



YARRA CITY COUNCIL

Internal Development Approvals Committee

Agenda

to be held virtually
on Wednesday 29 July 2020 at 6.30pm

Rostered Councillor membership

Councillor Amanda Stone
Councillor Mi-Lin Chen Yi Mei
Councillor Bridgid O'Brien

I. ATTENDANCE

Ally Huynh (Senior Co-Ordinator Statutory Planning)
Gary O'Reilly (Senior Planner)
Rhys Thomas (Senior Governance Advisor)
Cindi Johnston (Governance Officer)

II. DECLARATIONS OF PECUNIARY INTEREST AND CONFLICT OF INTEREST

III. CONFIRMATION OF MINUTES

IV. COMMITTEE BUSINESS REPORTS

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***"Welcome to the City of Yarra.
Yarra City Council acknowledges the
Wurundjeri Woi-wurrung as the
Traditional Owners of this country,
pays tribute to all Aboriginal and
Torres Strait Islander people in Yarra
and gives respect to the Elders past
and present."***

Internal Development Approvals Committee Submissions

“Prior to the consideration of any Committee Business Report at a meeting of the Internal Development Approvals Committee, members of the public shall be invited by the Chairperson to make a verbal submission. In determining the order of submissions, the Chairperson shall first invite the applicant or their representatives to submit, followed by formal objectors and finally any other interested persons.

All submitters accepting the invitation to address the meeting shall make submissions in accordance with these guidelines (or a variation of these guidelines as determined by the Chairperson at their sole discretion).

- Speak for a maximum of five minutes;
- Direct their submission to the Chairperson;
- Confine their submission to the planning permit under consideration;
- If possible, explain their preferred decision in relation to a permit application (refusing, granting or granting with conditions) and set out any requested permit conditions.
- Avoid repetition and restating previous submitters;
- Refrain from asking questions or seeking comments from the Councillors, applicants or other submitters;
- If speaking on behalf of a group, explain the nature of the group and how the submitter is able to speak on their behalf.

Following public submissions, the applicant or their representatives will be given a further opportunity of two minutes to exercise a right of reply in relation to matters raised by previous submitters. Applicants may not raise new matters during this right of reply.

Councillors will then have an opportunity to ask questions of submitters. Submitters may determine whether or not they wish to take these questions.

Once all submissions have been received, the formal debate may commence. Once the debate has commenced, no further submissions, questions or comments from submitters can be received.”

Extract from the Council Meeting Operations Policy, September 2019

1. Committee business reports

Item		Page	Rec. Page
1.1	PLN19/0364 - 142 - 144 Coppin Street Richmond - Construction of a four-storey building and reduction in the car parking requirements associated with the use of the land for dwellings and offices (no permit required for office use).	5	44

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| 1.1 | PLN19/0364 - 142 - 144 Coppin Street Richmond - Construction of a four-storey building and reduction in the car parking requirements associated with the use of the land for dwellings and offices (no permit required for office use). |
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Executive Summary

Purpose

1. This report provides Council with an assessment of planning permit application PLN19/0364 submitted for 142 – 144 Coppin Street Richmond. The application seeks approval for the construction of a four-storey building and reduction in the car parking requirements associated with the use of the land for dwellings and offices (no permit required for office use). The report recommends approval of the application, subject to conditions.

Key Planning Considerations

2. Key planning considerations include:
 - (a) Built form and Urban Design;
 - (b) Land Use;
 - (c) On-site amenity;
 - (d) Off-site amenity impacts;
 - (e) Car and bicycle parking.

Key Issues

3. The key issues for Council in considering the proposal relate to:
 - (a) Strategic justification;
 - (b) Land Use;
 - (c) Built form and Urban Design;
 - (d) On-site amenity;
 - (e) Off-site amenity;
 - (f) Parking, traffic, and bicycle parking; and
 - (g) Objector concerns.

Submissions Received

4. Thirty-one (31) objections were received to the application, these can be summarised as:
 - (a) Out of keeping with neighbourhood character / heritage;
 - (b) Inappropriate design and overdevelopment (height, scale, bulk, site coverage and permeability);
 - (c) Off-site amenity impacts (loss of solar access to north-facing windows, overshadowing, overlooking and noise impacts);
 - (d) Car parking, traffic impacts and pedestrian safety; and
 - (e) Impacts during construction phase (structural, noise, traffic and pest control).

Conclusion

5. Based on the following report, the proposal is considered to comply with the relevant planning policy and key considerations, and should therefore be supported, subject to conditions generally requiring limited design changes.

CONTACT OFFICER: Nish Goonetilleke
TITLE: Senior Statutory Planner
TEL: 9205 5005

1.1 PLN19/0364 - 142 - 144 Coppin Street Richmond - Construction of a four-storey building and reduction in the car parking requirements associated with the use of the land for dwellings and offices (no permit required for office use).

Reference: D20/125965
 Authoriser: Senior Coordinator Statutory Planning

Ward: Melba Ward
Proposal: Construction of a four-storey building and reduction in car parking associated with the use of the land for dwellings and offices (no permit required for office use)
Existing use: No. 142 Coppin Street – Shop/ dwelling
 No. 144 Coppin Street – Dwelling
Applicant: Bacolas Architects Pty Ltd and Fastnet Consulting
Zoning / Overlays: Commercial 1 Zone
 Design and Development Overlay (Schedule 5)
Date of Application: 07 June 2019
Application Number: PLN19/0364

Planning History

1. Council records indicate that there is no planning permit history for the two subject sites.

Background

2. The application was received by Council on 07 June 2019 and additional information was received on 17 September 2019. The application was advertised on 02 October 2019 and twenty-seven (27) objections were received.
3. Whilst the advertising process was occurring, Council sought and received formal referral advice from internal departments within Council, including Traffic Engineering Unit, Heritage and the Urban Design Unit.
4. A planning consultation meeting was held on 17 May 2019, and was attended by the applicant, sixteen (16) objectors and Council planning officers.

Section 57A Plans

5. The permit applicant submitted a set of amended plans to Council under Section 57(a) of the *Planning and Environment Act* (1987) (the “Act”) on 20 February 2020 in an attempt to resolve concerns raised by Council’s Engineering Unit, Urban Design Unit and objectors.
6. The Section 57(a) plans included the following plan changes to the originally advertised plans:
 - (a) Deletion of the ground level Apartment G.01 to provide two additional car parking spaces on-site;
 - (b) Re-arrangement of the storage areas at ground level;
 - (c) Changes to the western (rear) façade design and material associated with the Level 2 canopy; and
 - (d) Material change to the level 3 south-facing balcony of Apartment 3.01 from brick to a mix of powder-coated and perforated metal.

7. In addition, the applicant lodged the following amended reports:
 - (a) Sustainable Management Plan (SMP), dated February 2020 and prepared by Sustainable Development Consultants;
 - (b) Traffic Engineering Assessment, dated December 2019, prepared by Traffix Ground; and
 - (c) Waste Management Plan (WMP), dated 29 January 2020, prepared by R B Waste Consulting Service.
8. The amended plans and reports were re-advertised and four additional objections were received with some original objectors re-emphasising their concerns.

Sketch Plans

9. On 03 June 2020, the Applicant submitted Sketch Plan (TP100-C – ground level plan) to show:
 - (a) Convex mirrors associated with the rear garage located within the subject site's title boundaries.
 - (b) Amended levels within the garage to be 40mm above the existing levels at the sides of the lane.
 - (c) Addition of two sectional diagrams of the car park, taken from the midpoint of each garage showing the gradual transition from the ROW to the garage in order to show that a B85 vehicle can enter and exit without scraping.
10. The assessment in this report is based on the amended 57A plans submitted to Council on 20 February 2020, and references the abovementioned Sketch Plan submitted on 03 June 2020.

The Proposal

11. The application seeks approval for the construction of a four-storey building and reduction in the car parking requirements associated with the use of the land for dwellings and offices (no permit required for office use). The proposal is summarised as follows:

General

- (a) Demolition of all built form on-site (no permit required), including boundary fencing, with the exception of the existing 0.11m wide party-wall easement shared between No. 142 Coppin Street and No. 140 Coppin Street;
- (b) Construction of a four (4) storey building, with a maximum overall height of 13.45m above natural ground level (NGL);
- (c) The building design would encompass a contemporary, rectilinear form, with vertical-rectangular fenestrations to the front façade, and broadly stepped three-storey base from all title boundaries and a recessive fourth storey;
- (d) The overall development is proposed to be finished in a mix of 'white wash' and 'monument' brickwork, 'patterned natural finish' concrete, and 'monument' powder-coated metal cladding, with glazing along the front and rear facades;

Use

- (e) Commercial (2 x office) tenancies at ground level consisting of 70sqm and 75sqm of leasable floor area (permit not required for use);
- (f) Dwellings (apartments) between Levels 1 to 3 comprising:

- (i) 4 x one-bedroom;
 - (ii) 2 x two-bedroom; and
 - (iii) 1 x three-bedroom.
- (g) 4 on-site residential car parking spaces; 2 allocated to Apartment 3.01 and 1 car park each allocated per two bedroom apartments;
- (h) 14 bicycle spaces, consisting of 8, vertical resident spaces within a secure bike storeroom, 2 horizontal spaces allocated to the office tenancies and 4 visitor bicycle spaces along the Coppin Street frontage;
- (i) Two shower / change rooms provided within the offices;

Development

Ground Level

- (j) The majority of the ground level will be constructed to all four title boundaries, with the exception of a minimum setback of 0.15m from the northern boundary (abutting the existing party-wall shared with No. 140 Coppin Street), a minimum setback of 0.9m from the eastern (front) boundary. The ground level is also setback 0.8m from the western (rear) boundary with access to four car spaces from Wall Place;
- (k) An internal walkway along the southern boundary accesses bicycle hoops (two accessible bicycle hoops allocated to the office tenancies and 8 resident bicycle spaces), refuse room, residential lift lobby, storage areas for each apartment and a 10,000Ltr rainwater tank connected for sanitary purposes of all apartments;
- (l) A 2.5m setback from the northern boundary provides for a central light-court located between Office 1 and the rear garage. This light-court continues vertically up to Level 3;
- (m) A secondary pedestrian entrance for Apartment 3.01 is provided from Wall Place;

