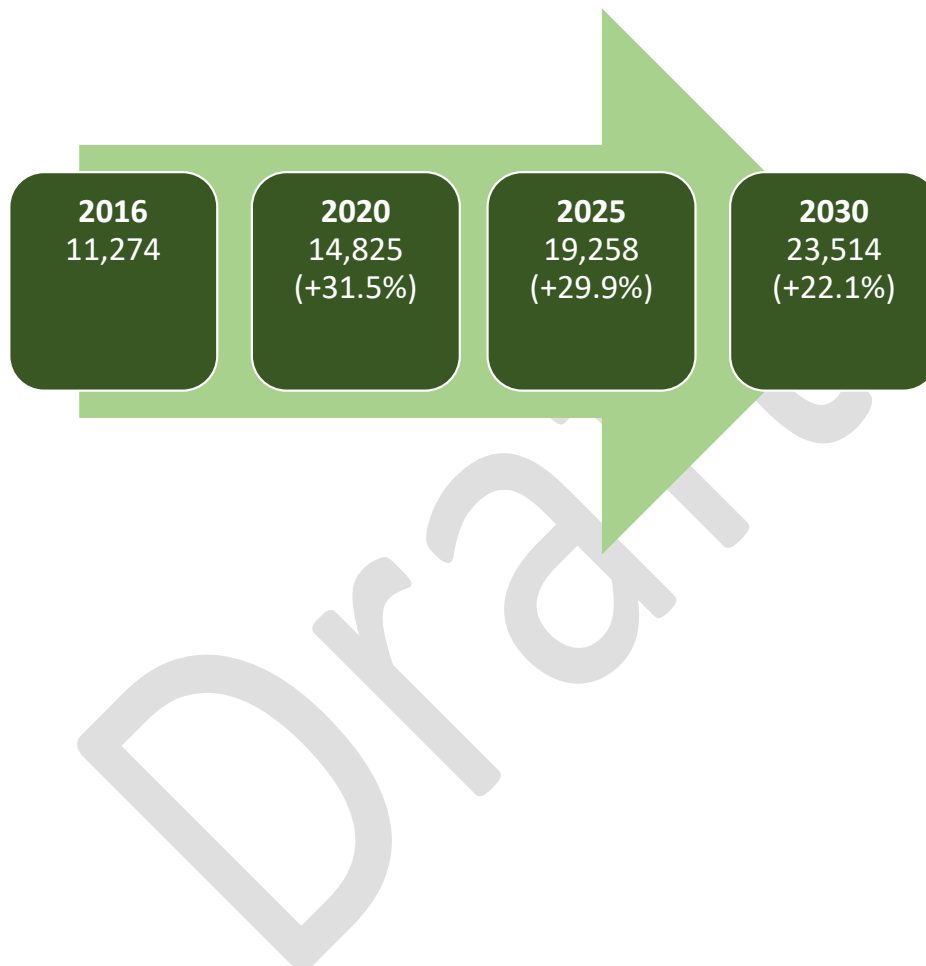


Collingwood Neighbourhood House catchment demographic snapshot

There are 11,274 people living in the 800-metre catchment around Collingwood Neighbourhood House, which is located within the public housing estates between Hoddle and Wellington Streets in Collingwood.

Projected population growth around Collingwood Neighbourhood House to 2030

The population growth for the 800-metre area around Collingwood Neighbourhood House is forecast to be between 22% and 32% every five years until 2030. In 2030 it is estimated there will be 23,514 people living in that radius, an increase over time of more than 100% of the 2016 population (11,274).



Carlton Neighbourhood Learning Centre



Volunteers celebrating Carlton Neighbourhood Learning Centre

Carlton Neighbourhood Learning Centre (CNLC) provides programs and services with a vision to ‘build a community that connects people, creates opportunities and challenges disadvantage and inequity’. It is a not-for-profit organisation that works with residents of Carlton and surrounding areas – particularly with people who are experiencing disadvantage. Through a range of programs and activities, CNLC supports the community to connect, learn, share skills and participate in work and community life.

Programs are offered across a broad range of learning opportunities, with nationally recognised courses, pre-accredited courses, workshops, volunteering and events. In addition to learning, CNLC offers employment and support services through the ‘Open Door’ program. The program aims to reduce barriers to employment and education by working with people from diverse backgrounds to gain representation in the workforce, and in positions of leadership and responsibility. In addition, the house offers a digital literacy skills program which includes one-on-one support and helps students to access low-cost devices. It also provides an all-abilities program that provides literacy pathways for work and community connection.

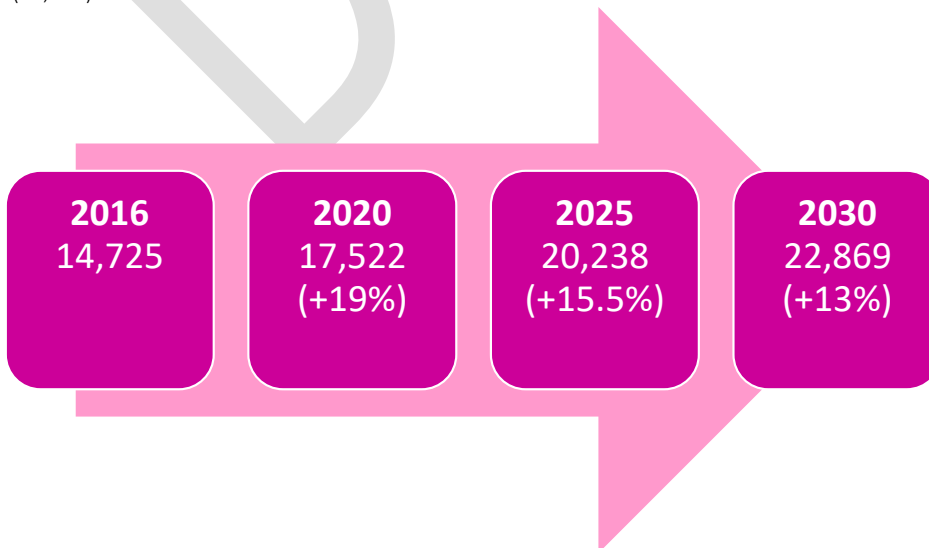
CNLC has a community garden that provides an inner-city oasis where people can learn more about gardening or volunteer. The house has a community compost hub to help reduce food waste going to landfill and is an e-waste collection point for the local community.

Carlton Neighbourhood Learning Centre catchment demographic snapshot

There are 14,725 people living in the 800-metre catchment around the Carlton Neighbourhood Learning Centre.

Projected population growth around Carlton Neighbourhood Learning Centre to 2030

The population growth for the 800-metre area around Carlton Neighbourhood Learning Centre is forecast to be between 13% and 19% every five years until 2030. In 2030 it is estimated that 22,869 people will live in that radius, an increase over time of more than 50% of the 2016 population (14,725).



Finbar Neighbourhood House



Finbar Neighbourhood House

Finbar Neighbourhood House has a vision to create a strong community that is proud of its diversity, where all people are able to realise their full potential. It offers a wide range of activities and educational programs to the residents of Richmond and nearby Abbotsford and has a focus on sustainability, including community composting exchange programs, a seed library and an extensive community garden project with plots where community members can grow their own vegetables. The House is also an e-waste collection point, and extra produce can be exchanged through the boxes on the house's verandah, next to the popular book swap.

Finbar offers a range of activities and support services for nearby residents encompassing targeted programs for older people, activities for children, music, art and craft, wellbeing classes, book clubs, men's groups and digital inclusion programs. It supports the local community by providing an inclusive environment with opportunities for lifelong learning, social connection, participation and sharing skills and information.

Finbar Neighbourhood House catchment demographic snapshot

There are 11,810 people residing in the 800-metre catchment around Finbar Neighbourhood House.

Projected population growth around Finbar Neighbourhood House to 2030

The population growth for the 800-metre area around Finbar Neighbourhood House is forecast to be between 15% and 20% every five years until 2030. In 2030 it is estimated there will be 19,333 people living in that radius, an increase over time of more than 50% of the 2016 population (11,810).

Fitzroy Learning Network



People enjoying a community event at Fitzroy Learning Network

Fitzroy Learning Network (FLN) is a Neighbourhood House, a Learn Local Centre, and a Registered Training Organisation. It is a place where refugees, migrants, people seeking asylum and those living on the public housing estates in Yarra can find support, get help navigating settlement services, and where they can learn and connect. FLN delivers programs and projects, often in partnership with other local groups and organisations, and is a registered charity and not for profit organisation. During 2021, FLN undertook 622 referrals to connect 63 people to support services.

The wide-ranging annual program at FLN includes: adult education, accredited training, short courses, creative classes, youth engagement programs, community support services (such as employment, housing and refugee support), a food bank, community lunches, gardening programs and events and celebrations. Fitzroy Learning Network is committed to building a strong, inclusive and engaged community, where people can access resources, build networks and find support to realise their aspirations. By investing in people and using a holistic community development approach, FLN creates opportunities for social, cultural and economic inclusion and participation.

Fitzroy Learning Network catchment demographic snapshot

There are 14,903 people residing in the 800-metre catchment radius around the Fitzroy Learning Network, which is situated next to the Atherton Gardens public housing estate.

Projected population in the area around Fitzroy Learning Network to 2030

The population growth for the 800-metre area around Fitzroy Learning Network is forecast to be between 13% and 21% every five years until 2030. In 2030 it is estimated there will be 23,869 people living in that radius, an increase over time of more than 50% of the 2016 population (14,903).

Holden Street Neighbourhood House



Second Bite program at Holden Street Neighbourhood House

Holden Street Neighbourhood House has a history of more than 47 years as a neighbourhood house, providing a place of connection and belonging for the local community. A fundamental value of Holden Street is to work collaboratively and respectfully with diverse communities to build capacity, connections and a sense of belonging.

The house provides a range of educational, recreational, wellbeing and social activities to encourage community participation and social connection. Holden Street has good access for people with mobility needs and offers programs and activities specifically for people with a disability, as well as the provision to support NDIS participants to access programs. The house provides classes for digital literacy, creative and visual arts, wellbeing and life skills. Additionally, it offers gardening, playgroups, excursions, zumba, community lunches, activities for seniors and men's groups. It is also a popular venue for hire by the local community for family functions, community groups and businesses forums.

Holden Street has an extensive focus on sustainability, using solar panels for energy, water tanks for the rainwater and herb garden, food growing, composting and worm farms. It is also a recycling drop off point and there is a seed library available to the community. The sustainability initiatives are integrated with the learning and education programs to increase participants' knowledge, skills and awareness for limiting energy consumption and minimising the environmental footprint. Additionally, the house provides a weekly food relief service in partnership with Second Bite and has recently established a community pantry.

Holden Street Neighbourhood House catchment demographic snapshot

There are 10,549 people residing in the 800-metre catchment of the Holden Street Neighbourhood House.

Projected population growth around Holden Street Neighbourhood House to 2030

The population growth for the 800-metre area around Holden Street Neighbourhood House is forecast to be between 9% and 15% every five years until 2030. In 2030 it is estimated there will be 14,825 people living in that radius, an increase over time of almost 50% of the 2016 population (10,549).

North Carlton Railway Neighbourhood House



A Covid-safe AGM at the North Carlton Railway Neighbourhood House

The North Carlton Railway Neighbourhood House is a place where social connections are strengthened, social action is encouraged, and people are supported to expand their possibilities and make meaningful contributions to the community. It resides in a building that was originally the North Carlton railway station, part of the Inner Circle Line, which was discontinued in the early 1980s. Prior to that, in the early 1970s, the residents, with the support of unions, saved the historic building and surrounding land from becoming an industrial site. Residents continued to work to have the former railway land transformed into a linear park and the old railway station developed as a neighbourhood house. In 1984, the North Carlton Railway Neighbourhood House was formally established.

The house's programs, services and activities promote participation, connection, social harmony between contrasting demographics, and foster a sense of belonging. It has a thriving community garden, which is a popular place for local residents to connect, and to learn about growing food, composting, soil and water management. Students from local primary and secondary schools also have dedicated gardening programs to learn to grow and harvest produce. The program provides a strong sense of inclusion and belonging where young people have opportunities to engage positively, learn skills and participate.

Railway House has a weekly free food market provided through donations from Second Bite, FairShare and local bakeries, and stocked with excess produce from the garden. Other regular offerings include health and wellbeing programs, music and choir groups, cooking classes and weekly community lunches, and a drop-off point for e-waste and soft plastics. There are dedicated intergenerational programs as well as activities for children and young people.

North Carlton Railway Neighbourhood House catchment demographic snapshot

There are 10,003 people residing in the 800-metre catchment of the North Carlton Railway Neighbourhood House.

Projected population growth around North Carlton Railway Neighbourhood House to 2030

The population growth forecast for the 800-metre area around North Carlton Railway Neighbourhood House is forecast to be between 11% and 18% every five years until 2030. In 2030 it is estimated there will be 14,651 people living within that radius, an increase over time of almost 50% of the 2016 population (10,003).

Richmond Community Learning Centre



Bike group at Burnley Backyard

Richmond Community Learning Centre (RCLC) creates spaces and opportunities for people to come together and connect, learn new skills and contribute towards an inclusive, vibrant healthy community. RCLC provides programs and services across three sites:

- **Studio 1:** a versatile space for local groups and organisations to meet and engage, as well as spaces for social functions for families
- **Burnley Backyard:** which focuses on sustainability initiatives and activities for children
- **The Stables:** which offers a range of activities, programs and educational opportunities to support families and children

Partnerships with Mums in Yarra, Ardency Place, Yarra Energy Foundation and MIND Australia support new community projects and workshops to facilitate a stronger, more connected and resilient community.

RCLC empowers local women to build a stronger sense of themselves and connection to other women by providing non-traditional hands-on learning opportunities in the areas of working with timber, welding and furniture refurbishment. Local women facilitators are also supported as they start and build their own small business.

There are extensive gardening and sustainability programs, organic gardening classes, composting, an e-recycling collection point, and monthly Repair Corner to fix, mend and repair anything from clothes to bikes to your favourite toaster, minimising waste and reducing landfill. Additionally, RCLC offers digital literacy programs, and a range of health and wellbeing activities.

Richmond Community Learning Centre catchment demographic snapshot

There are 8,331 people living in the 800-metres around the Richmond Community Learning Centre.

Projected population growth around Richmond Community Learning Centre to 2030

The population growth forecast for the 800-metre area around Richmond Community Learning Centre is forecast to be between 13% and 17% every five years until 2030. In 2030 it is estimated there will be 12,679 people living within that radius, an increase over time of about 50% of the 2016 population (8,331). Further development at the former GTV Nine television studio site is likely to impact on these demographics as more dwellings are completed, including aged care and retirement living.

DIANE

Diane has been involved in her house's Occasional Care program for 29 years, first as a participant, then as a volunteer and finally as an employee.

Diane has lived in Richmond all her life and is incredibly proud to be part of the neighbourhood. For Diane, her local house is so much more than a neighbourhood house. It has acted as an extension of her family, it provided occasional care and childcare to her daughter, and was somewhere for her to feel safe, cared for and heard as a newly single mum.

In 1993 she started taking children she was caring for to her house's playgroup. The warm welcome they received inspired her to become involved in fundraising and community lunches, all of which led her to join the committee. The house remained an integral part of not only her daily life, but also her wellbeing. This became most apparent in 2001, which brought both the loss of her mother and a divorce. During this challenging time, Diane says, 'The help I received from everyone at the centre was just wonderful, if it wasn't for them, I don't know what I would have done.'

Beyond the personal support provided by her house, Diane was given the opportunity of casual employment in the Occasional Care program. Staff also urged her to return to study, and so in 2006 she applied for a Certificate III in Children's Services. After not studying for over 40 years, it was a hard transition, but the staff and community members of her local house supported her throughout. Diane graduated in 2007 and in the same year she was encouraged to obtain a Diploma. Inspired, she followed this advice, which led her to becoming the house's Occasional Care Team Coordinator.

Diane believes that if it wasn't for the dedication, perseverance, and care that she and her daughter received from the house's staff, she doesn't think they would be where they are today.

For Diane the impact of her house hasn't stopped with her. She established an outstanding rapport with the children and their parents, grandparents, and extended families, building strong community connections. Her daughter now housesits for one of the families she used to babysit, and she notes that it feels full circle. Diane says, 'We have been given skills and connections that continue to move through the generations. My house pulled me from my isolated and withdrawn existence and planted me firmly within my community. I am always grateful.'



Implementation and monitoring

The Strategic Directions outlined above will be implemented and monitored through an annual progress report against this framework which will be reviewed and updated when the context in which it sits has significantly changed. Annual reports will be provided to Council on the progress and status of the framework and any relevant shifts in the policy environment or community circumstance. At the point of major change to Council's policy positions or the broader policy environment, a new framework can be developed.

Related Policies

Yarra Council Policies

The Neighbourhood House Partnership Framework is closely aligned with the Yarra City *Community Vision* and *Council Plan 2021–2025*. The following table demonstrates who is responsible for each strategic objective, and their alignment to both the Council Plan's Strategic Objectives and Strategies:

The draft Neighbourhood House Partnership Framework is strategically aligned with the following strategic objectives of the Council Plan:

- Climate and Environment – The houses offer activities and education to community, to raise awareness and encourage sustainable practices in the everyday lives of the community.
- Social Equity and Health – The houses support community members and groups to participate in recreational, educational and social programs that strengthen their capacity and improve wellbeing.
- Local Economy – The houses offer education and training to build capacity for disadvantaged communities which can lead to the development of small businesses.
- Democracy and Governance – Through strategic partnerships, the houses and Council utilise resourceful service delivery methods, increase transparency, and further the reach of civic/community engagement efforts.

Specifically, the framework aligns with the following specific strategies in the Council Plan, as mapped out in the [strategic directions](#) above:

Relevant Council Plan Strategic Objective	Related Council Plan Strategy	
1	Climate and Environment	1.1, 1.2, 1.3, 1.4
2	Social equity and health	2.1, 2.2, 2.3, 2.7
3	Local Economy	3.4
6	Democracy and governance	6.1, 6.2, 6.3, 6.4

Under the Council Plan, the following policy documents intersect with this Framework:

- **Aboriginal Partnerships**
 - [Yana Ngargna Plan 2020–2023](#)
- **Arts and Culture**
 - [Arts and Culture Strategy 2022–2026](#)
- **City Works and Assets**
 - [Asset Management Policy](#)
 - [Asset Plan 2022-2032](#)
 - [Waste Minimisation and Resource Recovery Strategy 2018–2022](#)

- **Climate and Sustainability**
 - [Climate Emergency Plan 2020-24](#)
- **Community Wellbeing**
 - [Active and Healthy Ageing Strategy 2018–2023](#)
 - [Community Infrastructure Plan](#)
 - [Multicultural Partnerships Plan 2019–2023](#)
 - [Social Justice Charter](#)
 - [Strategic Community Infrastructure Framework](#)
 - [Volunteer Strategy 2019–2023](#)
- **Families, Children and Young People**
 - [0–25 Years Plan 2018–2022](#)
- **Aged and Disability Services**
 - [Access and Inclusion Strategy 2018–2024](#)
- **Library Services**
 - [Yarra Libraries Strategic Plan 2022–2026](#)
- **Yarra Leisure**
 - [Yarra Moves Physical Activity Strategy 2021-2031](#)

Relevant Victorian Strategies and Guidelines

- [Neighbourhood Houses Victoria Strategic Plan \(2019–2021\)](#)
- [Neighbourhood House Coordination Program Guidelines 2016–2019](#)²⁵

Relevant Legislation (in alphabetical order)

- Child Safety Act 2005
- Equal Opportunity Act 2010
- Gender Equality Act 2020
- Local Government Act 2020
- Privacy Act 2000
- Work Health and Safety Act 2012
- Working with Children Act 2005

²⁵ Although this appears outdated these are the most recent guidelines. As new guidelines become available, they should be accessible here: <https://providers.dffh.vic.gov.au/neighbourhood-house-coordination-program>

Methodology

Consultation

Extensive consultation was undertaken to understand issues and opportunities for neighbourhood houses and their stakeholders. Themes were drawn after each consultation and were built upon as consultations progressed, thus taking an iterative approach.

The nine neighbourhood houses were initially consulted individually. They were then kept informed of the Framework progression through regular Neighbourhood House Network meetings. This approach was supported by the houses, with one neighbourhood house manager stating:

'I think it's very wonderful having a Council that is so supportive of neighbourhood houses and that this seems to have been a very clear and slow and consultative process. And I know a lot of my fellow managers feel very happy with the way it's been conducted. So just to pass on that, congratulations to you.' – Neighbourhood House Manager (2022)

Key stakeholders for Yarra's neighbourhood houses were also consulted to understand how Council can better facilitate internal and external opportunities for houses:

- North-East Neighbourhood House Network (the regional sector network for Yarra, Darebin, Banyule, Nillumbik and Whittlesea)
- Neighbourhood Houses Victoria (the sector's peak body)
- Council officers (regarding partnerships and subject matter expertise)
- Neighbourhood House Board/Committee Members (two consultation sessions held)
- Council Advisory Groups (Active Ageing Advisory Group, Disability Advisory Group, Rainbow Advisory Committee, Multicultural Advisory Group – officers also note that the Yana Ngargna Advisory Group was not being convened during the Framework development period).

Given the geographical specificity of neighbourhood houses, demographic profiles for each neighbourhood house were developed using the 20-minute neighbourhood model with the analysis outlined above in the section on [Yarra's neighbourhood houses](#). This model was adopted in *Plan Melbourne 2017–2050* with the aim of neighbourhoods to meet their needs through 'living locally'.²⁶ A key feature of the 20-minute neighbourhood model is its 800-metre walkable catchment area.²⁷ Demographic profiles for each house have therefore been calculated using the data within 800 metres of each house. Demographic information has been sourced from Australian Census data.²⁸ Creating profiles for each house is important to understand the differences that exist across the houses. This information not only serves to inform the Framework for Council but will also assist houses to further develop and tailor their programs and services.

Analysis

Issues and opportunities that arose from consultations emerged from thematic analysis of the consultation discussions and data gathered through desktop research. The themes and sub-themes identified through this process led to the development of the three strategic directions that lay the foundations for the Framework. Research and reports by Neighbourhood Houses Victoria were drawn on to provide deeper understanding of the activity and social impact of Yarra's neighbourhood houses during the several years leading up to this Framework. The calculations used in Neighbourhood

²⁶ State of Victoria Department of Environment, Land, Water and Planning, 2017

²⁷ State of Victoria Department of Environment, Land, Water and Planning, 2017, pp. 98–99.

²⁸ Australian Bureau of Statistics, 2016 Census (at time of writing, the data from the 2021 Census was yet to be released)

Houses Victoria's research are quoted in detail in [Appendix 2](#). All other research materials are as cited with references below.

Draft

References

- Australian Government (2022). 'DSS Demographics – March 2022'. Department of Social Services data set, available at: <https://data.gov.au/dataset/ds-dga-cff2ae8a-55e4-47db-a66d-e177fe0ac6a0/distribution/dist-dga-b67aa3d6-063a-4e55-8941-6ca291754523/details> (accessed 23 August 2022)
- Bowe, M., Gray, D., Stevenson, C., McNamara, N., Wakefield, J.R.H., Kellezi, B., Wilson, I, Cleveland, M., Mair, E., Halder, M. & Costa, S. (2020). 'A social cure in the community: A mixed-method exploration of the role of social identity in the experiences and wellbeing of community volunteers', in *European Journal of Social Psychology*, Vol. 50, No. 7, pp. 1523–1539.
- Yarra City Council. (2021). *Report for 2021 Neighbourhood House Survey*.
- Department of Families, Fairness and Housing (2021). 'Neighbourhood House Coordination Program', at <https://providers.dffh.vic.gov.au/neighbourhood-house-coordination-program> (viewed 24/06/22)
- Department of Health (2020) *Victorian Population Health Survey 2020*. State Government of Victoria, available at: <https://www.health.vic.gov.au/population-health-systems/victorian-population-health-survey-2020> (viewed 17/5/22).
- Department of Land, Water, Environment and Planning (DELWP) (2017) *Plan Melbourne 2017–2050*, State Government of Victoria.
- Harrison, U. (2018). *Neighbourhood Houses as sites of women's empowerment*. PhD thesis, Institute for Health and Sport, Victoria University.
- Harrison, U., Ollis, T. & Ryan, C. (2020). 'Practice in the social space of Neighbourhood Houses: Community, relationships and adult learning' in *Australian Journal of Adult Learning*, Vol. 60, No. 3, pp. 467–491.
- .id Informed Decisions (2022). 'City of Yarra Community Profile', available at: <https://profile.id.com.au/yarra> (viewed 16 August 2022).
- Lim, M. et al. (2020). Survey of health and wellbeing - monitoring the impact of COVID-19.
- McShane, I. & Coffey, B. (2022). 'Rethinking community hubs: community facilities as critical infrastructure', in *Current Opinion in Environmental Sustainability* 2022, Vol. 54:101149, <https://doi.org/10.1016/j.cosust.2022.101149>
- Neighbourhood Houses Victoria (2019). *Connecting a Diverse Victoria: How individual communities shapes neighbourhood houses*.
- Neighbourhood Houses Victoria (2016). 'Local Government support for Neighbourhood Houses in Victoria: a snapshot'.
- Neighbourhood Houses Victoria (2022a). 'New Minister for Neighbourhood Houses'. Media release available at: <https://www.nhvic.org.au/news/new-minister-for-neighbourhood-houses-june-2022> (viewed 8/7/22).
- Neighbourhood Houses Victoria (2022b). 'Our History', available at: <https://www.nhvic.org.au/history> (viewed 30/06/22).
- Neighbourhood Houses Victoria (2022c). 'Who we are', available at: <https://www.nhvic.org.au/about-nhvic> (viewed 17/5/22).
- Neighbourhood Houses Victoria (2021). 'Yarra City Council Neighbourhood Houses: Value to communities from selected Neighbourhood House activities'.

- Neighbourhood Houses Victoria (2022). 'Yarra City Council: Real Impact. Real Value.'
- North East Neighbourhood House Network (2022). 'Who are we?', available at: <https://www.nenetwork.org.au/who-we-are> (viewed 17/5/22).
- State Government of Victoria (2016). *Neighbourhood House Coordination Program Guidelines 2016–2019*. Department of Health and Human Services.
- State of Victoria Department of Environment, Land, Water and Planning (2017). *Plan Melbourne 2017–2050*.
- Weston, G. (2021). *Investigation into The Historic and Future Usage of Studio One*. Report prepared by Public Place for Yarra City Council.

Draft

Appendix 1: Impact of COVID-19

The Neighbourhood House Partnership Plan 2018 – 2021 was developed without the foresight of the impact of the COVID-19 pandemic on neighbourhood houses and their communities. Action taken by the houses during the pandemic has demonstrated their capacity for quick adaptation to changing community need. Houses were pivotal to communicating Council's pandemic response to the community – particularly to groups that can be harder to reach and who do not access digital media easily. They have also been key players in filling important service gaps, such as food relief, health and social support. Where institutions such as government can create efficiencies of scale, small community-based organisations such as neighbourhood houses have 'adaptive efficiency'.²⁹

Conversations with Neighbourhood House Managers and anecdotes from the community (as shown above in case studies) demonstrated to Council officers that neighbourhood houses have responded to the needs that have been emphasised by the pandemic by:

- providing food relief services (increased demand has been maintained since the pandemic)
- making efforts to bridge the digital divide (websites and apps were key sources of pandemic-related health information)
- mitigating loneliness and social isolation (the impacts of which are still heightened)

The pandemic has also highlighted how a lack of resourcing impedes the impact of neighbourhood houses across Yarra, and it was noted in the consultations that staff, and in particular manager, burnout has become a pressing concern. While working with limited resources is a historical issue for these organisations, the last two years have accentuated how this creates a strain on the wellbeing of not only the community but also the neighbourhood house staff. The focus on governance training and support in the strategic directions is intended to help address this issue.

²⁹ McShane and Coffey, 2022, p. 2.

Appendix 2: Neighbourhood Houses Victoria's methodology for calculating social impact value

The following pages have been extracted directly from the report produced by Neighbourhood Houses Victoria (2022), 'Yarra City Council: Real Impact. Real Value', which analyses and calculates the social impact and economic value of the 2022 Annual Survey of Yarra's Neighbourhood Houses. A summary of the key points from the full report have been included above in the [Social Impact Data Snapshot](#). This section should be read in conjunction with that snapshot.