Level 1 to Level 3

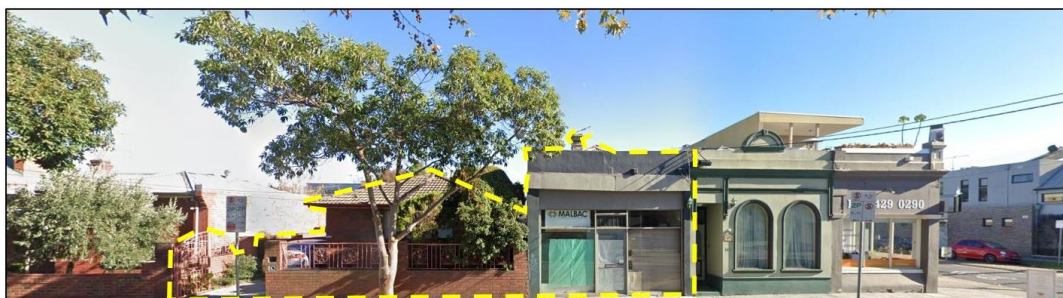
- (n) Level 1 is setback a minimum 0.15m from the northern boundary, setback a minimum 1.15m from the front boundary, setback 2.25m from the southern boundary and setback 2.25m from the rear boundary with balconies encroaching into this setback);
- (o) Level 1 contains 2 x 1 bedroom and 2 x 2 bedroom apartments, each with balconies measuring 8sqm (two addressing Coppin Street and two addressing Wall Place);
- (p) One bedroom from each of the 2 bedroom apartments will have a smaller terrace, setback 1.4m from the southern boundary;
- (q) Level 2 has a similar envelope with regards to the setbacks from the northern and front boundaries, with the southern setback increased to a minimum 3.05m and setback a minimum 1m from the rear boundary with balconies encroaching this setback;
- (r) Level 2 contains 2 x 1 bedroom apartments, each with balconies measuring 8.1sqm fronting Coppin Street. The remainder of Level 2 consists of Apartment 3.01 with a Wall Place and south-facing balcony;
- (s) Level 3 has the same envelope as the levels below with regards to the setbacks from the northern boundary, setback a minimum 2.1m from the front boundary, setback a minimum 4.8m from the southern boundary and setback a minimum 1.25m from the rear boundary; and

- (t) Level 3 contains the open plan dining/ kitchen/ living area of Apartment 3.01, including two large balconies, each addressing Coppin Street and Wall Place and a smaller north-facing balcony. An operable, louvered pergola partially covers the balcony fronting Wall Place and the north-facing balcony.

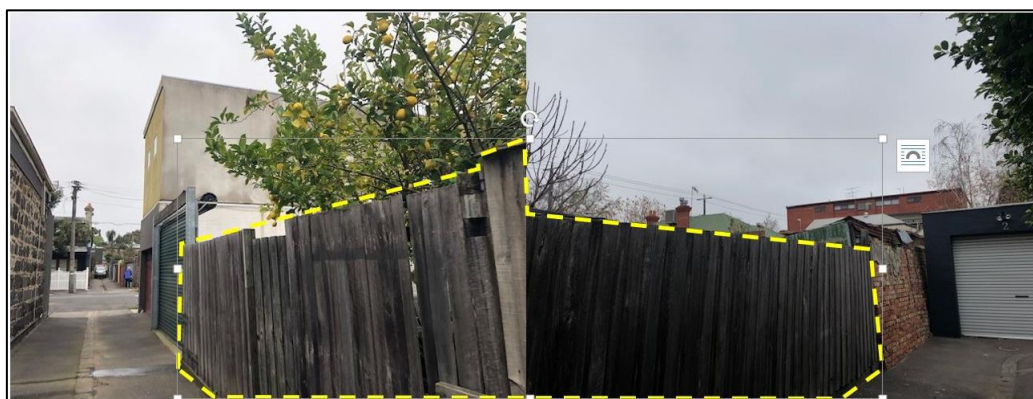
Existing Conditions

Subject Site

12. The subject site is located on the western side of Coppin Street, approximately 400m south of Bridge Road, 350 north of Swan Street. Church Street is 380m west of the site and Burney Street 400m to the east. The site is generally rectangular in shape, with a total frontage of 16.37m to Coppin Street and a maximum depth of 31.24m, consisting an overall combined site area of approximately 512sqm. The western boundary abuts a 3.3m wide Right-of-Way (ROW) known as Wall Place.
13. No. 142 Coppin Street is occupied by a single-storey, office building, built to the majority of the northern and southern title boundaries, with the exception of a 1.4m setback from the southern boundary and a 3.02m setback from the rear boundary. The building presents to Coppin Street with an on-boundary, single-storey wall with glazed windows and pedestrian door. This site has relatively high site coverage. There is no car parking on-site.
14. No. 144 Coppin Street is occupied by a single-storey, brick dwelling, setback a minimum 1m from the northern boundary, 3m from the front boundary, 2m from the southern boundary, and approximately 10m from the rear boundary. The majority of the rear setback is covered by sheds, with secluded private open space (SPOS) located between the main dwelling and sheds. Car parking on-site is accessed via Coppin Street.



The subject sites when viewed from Coppin Street (Planning Officer, July 2019)



The subject sites from Wall Place (Planning Officer, July 2019)

Title and Plan of Subdivision

15. There are no restrictive covenants listed against the certificate of titles provided for Nos. 142 and 144 Coppin Street. There is however a party-wall easement between No. 140 Coppin Street and No. 142 Coppin Street. The development proposes to retain the existing party-wall shared with No. 140 Coppin Street and build abutting the party-wall.

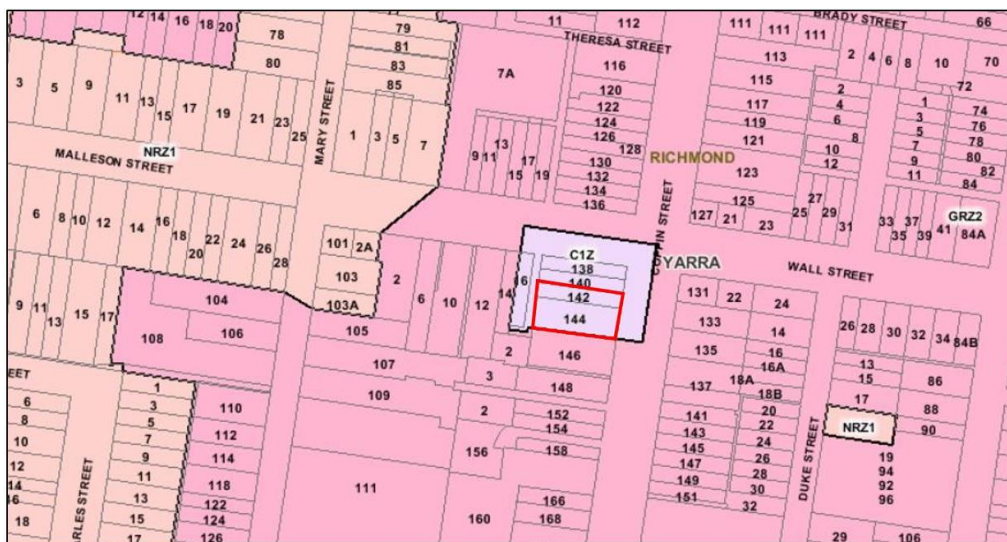
Surrounding Land

16. The immediate surrounds are predominantly residential in nature and defined by a mix of single to double-storey dwellings with three and four storey apartments interspersed along the street. As shown below, there are several three to four storey 1970's apartments, including more recently constructed three-storey apartment developments (No. 135 Coppin Street) and recently approved, three-storey townhouse developments (No. 170 Coppin Street) within the vicinity.



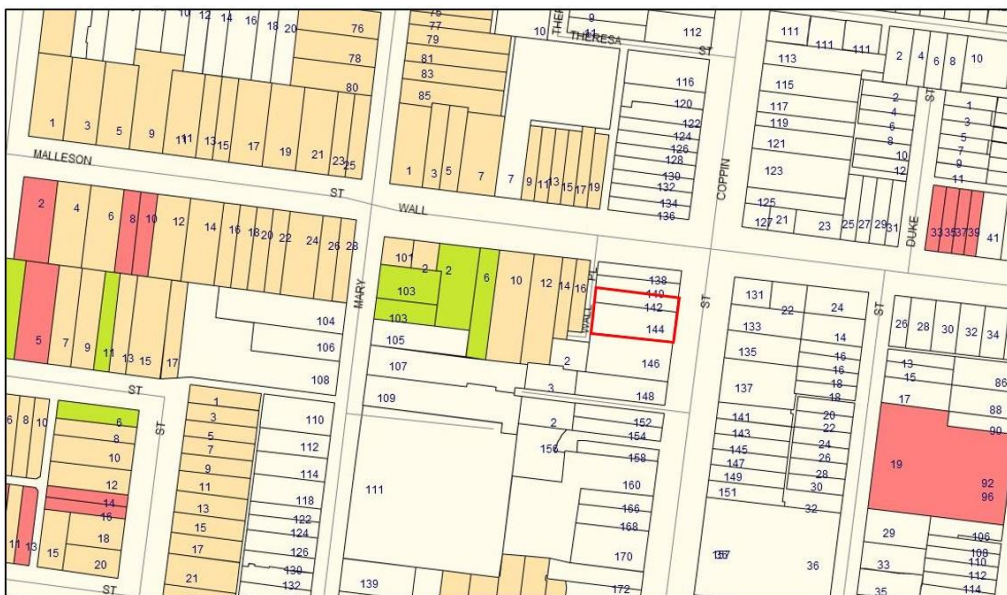
Existing and approved 2, 3 and 4-storey buildings in the surrounding area (Planning Maps Online, June 2020)

17. As shown below, the surrounding land is largely located within the General Residential Zone, with the subject site located within a pocket of Commercial 1 Zone between Nos. 138 to 144 Coppin Street. No. 16 Wall Street is also located in this zone. The broader neighbourhood has a mixture of commercial and residential activities.



The land zoning context of the surrounding land (Planning Maps Online, June 2020) with subject site in red

18. As seen below, the subject site and the properties to the north, south and east of Coppin Street are in a non-heritage context, where most variety in built form (scale, type and era) is seen. The properties to the west of the subject site (fronting Wall Street) fall within the Heritage Overlay (HO319) with many of these sites 'contributory' to the heritage of the Elm Grove Precinct. These properties are quite consistent in their character, being predominantly single-storey; some with first floor additions.



Heritage graded buildings of the surrounding land (GIS, June 2020)

19. To the north of the site, are Nos. 138 and 140 Coppin Street. No. 138 Coppin Street is a double-storey, rendered brick building located at the intersection of Coppin Street and Wall Street, and built to all title boundaries at both levels, with the exception of a Level 1 balcony addressing this intersection. The ground level is used as a wellness centre (commercial use), with Level 1 used as a dwelling.
20. No. 140 Coppin Street is a single-storey, rendered brick building, built flush to the front boundary and along the majority of the shared boundary with the subject site, with a setback of approximately 7m from the rear boundary to accommodate a shared car parking space and SPOS. Vehicle access is provided via Wall Place to the rear. The use and appearance of this building is for commercial purposes (shop).

21. Abutting the subject site to the south, is No. 146 Coppin Street, a single-storey, brick dwelling, setback 3m from the front boundary, and setback a minimum 1m from the shared boundary with the subject site. A single-storey shed abuts the rear boundary. SPOS of over 100sqm is located between the dwelling and shed. Car parking on-site is accessed via Coppin Street.
22. To the west of the subject site, is Wall Place. Despite Wall Place being a ROW, it is named and identified as a “road” and provides vehicular access to a number of properties along Coppin Street, Wall Place and Wall Street. To the west of Wall Place are dwellings fronting Wall Street. The immediate interface with the subject site are Nos. 14 and 16 Wall Street and No. 2 Wall Place.