Calculation methods

Social Connection

In 2018, Deloitte Access Economics produced a report³⁰ that determined a monetary value for the community connection work of Morwell Neighbourhood House. The method, detailed in the report, uses existing research to calculate the contribution of community connection to a Quality-Adjusted-Life-Years (QALYs)³¹. Quality-Adjusted-Life-Years is the most widely used approach for estimating quality of life benefits in economic evaluations³².

The report assumed that 50% of the annual unique visitors to the neighbourhood house were one off or infrequent for the purpose of their calculations. Appendix C of their report outlines the detail on their method.

Because programmed activities are group activities run over a period of time and therefore not attended in a one-off or infrequent way, using the number of participants per week in programmed activities figure from the Neighbourhood House survey allows for a conservative calculation of the numbers of visitors potentially obtaining social connection benefits.

The number of weekly participants in programmed activity is multiplied by the percentage of participants that identified "meeting new people/making friends" and/or "spending time with others" as benefits of attending their neighbourhood house based on each Neighbourhood House's 2017 Participants Survey³³. These two reported benefits are used in the Deloitte calculations and are most strongly associated with participants who identified attending for various programmed activities including, social and support groups, job training and support and other courses and classes.

The \$ Values are expressed in 2022 equivalents i.e. CPI adjusted Quality Adjusted Life Year value of \$227,000, which is consistent with Deloitte's method.

The value of your Neighbourhood Houses increased social connection is calculated using this formula:

Number of participants in activities X 1 QALY (\$227,000) X percentage of people identifying a social connection benefit X contribution of social connection to a QALY (3.84%) X the extent to which contribution of social connection to a QALY can be attributed to attending the Neighbourhood House (28.57%).

³⁰ http://www.morwellnh.org.au/wp-content/uploads/2018/05/MNH_Social-Impact-Analysis_May-2018_.pdf

³¹ https://www.pmc.gov.au/sites/default/files/publications/Value_of_Statistical_Life_guidance_note.pdf

³² <https://www1.health.gov.au/internet/publications/publishing.nsf/Content/illicit-pubs-needle-return-1-rep-toc~illicit-pubs-needle-return-1-rep-5~illicit-pubs-needle-return-1-rep-5-2>

³³ Where A Neighbourhood House's participant data are absent or unreliable due to sample size, an average of Neighbourhood Houses in similar sized communities with similar incomes is used. Income is a proxy for volume of activities delivered through a Neighbourhood House.

The use of the participants in programmed activities as the basis for the calculation is conservative as it excludes regular attendees that receive a connection benefit through drop in, food relief or other non-program activities

Deloitte further calculate the value of increased connection through increased participation in the broader community due to participation at the Neighbourhood House using the formula above for 10% of the participants.

Volunteering

Volunteering value is based on the replacement cost of volunteers' labour. This is valued at \$48.16 per hour derived from "State of Volunteering" replacement cost calculator³⁴ for volunteers aged 55-64.³⁵

The formula for calculating the community value of volunteering is:

Number of volunteer hours undertaken X volunteer hourly replacement rate

This is a conservative valuation. Replacement cost figure allows for some aging of Neighbourhood House volunteer population which averaged 50 years of age in 2012. The replacement cost for a 50-year-old is 11% greater (\$53.82) than the figure used here.

In addition, the valuation does not include the value of the services provided as a result of volunteering or the contribution to the economy and taxation from participating in volunteering, e.g. cost of travel to the place of volunteering.

Emergency relief

Food and groceries

The value to community of emergency food relief is based on work undertaken by Foodbank in Australia³⁶. Their social return on investment analysis determined that food relief was valued at an average \$20.05 per kilogram of food in 2014 dollars. This valuation included the value of:

- Improved physical health (children)
- Better performance at school (students)
- Better social relationships
- Increased sense of self-worth
- Improved standard of living
- Improved physical health
- Increased emotional wellbeing
- Reduced waste and greenhouse emissions

While the cost of food has increased since 2014, the change in value of the social benefits is unclear. For this reason, we have retained the \$20.05 figure making this a conservative evaluation.

The formula for calculating the community value of food and groceries is:

Number of Kgs distributed for an average month X 12 (months) X \$20.05

³⁴ [Volunteer Replacement Cost Calculator - State of Volunteering](#)

³⁵ <https://www.abs.gov.au/ausstats/abs@.nsf/mf/6302.0>

³⁶ <https://www.foodbank.org.au/wp-content/uploads/2019/06/Foodbank-Hunger-Report-2014.pdf>

Food vouchers

Based on the dollar value of vouchers given out. This is a conservative valuation as it does not include the benefit derived from accessing food such as improved health and wellbeing, improved school performance for children etc.

The formula for calculating the community value of food vouchers is:

Total \$ value of food vouchers distributed in an average month X 12 (months)

Cash/prepaid or gift cards

Based on the dollar value of cash or gift cards given out. This is a conservative valuation as it does not include the benefit derived from items purchased such as improved health and wellbeing, improved school performance for children, added value to the economy etc.

The formula used for calculating the community value of cash/prepaid or gift cards is:

Total \$ value of cash/prepaid or gift cards distributed in an average month X 12 (months)

Fuel Vouchers

The community value of providing fuel vouchers is based on the dollar value of vouchers given out. This is a conservative valuation as it does not include the benefit derived from increased access to transport or the alternative use of funds that would otherwise have been used for transport such as improved health and wellbeing, improved school performance for children etc. It also does not include benefits to the local economy.

The formula used for calculating the community value of fuel vouchers is:

Total \$ value of fuel vouchers distributed in an average month X 12 (months)

Bill payments

The community value of providing bill payments is based on the dollar value of bills paid by the Neighbourhood House for individuals in need. This is a conservative valuation as it does not include the benefit derived from increased access to services for which bills were paid or the alternative use of funds that would otherwise have been used for transport such as improved health and wellbeing, improved school performance for children etc. It also does not include benefits to the broader economy.

The formula used for calculating the community value of bill payments is:

Total \$ value of participants' bills paid in an average month X 12 (months)

Public transport cards

The community value of providing clothing is based on the dollar value of public transport cards given out. This is a conservative valuation as it does not include the benefit derived from increased access to transport or the alternative use of funds that would otherwise have been used for transport such as improved health and wellbeing, improved school performance for children etc.

The formula used for calculating the community value of public transport cards is:

Total \$ value of public transport cards distributed in an average month X 12 (months)

Clothing

The community value of providing clothing is based on the dollar value of clothing cards given out. New clothing is valued at replacement cost whereas second-hand clothing is based on resale value such as in an opportunity shop. This is a conservative valuation as it does not include the benefit derived from increased access to clothing such as improved confidence and sense of wellbeing or the alternative use of funds that would otherwise have been used for clothing such as improved health and wellbeing, improved school performance for children etc.

The formula used for calculating the community value of clothing is:

Total \$ value of clothing distributed in an average month X 12 (months)

Personal hygiene items

The community value of providing personal hygiene items is based on the dollar value of personal hygiene items cards given out. New personal hygiene items is valued at replacement cost whereas second-hand personal hygiene items is based on resale value such as in an opportunity shop. This is a conservative valuation as it does not include the benefit derived from increased access to personal hygiene items such as improved confidence and sense of wellbeing or the alternative use of funds that would otherwise have been used for personal hygiene items such as improved health and wellbeing, improved school performance for children etc.

The formula used for calculating the community value of personal hygiene items is:

Total \$ value of personal hygiene items distributed in an average month X 12 (months)

Services

Except for school breakfast clubs, service valuations in this section do not include additional benefits from the service such as improved health, job prospects or employment nor the auspiced community groups' outcomes. This is due to the absence of appropriate research that quantifies these benefits.

Facilities Usage

The community value of facilities usage is based on the number of hours of facilities use by external groups and organisations per month and the cost of hiring an equivalent space locally as determined by each Neighbourhood House. This figure reflects value provided to the community rather than income received as rooms and facilities are often made available to community groups at heavily discounted rates or gratis. The value also does not include the benefits to community of the room use activity e.g., improved health, improved access to information or services, reduced cost of services etc., relative to the activity type provided.

The formula used for calculating the community value of facilities usage is:

Total number of hours of room hire in an average month x 12 months X cost per hour of local equivalent (either supplied or \$30).

Internet/computer usage

The community value of internet/ computer usage is based on the number of hours of internet or computer use by individuals in an average month. This is benchmarked to the cost of a commercially available equivalent i.e. internet kiosk regardless of whether a commercial alternative is available. Note that free Wi-Fi is not an equivalent as there is no support or equipment made available.

Commercial rates from \$3-\$5³⁷ have been benchmarked. A \$2 lower rate has been used to account for the variation in the equipment and software provided. The rate does not include non-market benefits such as family connection, benefits from accessing or managing government services etc.

The formula used for calculating the community value of internet/computer use is:

Total number of hours of internet/computer in average month x 12 months X \$2

Resume assistance

Based on the cost of a resume service for a fee. The fee was benchmarked at the median price of \$50 on airtasker.com³⁸. The value was discounted to \$30 to account for the fact that Neighbourhood Houses may provide a participant with assistance in developing a resume rather than creating a full resume as a service.

The formula used for calculating the community value of resume assistance is:

Total number of resumes assisted with in an average month X 12 (months) x \$30

Tax help

Based on the cost of the cheapest commercial tax service found online³⁹ at \$100 per tax return. This is a conservative valuation as many tax help clients have multiple and/or complex returns which attract additional fees at commercial tax service providers.

The formula used for calculating the community value of Tax Help is:

Total number of tax returns lodged in 2022 x \$100

Auspicing other organisations

The community value of auspicing other organisations is based on the cost of purchasing public liability cover which groups would have to take out if they were not covered by the Neighbourhood House under auspicing arrangements. The price is benchmarked at \$632.46 for annual cover provided by Local Community Insurance Services⁴⁰

The formula used for calculating the community value of auspicing other organisations is:

Total number of organisations auspiced in 2022 x \$637

Community lunch, frozen or other meals

Based on the cost of purchasing a meal commercially, this has been benchmarked at \$10 per meal. This is benchmarked based on the prices quoted by ING, and numbeo.com⁴¹ ranging from \$13 to \$25. It is discounted to \$10 per meal to account for regional price variation.

While many meals provided at community lunches are likely to be a form of emergency relief, participants may attend community lunches for other reasons such as for company or a lack of cooking skills. Because we are unable to distinguish between the two, meals provided are not valued as emergency relief.

³⁷ <https://www.facebook.com/dsinternet512/?rf=710935435612179>

<https://www.facebook.com/galaxysonicgaming>

³⁸ <https://www.airtasker.com/writing/resume-writing/>

³⁹ www.taxtoday.com.au/information/fees/

⁴⁰ <https://www.localcommunityinsurance.com.au/>

⁴¹ <https://www.numbeo.com/cost-of-living/in/Melbourne> , <https://blog.ing.com.au/money-matters/saving/dust-off-your-lunch-boxes/#article-1811>,

The formula used for calculating the community value of community lunches, frozen or other meals is:

Total number of individual meals served/provided in an average month x 12 months x \$10

School aged breakfast clubs

The value to community of food provided through school breakfast clubs is based on work undertaken by Foodbank in Australia⁴². Their social return on investment analysis determined that school breakfast clubs were valued at an average \$110 per kilogram of food in 2014 dollars. This valuation included the value of:

- Improved physical health (children)
- Better performance at school (students)

Based on data from their report, the average breakfast is valued at \$31.40 in 2014 dollars. While the cost of food has increased since 2014, the change in value of the social benefits is unclear. For this reason, we have retained the \$31.40 figure making this a conservative evaluation.

The formula used for calculating the community value of school aged breakfast programs is:

Total number of individual breakfasts served/provided in an average month x 10 months x \$31.40

Fee for service activities

The value to community of fee for service activities is based on the actual fees paid for activities undertaken by community members where the activity was not subsidised by grants or third parties other than NDIS.

Many Neighbourhood House activities are provided at low cost and therefore the value is conservative as it is likely less than the replacement value if the activity was undertaken with a commercial or for-profit provider.

The formula used for calculating the fee for service activities is:

Total value of fee for service activities from the period covered by the applicable annual report

Power Saving Bonus

The Victorian State Government's Power Saving Bonus (PSB) provided a one-off \$250 payment for Victorian households to help ease cost-of-living pressures and encourage them to compare energy offers and save money. Neighbourhood Houses Victoria and Good Shepherd partnered to help community members who experience barriers to accessing the PSB apply for the State Government's \$250 Power Saving Bonus.

This valuation does not include ongoing savings from finding cheaper energy deals or the value of being linked to other services and opportunities through the Neighbourhood House and its networks. It also does not include value from the alternative use of funds that would otherwise have been used for power bills such as improved health and wellbeing etc.

The formula used for calculating the fee for service activities is:

Total number of people assisted to obtain the Power Saving Bonus in 2022 X \$250

⁴² <https://www.foodbank.org.au/wp-content/uploads/2019/05/Foodbank-Hunger-in-the-Classroom-Report-May-2015.pdf>

Government subsidised Adult Community Education (ACE)

Based on analysis of the Allen Consulting's 2008 report, The Economic Benefit of Investment in Adult and Community Education in Victoria⁴³ commissioned by the ACFE Board. While there have been significant subsequent structural changes that have occurred in the VET sector, the work is most relevant because it examines the Victorian ACE sector specifically and includes pre-accredited as well as accredited training. The analysis discounts the value of pre-accredited compared to accredited training by estimating a proportional certificate equivalence.