Corner of Wall Place and Wall Street (Planning Officer, July 2019)

23. No. 16 Wall Street is one of an attached pair with No. 14 Wall Street to the west, sharing a common wall and roof form. This single-storey dwelling is built along the majority of its eastern boundary, with the exception of a 1.2m wide, central light-court. The southern (rear) setback of approximately 6m accommodates their SPOS. As stated earlier, No. 16 Wall Street is located within a Commercial 1 Zone.
24. Wall Place extends from the rear boundaries of Nos. 138 to 146 Coppin Street and doglegs to the west, abutting the side and rear boundaries of Nos. 14 to 16 Wall Street, respectively. No. 2 Wall Place is located to the south of Wall Place and is a contemporary, double-storey dwelling, setback 2.5m from its northern boundary and 3.6m from the eastern boundary to accommodate a shared car space and SPOS.
25. To the east of the subject site, on the opposite side of Coppin Street are a mix of single and double-storey dwellings as well as a number of three and four-storey apartments.



The subject site and surrounding land (Council GIS, June 2020)

26. The subject site has good access to public transport, retail, and public open space services and facilities, including:
- (a) Burnley train station located 400m east;
 - (b) Swan Street tram line located approximately 350m south. Swan Street is an Activity Centre (AC) which consists of commercial uses, including restaurants, cafes and licensed premises;
 - (c) Bridge Road tram line located approximately 400m north, and Bridge Road is also an AC;
 - (d) Church Street tram line located approximately 380m west;
 - (e) Barkly Gardens, Burnley Park, and Dame Nellie Melba Reserve, all located approximately 400m south, 1km east and 300m north of the site, respectively; and
 - (f) Access to the Yarra River and Capital City Trail 800m south of the site.

Planning Scheme Provisions

Zoning

27. The subject site is zoned Commercial 1 Zone (C1Z). The following provisions apply:
- (a) Pursuant to *Clause 34.01-1* of the Yarra Planning Scheme (the Scheme) a planning permit is required for 'dwelling use' if the frontage exceeds 2m. In this instance, the residential entrance equates to an overall width of 2.85m, therefore a planning permit is required.
 - (b) The commercial tenancies (office) use is identified as a 'Section 1 - Permit not required' use. There is no limit on leasable office floor area in the schedule to the C1Z, therefore a planning permit is not required for this use.
 - (c) Pursuant to *Clause 34.01-4*, a planning permit is required to construct a building or construct or carry out works.
 - (d) For an apartment development, the decision guidelines at *Clause 34.01-8* specify the objectives, standards and decision guidelines of *Clause 58* must be considered.

Overlays

28. The subject site is affected by the Design and Development Overlay (Schedule 5). The following provisions apply:
- (a) Pursuant to *Clause 43.02-2* of the Scheme, a permit is required to:
 - (i) *construct a building or to construct or carry out works. This does not apply if a schedule to this overlay specifically states that a permit is not required.*
 - (b) Schedule 5 specifically states that a permit is not required for buildings and works. Notice however must be given to the Environment Protection Authority (EPA), Transurban City Link, and Vic Roads in the event that a planning permit is triggered under another provision within the Scheme.
 - (c) However, the City of Yarra has entered into an agreement with the EPA on 10 July 2019 regarding the requirement for notice to be given to the EPA under *Clause 43.02*, Schedule 5. The agreement is to exempt certain applications from being required to be referred to the EPA. These applications are as follows:
 - (d) *An application to use land or for the construction of a building or the construction or carrying out of works does not require notice to be given to the EPA if the following requirements are met:*
 - (i) *The title boundary of the subject site is more than 50 metres from the centre of the Burnley Tunnel exhaust stack (located at Barkley Ave. Richmond. Latitude - 37.8295434, Longitude 145.0018514); and*
 - (ii) *The proposed building height is less than 10 stories or 30 metres, whichever is lesser.*
 - (e) *Regardless of clause 3(a) of this Agreement, an application for carrying out of works specified in clause 62.02-2 of the Yarra Planning Scheme (even if a permit is specifically required for any of these matters) does not require notice to be given to the EPA.*
29. As the subject site is over 1km from the centre of the Burnley Tunnel exhaust stack and the proposed overall height of the building being limited to 13.45m above NGL, notice to the EPA was not required to be given.

Particular Provisions

Clause 52.06 (Car Parking)

30. The number of car parking spaces required under *Clause 52.06-5* of the Scheme must be provided to the satisfaction of the responsible authority. A planning permit is required for a reduction in the number of car parking spaces.
31. The following table identifies the car parking requirement under *Clause 52.06-5*, the provision on site, and the subsequent reduction:

Proposed Use	Quantity/ Size	Statutory Parking Rate	No. of Spaces Required	No. of Spaces On-site	Reduction Required
1 x bedroom dwelling	4	1 space per dwelling	4	0	4

2 x bedroom dwelling	2	1 space per dwelling	2	2	0
3 x bedroom dwelling	1	2 spaces per dwelling	2	2	0
Office (Combined leasable floor area)	145sqm	3 spaces to each 100sqm of leasable area	4	0	4
Total			12	4	8

32. With 4 car parking spaces provided on-site, the proposal seeks a total reduction of 8 car spaces; 4 spaces for resident car parking and 4 spaces for the offices.

Clause 52.34 – Bicycle facilities

33. Pursuant to *Clause 52.34-3*, in developments of four or more storeys, 1 resident bicycle parking space should be provided for every 5 dwellings (rounded up), plus 1 visitor space for every 10 dwellings as seen in the table below.

Use	Bedrooms/ Area	Rate	No. required on-site	No. provided on-site
7 x dwellings	4 x 1 bedroom 2 x 2 bedroom 1 x 3 bedroom	1 space per every 5 dwellings	2	8
		1 space for visitors to every 10 dwellings for developments	1	4
Office	145sqm	1 employee space to each 300sqm of net floor area if the net floor area exceeds 1000sqm	0	2
		1 visitor space to each 1000sqm of net floor area if the net floor area exceeds 1000sqm	0	
Totals			3	14

34. The proposal exceeds the bicycle parking rate for dwelling residents/visitors and office employees/visitors.

Clause 58 Apartment Developments

35. *Clause 58* applies to applications to construct an apartment development within a Commercial 1 Zone. This clause seeks to encourage apartment development that provides reasonable standards of amenity for existing and new residents and to encourage apartment development that is responsive to the site and surrounding area.

General Provisions

Clause 65 - Decision Guidelines

36. 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 State and Local Planning policy Frameworks, as well as the purpose of the zone, overlay or any other provision.

Planning Policy Framework (PPF)

37. Relevant clauses are as follows:

Clause 13.05-1S – Noise abatement

38. The relevant objective of this clause is *“To assist the control of noise effects on sensitive land uses”*.

Clause 15.01-1S – Urban Design

39. The relevant objective of this clause is *“to create urban environments that are safe, healthy, functional and enjoyable and that contribute to a sense of place and cultural identity”*.

Clause 15.01-2S – Building Design

40. The relevant objective of this clause is *“to achieve building design outcomes that contribute positively to the local context and enhance the public realm”*.

Clause 15.01-5S – Neighbourhood Character

41. The relevant objective of this clause is *“to recognise, support and protect neighbourhood character, cultural identity, and sense of place”*.

Clause 15.02 – Sustainable Development

42. The objective of this clause is *“to encourage land use and development that is energy and resource efficient, supports a cooler environment and minimises greenhouse gas emissions”*.

Clause 16.01-1S – Integrated housing

43. The objective of this clause is *“to promote a housing market that meets community needs”*.

Clause 16.01-1R – Integrated housing- Metropolitan Melbourne

44. Strategies for this clause are:

- (a) *Provide certainty about the scale of growth by prescribing appropriate height and site coverage provisions for different areas.*
- (b) *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.*

Clause 16.01-2S – Location of residential development

45. The objective of this clause is *“to locate new housing in designated locations that offer good access to jobs, services and transport”*.

46. Relevant strategies for this clause are:

- (a) *Increase the proportion of new housing in designated locations within established urban areas and reduce the share of new dwellings in Greenfield and dispersed development areas.*
- (b) *Encourage higher density housing development on sites that are well located in relation to jobs, services and public transport.*
- (c) *Ensure an adequate supply of redevelopment opportunities within established urban areas to reduce the pressure for fringe development.*

- (d) *Facilitate residential development that is cost effective in infrastructure provision and use, energy efficient, water efficient and encourages public transport use.*
- (e) *Identify opportunities for increased residential densities to help consolidate urban areas.*

Clause 16.01-3S – Housing diversity

47. The objective of this clause is “to provide for a range of housing types to meet increasingly diverse needs”.

Clause 16.01-3R – Housing diversity - Metropolitan Melbourne

48. The strategy of this policy is “create mixed-use neighbourhoods at varying densities that offer more choice in housing”.

Clause 16.01-4S – Housing affordability

49. The objective of this clause is “to deliver more affordable housing closer to jobs, transport and services.”

Clause 17.02-1S – Business

50. The objective of this clause is “To encourage development that meets the community’s needs for retail, entertainment, office and other commercial services”.

Clause 18.01-1S – Land use and transport planning

51. The objective of this clause is “to create a safe and sustainable transport system by integrating land use and transport”.

Clause 18.02-1S – Sustainable personal transport

52. The objective of this clause is “to promote the use of sustainable personal transport”.

Clause 18.02-2R – Principal Public Transport Network

53. Relevant strategies for this clause are:

- (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.*

Local Planning Policy Framework (LPPF)

Clause 21.04 – Land Use

Clause 21.04-1 – Accommodation and housing

54. Relevant objectives and strategies for 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 1.3 Support residual population increases in established neighbourhoods.*
- (b) *Objective 2 To retain a diverse population and household structure.*
- (c) *Objective 3 To reduce potential amenity conflicts between residential and other uses.*
 - (i) *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.*

- (ii) *Strategy 3.2 Apply the Interface Uses policy at clause 22.05.*

Clause 21.04-3 Industry, office and commercial

55. The relevant objective for this clause is “*To increase the number and diversity of local employment opportunities*”.