Its use to estimate community value is also adopted because it is conservative in that it does not;

- include the significant known non-market benefits such as improved health, reduced criminality and welfare dependency etc. estimated to be equal in value to the market benefits
- include 36.3% of student contact hours to account for those with no market benefit
- include the direct contribution of ACE provision to the economy (direct and induced economic impact of provider expenditure and wages)
- include the benefits provided to community from \$10.09 additional tax revenues from increased income and gross state product for each dollar invested by the Victorian government in ACE
- account for the increased focus on delivery of pre-accredited training with market benefits since 2008
- account for tighter targeting of vocational training to industry demand

This report effectively values two principle community benefits at \$17.23 for each dollar of government funding. It is the value created over a 25-year timeframe from the learning provided. This rate is comparable with other work conducted locally and internationally. From a single year of state government investment of \$36.7 million, the report models:

- Future income – \$202 million
- Increased gross state product – 2.13 times the income effect - \$202 million x 2.13 = \$ 430.26 million
- Total \$632.26 million / \$36.7 million state government funding = \$17.23

By comparison, a 2017 study from the University of Adelaide's South Australian Centre for Economic Studies⁴⁴ showed a return on investment for Cert I foundation courses averaging just 34 student contact hours at \$6.50 for each dollar of funding. However, the average SCH rate of \$43.70 was about 4.8 times the value of \$9.10 ACFE rate so equates to over \$31 return on investment for the same volume of activity if conducted as pre-accredited in Victoria. The study also only included the benefit of increased income and Victorian transition rates to Cert III and above for Learn Local students, with the corresponding higher income earning potential, are much higher⁴⁵ than those in the South Australian study.

Work that includes a more comprehensive range of non-market benefits values Government subsidised Adult Community Education at much higher rates. A New Zealand analysis from Price

⁴³ https://melbourneinstitute.unimelb.edu.au/assets/documents/hilda-bibliography/other-publications/pre2010/ACG_economic_benefit_of_investment_adult_education.pdf

⁴⁴ South Australian Centre for Economic Studies. The Economic and Social Impact of the Adult Community Education (ACE) Sector. University of Adelaide; 2016.

⁴⁵

https://www.education.vic.gov.au/Documents/about/research/acfepublications/Participation%20training%20outcomes%20and%20patterns%20report_FINAL_Nov%202017.pdf

Waterhouse Coopers⁴⁶ valued ACE returns, including a range of non-market benefits, up to \$72 for each \$1 invested. While the comparisons differ substantially in many ways, all add significant value because they focus on disadvantaged learners.

Any potential overstatement of community value due to the changes in the structure of ACE since 2008 are more than compensated for by the value of other benefits not included in the calculation.

The formula used for calculating the community value of Government subsidised Adult Community Education programs is:

Total \$ value of government student contact hour subsidies in 2022 X 17.23

Childcare

While there is research that suggests significant benefit from childcare for some cohorts within the community⁴⁷, there is inadequate research to determine the value to community of occasional childcare beyond the actual value of the service for the broader population.

The formula used for calculating the community value of childcare is:

Total \$ value of government subsidies + parent fees in 2022 X 1

Four-year-old Kinder

The community value of four-year-old Kinder is based on a 2019 Price Water House Coopers study⁴⁸ which valued early childhood education in the year-before-school. It calculated a \$2 benefit for each dollar of costs.

The formula used for calculating the community value of four-year-old kinder is:

Total \$ value of government subsidies + parent fees in 2022 X 2

Social Enterprises

The community value of running social enterprises is based on the value of sales from goods and services through Neighbourhood House run community enterprises in the most recent applicable financial reporting period. This reflects the market value of the goods and services provided. It does not include additional value generated such as avoided landfill, value of training and work experience, economic multipliers or the value of services or activities any profits support.

Total \$ value of social enterprise sales from the period covered by the applicable annual report

Community value relative to inputs

Community value for every \$1 of Neighbourhood House Coordination Program (NHCP)

Shows the total calculable community value from the organisation for each dollar of NHCP funding received. The NHCP provides the platform to develop and attract funding for the various activities the organisation undertakes.

⁴⁶

<http://www.crystaladventures.co.nz/ACE/ACE%20Price%20Waterhouse%20Coopers%20Research%20Summary%20V4.pdf>

⁴⁷ [Literature review of the impact of early childhood education and care on learning and development: working paper \(full report; 30 Sep 2015\) \(AIHW\)](#)

⁴⁸ <https://www.thefrontproject.org.au/images/downloads/ECO%20ANALYSIS%20Full%20Report.pdf>

The formula used for calculating the community value for each dollar of NHCP is:

Total community value/ total NHCP for the reported year

Community value for every \$1 of income

Shows the total calculable community value from the organisation for each dollar of income received.

The formula used for calculating the community value for each dollar of NHCP is:

Total community value/ total annual income for the reported year

Community value for every hour the Neighbourhood House is in use

Shows the total calculable community value as an average for each hour the Neighbourhood House is in use. 'In use' includes any time of the week or day when activities are occurring, regardless of whether the organisation is staffed or open to the broader public. It does not reflect concurrent usage i.e. multiple activities occurring simultaneously for one hour are counted as 1 hour of use, even if these activities occur at different sites operated by the organisation. It is essentially an expression of community value from a building utilisation perspective.

The calculation assumes activities take place over 50 weeks in the year.

The formula used for calculating the community value for every hour the Neighbourhood House is in use is:

Total community value / (hours per week the building/s is in use x 50)

Employment

Employment is calculated using the total hours of paid employment response combined with multipliers derived from 2017 analysis by Deloitte ACCESS Economics on the Economic contribution of the Australian charity sector for the Australian Charities and Not-for-profits Commission⁴⁹. The multipliers are based on employment data for the development and housing sector classification. This classification covers much of the work done by Neighbourhood Houses including community development and training (multiplier = 1.39). This means that for every full-time equivalent employee, a further 0.39 full-time equivalent jobs are supported elsewhere in the economy due to the economic activity created by wage spending. Neighbourhood Houses engage in activities that fit in other classifications e.g. emergency relief, referral etc which fit within the social services classification (multiplier = 1.46) or recreational activities that fit within the culture and recreation (multiplier = 1.35). These classifications' multipliers are marginally higher and lower than the development and housing multiplier respectively, further supporting the use of a 1.39 employment multiplier for the sector.

The formula used for calculating the total employment effect is:

Total reported hours of paid employment /38 X 1.39

⁴⁹ <https://www.acnc.gov.au/%2Ftools%2Freports%2Feconomic-contribution-australian-charity-sector&usg=AOvVaw2R-20vVOybpm8ctvW5xsCY>

Discussion

Canopy Mapping Methodologies

7. Technology for mapping canopy cover has improved considerably since the last canopy cover mappings were undertaken in 2014. It is now possible to generate much more accurate measurements using new technologies.

2014 Canopy Cover Mapping

8. The 2014 canopy cover mappings were generated using a pixel analysis of 2014 infrared imagery. These mappings measured canopy cover at 17% across the municipality.
9. This was the best available technology for measuring canopy at the time. However, a closer examination of the results reveals many 'false-negatives' and 'false-positives'. (Figure 2)

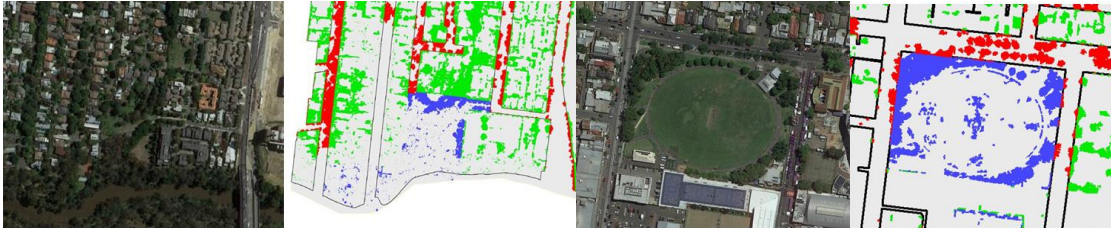


Figure 2 – 2014 mappings compared to aerial image to illustrate false negative results along the Yarra River and false positive results in an open sports field lawn.

10. This technology is now outdated with newer, more accurate options available.
11. Due to the inaccuracies of the 2014 mapping and the inability to accurately replicate the methodology, Council officers explored all current available measurement options and determined that the canopy coverage data from Nearmap is the preferred methodology for measuring canopy cover.
12. Due to the inaccuracies of the 2014 pixel analysis mappings it is necessary to set a new baseline using the Nearmap canopy measurement methodology. Using this same measurement methodology allows results to be accurately compared against each other over time.
13. 2016 has been selected as the new baseline year due to the availability of all other relevant tree data which informed the UFS. This tree data includes a comprehensive street tree survey that has not been replicated since. The UFS recommends that this comprehensive tree survey be repeated at the 10-year milestone in 2026. As such mappings have been aligned to these milestones.
14. Measurements were therefore also collected in 2021 at the five-year interval from 2016. This allows us to assess the progress of Yarra's canopy coverage as per the requirements of the UFS.
15. It should be noted that the 2014 pixel analysis mapping and the 2016 Nearmap mapping both register a total canopy coverage result of 17%. However, these results should not be compared against each other directly as they use different measurement methodologies.

Nearmap AI – Vegetation mapping.

16. A methodology for measuring vegetation and canopy coverage has been developed by Nearmap that uses a machine learning model to analysing aerial imagery and identify vegetation and canopy cover >2m in height.
17. This model can be used to derive a canopy cover layer from historic aerial imagery, allowing us to directly compare results from 2016 with 2021.
18. Results from this methodology are considerably more accurate however, it should be noted that the mappings are still not perfect with results affected in some cases by very tall buildings that obscure or overshadow trees depending on the time of day or angle of the aerial capture.

19. This methodology of measuring canopy cover is simple to replicate in the future and is significantly more affordable than other technologies.
20. These Nearmap mappings are accessible to Council officers to guide decision making and the implementation of the UFS and:
 - (a) Data can be analysed by land-use type and suburb to gain insights into trends in canopy coverage across the municipality; and
 - (b) Canopy coverage rates can also be derived from the data for all streets, parks and properties in Yarra offering further insights into Yarra’s urban forest.
21. Council officers also explored the potential use of LiDAR scanning as another technology that can be used to measure canopy, however this was not the preferred approach as this methodology picked up too many false positives and historic comparisons are not possible.

Canopy Mapping Results

22. The following canopy coverage rates were derived from a comparison of the 2016 and 2021 Nearmap canopy coverage data (5 years since the introduction of the UFS): (Figure 3)

Yarra Total Canopy Coverage			
Locality/Suburb	2016	2021	Canopy area increase
City of Yarra	17.0%	17.7%	+ 3.8%
Canopy Area	3,336,084 sq.m	3,463,960 sq.m	+ 127,876 sq.m

Figure 3 – Yarra total canopy coverage rates from 2016 – 2021.

23. The graphical representation in Figure 4 below shows that:
 - (a) the area of tree canopy cover in Yarra has increased by 3.8% across the municipality;
 - (b) this results in an increase in percentage of canopy cover across the municipality from 17% to 17.7%;
 - (c) this represents an increase in canopy coverage of 127,876 m², equivalent to 7 MCGs worth of additional canopy; and
 - (d) 51,142 m² (equivalent to 2.9 MCGs) of that canopy was gained in Yarra’s streetscapes which has been the primary focus of the UFS.

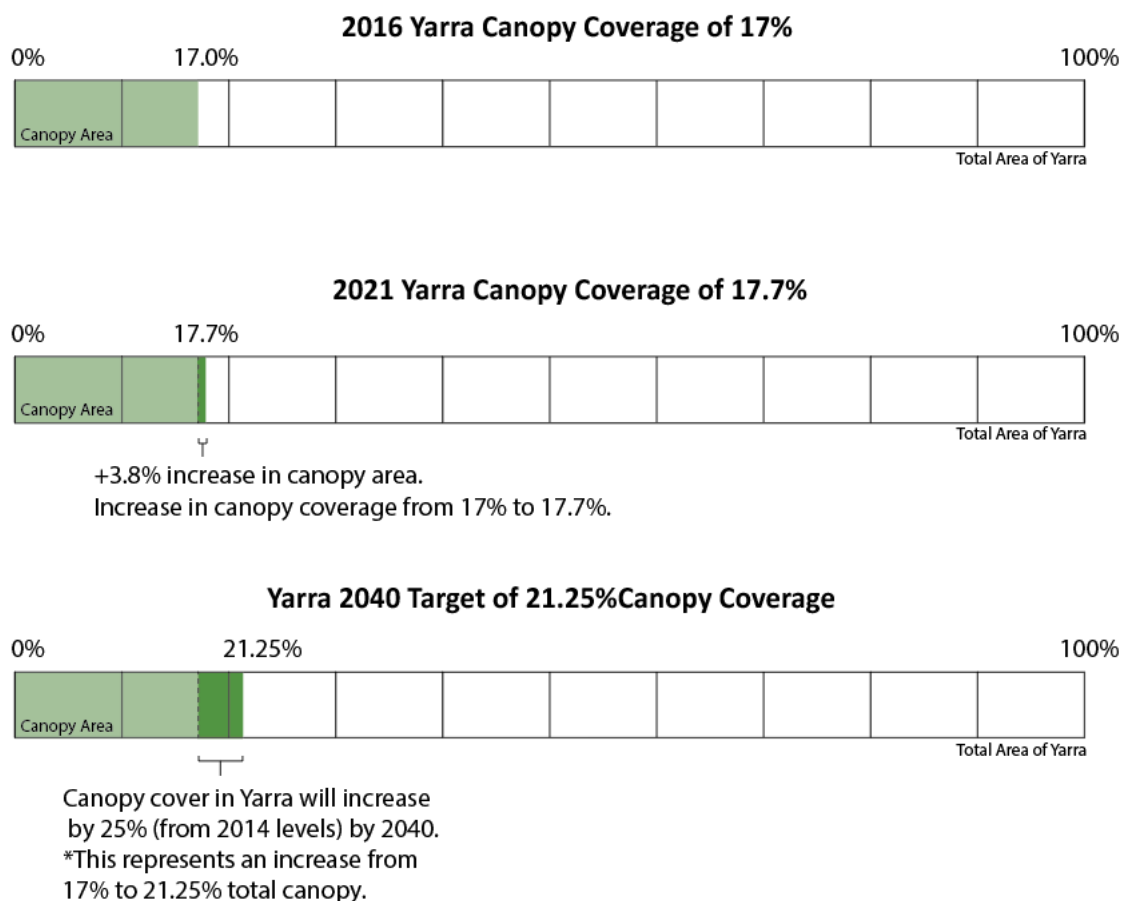


Figure 4 – Graphic illustrating Yarra’s progress towards a canopy target of 21.25%.

24. Canopy results have been broken into the following three land-use categories (Figure 5) and summarised:

Yarra Canopy Coverage By Land Use			
Year	Road Canopy %	Parks Canopy %	Property Canopy %
2016	16%	34.0%	12.2%
2021	17.4%	35.2%	12.5%
Canopy Area Increase	6.0%	3.4%	2.8%

Figure 5 – Yarra canopy coverage rates from 2016 – 2021 by land use category.

All land-use types have made gains in canopy coverage across Yarra, however the most significant gains have been made in the streetscape with a 6% increase in canopy over roads from 16% to 17.4%.

25. The largest gains in canopy have been made in Yarra’s streetscapes with a 6% gain in road canopy area. This aligns with the objectives of the UFS which focuses on increasing canopy in streets where the effects of urban heat island are most acutely felt, and the benefits of trees are greatest.

Canopy Cover Mapping Results by Suburb

26. Results have also been broken down by suburb as follows:

Total Canopy Coverage by Suburb			
Locality/Suburb	2016	2021	Canopy area increase
Abbotsford	14.4%	16.0%	11.5%
Alphington	29.6%	28.5%	-3.6%
Burnley	21.3%	24.0%	12.8%
Carlton North	13.2%	12.9%	-2.3%
Clifton Hill	19.3%	19.9%	3.2%
Collingwood	8.2%	9.2%	12.3%
Cremorne	6.2%	6.3%	0.7%
Fairfield	33.0%	33.5%	1.4%
Fitzroy	11.8%	12.8%	8.5%
Fitzroy North	17.2%	17.4%	1.6%
Princes Hill	15.1%	15.5%	3.1%
Richmond	11.6%	12.4%	6.3%
City of Yarra	17.0%	17.7%	3.8%

Figure 6 – Yarra canopy coverage rates from 2016 – 2021 by suburb.

27. Most suburbs across Yarra have made gains in canopy coverage with the largest gains made in Burnley (+12.8%), Collingwood (+12.3%) and Abbotsford (+11.5%) which all recorded more than 10% gains in canopy.
28. Some significant gains in canopy coverage have been made in areas with high social vulnerability including the Collingwood public housing estate (Figures 7 & 8). As a suburb Collingwood has seen a 12.3% rise in canopy cover from 8.2% to 9.2%.

Collingwood Canopy Coverage			
Land Use	2016	2021	Canopy area increase
ROADS	11.8%	13.5%	14.2%
PARKS	39.6%	47.6%	20.2%
PROPERTY	6.3%	6.9%	10.3%
TOTAL	8.2%	9.2%	12.3%

Figure 7 – Collingwood canopy coverage rates from 2016 - 2021 by land-use category.



Figure 8 – Change in tree canopy from 2016 – 2021 in Collingwood. Significant gains in canopy have been made in proximity of the Collingwood Public Housing Estate.

29. Reductions in canopy cover were recorded in Alphington (-3.6%) and Carlton North (-2.3%). (Figures 9,10,11&12):
 - (a) Reductions in Alphington can be primarily attributed to the significant removal of canopy required for the remediation and development of the AMCOR site. New trees have been planted however these are not yet registering significantly in the canopy mapping; and

Alphington Canopy Coverage			
Land Use	2016	2021	Canopy area increase
ROADS	27.3%	25.1%	-8.1%
PARKS	47.3%	51.4%	8.6%
PROPERTY	28.5%	27.1%	-4.7%
TOTAL	29.6%	28.5%	-3.6%

Figure 9 – Alphington canopy coverage rates from 2016 – 2021 by land-use category.

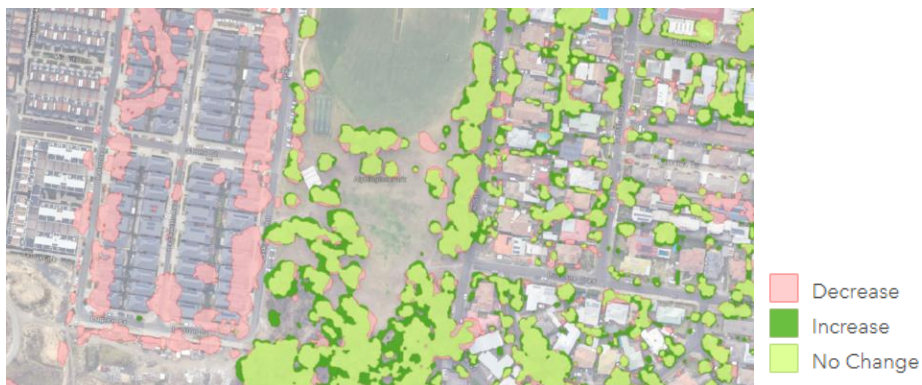


Figure 10 – Change in tree canopy from 2016-2021 in Alphington. Significant reduction in canopy indicated at the AMCOR development.

- (b) Reductions in canopy in Carlton North streetscapes can be primarily attributed to major street tree upgrades, including Canning, Drummond and Station Streets. These upgrades have resulted in the replacements of many over-mature poplar and elm trees. Trees have been replaced; however new trees are not yet registering significantly in the canopy mappings.

Carlton North Canopy Coverage			
Land Use	2016	2021	Canopy area increase
ROADS	17.3%	16.8%	-2.7%
PARKS	42.3%	40.5%	-4.2%
PROPERTY	9.4%	9.3%	-1.5%
TOTAL	13.2%	12.9%	-2.3%

Figure 11 – Carlton North canopy coverage rates from 2016 – 2021 by land-use category.



Figure 12 – Change in tree canopy from 2016-2021 in Carlton North. Significant reduction in canopy recorded due to several major park and street tree upgrades.

Changes to Tree Numbers (as distinct from canopy cover area)

- 30. The total number of street trees in Yarra has grown by 3,819 from 2016 to 2021 which represents an 18% increase in the number of trees.
- 31. The below table (Figure 13) provides an estimate of the change in total tree numbers from 2016 – 2021.

	2016	2021	Change	
	Street Trees	Street Trees		
Street Tree Numbers	20,897	24,716	+3,819	+18%

Figure 13 – Yarra estimate of total number of street trees from 2016 – 2021.

- 32. This increase is in part due to the additional climate emergency funding allocated by Council to accelerate the tree planting program.
- 33. While the number of street trees has increased by 18% from 2016 to 2022, canopy coverage in streetscapes across Yarra has only increased by 6% from 2016 to 2021.
- 34. The disparity between the total number of trees and tree canopy coverage can be attributed to a number of factors including:
 - (a) Insufficient size of new juvenile plantings to register in the mapping; and
 - (b) A shift in tree species selection away from large-scale plane and elm species to more compact tree species appropriate for dense urban environments.

Future Challenges to Canopy Coverage

- 35. The UFS identified that Yarra will face significant challenges in canopy loss in the decade between 2027 and 2037.
- 36. Based on the estimated Useful Life Expectancy (ULE) of all trees across Yarra in 2016, 24% of the trees are likely to reach the end of their useful life and need removing and replacing in the decade between 2027 and 2037, equalling 5,051 trees.
- 37. This is more than double the best-practice proportion of the tree population expected to reach end of life in any one decade. A strategic approach is therefore required to minimise the impact of tree and canopy loss during this decade.
- 38. Work has already begun on succession strategies to gradually replace trees within this ULE range to limit the impact of losing many mature trees all at once.
- 39. It should be noted that these succession strategies will have significant impacts on canopy cover in the short term as mature trees are gradually replaced with new juvenile trees. This has been evident in Carlton North where upgrades of mature trees have led to a short-term loss in canopy.
- 40. This loss of mature canopy is likely to be compounded by the effects of climate change and predictions of El Niño weather patterns developing in 2023 that may result in hotter, dryer conditions in Yarra over the coming years.
- 41. Yarra’s increasing urban density presents further challenges to finding appropriate locations within our streetscapes to plant new trees.

Implications for the UFS Canopy Cover Targets

- 42. The target of the UFS is:
Canopy cover in Yarra will increase by 25% (from 2014 levels) by 2040. This represents an increase from 17% to 21.25% total canopy.
- 43. Between 2016 and 2021 Yarra made a 3.8% gain in canopy cover. If this gain was sustained over each five-year period into the future, we would be projected to reach our canopy coverage target of 21.25% by 2046 (Figure 14).

Yarra Canopy Coverage Projections		
2016	3,336,084 sq.m	17.0%
2021	3,463,960 sq.m	17.7%
2026 (projection)	3,596,738 sq.m	18.4%
2031 (projection)	3,734,606 sq.m	19.1%
2036 (projection)	3,877,758 sq.m	19.8%
2041 (projection)	4,026,398 sq.m	20.6%
2046 (projection)	4,180,735 sq.m	21.3%

Figure 14 – Projected canopy cover change 2016 – 2046.

44. Note that the above projections are estimates and do not account for the impact of accelerated planting rates. Projections also do not factor in the challenges in loss of significant established trees that we are likely to face over the next decade.

Community and stakeholder engagement

45. Internal consultation has been conducted to update the following teams on the new methodology for measuring canopy and canopy cover results:
- (a) Urban Design;
 - (b) Digital & Technology - Data Services;
 - (c) Sustainability;
 - (d) Biodiversity;
 - (e) Open Space Planning; and
 - (f) Council Arborists.
46. Over the coming months the project team will work with the Communications and Engagement team to update the public on the new canopy cover rates and targets.
47. Targeted consultation with the Yarra Environment Advisory Committee (YEAC) is recommended to provide an update on the new mapping methodology and results.

Policy analysis

Alignment to Community Vision and Council Plan

48. Updating Yarra’s canopy cover mappings aligns with the Community Vision priority of leading the way in climate change mitigation and resilience within Yarra and extend our impact through advocacy and innovative partnership.
49. The updated canopy cover exercise aligns with Council Plan 2021-25 objectives and initiatives including:
- (a) Protect and enhance the biodiversity values, connectivity and resilience of Yarra’s natural environment (Strategic Objective three: Place and Nature); and
 - (b) Measure tree canopy cover across the municipality (Initiative (c): Place and Nature).

Climate emergency and sustainability implications

50. The climate emergency plan includes a target to increase canopy cover in 2040 by 25% for the whole municipality from a 17% baseline in 2014.
51. Increasing canopy coverage would be expected to have significant positive sustainability implications for Yarra by mitigating the effects of urban heat island and building climate resilience.

Community and social implications

52. Increasing canopy coverage in Yarra is likely to have significant positive social implications—via a reduction of the urban heat island effect and other liveability benefits trees in the urban environment provide.
53. Increasing public access to canopy coverage data in an engaging and compelling way is likely to encourage community to value and contribute towards increasing Yarra's Urban Forest.

Economic development implications

54. A flourishing and well managed urban forest can contribute many economic benefits within the Municipality, including:
 - (a) reduction of energy use in buildings from cooling through canopy shade;
 - (b) improved retail activity from shoppers spending longer in retail areas well treed and landscaped; and
 - (c) improved character, amenity and brand of the region.

Human rights and gender equality implications

55. There are no known human rights implications from the report.

Operational analysis

Financial and resource impacts

56. There is a cost associated with procuring canopy data from Nearmap. The UFS recommends updating canopy cover measurements every 5 years with the next review scheduled for 2026.

Legal Implications

57. There are no identified legal implications from the report.

Conclusion

58. Council officers have established a process for accurately measuring canopy coverage across the municipality. This process can be replicated in the future to track Yarra's progress towards our UFS targets.
59. Tree canopy cover has increased by 3.8% across Yarra, resulting in a rise in the percentage of Yarra that is covered by tree canopy from 17% to 17.7%. This represents an increase in canopy coverage of 127,876 m², equivalent to 7 MCGs worth of additional canopy across the municipality.
60. This increase puts Yarra roughly on track to achieve our UFS target of a 25% increase in canopy by 2040. However, additional planning and funding will be required to overcome the challenges of significant mature tree loss predicted to occur in Yarra over the next decade.
61. Canopy within streetscapes only, has increased by 6% across the municipality, resulting in a rise in the percentage of Yarra's streetscapes covered by tree canopy from 16% to 17.4%. Streetscapes have been the primary focus of the UFS as the places where the effects of urban heat island are most acutely felt, and the benefits of trees are greatest.
62. Over the coming months the project team will work with the Communications and Engagement team to update the public on the new canopy cover rates and targets via the Yarra website.

RECOMMENDATION

1. That Council note that:
 - (a) Council officers have established a process for accurately measuring canopy coverage across the municipality which will be replicated in the future to track Yarra's progress towards our Urban Forest Strategy targets;
 - (b) tree canopy cover has increased by 3.8% across Yarra, resulting in a rise in the percentage of the municipality covered by tree canopy from 17% to 17.7%;
 - (c) Yarra is on track to achieve our Urban Forest Strategy target of a 25% increase in canopy by 2040; and
 - (d) the public will be updated on the new canopy cover rates and targets via the Yarra website and other relevant avenues.

Attachments

There are no attachments for this report.

7.8 Governance Report - August 2023

Reference	D23/248989
Author	Rhys Thomas - Senior Governance Advisor
Authoriser	General Manager Governance, Communications and Customer Experience
Disclosure	The authoriser, having made enquiries with members of staff involved in the preparation of this report, asserts that they are not aware of any general or material conflicts of interest in relation to the matters presented.

Purpose

1. The Governance Report is prepared as a periodic report to Council which provides a single reporting platform for a range of statutory compliance, transparency and governance related matters.

Critical analysis

History and background

2. To ensure compliance with the Local Government Act 2020 and in accordance with best practice and good governance principles, transparency and accountability, this standing report consolidates a range of governance and administrative matters.
3. Matters covered in this report are:
 - (a) the delivery of conflict of interest training for Councillors;
 - (b) the release of the IBAC report following Operation Sandon; and
 - (c) changes to the Civic Flag Policy.

Discussion

Conflict of interest training for Councillors

4. Schedule 1 of the Local Government (Governance and Integrity) Regulations provides that a Councillor must “*undertake any training or professional development activities the Council decides it is necessary for all Councillors to undertake in order to effectively perform the role of a Councillor*”. Councillors are offered a program of training sessions covering matters relevant to their role, including strategic planning, financial stewardship, governance and other matters.
5. On 25 July 2023, training was delivered to Councillors in conflicts of interest. The training was delivered by Tony Raunic of Hunt and Hunt Lawyers, in partnership with Council officers. The training examined the legislative obligations insofar as they relate to conflicts of interest, including sections 127, 128 and 129 of the Local Government Act 2020.
6. In attendance at the training were Councillors Crossland, Glynatsis, Landes, Mohamud, Nguyen and Stone as well as members of the Council executive.