Clause 21.05 – Built Form

Clause 21.05-2 – Urban design

56. The relevant objective and strategy of this clause are;

- (a) *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:*
- i. *Significant upper level setbacks*
 - ii. *Architectural design excellence*
 - iii. *Best practice environmental sustainability objectives in design and construction*
 - iv. *High quality restoration and adaptive re-use of heritage buildings*
 - v. *Positive contribution to the enhancement of the public domain*
 - vi. *Provision of affordable housing.*

Clause 21.06 – Transport

Clause 21.06-1 Walking and cycling

57. 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.*
- (ii) *Strategy 30.2 Minimise vehicle crossovers on street frontages.*
- (iii) *Strategy 30.3 Use rear laneway access to reduce vehicle crossovers.*

Clause 21.07 – Environmental Sustainability

Clause 21.07-1 – Environmentally sustainable development

58. The relevant objective of this clause is to “*promote environmentally sustainable development*”.

Clause 21.08-8 – Central Richmond (area between Swan Street and Bridge Road)

59. Within Figure 24 (Built form character map: Central Richmond), the subject site is located within the ‘Inner Suburban Residential’ area. The relevant design strategy is to

- (a) *Maintain the existing pattern of front setbacks.*
- (b) *Limit variation height to a maximum of one-storey compared to the adjacent properties, on single house sites/small development sites in areas with generally consistent building heights.*

Relevant Local Policies

Clause 22.05 – Interface Uses Policy

60. This policy applies to applications for use or development within Business (now Commercial) Zones (amongst others). The relevant 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.*
- (b) *To ensure that residential uses located within or near commercial centres or near industrial uses enjoy a reasonable level of amenity.*

61. *Clause 22.07 – Development Abutting Laneways*

- (a) The objectives of this clause are;
 - (i) *To provide an environment which has a feeling of safety for users of the laneway.*
 - (ii) *To ensure that development along a laneway acknowledges the unique character of the laneway.*
 - (iii) *To ensure that where development is accessed off a laneway, all services can be provided to the development.*
 - (iv) *To ensure that development along a laneway is provided with safe pedestrian and vehicular access.*

Clause 22.10 – Built form and design policy

62. The policy applies to all new development not included in a heritage overlay and comprises ten design elements that address the following issues: urban form and character; setbacks and building heights; street and public space quality; environmental sustainability; site coverage; on-site amenity; off-site amenity; landscaping and fencing; parking, traffic and access; and service infrastructure.

Clause 22.16 – Stormwater Management (Water Sensitive Urban Design)

63. This policy applies to applications for new buildings (amongst others). Under this clause it is policy to:
- (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).*
 - (b) *To promote the use of water sensitive urban design, including stormwater re-use.*
 - (c) *To mitigate the detrimental effect of development on downstream waterways, by the application of best practice stormwater management through water sensitive urban design for new development.*
 - (d) *To minimise peak stormwater flows and stormwater pollutants to improve the health of water bodies, including creeks, rivers and bays.*
 - (e) *To reintegrate urban water into the landscape to facilitate a range of benefits including microclimate cooling, local habitat and provision of attractive spaces for community use and well-being.*

Clause 22.17 – Environmentally Sustainable Design

64. 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 considerations are energy performance, water resources, indoor environment quality, storm water management, transport, waste management and urban ecology.

Advertising

65. The originally submitted application was advertised under the provisions of Section 52 of the *Planning and Environment Act (1987)* by 117 letters sent to surrounding owners and occupiers and by two signs displayed on site (one at the Coppin Street and the second along Wall Place).
66. Council received 27 objections, the grounds of which are summarised as follows:
- (a) Out of keeping with neighbourhood character / heritage;
 - (b) Inappropriate design and overdevelopment (height, scale, bulk, site coverage and permeability);
 - (c) Off-site amenity impacts (loss of solar access to north-facing windows, overshadowing, overlooking and noise impacts);
 - (d) Car parking, traffic impacts and pedestrian safety; and
 - (e) Impacts during construction phase (structural, noise, traffic and pest control).
67. A planning consultation meeting was held on 17 May 2019, and was attended by the applicant, sixteen (16) objectors and the Council planning officers to discuss the concerns raised. There was no specific resolution reached, however following the meeting, on 20 February 2020, the applicant submitted revised plans under a S57(A) of the Act.
68. The S57A plans were advertised to all previously notified properties and all objectors. Four (4) additional objections were received, thereby increasing the total number of objections from 27 to 31.

Referrals

External Referrals

69. As stated earlier in the report, whilst the application is not required to be referred to the EPA, the application was referred to City Link Authority and VicRoads under Section 52 of the Act based on the requirements of the DDO5. There was no objection to the application from any authority.

Internal Referrals

70. The originally advertised application was referred to the following areas within Council:
- (a) Urban Design Unit
 - (b) Traffic Engineering Unit;
 - (c) ESD Advisor;
 - (d) City Works Unit;
 - (e) Arborist; and
 - (f) Strategic Transport Unit.
71. Referral comments have been included as attachments to this report.
72. The amended (S57A) plans were referred to Council's Traffic Engineering Unit and City Works Department as additional car parking spaces are proposed on-site, with changes to the bin storage area.

OFFICER ASSESSMENT

73. The following key issues and policies will be used to frame the assessment of this planning permit application:
- (a) Strategic justification;

- (b) Land Use;
- (c) Built form and design;
- (d) On-site amenity;
- (e) Off-site amenity;
- (f) Parking layout, traffic and bicycle parking; and
- (g) Objector concerns.

Strategic justification

74. There is strong strategic direction to support the redevelopment of the site to provide a mixed-use development with office premises at ground level and residential use above. The site is located within the C1Z and between Bridge Road and Swan Street ACs and is therefore well serviced by public transport and community services. Policy at *Clauses 11 (Settlement), 16 (Housing), 18 (Transport) and 21.04 (Land use)* of the Scheme, together with Plan Melbourne, encourage the accumulation of activities and the intensification of development in and around activity centres. This ensures efficient use of infrastructure and supports Council's preference that established areas experience residual increases in population growth.
75. The C1Z specifically identifies the purpose of the land as an area where higher residential density developments are anticipated, with growth specifically directed to occur within or close to activity centres. The dwellings would provide increased housing opportunities consistent with the policy outlined above. The site has excellent access to shops, restaurants, community facilities and supermarkets, ensuring that the proposal will result in efficient use of existing infrastructure, consistent with *Clause 21.04 (Land use)* of Council's MSS. Further, the provision of two office tenancies at ground level, addressing Coppin Street, will provide a degree of activity within the street, also consistent with the purpose of the C1Z.
76. *Clause 16.01-4 (Housing affordability)* of the Scheme encourages developments to provide for a variety of housing sizes, which this proposal does by adding to the wider spread of dwelling types in the area. The development offers a variety of dwelling sizes, providing one, two and three-bedroom apartments with a variety of open space.
77. The non-heritage area in a C1Z allows for a more robust development to occur, with the site currently underutilized within the context outlined above. However more intensive growth, whilst strongly supported by policy, must respond to existing conditions and be tempered to respect the existing neighbourhood character and the site specific relationship with adjoining built form. These factors will be discussed later in the report.

Land Use

78. A purpose of the C1Z is *to provide for residential uses at densities complementary to the role and scale of the commercial centre*. Whilst the site is located within the C1Z, Coppin Street is predominantly residential in use and zoning. On this basis the use of the land for dwellings will not unreasonably impact any existing commercial uses in the surrounding area, with the closest of these being a shop at No. 140 Coppin Street and a wellness-centre at No. 138 Coppin Street.
79. Residential noise is unlikely to impact upon existing uses within these abutting buildings, with internal noise to the dwellings from external sources discussed later in the assessment. The proposed dwelling use must comply with relevant objectives at *Clause 22.05 (Interface uses policy)* of the Scheme, by incorporating measures to minimise the impact of the normal operation of business activities on the reasonable expectation of amenity within the dwellings. This will ensure that the growth of further commercial opportunities within proximity to the new dwellings is not impeded. Furthermore, the residential facet to the proposal is considered appropriate given the nature of residential use found within the immediate area. Based on the appropriate design of the dwellings to ensure this is achieved, the use of the land as dwellings is considered entirely appropriate in the context and is supported.

Built form and design

80. In considering the design and built form of the proposed development, the most relevant aspects of the Scheme are provided at *Clause 15 (Built environment and heritage)*, *21.05 (Built form)*, *22.10 (Built form and design policy)*, the decision guidelines of *Clause 34.01-8* and policy at *Clause 58 (Apartment Developments)*. These provisions support a development outcome that responds to the existing or preferred neighbourhood character and provides a contextual urban design response reflective of the objectives for the area. Particular regard must be given to the acceptability of the design in terms of height and massing, design and relationships to adjoining buildings.

Context

81. As outlined in the 'sites and surrounds' section of this report, the existing character of the surrounding area contains a mix of building sizes and heights, varying between single-storey heritage cottages to modern two to three-storey developments. A number of three to four-storey, 70's brick apartment buildings are also located along Coppin Street. These buildings are currently the highest visible buildings within the immediate vicinity.
82. The sites between Nos. 138 to 144 Coppin Street (which includes the subject site) and No. 16 Wall Place to the west are located within the C1Z. Considering the strategic direction of the C1Z to encourage higher density developments, it is expected to have more intensive development compared to the residential areas to the south, east and west, which are located within a General Residential Zone (Schedule 2). Nonetheless, the GRZ2 allows for developments of three-storeys at a maximum height of 9m above NGL. Therefore, whilst it is acknowledged that this proposal would be one of the highest developments in the immediate area, the sites to the immediate south, north (across Wall Street) and east (across Coppin Street) have the opportunity to be developed up to three-storeys; i.e. one storey less than the proposed developed on-site. Based on this context, the addition of this higher built form is considered to be an acceptable outcome.
83. The row of heritage cottages located to the rear of the subject site, across Wall Place and fronting Wall Street is read in both a different street and different context (one of a heritage overlay with smaller block sizes) with the buildings in the commercial zone (and no heritage overlay) forming a backdrop to these buildings. Nonetheless, off-site amenity impacts must be considered, and will be discussed in the assessment below.

Height, Scale and Massing of the development

84. *Clause 21.08 (Neighbourhoods)* and *Clause 22.10* of the Scheme provides guidance on design outcomes for the site. *Clause 22.08* of the Scheme encourages the following:
- (a) *Maintain the existing pattern of front setbacks.*
 - (b) *Limit variations in height to a maximum of one-storey compared to the adjacent properties, on single house sites/small development sites in areas with generally consistent building heights.*
85. The relevant objective at *Clause 22.10* of the Scheme aims 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.*

86. The proposal seeks to construct a four-storey building, with a stepped three-storey base and a recessed fourth-storey. There is no distinct setback pattern in the immediate streetscape. Nos. 138 to 140 Coppin Street consist of single-storey street walls, with vertical, rectangular fenestrations, whilst No. 146 Coppin Street consists of a street setback of 3m. As a result, the proposal responds to this variation by not providing a clearly defined street wall (aside from the north-eastern corner), with multiple setbacks of 0.9m to 2.1m incorporated into the front façade between ground level to Level 3. The setback of the east-facing balconies from the front boundary is consistent at 1.15m between Level 1 and Level 2. The use of a mix of light coloured brickwork and patterned concrete is also consistent between ground level to Level 2, with Level 3 finished in a combination of rendered brick and dark metal cladding. These features in combination with the use of vertical, patterned cement along the north-eastern corner between ground level and Level 2 create the impression of a single-storey street wall to Coppin Street (in-line with the abutting commercial sites to the north), with the upper levels setback incrementally from the south-eastern corner (abutting the residential interface). This is an appropriate design response that allows for the proposal to sit comfortably between the neighbouring buildings.