Operation Sandon

7. Operation Sandon was an investigation by the Independent Broad-based Anti-Corruption Commission (IBAC) into allegations of corrupt conduct involving councillors and property developers in the City of Casey. It also examined the adequacy of Victoria’s current systems and controls for safeguarding the integrity of the state’s planning processes.
8. IBAC’s investigation was primarily concerned with four planning matters. Each matter involved the Casey Council as decision-maker, and two required the Minister for Planning to make a determination.

9. The full report is available on the independent Broad-based Anti-corruption Commission's website at www.ibac.vic.gov.au
10. As a result of Operation Sandon, IBAC recommended a suite of reforms to address corruption risks to:
 - (a) promote transparency in planning decisions;
 - (b) enhance donation and lobbying regulation;
 - (c) improve the accountability of ministerial advisors and electorate officers; and
 - (d) strengthen council governance.
11. The Sandon Report makes 34 recommendations (refer summary document at **Attachment One**) including recommending that a Taskforce be appointed to oversee the implementation of the recommendations and provide quarterly reporting to IBAC detailing progress and report publicly within 18 months of actions taken.
12. Shortly after the release of the report, the Municipal Association of Victoria (MAV) issued a statement saying it will work through the planning recommendations with the sector and that it is essential that the recommended taskforce meaningfully consult with the MAV particularly in relation to recommendations to take statutory planning powers away from Councillors.
13. In a President Alert sent to all Victorian Mayors and Councillors on 4 August 2023, David Clark, President of the MAV advised;

At this morning's MAV Board meeting, the Board endorsed a planning reform advocacy position for the MAV to progress with our members.

Our goal is to have the sector articulate a clear and consistent vision for the Victorian planning system and use that to engage constructively with the Government.

The MAV will continue to actively seek to influence the Government's planning and housing reforms, including securing a seat on the Government working group to progress the recommendations of the Operation Sandon.

In addition to the release of the Operation Sandon report, the Victorian Government has been positioning itself for major reforms to the planning system. As a sector we need to articulate our vision for what planning in Victoria should be and use that to engage constructively with the Government. Building on the outputs of a council working group, the MAV Board has endorsed a position on planning reform encompassing seven themes:

Vision-based reforms

- *Social licence of the planning system*
- *Sustainability and future generations*
- *Delivering the housing Victorians need*

Process-based reforms

- *Good decisions grounded in local communities*
- *A high-impact, low-footprint planning system*
- *Continuous improvement*
- *Integrity, transparency, and accountability*

14. The MAV's Vision for planning reform overview is copied below:

The MAV's vision for planning reform - Overview

Vision-based reforms		
1) Social licence of the planning system	2) Sustainability and future generations	3) Delivering the housing Victorians need
1A Delivering on community expectations for their neighbourhoods	2A Addressing a changing climate	3A Mandatory social and affordable housing contributions
1B Delivering the infrastructure Victorians need	2B Sustainable transport hierarchy	3B Strategic planning that supports housing capacity
1C State and Local governments partnering to deliver place-based density	2C Making invisible costs visible	3C Converting approvals into supply
Process-based reforms		
4) Good decisions grounded in local communities	5) A high-impact, low-footprint planning system	6) Continuous improvement
4A Enhancing local democracy	5A Increasing clarity, prescription, and direction	6A Improving the Planning Scheme Amendment process
4B Properly resourcing the planning system	5B Streamlining applications by risk	6B Utilising local government expertise in planning reform
4C A framework for regional and state-wide issues	5C Consistent and decision-ready applications	6C Monitoring reform against measurable benchmarks
	7) Integrity, transparency, and accountability	
	7A Transparency and accountability across the whole planning system	
	7B Removing inappropriate influence	
	7C The role of independent panels	

15. In relation to recommendations relating to the role of local government in planning matters, Councillors will recall that on 16 May 2023, the following motion was carried unanimously:

COUNCIL RESOLUTION

Moved: Councillor Stone

Seconded: Councillor O'Brien

1. That Yarra Council note recent media reports of an IBAC recommendation, following operation Sandon, to remove planning powers from councillors.
2. That the Mayor write to the Minister for Planning expressing Yarra Council's concern about these reports that the state may consider removing planning powers from local governments.
3. That the Mayor communicate to the Minister for Planning that:
 - (a) Local governments know their local areas and local communities best and are best placed to make planning decisions in the interests of present and future occupiers;
 - (b) Local governments are subject to a high level of scrutiny from their citizens. Corruption is therefore less likely to be undetected than at other levels of government;
 - (c) Local governments have approved over 85% of planning applications in the current financial year (State Government Planning Permit Activity Report). Housing affordability is not demonstrably being influenced by the planning decision-making of local government;
 - (d) To date in this financial year, 35,337 planning determinations have been made by councils across the state. 33,338 applications were received, 29,041 permits have been issued (new applications and amended), 4,119 notices of decision have been made, 1,073 refusals issued and 4,510 applications were withdrawn.¹ **Refusals comprise about 3 % of total applications;** and
 - (e) Removing planning powers from local councils will disenfranchise local communities and arguably decrease their confidence in the state government.
4. That the Mayor urge the Minister to meet with the local government sector to discuss any proposed changes to planning powers for local government before proceeding with such changes.
5. That the Mayor urge the Minister to ensure planning powers for local planning decisions remain in the hands of local governments to ensure the best planning decisions for their communities, present and future.
6. That the Mayor seek a meeting with the Minister for Planning to discuss the matters raised in this motion.
7. That a copy of this motion be sent to the Member for Richmond and members for the Northern Metropolitan Region.

16. This resolution has been actioned.
17. Officers will continue to review and consider the implications for Yarra and update Councillors accordingly.

Civic Flag Policy

18. Council's Civic Flag Policy governs the flying of flags at Council's Town Halls, Civic Flagpoles and other facilities.
19. The installation of new flagpoles at Council's depot in Roseneath Street Clifton Hill has triggered a review of the policy and a number of minor changes are now recommended. The Community Flag Schedule (which sets out which flags are flown) is not proposed to change.
20. The following changes are recommended for Council's endorsement:
 - (a) Inclusion of the Clifton Hill Depot alongside the three town halls as a flag location;
 - (b) Removal of references to the City of Yarra flag, which is no longer in use;
 - (c) Updating the reference to the former Internal Development Approvals Committee to the Planning Decisions Committee;
 - (d) Clarifying the intention to lower all three Australian flags to half-mast when recognising the passing of an Aboriginal or Torres Strait Islander person;
 - (e) Providing that the Australian national flags be lowered to half-mast upon the passing of Councillors, members of parliament or outstanding local citizens (instead of the City of Yarra flag as had previously been the case);
 - (f) Updating references to the former Group Manager Chief Executive's Office to the General Manager Governance, Communications and Customer Experience; and
 - (g) Adding the responsibility of the City Works Branch to appoint a flag Marshall for the new Clifton Hill flagpoles.
21. In addition, the review recommends that decisions about which flags are flown on the Civic flagpoles should rest with the Council, and that the process which enables community organisations to directly apply to the administration to fly a flag (which has gone unused to date) be removed from the policy. In line with this change, the criteria to be considered when making a decision about which flags to fly has been removed, with this to be left as a matter for the Council at the time of each decision.
22. It is recommended that Council endorse the changes set out in the marked up version of the Civic Flag Policy at **Attachment Two**.

Options

23. There are no options presented in this report.

Community and stakeholder engagement

24. No community or stakeholder engagement has been undertaken in the development of this report, save the engagement with internal stakeholders necessary to compile the report content.

Policy analysis

Alignment to Community Vision and Council Plan

25. In its Yarra 2036 Community Vision, Council articulated an objective for a community that is *"informed and empowered to contribute to the shared governance of Yarra, (where) decision-making is through access, inclusion, consultations and advocacy."*
26. City of Yarra Council Plan 2021-2025 includes Strategic Objective six: 'Democracy and governance', which states that good governance is at the heart of our processes and decision-making. The plan commits Council to *"practice good governance, transparency and accountable planning and decision-making."*

27. The presentation of a Governance Report provides an opportunity to provide updates on key organisational matters both to the Council and the community.

[Climate emergency and sustainability implications](#)

28. There are no climate emergency or sustainability implications considered in this report.

[Community and social implications](#)

29. There are no community or social implications considered in this report.

[Economic development implications](#)

30. There are no economic development implications considered in this report.

[Human rights and gender equality implications](#)

31. There are no human rights or gender equality implications considered in this report.

Operational analysis

[Financial and resource impacts](#)

32. There are no financial and resource impacts considered in this report.

[Legal Implications](#)

33. There are no legal implications considered in this report.

Conclusion

34. This report presents an officer recommendation on:
- (a) the delivery of conflict of interest training for Councillors;
 - (b) the release of the IBAC report following Operation Sandon; and
 - (c) minor changes to the Civic Flag Policy.

RECOMMENDATION

1. That Council note this Governance Report on:
 - (a) the delivery of conflict of interest training for Councillors; and
 - (b) the release of “Operation Sandon – Special Report” by the Independent Broad-based Anti-corruption Commission.
2. That Council adopt the changes to the Civic Flag Policy as set out in the marked up version at **Attachment Two**.

Attachments

1. Attachment 1 - IBAC Operation Sandon - Recommendation summary
2. Attachment 2 - Civic Flag Policy (2023 revision)

Operation Sandon — Recommendations

Operation Sandon is an investigation by the Independent Broad-based Anti-corruption Commission into allegations of corrupt conduct involving councillors and property developers in the City of Casey in Melbourne’s south-east. It also examined the adequacy of Victoria’s current systems and controls for safeguarding the integrity of the state’s planning processes.

Background

In November 2017, IBAC authorised a preliminary inquiry into allegations of serious corrupt conduct concerning Mr Sameh Aziz, a Casey councillor.

IBAC expanded the investigation in October 2018 to consider the conduct of developer Mr John Woodman, as well as another Casey councillor, Mr Geoff Ablett, and whether other Casey councillors had accepted undeclared payments, gifts or other benefits, including political donations, in exchange for favourable Casey Council outcomes.

IBAC’s investigation was primarily concerned with four planning matters involving Mr John Woodman and his associates. Each matter involved the Casey Council as decision-maker, and two required the Minister for Planning to make a determination. As a result, IBAC’s investigation examined the conduct of public officers at both state and local government levels.

Operation Sandon found a number of councillors within the City of Casey had accepted payments, gifts or other benefits, including political donations in exchange for supporting Council decisions on planning matters that favoured the interests of a property developer.

Operation Sandon exposed how decisions at the local and state levels of government were improperly influenced or were at risk of undue influence through manipulation of council governance processes, donations and lobbying.

Extensive reforms are necessary to minimise the risk of this behaviour occurring again and promote integrity in decision-making processes. As a result of Operation Sandon, IBAC is recommending a suite of reforms to address corruption risks to:

- promote transparency in planning decisions
- enhance donation and lobbying regulation
- improve the accountability of ministerial advisors and electorate officers
- strengthen council governance.

Recommendations

The Operation Sandon special report makes 34 recommendations to address the risk of corruption and other forms of improper influence and the planning policy settings that incentivise corruption in council decisions.



Recommendation 1

IBAC recommends that the Premier establish an Implementation Inter-departmental Taskforce (the Taskforce) that is:

- (a) chaired by the Department of Premier and Cabinet and comprises senior representatives of other relevant departments and agencies including, but not limited to, the:
 - i) Department of Transport and Planning
 - ii) Department of Government Services
 - iii) Victorian Public Sector Commission
 - iv) Local Government Inspectorate
 - v) Victorian Electoral Commission
- (b) responsible for:
 - i) coordinating implementation of IBAC's recommendations, where immediate action can be taken
 - ii) progressing consideration of longer-term reforms proposed in the special report that require expert analysis and stakeholder consultation
 - iii) making sure that the proposed reforms meet the principles and outcomes set out in IBAC's report, and that these reforms are implemented for each of the strategic issues
 - iv) reporting quarterly to IBAC, detailing the progress of action taken in response to IBAC's recommendations
 - v) reporting publicly within 18 months on action taken in response to IBAC's recommendations, noting that IBAC may further publicly report on the adequacy or otherwise of those proposals.

In undertaking this work, the Taskforce should consult IBAC officers on the development of an implementation plan and the drafting of legislative amendments.

PLANNING

Recommendation 2

IBAC recommends that the Premier ensures that the Taskforce considers and recommends measures to address the corruption risks associated with windfall gains from changes in permissible land use, drawing on any lessons learnt in the development and implementation of the *Windfall Gains Tax and State Taxation and Other Acts Further Amendment Act 2021* (Vic).

Recommendation 3

IBAC recommends that the Minister for Planning develops and introduces to Parliament amendments to the *Planning and Environment Act 1987* (Vic) so that authorisation of a planning scheme amendment operates as a transparent and accountable gateway process by:

- (a) amending section 8A(7) to facilitate proper consideration of the strategic justification and timely authorisation of planning scheme amendments
- (b) setting clear criteria that the Minister for Planning must consider in exercising their discretion to authorise progression of an amendment, including satisfaction of strategic justification
- (c) specifying a presumption against amendment for an appropriate period, noting that the reasons for any exemptions should be clear and details made publicly available.

Recommendation 4

IBAC recommends that the Premier ensures that the Taskforce considers and recommends amendments to the *Planning and Environment Act 1987* (Vic) to ensure that the number of possible outcomes that could be considered 'correct' decisions in response to a given proposal at the adoption and approval stages of a planning scheme amendment is narrowed by specifying criteria that must be addressed to the satisfaction of:

- (a) the planning authority to adopt an amendment
- (b) the Minister for Planning to approve an amendment.

Recommendation 5

IBAC recommends that the Department of Transport and Planning reviews and clarifies guidance to help prioritise competing policy criteria when assessing the merits of a planning scheme amendment, including, but not limited to:

- (a) the factors that should be considered in assessing strategic justification
- (b) the hierarchy of broader-scale plans.

Recommendation 6

IBAC recommends that the Minister for Planning develops and introduces to Parliament amendments to the *Planning and Environment Act 1987* (Vic) to require the decision-maker to record the reasons for decisions at relevant points in the planning scheme amendment process.