Proposed streetscape - Coppin Street (CBG Architects & Interior Designers, December 2019)

87. The overall height of the proposal is 13.45m. As discussed earlier in the report, Coppin Street has a varied streetscape, ranging between single-storey buildings to four-storey apartment blocks, with no heritage overlay. As can be seen by the proposed streetscape above, the street is not one formed by a consistent row of eras, heights or construction materials.
88. The proposed residential building is two-storeys higher than the immediately abutting sites to the north (No. 140 Coppin Street) and to the south (No. 146 Coppin Street), and as such is non-compliant with policy at *Clause 21.08* of the Scheme. However as shown in the various streetscape images in this report, the built form is acceptable in this instance given the commercial appearance and use of No. 140 Coppin Street, and the generous setbacks and varied materials proposed to the interface with No. 146 Coppin Street.
89. Whilst Council's Urban Design Unit has recommended *to rationalise setbacks and balconies along this interface to simplify the overly stepped and bulky form*, these setbacks are required in order to limit off-site amenity impacts to No. 146 Coppin Street. Nonetheless, the applicant submitted S57A plans, reducing the bulk of the southern perimeter of Apartment 3.01's balcony at Level 3 by changing the material from brick to a mixture of powder-coated and perforated metal finish.
90. Council's Urban Design Unit also recommended that in order to ensure the upper forms are recessive at Level 3, *the brick wing walls be removed and a light weight structural form be pursued*. Planning Officers agree with this recommendation and in order to provide emphasis on the two-storey built form found along Coppin Street, Wall Street and Wall Place, a condition will require wing walls to pergolas at Level 3 to be deleted.

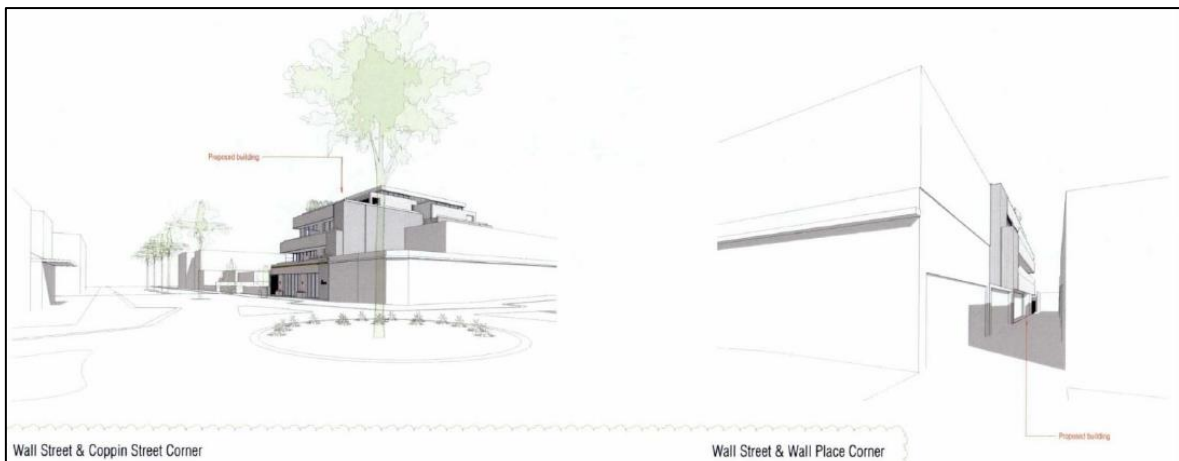


Eastern façade of proposed development



South-eastern façade of proposed development

91. There is also a high incidence of existing double, triple and even four-storey built form in the immediate streetscape; e.g. Nos. 135 and 137 Coppin Street which are three-storey developments diagonally across from the subject site. In this context, the proposed three-storey building, with a recessive fourth-storey (setback a maximum of 8m from the front boundary) will not appear excessively visually bulky, particularly given the zoning of the subject land and the existing built form along both sides of Coppin Street.
92. In addition the contrasting use of light finished brick within the base of the building, and a darker shade to Level 3 achieves a visually interesting and modulated built form outcome, reducing the massing of the overall development as it presents to Coppin Street. Furthermore, the use of glazing along the front, rear and southern facades would further assist in providing a level of articulation and reduce visual bulk when viewed from Coppin Street and Wall Place. The three-storey, northern boundary wall abutting No. 140 Coppin Street allows for a level of articulation when viewed from the corner of Coppin Street and Wall Place as a result of the patterned, concrete finish. In addition, given the double-storey development at No. 138 Coppin Street, the majority of this wall will not be visible and therefore, further articulation of this side façade is not required.
93. Whilst the subject site and both sides of Coppin Street are not affected by a heritage overlay, the immediate sites across Wall Place are located within the Elm Grove Heritage Precinct and are a row of 'contributory' dwellings between Nos. 10 to 16 Wall Street. Nevertheless, as shown below, the location of the subject site ensures there is no loss of view of the heritage cottages from any part of Wall Street or at the intersection with Coppin Street. The proposed development will not create an imposing and overwhelming backdrop to the modestly scaled heritage built form along Wall Street as a result of the proposed light coloured, patterned wall finishes and balconies. When viewed from further west along Wall Street, the majority of the proposed development will be obscured by the double-storey addition and boundary walls associated with No. 138 Coppin Street, including parapets and roof forms of existing built form along Wall Street.



Development viewed from the north-eastern corner of Wall Street and Coppin Street/Wall Place (CBG Architects & Interior Designers, December 2019)

94. The provision of west-facing balconies at Level 1, combined with pale coloured, patterned materials provide a transition of built form from the varied single to double-storey heritage dwellings found along Wall Street. However, minimal upper level setbacks are provided at Level 2 and 3. Pursuant to Clause 22.10-3.3 (*Setbacks and building height*) new development which abuts a ROW should be no higher than two-storeys. *Clause 22.07 (Development abutting laneways)* aims to maintain the unique character of the ROW and ensure that development abutting ROWs respect the scale of surrounding built form. *Clause 22.07-3* further recommends that *development respect the scale of the surrounding built form*. Council's Urban Design Unit recommended that the *solid component (horizontal concrete) of the street wall at the northwest corner be reconsidered and the Second Floor and Third Floor balcony be setback further (minimum 2.25m) to achieve a recessed upper level*. As shown earlier in the report, the applicant lodged S57A plans, limiting the street wall at the north-western corner between ground Level to Level 1 (9.5m above NGL), as opposed to the previously proposed street wall which extended between ground level to Level 2 (10.2m above NGL).
95. Wall Place, at a width of 3.3m provides a degree of separation between the subject site and the single-storey dwellings to the west. Moreover, the immediate dwelling across Wall Place, at No. 16 Wall Place, is located with a C1Z where building height is discretionary, and cannot expect the same level of amenity as would be afforded within a purely residential zone. Nonetheless, given the width of this neighbouring lot and its location in a heritage overlay, it is unlikely to be developed for commercial purposes. Therefore, in order to preserve the two-storey built form along Wall Street, Planning Officers agree with the above recommendation by Council's Urban Design Unit to increase the upper level setbacks between Levels 2 and 3 to a minimum of 2.25m. As such, a condition will require increased setbacks to Level 2 and balcony of Level 3 from the west to a minimum of 2.25m. Changes to the floor plate as a result of this condition will be discussed later in the report.
96. In conclusion, given the commercial zoning of the land between Nos. 138 to 144 Coppin Street, and the absence of a heritage overlay between the eastern and western sides of Coppin Street, it is acknowledged that the area is undergoing change, with new development resulting in the emergence of higher built form within the immediate surrounds. Taking into consideration the relevant policy guidelines, the emerging built form character of the area and for all the reasons outlined above, subject to condition, the proposed development will not overwhelm the existing character along Coppin Street and Wall Street.

The Public Realm & Pedestrian spaces

97. *Clause 21.05 (Built form)* of the Scheme seeks new development to make a positive contribution to the enhancement of the public domain, whilst *clause 22.10-3.4 (Street and public space quality)* aims to ensure that new development enhances public safety and the pedestrian experience by creating attractive and active interfaces.
98. The glazed façade to the ground floor offices addressing Coppin Street will provide an engaging frontage to this interface, creating passive surveillance opportunities. Council's Urban Design Unit broadly supports the ground level interface as the *presence of two office tenancies strengthens the presence of the small commercial pocket*. The relatively simple and rectilinear façade; glazing intercepted with pillars and planter-boxes, including a metal awning will clearly help to identify the entrances to the building and provide adequate activation. The minimum front setback limited to 0.9m will create a safe environment, with no undercroft area. Furthermore, the use of glazed doors to the two office tenancies and a decorative wrought-iron security gate for the dwellings will help to distinguish between the two separate uses. Council's Urban Design Unit have recommended that *the entrances could be further enhanced and differentiated through the introduction of a plinth below the window glazing*.

This will be required as a condition. Council's Urban Design Unit have also recommended the proposed decorative wrought-iron gate to the dwellings be reduced in height from 2.7m to a maximum of 1.8m. This too will be required by way of condition. The width of the pedestrian entrance at 2.85m provides an adequate pedestrian circulation space.

99. Whilst landscaping is proposed to the Coppin Street façade, a landscape plan has not been provided and as such, a condition will require the provision of a landscape plan. Furthermore, the existing street trees adjacent to the subject site on Coppin Street are proposed to be retained. Council's Arborists have confirmed that the amenity value of each trees is \$9,034 (Tree 1) and \$11,217 (Tree 2). In addition, it has been advised that both trees will require Tree Protection Zone (TPZ) fencing. This will be required by way of condition.
100. The upper levels will also consist of extensive glazing which would contribute to passive surveillance and activation. This outcome is encouraged within commercial areas, as outlined as a decision guideline of the zone at *Clause 34.01-8* and policy direction under *Clause 22.10-3.4* of the Scheme.

Laneway interface

101. As discussed earlier in the report, the rear interface has been designed to reasonably respond to the existing scale of the surrounding built form. This discussion will be limited to the remainder of the policy recommendations of *Clause 22.07-3*. Wall Place is currently used by vehicles to access No. 140 Coppin Street and No. 2 Wall Place. Wall Place will be used for vehicle access for 4 on-site car spaces. Whilst two pedestrian entrances are located within this rear wall; one being a pedestrian link through the building for the residential component of the development and the second being solely used by Apartment 3.01, these are secondary entrances that are unlikely to be frequently used. Given that the car parking access to the site will be provided from the rear ROW and the principal pedestrian entrance is provided via Coppin Street, the proposal is consistent with *Clause 22.10-3.10* (Parking, traffic and access) which encourages *access to car parking areas and loading area not adversely affect pedestrian amenity* and *Clause 22.07-3* which states *pedestrian entries be separate from vehicle entries*.
102. A number of west-facing windows and balconies face the ROW, thereby providing a level of passive surveillance through activity at this frontage. Potential overlooking to the habitable room windows and SPOS associated with the dwellings across Wall Place will be discussed later within this report.
103. A designated internal bin storage room for waste is provided at ground level, ensuring that no refuse will be stored in the ROW. All proposed works, including doors and windows (with the exception of the convex mirrors on the garage wall) will be located wholly within the title boundaries of the subject site. A discussion regarding the convex mirrors can be found later in the report. On this basis, the ROW will continue to meet emergency services access requirements and will not obstruct existing access to other properties in the laneway. The objectives of clause 22.07 will be met.

Light and Shade

104. Due to the east-west orientation of the site the proposed development would result in a degree of additional overshadowing to the rear ROW in the morning between 9.00am to 12.00pm, and limited to the western footpath associated with Coppin Street from 2.00pm to 3.00pm.
105. The subject site is within a location where a degree of overshadowing is inevitable due to the mixed built form character which has been established in this area. Irrespective of this, it is considered that the shadowing from the development would not affect the usability of the public realm, being limited in scale and duration at both interfaces.

Site Coverage

106. The proposal occupies approximately 93% of the site area. This extent of site coverage is considered to be appropriate and consistent with the mixed residential and commercial character of the area that accommodates predominantly hard-edged built form with limited open space or landscaping; e.g. at No. 131 Coppin Street, between Nos. 138 to 142 Coppin Street, and other 70's three to four-storey apartment blocks.

Architectural Quality

107. The development is of a contemporary design and incorporates a mix of traditional (brick) and modern materials (metal cladding). The rectilinear design creates a clearly modern form which will integrate well with existing and emerging contemporary development in the immediate surrounds.
108. The use of brickwork between ground level to Level 2 aims to create a degree of connectivity with the prevalence of brickwork and masonry in the area, with the mix of vertical glazing, patterned cement, pillars and planter-boxes to provide a degree of difference to these materials. As discussed earlier in the report, a condition will require a landscape plan to be provided. Council's Urban Design Unit have recommended the introduction of further *vertical articulation to the Coppin Street frontage to respond to the prevailing streetscape grain as the current composition and heavy horizontal banding increases the bulk*. However, Planning Officer's support the proposed horizontal banding, as the vertical glazing and pillars between ground level to Level 2 provide a level of articulation when viewed from Coppin Street. The vertical banding at the north-eastern corner of the site helps to distinguish and reinstate the C1Z interface to the north while eroding the built form through increasing setbacks down to the finer-grained residential interface to the south.
109. Level 3 and sections of the balconies of the development will be finished in powder-coated or perforated metal and pre-cast concrete. On balance, with the brickwork, the use of a mix of powder-coated and perforated metal is supported, with this finish providing a degree of articulation and visual interest to the uppermost level of the development. In addition, the condition requiring the deletion of wing walls at Level 3, will further lighten the uppermost levels.
110. Overall it is considered that the proposed development would achieve a good level of architectural quality. The proposal would significantly contribute to and improve the streetscape through active frontages and use of high-quality materials which the existing building within the subject site currently lacks.

Clause 58

Standard D1 – Urban context

111. The purpose of this Standard is to ensure that the design responds to the existing urban context and contributes to a preferred future development of the area, while also responding to the features of the site and the surrounding built form. This aspect has been discussed in detail earlier within this assessment and this Standard is considered to be met.

Standard D2 – Residential Policies

112. As outlined within the Strategic Policy section of this report, the proposed development has strong policy support under the purpose of the C1Z and local policies of the Scheme. The site can clearly support a reasonable degree of higher density residential development, based on its proximity to public transport, community infrastructure and services. The Standard is met.

Standard D3 – Dwelling diversity

113. The provision of a diverse housing stock assists in achieving broader strategic goals by promoting housing choice, adaptability and encouraging a diverse range of people within a neighbourhood, including families. The proposed mix of dwelling sizes allows for a reasonable variety of dwellings to be provided and ensures that the Standard is met.

Standard D4 - Infrastructure

114. The proposal is located within an existing commercial and residential area with established utility services and infrastructure. There is no evidence to suggest that the proposed development would impact on the operation of these existing services and therefore the purpose of the Standard is considered to be met.

Standard D5 – Integration with the street

115. The proposed development would provide a significant improvement in terms of the subject site's interface with Coppin Street, as discussed previously in the *Public Realm & Pedestrian spaces* assessment of this report.

Standard D6 – Energy efficiency

116. The orientation of the subject site, with two abutting street frontages, somewhat dictates that proposed dwellings would be orientated to face east or west, however Apartment 3.01 has access to north-facing balconies, thereby increasing direct sunlight opportunities within these spaces. The pergola structures at Level 3 will provide adequate shading to these balconies of Apartment 3.01. All dwellings have good access to natural ventilation with east, west and south-facing windows.
117. The originally advertised SMP (dated July 2019 and prepared by Sustainable Development Consultants) was referred to Council's ESD Officer for comment. This SMP was found to be generally acceptable, with the following recommendations:
- (a) Show the location of the private outdoor clotheslines for each apartment;
 - (b) Extend application of ceiling fans to all bedrooms;
 - (c) Use permeable paving to reduce run-off;
 - (d) Increase the size of PV system;
 - (e) Natural ventilation to office spaces.
118. Based on the amended (S57A) SMP (dated February 2020 and prepared by Sustainable Development Consultants, the development incorporates a number of positive ESD outcomes into its design, as follows;
- (a) A BESS Score of 60%.
 - (b) Preliminary NatHERS rating of 7.3 star.
 - (c) Provision of LED lighting.
 - (d) 5 star reverse cycle heating and cooling systems.
 - (e) 4 star WELS rated toilets.
 - (f) 3 star WELS rated shower heads.
 - (g) 2 kWp solar PV system.
 - (h) Provision of 10,000Ltr rainwater tank for sanitary purposes achieving a STORM Rating of 102%.
 - (i) No VOC paint used.
 - (j) Provision of a minimum of 1 bicycle parking space per apartment.
 - (k) Provision of 4 public use bicycle parking spaces.
 - (l) Private outdoor clothesline for each apartment.
119. The following items will be conditioned to show on either the plans and/or the SMP (as appropriate);

- (a) Location of the private outdoor clotheslines for each apartment to be shown on plan;

- (b) SMP amended to extend application of ceiling fans to all bedrooms. Currently these are limited to Apartments 2.02 and 3.01;
- (c) Increase the size of the PV system;
- (d) Provision of natural ventilation for the office tenancies.

120. With regards to internal daylight, given the overall height of the development and the limited number of apartments, Council's ESD Advisor advised that a daylight modelling report is not required. Nonetheless, all apartments would receive a good level of daylight amenity from the east and west, including the central, north-facing light-court. The office tenancies will also benefit from the east-facing windows, including the northern light-court and south-facing windows.
121. The Standard notes that dwellings located in the Melbourne climate zone should not exceed a 30MJ/m² cooling load. The SMP confirm that this cooling load requirement is met, with a *10% improvement on heating and cooling consumption in comparison to a reference case defined by the NCC 2016 BCA Section J provided for the office*. Council's ESD Advisor has informed that this is an acceptable approach.
122. Overall, it is considered that subject to the conditions discussed above, the proposed development would achieve best practice in environmentally sustainable development in accordance with the overarching objectives under *Clause 22.17 (Environmentally sustainable development)* of the Scheme.

Standard D7 – Communal open space

123. This Standard only applies to developments which propose forty (40) or more dwellings and therefore does not apply to this proposal.

Standard D8 – Solar access to communal open space

124. No communal open space is proposed as part of this development.

Standard D9 – Safety

125. The Standard encourages that dwelling entries should not be obscured or isolated from the street or internal accessway. The main pedestrian entrance to the apartments will be provided via a communal, decorative wrought-iron security gate, fronting Coppin Street. The use of wrought-iron for this entrance helps to clearly distinguish from the glazed entrances of the office tenancies. This wrought-iron gate scales at a height of 2.7m above NGL. To further improve the visibility of the foyer area associated with the apartments, Council's Urban Design Unit has recommended this gate to be lowered in height to 1.8m above NGL. This will be required by way of condition.

The addition of wall-mounted lighting on the eastern façade pillars, combined with the wrought-iron security gate and the glazed roof above the residential walkway will also ensure that the objective of the standard is met, providing safety and security for both residents and visitors.

126. The Standard recommends that *developments should be designed to provide good lighting, visibility and surveillance of car parks and internal accessways*. There are secondary pedestrian entrances provided from Wall Place. As discussed earlier in the report, these secondary entrances are unlikely to be frequently used. Nonetheless, these entrances are separated from the roller-doors associated with the two garages. However, as both the pedestrian entrances and garage doors are constructed of the same material, to further highlight the location of the pedestrian access points along the western boundary to passing pedestrians, and provide for increased glazing at the ground level, a condition will require the provision of transparent elements such as glazing to these pedestrian doors.

127. The garages and secondary pedestrian entrances are setback 0.7m from the rear boundary. Given Wall Place is shared for both vehicle and pedestrian access, the recessed secondary pedestrian entries provide an appropriate transitional space for pedestrians, minimising any conflict with vehicle access. Internally, there is adequate width separating the pedestrian walkways from the 4 car-spaces on-site, thereby, providing safe accessways. There is no lighting proposed to the rear pedestrian entrances. To further increase pedestrian safety and improve the integration between the development and the street, a condition will require wall-mounted lighting to be provided to the rear pedestrian entrances. Standard conditions will be imposed to ensure the lights are appropriately baffled and shielded to prevent light spill.
128. The proposed ground level planter boxes fronting Coppin Street are located within the 0.9m front recess and will not create unsafe spaces for pedestrians using Coppin Street.
129. Overall, subject to condition, the development achieves a satisfactory outcome against the objective of this Standard.

Standard D10 – Landscaping

130. Given the C1Z, landscaping and vegetation does not form a characteristic of the immediately abutting sites to the north between Nos. 138 to 144 Coppin Street. However, given the surrounding residential zone, the development aims to provide a moderate level of landscaping as one of the features of the proposal at all levels; mainly located within planter boxes. In order to ensure that the level of landscaping proposed will provide a safe, attractive and functional environment for future residents a condition will require a landscape plan to be submitted and thereafter maintained.

Standard D11 – Access

131. This objective and Standard seeks to ensure that the number of vehicle crossovers respects the character of the street, whilst maximising the retention of on-street car parking. The proposed development does not seek to introduce any new crossovers to Coppin Street. Therefore, the proposal will continue to maintain the current kerb-side parking. Whilst not shown on the plans, there is an existing vehicle crossover in front of No. 144 Coppin Street which will be made redundant as a result of the proposed development. Therefore, a condition will require the existing redundant crossover in front of No. 144 Coppin Street to be removed and reinstated with footpath. This will also create an additional on-street car space on Coppin Street.
132. Wall Place will service vehicle access to the apartments, with this ROW already used for this purpose. Council Engineers have provided standard conditions and notes to accommodate this development, such as the protection or relocation of infrastructure as necessary.
133. Further to the above, a standard condition will require a Construction Management Plan (CMP) to be prepared prior to the commencement of the development. This will ensure that any emissions and road disruptions during construction will be appropriately managed.