Recommendation 7

IBAC recommends that the Minister for Planning develops and introduces to Parliament amendments to the *Planning and Environment Act 1987* (Vic) and/or amends ministerial guidance to require every applicant and person making submissions to a council, the Minister for Planning or Planning Panels Victoria to disclose reportable donations and other financial arrangements that parties have made or have with relevant decision-makers in relation to that planning matter (with reference to the New South Wales provisions).

Recommendation 8

IBAC recommends that the Minister for Planning issues Ministerial Directions for Planning Panels Victoria panels to specify that there is a presumption in favour of the existing planning scheme and state policy settings.

Recommendation 9

IBAC recommends that the Premier ensures that the Taskforce considers and recommends amendments to the *Planning and Environment Act 1987* (Vic) to deter submitters from attempting to improperly influence a council, the Minister for Planning or Planning Panels Victoria in their role in the planning scheme amendment process, including, but not limited to, specifying relevant offences together with appropriate penalties.

Recommendation 10

IBAC recommends that the Premier ensures that the Taskforce engages subject-matter experts and consults stakeholders to develop a model structure for independent determinative planning panels for statutory planning matters that addresses the integrity risks identified in Operation Sandon, having regard to:

- (a) the skills mix and method of appointing panel members and the efficacy of rotating panel members
- (b) the scope of panel coverage, being whether all councils should be required to use an independent planning panel, including the option of shared or regional panels in areas where councils handle fewer planning permits
- (c) the referral criteria that should apply statewide to make clear which matters should be determined by planning panels rather than by council planning officers
- (d) decision-making process and reporting requirements to ensure transparency and accountability of panel decisions
- (e) arrangements to handle complaints about planning panels and review their performance to ensure continuous improvement.

Recommendation 11

IBAC recommends that the Minister for Planning develops and introduces to Parliament amendments to the *Planning and Environment Act 1987 (Vic)* to:

- (a) remove statutory planning responsibilities from councillors
- (b) introduce determinative planning panels for statutory planning matters, where a local council is currently the responsible authority

This is to give effect to the model developed by the Taskforce in response to Recommendation 10.

Recommendation 12

IBAC recommends that the Premier ensures that the Taskforce engages subject matter experts and consults with key stakeholders to assess the operation of Part 4AA of the *Planning and Environment Act 1987 (Vic)* and recommends whether further amendments are required to give full effect to independent panels as the decision-makers for all statutory planning matters, including those where the Minister for Planning is the responsible authority.

Recommendation 13

IBAC recommends that the Premier ensures that the Taskforce considers and recommends whether the regulatory regime governing donations in Victoria would be strengthened by identifying and prohibiting high-risk groups (including, but not limited to, property developers) from making political donations to political entities and state and local government candidates.

Recommendation 14

IBAC recommends that the Premier ensures that the Taskforce advises the independent panel review of the 2018 electoral reforms to ensure its report appropriately addresses the corruption risks of political donations highlighted in Operation Sandon.

Recommendation 15

IBAC recommends that the Premier ensures that the implementation of Recommendations 3 and 4 from the *Donations and Lobbying* special report appropriately addresses the lobbying risks highlighted in Operation Sandon.

Recommendation 16

IBAC recommends that the Department of Parliamentary Services develops guidelines to apply to electorate offices when a Member of Parliament is on extended leave, to ensure electorate officers are appropriately supervised and are subject to clear lines of accountability.

COUNCIL GOVERNANCE

Recommendation 17

IBAC recommends that the Minister for Local Government:

- (a) ensures that Local Government Victoria develops and maintains a Model Councillor Code of Conduct that includes better practice provisions that will apply to *all* councils, noting that councils can adopt additional provisions to the extent that they are consistent with the minimum standards specified in the Model Councillor Code of Conduct
- (b) develops and introduces to Parliament amendments to the *Local Government Act 2020* (Vic), or amends relevant regulations to amend the *Local Government Act 2020* (Vic), or amends relevant regulations to specify that councils *must* adopt the Model Councillor Code of Conduct.

Recommendation 18

IBAC recommends that the Minister for Local Government uses an appropriate mechanism, such as amendments to the *Local Government Act 2020* or relevant regulations, to require that councillors undertake mid-term refresher training on governance, leadership, and integrity.

Recommendation 19

IBAC recommends that the Minister for Local Government:

- (a) ensures that Local Government Victoria develops and publishes Model Governance Rules to operate as the minimum standards for council meeting procedures
- (b) develops and introduces to Parliament amendments to the *Local Government Act 2020*, or amends relevant regulations to specify that councils must adopt the Model Governance Rules
- (c) ensures that Local Government Victoria maintains the Model Governance Rules in a way that promotes better practices that apply to all councils, noting that councils can adopt additional rules to the extent that they are consistent with the minimum standards specified in the Model Governance Rules.

Recommendation 20

IBAC recommends that the Minister for Local Government encourages diligent, considered councillor decision-making by providing guidance and training to councils on administrative and council meeting best practice.

Recommendation 21

IBAC recommends that the Minister for Local Government ensures that Local Government Victoria includes in the Model Code of Conduct for Councillors a clear statement of expectations to guide councillors and staff in their interactions with each other.

Recommendation 22

IBAC recommends that the Minister for Local Government ensures that Local Government Victoria:

- (a) develops and publishes a Model Transparency Policy to specify the minimum standards for council openness and transparency
- (b) ensures that the Model Governance Rules and Model Transparency Policy:
 - i) highlights the importance of open government and the related risks in holding pre-council meetings
 - ii) notes the limited circumstances in which it may be appropriate to hold pre-council meetings immediately before a public council meeting, such as to discuss procedural arrangements for the meeting
 - iii) makes clear that councillors must not discuss the substance of agenda items in detail, reach agreements on council agenda items in private, and that briefings should involve the presentation of information only
- (c) develops further guidance to explain to councillors *why* deliberation on an agenda item (not just voting) in public is important, particularly for planning matters.

Recommendation 23

IBAC recommends that the Minister for Local Government ensures that the Model Governance Rules expressly prohibit voting en bloc in council meetings.

Recommendation 24

IBAC recommends that the Minister for Local Government ensures that the Model Governance Rules require council meeting minutes to state:

- (a) the names of councillors who spoke on each motion
- (b) the names of councillors who voted for and against each motion (regardless of whether a division was called).

Recommendation 25

IBAC recommends that the Minister for Local Government ensures that Local Government Victoria undertakes a review, and introduces related reforms, to ensure that councillor breaches of the conflict-of-interest provisions are addressed in a timely and effective manner.

Recommendation 26

IBAC recommends that the Minister for Local Government ensures that the Model Governance Rules stipulate that:

- (a) council officer reports on local government planning matters be accompanied by:
 - i) a schedule of reportable donations and other financial arrangements that parties have made or have with councillors (as discussed in Recommendation 7)
 - ii) a statement of the interested parties that includes details of the parties affected by the motion before council, such as the names of personnel, company names and registered addresses
 - (b) councillors must acknowledge that they have read the schedule of reportable donations and other financial arrangements and the statement of involved parties before declaring whether they have a conflict of interest in the relevant agenda item for any local government planning matters.
-

Recommendation 27

IBAC recommends that the Minister Local Government Victoria ensures that the Model Governance Rules (such as through an amendment to clause 18.3 of the draft rules):

- (a) provide a clear process for disclosing all conflicts of interest, including those that involve privacy matters. This process must set out:
 - i) precisely what matters will be included in the declaration and public register
 - ii) how declarations involving privacy matters will be recorded
 - iii) how long records will be retained
 - (b) require councillors to disclose, in sufficient detail, the circumstances that give rise to a conflict of interest, including, but not limited to, the names of the people or entities associated with the conflict and their relationship to the councillor.
-

Recommendation 28

IBAC recommends that the Minister for Local Government ensures that Local Government Victoria develops model conflict-of-interest training and an associated strategy to ensure that its completion is enforceable, to consistently reinforce conflict-of-interest obligations across councils. The training should:

- (a) explain why a councillor cannot or should not participate in the decision-making process for a matter in which they have a conflict, during or outside council meetings
 - (b) ensure that councillors understand their obligation to:
 - i) familiarise themselves with the parties who donate to any political, charitable or community interests with which the councillor has an involvement
 - ii) assess whether those donations give rise to a conflict of interest for particular council matters
 - iii) provide precise details of the nature of the conflict when declaring a conflict of interest.
-

Recommendation 29

IBAC recommends that the Minister for Local Government develops and introduces to Parliament amendments to the *Local Government Act 2020 (Vic)* to

- (a) expressly prohibit councillors with a conflict of interest from attempting to influence other councillors (with reference to the Queensland provisions)
- (b) specify an appropriate penalty for councillors who contravene this provision.

Recommendation 30

IBAC recommends that the Minister for Local Government ensures that Local Government Victoria reviews the available sanctions for misconduct to ensure that the options provided are adequate and applied in an appropriate way. This includes, but is not limited to, ensuring that the option to direct that a councillor be ineligible to hold the position of mayor after a finding of misconduct can be applied in a way that is both proportional to the conduct and timebound.

Recommendation 31

IBAC recommends that the Minister for Local Government ensures that Local Government Victoria includes in the Model Councillor Code of Conduct a clear statement that:

- (a) council officers and members of the public may make a complaint to the Chief Municipal Inspector
- (b) a CEO must notify IBAC under section 57 of the *Independent Broad-based Anti-corruption Commission Act 2011 (Vic)* if they suspect on reasonable grounds that a breach of the Model Councillor Code of Conduct involves corrupt conduct.

Recommendation 32

IBAC recommends that the Minister for Local Government develops and introduces to Parliament amendments to the *Local Government Act 2020 (Vic)* to require that the Principal Councillor Conduct Registrar collate and publish data annually on:

- (a) the internal arbitration process, including:
 - i) the number of applications received
 - ii) the number of applications withdrawn
 - iii) the nature of the issues raised
 - iv) the outcome of completed arbitration processes
 - v) the cost to the council of dealing with arbitrated matters, including staff costs
- (b) councillor conduct panels, including:
 - i) the number of applications received
 - ii) the number of applications withdrawn
 - iii) the nature of the issues raised
 - iv) the outcome of completed panel processes
 - v) the cost to the council of dealing with panel matters, including staff costs.

Recommendation 33

IBAC recommends that the Premier ensures that the Taskforce identifies the most appropriate mechanism to support a council CEO in making a mandatory notification about serious misconduct. This includes suspected breaches of the conflict-of-interest provisions by councillors – in particular, breaches involving material conflicts of interest – noting that the Chief Municipal Inspector has the authority to apply to a councillor conduct panel or prosecute a councillor for misuse of position due to a conflict of interest, but is not currently authorised to receive a mandatory notification concerning a councillor from a CEO, under the *Public Interest Disclosure Act 2012 (Vic)*.

Recommendation 34

IBAC recommends that the Minister for Local Government develops and introduces to Parliament amendments to the *Local Government Act 2020 (Vic)*, or amends relevant regulations, and institutes related enabling processes, in order to amend the *Local Government Act 2020 (Vic)*, or relevant regulations, and institutes related enabling processes, to promote greater consistency and independent oversight of recruitment and employment of council CEOs by:

- (a) mandating that councils use a standard employment contract for CEOs that:
 - i) covers, among other things, the role of the CEO, performance review and management, and termination payment (including limits on such payments)
 - ii) bans non-disclosure agreements between councils and CEOs or former CEOs
- (b) amending section 45 to require each council to establish a committee to determine matters relevant to the recruitment, employment, and remuneration of the CEO. The committee must be chaired by an independent professional with executive experience in local or state government, and most of its members must be external to the council.

IBAC's proposed reforms are designed to be implemented by a cross section of local and state government to minimise the significant risks of the conduct identified in Operation Sandon from recurring.

IBAC has recommended that the Premier report publicly on the action taken in response to the relevant recommendations by 27 January 2025. IBAC has also requested the Minister for Local Government, the Minister for Planning and the relevant departments report to IBAC on the implementation of their relevant recommendations within 12 months.

IBAC is committed to working with local and state government and other bodies in Victoria's integrity framework to implement the reforms to safeguard from this type of activity to occur again – and to restore community trust in the role of elected officials.

Responses

Responses to our investigations are published on IBAC's website to inform the community about actions agencies advise they are taking, and to share learnings that may help other agencies improve their systems and practices to prevent corruption and misconduct.

Level 1, North Tower
459 Collins Street,
Melbourne VIC 3000
GPO Box 24234,
Melbourne, VIC 3001
T 1300 735 135
E info@ibac.vic.gov.au

IBAC is Victoria's anti-corruption agency responsible for preventing and exposing public sector corruption and police misconduct. We do this by:

- investigating serious corruption and police misconduct
- informing the public sector, police and the community about the risks and impacts of corruption and police misconduct, and ways in which it can be prevented.

To report corruption now, visit www.ibac.vic.gov.au or call **1300 735 135**.

If you need help with translation, call Translating and Interpreting Service on **13 14 50** or visit www.ibac.vic.gov.au/mylanguage



CIVIC FLAG POLICY

Title	Civic Flag Policy
Description	A policy to govern the flying of flags at Council's Town Halls, Civic Flagpoles and other facilities.
Category	Civic
Type	Policy
Approval authority	Chief Executive Officer General Manager Governance, Communications and Customer Experience
Responsible officer	Group Manager, Chief Executive's Office Manager Governance and Integrity
Approval date	12/7/2022 18/7/2023
Review cycle	Every four years
Review date	12/7/2026 18/7/2027
Document Reference (Trim)	D10/57080
Human Rights compatibility	This policy has been assessed and is compatible with the Victorian Charter of Human Rights and Responsibilities

1. Purpose

A policy to govern the flying of flags at Council's Town Halls, Civic Flagpoles and other facilities ~~and to establish a mechanism to consider requests for flying of flags of significance to the Yarra community.~~

2. Policy

2.1. Definitions

In this policy,

Civic Flagpoles means the flagpoles erected for the purpose of displaying the flags set out in the Community Flag Schedule.

~~*Clifton Hill Depot* means the buildings and grounds at the City of Yarra works depot at 168 Roseneath Street Clifton Hill.~~

Collingwood Town Hall means all buildings and grounds at the Collingwood Town Hall and administrative offices at 140 Hoddle Street Abbotsford.