Standard D12 – Parking location

134. The on-site car parking for the three apartments will be provided at grade. The location of the residential parking will provide secure access to the residential lobby. Council's Traffic Engineering Unit have assessed the S57A plans and have confirmed that the swept path diagrams satisfactorily demonstrate vehicle turning movements into and out of the garages using the B85 design vehicle. This, together with the direct access between the garages and dwellings achieves the objective to provide "convenient" parking for residents. Whilst Council's Engineering Unit were generally supportive of the parking location and access, the following were recommended:

- (a) *The convex mirrors are to be relocated inside the property line, at the corner of the garage.*

- (b) *For any new internal concrete works, the finished floor levels along the edge of the slab must be set 40 mm above the edge of Wall Place – Council Infrastructure requirement.*
- (c) *The applicant is to demonstrate by a ground clearance check, that a B85 design vehicle can enter and exit the property without scraping or bottoming-out.*

135. As a result of the above comments, the applicant lodged Sketch Plan (TP100-C) on 03 June 2020 to address these concerns. The plan incorporated the following changes:

- (a) Convex mirrors located inside the property line.
- (b) Amended levels within the garage to be 40mm above the existing levels at the sides of the lane.
- (c) Addition of two sectional diagrams of the car park, taken from the midpoint of each garage showing the gradual transition from the ROW to the garage in order to show that a B85 vehicle can enter and exit without scraping.

136. Council's Traffic Engineering Unit are supportive of the changes made under the Sketch Plan. A condition will require the above changes to be added to the ground level plan, in accordance with the Sketch Plan.

137. This Standard requires that *shared accessways or car parks of other dwellings should be located at least 1.5m from the windows of habitable rooms*. Whilst the proposal incorporates west-facing habitable room windows and balconies, they will be directly adjacent to Wall Place and located between Levels 1 to 3, and as such providing an adequate buffer of well over 1.5m. Any off-site amenity impacts will be discussed later in the report.

138. An objective of the Standard is to protect residents from vehicular noise within developments. Given vehicles travel at low speeds through this area, and the car parking spaces on-site do not involve stackers, unreasonable noise impacts are not expected. It is also noted that the proposed garage will directly abut an existing car park associated with No. 140 Coppin Street to the north and a proposed 3.2m high wall along the shared boundary with No. 146 Coppin Street to the south. As such, this will ensure that adequate noise levels and internal amenity to these dwellings is achieved.

Standard D13 – Integrated water and stormwater management

139. Decision guidelines of this Standard encourage the use of alternative water sources such as rainwater, stormwater and recycled water, and encourage proposals to facilitate stormwater collection, utilisation and infiltration within the development. Further, buildings should be designed to collect rainwater for non-drinking purposes such as flushing toilets, laundry appliances and garden use.

140. The application proposes the installation of a 10,000Ltr rainwater tank which would be connected for sanitary purposes of the apartments, thereby achieving a STORM rating of 102%. Therefore, the STORM score exceeds that required 100% by Council's WSUD policy and thereby meeting this Standard and *Clause 22.16 (Stormwater management)* of the Scheme.

Standard D14 – Building setbacks

141. This Standard seeks to ensure that building setbacks respond to the surrounding context of the site, and allow adequate internal and off-site amenity to be achieved. As discussed earlier in the report, the proposed development respects the existing and emerging built form along Coppin Street and thereby, the proposal integrates with the surrounding neighbourhood character subject to a condition requiring the setbacks of Level 2 and Level 3 balcony to be increased from the western boundary to further improve the interface between the subject site and the single-storey dwelling at No. 16 Wall Street.

142. Adequate outlooks for each dwelling are provided, with apartments receiving adequate daylight from east and west-facing windows, including the northern central light-court. The individual internal layouts of each dwelling, as will be discussed in detail later within this assessment, are considered appropriate.
143. The setbacks provided at each level, along with the privacy screening, prevent unreasonable overlooking to adjacent residential land. This aspect of the proposal will also be discussed in more detail within the 'off-site amenity' section of this report.

Standard D15 – Internal views

144. The arrangement of the east and west facing balconies above each other ensure there are no internal views available between dwellings. Furthermore, the fixed, metal screening with a maximum 25% transparency, at a height of 1.7m above floor level between each balcony will also prevent internal views between dwellings. The Standard is met.

Standard D16 – Noise impacts

145. This Standard aims to contain noise sources in developments that may affect existing dwellings, whilst protecting residents from any external and internal noise sources. In this instance, the proposed development would not be located in proximity to any noise generating areas as listed under Table D3 of this Standard. In addition, the Bridge Road AC, Swan Street AC and Church Street are all located well over 300m from the subject site. Therefore, the apartments on-site will not be unreasonably affected by traffic and tram noise along those busy thoroughfares.
146. However the site is located within a C1Z, with two office tenancies proposed at ground level, resulting in the potential for the dwellings at Level 1 to be impacted. Whilst the proposal did not include the submission of an acoustic report addressing these possible impacts, the plans demonstrate that noise attenuation measures will be included between the offices at ground level and the immediate apartments above. Furthermore, a planning permit is not required to use the subject site for offices within a C1Z and is considered a 'quiet' use and entirely compatible with a residential interface.
147. Any noise generated from air conditioning units or similar machinery associated with the office use can be managed by the use of a standard condition that the development must comply at all times with the *State Environment Protection Policy – Control of Noise from Commerce, Industry and Trade (SEPP N-1)*.

Standard D17 – Accessibility objective

148. This Standard requires the following:
 - (a) *At least 50 per cent of dwellings should have:*
 - (i) *A clear opening width of at least 850mm at the entrance to the dwelling and main bedroom.*
 - (ii) *A clear path with a minimum width of 1.2 metres that connects the dwelling entrance to the main bedroom, an adaptable bathroom and the living area.*
 - (iii) *A main bedroom with access to an adaptable bathroom.*
 - (iv) *At least one adaptable bathroom that meets all of the requirements of either Design A or Design B specified in Table D4.*
149. Of the 7 apartments, 4 have been annotated to show the above requirements (excepting Apartments 1.02, 2.02 and 3.01). Therefore, more than 50% of the apartments meet the requirements outlined above. Nonetheless, a notation on all floor plans confirm that all apartments meet the requirements of this Standard.

Standard D18 – Building entry and circulation

150. The proposed residential lobby would be readily identifiable within Coppin Street, subject to the reduced height of the decorative wrought-iron security gate. The glazed roof above the pedestrian walkway provides a degree of shelter and natural light to this passage.
151. The main lobby and those at each upper level would be sufficiently dimensioned to service residents coming and going to a development of this scale, with no services obstructing these passageway, and therefore are generally in line with the objectives under this Standard.

Standard D19 – Private open space

152. The Standard notes that 1 x bedroom, 2 x bedroom and 3 x bedroom dwelling should be provided with SPOS of 8sqm and a minimum width of 1.8m, 8sqm and a minimum width of 2m, 12sqm and a minimum width of 2.4m, respectively.
153. In its current form, all dwellings meet these requirements. However, as a result of conditioning an increased western setback of the Level 3 balcony, the size of the SPOS associated with Apartment 3.01 will be reduced. Nonetheless, there is ample alternate SPOS associated with this apartment located at Levels 2 and 3. Therefore, the development will continue to meet the requirements of this Standard.
154. In addition, as required by the Standard, the inclusion of planter boxes and A/C units within these balcony spaces do not encroach into these dimensions, thereby providing an additional area of 1.5sqm for these services. Furthermore, the provision of landscaping and the ESD features of the proposal form a positive outcome of this development and are limited to the edges of each space. Therefore, the proposal meets the requirements of this Standard.

Standard D20 – Storage

155. The Standard notes that 1 x bedroom, 2 x bedroom and 3 x bedroom dwelling should be provided with a total minimum storage volume and a minimum storage volume within the dwelling of 10m³ and 6m³, 14m³ and 9m³, 18m³ and 12m³, respectively.
156. Each of the proposed apartments would exceed the storage requirement of this Standard, as outlined below.

Apartment	External Storage	Internal Storage	Total Storage
4 x 1 Bedroom	4m ³ storage cupboards each, within the communal storage area at ground level	6m ³	10m ³
2 x 2 Bedroom	6m ³ storage cupboards each at the ground level car park	10m ³	16m ³
1 x 3 Bedroom	6m ³ storage room at ground level	12m ³	18m ³

Standard D21 – Common property

157. The common property areas within the development are clearly delineated and would not create areas which were difficult to maintain into the future. The residential lobby and lift access areas are well conceived, with the refuse and bicycle storage rooms easy to access and generally cohesive with the overall building design. The Standard is met.

Standard D22 – Site services

158. Site services and meters would be readily accessible from the main lobby. This will avoid any services within the Coppin Street façade. This outcome is considered to provide a good design response to the objective of this Standard.

Standard D23 – Waste and recycling

159. A shared refuse room is provided at ground level, with this space easily accessible from the apartments. The Waste Management Plan (WMP) dated 29 January 2020 and prepared by R B Waste Consulting Service states that waste collection is proposed via Coppin Street and is to be undertaken by Council.
160. The WMP was referred to Council's City Works Branch, who identified a number of deficiencies with this document and the associated waste management procedures. These are outlined below;
- (a) *Council provides 1x80L waste and 1x120L recycle bin for individually rated commercial properties.*
 - (b) *The commercial and residential streams should be calculated separately and appropriate bins allocated.*
 - (c) *Commercial bins and residential bins should be separated.*
 - (d) *Please detail the bin store plan showing path of access to collection point, hard waste area etc.*
 - (e) *Council does not offer hard waste services for commercial properties.*
 - (f) *Council does not alter collection services on request.*
 - (g) *Space must be available to accommodate extra bins that will be required once Councils new kerbside service is introduced later this year.(glass bin and food and green waste bin)*
 - (h) *Please provide an explanation of how any risk relating to waste service will be managed.*
 - (i) *A clause must be included in the plan regarding potential review into the service if operational requirements change.*
161. A condition will require an amended WMP.

Standard D24 – Functional layout

Living areas

162. This Standard notes that living areas for dwellings with 1 x bedroom and 2 or more bedrooms should have a minimum width and a minimum area of 3.3m and 10sqm, 3.6m and 12sqm, respectively. As shown below, all apartments meet the requirements of this Standard.