Community Flag Schedule means the schedule adopted in conjunction with this policy and amended by Council resolution thereafter, which sets out which flags shall be flown, when they shall be flown, and which flagpoles shall be used.

Exterior Town Hall flagpoles means the external flagpoles at Collingwood, Fitzroy and Richmond Town Halls as identified in section 2.2 of this policy.

Fitzroy Town Hall means all buildings and grounds at the Fitzroy Town Hall, including the former Library, former municipal offices, the Ballroom and the Library.

Interior Town Hall flagpoles means the floor mounted portable flagpoles that are used for meetings at Fitzroy and Richmond Town Halls, and displayed in the foyer at Richmond Town Hall.

Document Name: Civic Flag Policy

Responsible Officer: ~~Group Manager, Chief Executive's Office~~[Manager Governance and Integrity](#)

Page

1 / 9



CIVIC FLAG POLICY

Richmond Town Hall means all buildings and grounds at the former City Hall at 333 Bridge Road Richmond and the Council administrative offices at 345 Bridge Road Richmond.

2.2. Exterior Town Hall flagpoles

The exterior flagpoles at [Council's Town Halls at Clifton Hill Depot](#), Collingwood [Town Hall](#), Fitzroy [Town Hall](#) and Richmond [Town Hall](#) shall be used for the flying of the Australian National Flag, the Australian Aboriginal Flag and the Torres Strait Islander Flag.

[At Clifton Hill Depot, the following flagpoles shall be used:](#)



At Collingwood Town Hall, the following flagpoles shall be used:



The flagpole on the south-east tower of the building, at the intersection of Stanton Street and Eddy Court Abbotsford shall not be used. The use of the flagpole on the facade at the entry to the Collingwood Police Station in Eddy Court Abbotsford shall be controlled by the Collingwood Police.



CIVIC FLAG POLICY

At Fitzroy Town Hall, the following flagpoles shall be used:



At Richmond Town Hall, the following flagpoles shall be used:



For occupational health and safety reasons, the flagpole at the top of the Richmond Town Hall clocktower shall not be used.

At each Town Hall, the flags shall be flown with the Australian National Flag in the preeminent position (the centre) and the Australian Aboriginal Flag and the Torres Strait Islander Flag in the next positions (left and right respectively, when viewed facing the front of the building).

In all respects, flying of these flags shall accord with Australian National Flag protocol as published by the Commonwealth Government.

Document Name: Civic Flag Policy

Responsible Officer: [Group Manager, Chief Executive's Office](#) [Manager Governance and Integrity](#)

Page

3 / 9



CIVIC FLAG POLICY

2.3. Interior Town Hall flagpoles

The Australian National Flag, the Australian Aboriginal Flag ~~and~~ the Torres Strait Islander Flag ~~and the City of Yarra flag~~ shall be flown at all public Council Meetings, meetings of Council's ~~Internal Development Approvals Planning Decisions~~ Committee and ~~at~~ Citizenship Ceremonies.

The interior flagpoles at Richmond Town Hall shall be exclusively reserved for the flying of the Australian National Flag, the Australian Aboriginal Flag ~~and~~ the Torres Strait Islander Flag ~~and the City of Yarra flag~~. When not in use for a Council meeting or civic function, these flagpoles shall be displayed in the foyer or other public area of the building.

2.4. Civic Flagpoles

The Civic Flagpoles at ~~Clifton Hill~~, Collingwood, Fitzroy and Richmond are reserved for the flying of flags that symbolise and celebrate the diverse community of the City of Yarra and shall be used for flying flags that have special meaning to all or part of Yarra's community. In flying these flags, Council celebrates Yarra's rich history and formally acknowledges the flag flown as one of significance to the City of Yarra.

As they are not lit, no national flag shall be flown from a Civic Flagpole before sunrise or after sunset.

~~At Clifton Hill Depot, the Civic Flagpole is located on Roseneath Street, immediately to the west of the main vehicle entrance.~~ At Collingwood Town Hall, the Civic Flagpole is located on Hoddle Street at the north-west corner of the building. At Fitzroy Town Hall, the Civic Flagpole is located on Napier Street in the forecourt beside the entry stairs to the former Fitzroy Library. At Richmond Town Hall the Civic Flagpole is located on Bridge Road at the south-west corner of the building.

Upon the adoption of this policy and upon every subsequent policy review, Council shall adopt a Community Flag Schedule which sets out which flags shall be flown, when they shall be flown, and which flagpoles shall be used. The schedule is to be considered a living document, and can be added to by one of the following mechanisms:

- By Council resolution, either for a one-off occasion or on an ongoing basis.
- By the ~~Chief Executive Officer~~ Mayor for a one-off occasion, ~~after consulting the Councillors and~~ where a resolution from Council is not practicable.
- ~~• Upon request by a bona fide organisation at least one calendar month prior to the proposed flag flying date and following approval by Council resolution or by the Chief Executive Officer (where a resolution from Council is not practicable). The flag(s) is to be provided by the organisation making the request.~~
- ~~• In considering the addition of flags to the Community Flag Schedule, regard shall be given to whether the flying of the flag will cause offence to sectors of the community or whether highlighting a particular issue, cause or group would be inconsistent with Council's values and commitment to inclusiveness.~~

The Schedule will expire upon every subsequent policy review, but any flag is eligible to be included again in the following Schedule.

2.5. Half Masting

Commemoration

The Australian National flag on the Town Hall flag poles shall be flown at half-mast in accordance with national flag protocol.



CIVIC FLAG POLICY

Following a request from the relevant Aboriginal ~~or Torres Strait Islander~~ cCommunity and at the discretion of the Chief Executive Officer or ~~in his/her absence the Group General Manager, Chief Executive's Office, Governance, Communications and Customer Experience, the Australian National Flag, Australian Aboriginal Flag and Torres Strait Islander Flag~~ will be flown at half mast to mark the passing of an Aboriginal ~~or Torres Strait Islander~~ person who has contributed significantly to the community of the City of Yarra.

~~Following a request from the relevant Torres Strait Islander Community and at the discretion of the Chief Executive Officer or in his/her absence the Group Manager, Chief Executive's Office, the Torres Strait Islander Flag will be flown at half mast to mark the passing of a Torres Strait Islander person who has contributed significantly to the community of the City of Yarra.~~

The ~~Australian National Flag, Australian Aboriginal Flag and Torres Strait Islander Flag Yarra City Council flag~~ will be flown at half mast on the Civic Flagpoles at Clifton Hill, Collingwood, Fitzroy and Richmond on the day of the funeral following the death of:

- a Councillor of the City of Yarra;
- a former Mayor of the City of Yarra or any of the former Cities of Collingwood, Fitzroy and Richmond;
- a member or former member of federal or state parliament who held a seat in an electorate in the City of Yarra; and
- an outstanding local citizen (at the discretion of the Chief Executive Officer or ~~in his/her absence the Group General Manager, Governance, Communication and Customer Experience~~Chief Executive's Office).

~~If the Civic Flagpole is in use on the day of a funeral, the Chief Executive Officer or in his/her absence the Group Manager, Chief Executive's Office shall determine which flag shall be flown.~~

Community flags can be flown at half mast on the Civic Flagpoles where appropriate.

Reconciliation

The Australian National Flag shall be removed and the Australian Aboriginal Flag and the Torres Strait Islander Flag shall be flown at half mast at Clifton Hill Depot, Collingwood Town Hall, Fitzroy Town Hall and Richmond Town Hall each year on:

- 26 January;
- 15 April (anniversary of the release of *National Report of the Royal Commission into Aboriginal Deaths in Custody* on 15 April 1991);
- 26 May (National Sorry Day and the anniversary of the tabling in the Commonwealth Parliament of *Bringing Them Home: Report of the National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from Their Families* on 26 May 1997); and
- other dates determined by resolution of Council following consultation with the Yana Ngargna Advisory Committee."

2.6. Notification

Where any flag is flown on the Civic Flagpoles, or where a flag is flown at half mast ~~on the Town Hall~~, a notice is to appear on Council's website indicating the reason.



CIVIC FLAG POLICY

2.7. Variation to policy

The Chief Executive Officer or ~~in his/her absence the General Manager, Governance, Communication and Customer Experience Group Manager, Chief Executive's Office~~ shall be authorised to permit departures from this policy where adherence to the policy:

- would have financial and staffing implications due to a need to raise or lower a flag outside business hours;
- could cause offence to sectors of the Yarra community;
- results in a conflict between different policy requirements; or
- is warranted due to extraordinary or unforeseen circumstances.

2.8. Responsibility

Governance ~~Support and Integrity~~

The Governance ~~Support and Integrity Branch~~ Unit is responsible for:

- ~~processing requests for the flying of flags from community organisations;~~
- preparation and submission of formal Council Reports where a resolution is required; and
- conducting periodic reviews of the Civic Flag Policy and Community Flag Schedule and presenting them to Council for determination.

~~Venues, Libraries, Arts and Events~~

The ~~Venues, Libraries, Arts and Events~~ Unit Branch is responsible for:

- appointment of a Flag Marshal for each Town Hall and ~~the Collingwood, Fitzroy and Richmond~~ Civic Flagpoles.
- cyclical replacement of flags; and
- ~~timely~~ replacement of damaged flags where a flag is rendered unsuitable for display.

~~City Works~~

~~The City Works Branch is responsible for:~~

- ~~appointment of a Flag Marshal for the Clifton Hill Depot flagpoles.~~

Flag Marshals

Flag Marshals are responsible for:

- maintaining a subscription to the Department of Prime Minister and Cabinet's Commonwealth Flag Network email notification service;
- arranging the flying of flags in accordance with this policy; and
- monitoring the condition of the flags and flagpoles and reporting any maintenance issue as required.

3. Related Documents

- Flags Act (Cth) 1953
- Australian flags – Part 2: The protocols for the appropriate use and the flying of the flag



CIVIC FLAG POLICY

COMMUNITY FLAG SCHEDULE

updated 12 July 2022

Community Flags

(flown at Clifton Hill, Collingwood, Fitzroy and Richmond)

Flag	When	Where	Conditions
Intersex Inclusive Pride Flag	Mid January to mid February (Midsumma)	Collingwood Fitzroy and Richmond	
Aromantic Flag	Last week in February (Aromantic Spectrum Awareness Week)	Collingwood Fitzroy and Richmond	Except on 27 February
Flag of Sahrawi Arab Democratic Republic	27 February (SADR Independence Day)	Collingwood Fitzroy and Richmond	
Transgender Flag	31 March (Trans Day of Visibility)	Collingwood Fitzroy and Richmond	
Lesbian Pride Flag	26 April (Lesbian Visibility Day)	Collingwood Fitzroy and Richmond	
Intersex Inclusive Pride Flag	17 May (International Day Against Homophobia Biphobia and Transphobia)	Collingwood Fitzroy and Richmond	
Pansexual Pride Flag	24 May (Pansexual Pride flag)	Collingwood Fitzroy and Richmond	
Vietnamese Yellow Flag	19 June (Vietnamese Veterans Day)	Collingwood Fitzroy and Richmond	
Non Binary Pride Flag	14 July (International Non-Binary People's Day)	Collingwood Fitzroy and Richmond	
Flag of the International Campaign to Abolish Nuclear Weapons	6 August (Anniversary of the 1945 bombing of Hiroshima, Japan)	Collingwood Fitzroy and Richmond	

Document Name: Civic Flag Policy

Responsible Officer: [Group Manager, Chief Executive's Office](#) [Manager Governance and Integrity](#)

Page

7 / 9



CIVIC FLAG POLICY

Flag	When	Where	Conditions
Intersex Inclusive Pride Flag	26 August (Wear it Purple Day)	Collingwood Fitzroy and Richmond	
Bisexual Flag	23 September (Bi Visibility Day)	Collingwood Fitzroy and Richmond	
Lesbian Pride Flag	8 October (International Lesbian Day)	Collingwood Fitzroy and Richmond	
United Nations Flag	24 October (United Nations Day)	Collingwood Fitzroy and Richmond	
Intersex Flag	26 October (Intersex Awareness Day)	Collingwood Fitzroy and Richmond	
Asexual flag	Final week in October (ACE week)	Collingwood Fitzroy and Richmond	Except on 24 and 26 October
Intersex Flag	8 November (Intersex Day of Remembrance)	Collingwood Fitzroy and Richmond	
Transgender Flag	20 November (Trans Day of Awareness)	Collingwood Fitzroy and Richmond	
Morning Star Flag	1 December (anniversary of the first raising of the flag in 1961)	Collingwood Fitzroy and Richmond	
Eureka Flag	3 December (anniversary of the Battle of Eureka in 1854)	Collingwood Fitzroy and Richmond	

Document Name: Civic Flag Policy

Responsible Officer: [Group Manager, Chief Executive's Office](#) [Manager Governance and Integrity](#)

Page
8 / 9



CIVIC FLAG POLICY

Sporting Flags

Where the flying of a sporting flag clashes with the flying of a community flag, the sporting flag will take precedence at the relevant location, and the community flag will be flown at the remaining locations.

Flag	When	Where	Conditions
Brisbane Lions Football Club flag	For one week from Monday morning preceding the AFL or AFLW Grand Final	Fitzroy	Flown <u>in Fitzroy only</u> if the Brisbane Lions Football Club qualifies for the AFL or AFLW Grand Final.
	For one week from Monday morning following the AFL or AFLW Grand Final	Fitzroy	Flown <u>in Fitzroy only</u> if the Brisbane Lions Football Club wins the AFL or AFLW Premiership.
Collingwood Football Club flag	For one week from Monday morning preceding the AFL or AFLW Grand Final	Collingwood	Flown <u>in Collingwood only</u> if the Collingwood Football Club qualifies for the AFL or AFLW Grand Final.
	For one week from Monday morning following the AFL or AFLW Grand Final	Collingwood	Flown <u>in Collingwood only</u> if the Collingwood Football Club wins the AFL or AFLW Premiership.
Richmond Football Club flag	For one week from Monday morning preceding the AFL or AFLW Grand Final	Richmond	Flown <u>in Richmond only</u> if the Richmond Football Club qualifies for the AFL or AFLW Grand Final.
	For one week from Monday morning following the AFL or AFLW Grand Final	Richmond	Flown <u>in Richmond only</u> if the Richmond Football Club wins the AFL or AFLW Premiership.