Apartment	Minimum Living Room Width	Minimum Living Room Area
4 x 1 Bedroom	3.3m	10sqm
2 x 2 Bedroom	3.6m	12sqm
1 x 3 Bedroom	>3.6m	>12sqm

Bedrooms

163. This Standard notes that main bedrooms and all other bedrooms should have a minimum width and a minimum depth of 3m and 3.4qm, 3m and 3sqm, respectively. The current proposed development is fully compliant with the bedroom dimensions required under this Standard. However, as a result of conditioning an increased western setback at Level 2, the size of the master bedroom of Apartment 3.01 will be reduced. Nonetheless, there is adequate internal space to rearrange and increase the size of this bedroom. Therefore, the internal amenity of these rooms are supported and will not be compromised as a result of increasing the western setback of Level 2.

Standard D25 – Room depth

164. All of the apartments at Level 1 (4 out of 7 apartments) would be single aspect. The Standard notes that the depth of a single aspect, open-plan, habitable room may be increased to 9m, if the following requirements are met:

- (a) *The room combines the living area, dining area and kitchen;*
- (b) *The kitchen is located furthest from the window; and*
- (c) *The ceiling height is at least 2.7 metres measured from finished floor level to finished ceiling level.*

165. These requirements are met in all four dwellings. However, the decision guidelines associated with this Standard also highlight that any overhang above habitable room windows that limits daylight should be taken into consideration. In this instance, all of these habitable room windows would be affected by the overhang of balconies within levels above. The most impacted would be the two apartments facing Wall Place at Level 1; Apartment 1.03 and 1.04. Nonetheless, Council's ESD Officer has confirmed that given the minimal overall height of the development and the limited number of dwellings, a daylight modelling report is not required and the apartments will not be drastically impacted.

Standard D26 – Windows

166. All habitable rooms within the proposed development contain a window within an external wall to the building, thereby meeting the Standard.

Standard D27 – Natural ventilation

167. A good degree of natural ventilation is provided for all dwellings, with cross-ventilation opportunities provided within the living rooms, and breeze paths also providing good cross-ventilation between habitable rooms. The Standard is met.

Off-site amenity

168. *Clause 22.05-4.1* of the Scheme recommends that non-residential development is to be designed to (relevantly):

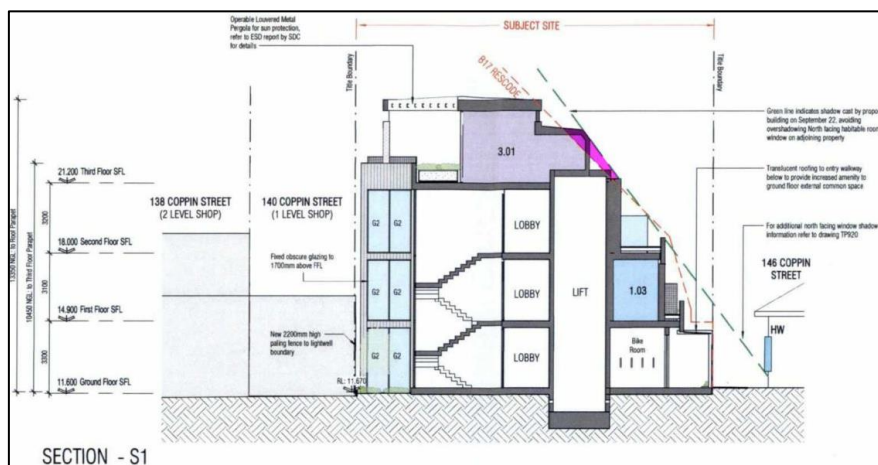
- (a) *Minimise the potential for unreasonable overlooking of private open space areas and into habitable room windows of adjoining residential properties, through the use of appropriate siting, setbacks, articulation and possibly screens.*
- (b) *The location, length and height of any wall built to a boundary not adversely impact on the amenity of any adjoining residential properties in terms of unreasonable overshadowing of private open space, visual bulk or loss of day light to habitable room windows.*
- (c) *Where private open space and/or windows to adjoining residential properties are unreasonably affected, appropriate setbacks from boundaries are to be provided to address loss of daylight, overshadowing and visual bulk impacts.*
- (d) *Provide for a high level of acoustic protection to adjoining residential properties*
- (e) *Minimise the opportunity for light spill due to fixed or vehicular lights, outside the perimeter of the site and on to habitable room windows of nearby residential properties.*

Setbacks and visual bulk

169. The proposed development would be visible from various points along Coppin Street and Wall Street as outlined earlier within this report, however the proposed height of three-storeys, with a recessed fourth-storey would not result in an overwhelming or visually dominant building. The introduction of various setbacks at all levels of the building, combined with the deletion of the wing walls at Level 3 reduces the overall size of the uppermost level and as such, this design response (subject to condition), is considered to reduce the overall scale of the building to an acceptable degree. As discussed earlier in report, the four-storey built form would not result in a stark height transition to the single-storey commercial building to the north and single-storey dwelling to the south.

Subject to increasing the western setback of Level 2 and Level 3 balcony, the proposed development will provide a degree of articulation when viewed from Wall Place.

170. Abutting the subject site to the north is a car space associated with the commercial use at No. 140 Coppin Street. Given that this is not a sensitive interface and it is likely that this area will be developed into built form in the future (given the commercial zoning), the proposed three-storey wall along this shared boundary is acceptable.
171. The SPOS and one north-facing habitable room window (HRW) associated with the dwelling at No. 146 Coppin Street abuts the subject site to the south. Under this application, a staggered setback design is proposed along this shared boundary; a 1.2m high brick fence, with a 2.2m high timber fence and a 9.5m long x 3.2m high a solid wall. Whilst not strictly applicable, in the absence of policy at *Clause 58*, Standard B18 (*Walls on boundaries objective*) of *Clause 55.04-2* of the Scheme can be considered to provide some guidance relating to visual bulk. If *Clause 55* of the Scheme applied to this site, then Standard B18 would allow for a total length 15.25m along this shared boundary at an average wall height of 3.2m above NGL. Given that this proposed wall is limited to a length of 9.5m and a height of 3.2m, the proposed boundary wall is acceptable and will not be visually intrusive when viewed from the SPOS and HRW of No. 146 Coppin Street.
172. With the exception of the lift overrun associated with Apartment 3.01, the remainder of the development meets the setback requirements of Standard B17 (*Side an rear setbacks objective*) of *Clause 55.04-1* of the Scheme. However, as highlighted on below, the encroachment of this lift overrun into the B17 setback line is limited. This element coupled with the use of a mix of materials on the southern façade will assist in reducing the perception of any visual bulk impacts when viewed from the SPOS of No. 146 Coppin Street.



B17 Setback encroachment from No. 146 Coppin Street (CBG Architects & Interior Designers, December 2019)

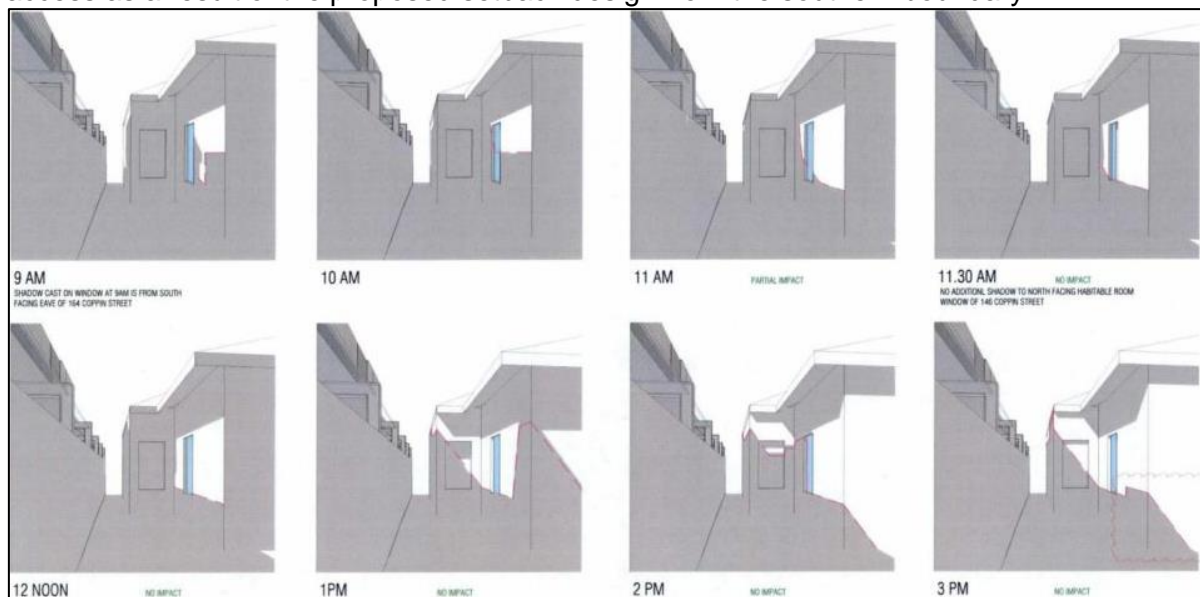
173. Across Wall Place to the rear is No. 16 Wall Street, a single-storey, heritage dwelling located within the C1Z pocket. The proposed development on-site will be positioned adjacent to two, east-facing HRW and SPOS of this dwelling. As discussed earlier in the report, a dwelling in a C1Z cannot expect the same level of amenity as would be afforded within a purely residential zone. Nonetheless, based on the proposed western façade having a direct interface with Wall Place, which provides a 3.3m separation from the adjacent property to the west, there will be minimal impact on any sensitive interfaces such as the two HRWs and SPOS of No. 16 Wall Street. Furthermore, the use of a number of different materials (brick, patterned cement and metal cladding), including the addition of windows would provide an appropriate level of articulation of the development when viewed from these neighbouring sensitive interfaces.

Daylight to habitable room windows

174. As outlined earlier in the report, the abutting dwelling to the south at No. 146 Coppin Street has one north-facing HRW. This window is setback 2.4m from the shared boundary. The proposal has responded to this context by providing incremental setbacks adjacent to this window, between 1.4m to 4.8m at Level 1 to Level 3 respectively. Whilst not strictly applicable, Standard B19 (*Daylight to existing windows objective*) of Clause 55.04-3 of the Scheme requires that walls more than 3m in height opposite an existing HRW should be set back from the window to provide for a light court to the existing window that has a minimum area of 3sqm and minimum dimension of 1m clear to the sky. Standard B19 requires a setback of 6.55m between the proposed development and this HRW. The proposed southern façade at an overall height of 13.1m above NGL will be setback a total of 7.2m from this HRW, thereby limiting any unreasonable loss of daylight to this HRW.
175. The east-facing HRW of No. 16 Wall Street are setback between 4.6m to 5.4m from the subject site and therefore, there will be no unreasonable loss of daylight to these windows.

Solar access to habitable room windows

176. No. 146 Coppin Street; the dwelling to the south of the subject site has one, north-facing HRW. As illustrated on below, the proposed development has been setback from the shared boundary and designed in order to reduce unreasonable loss of solar access to this HRW. Whilst solar access to this window will be impacted between 9.00am to 10.00am, between 11.00am to 3.00pm, more than 50% of this window will continue to receive adequate solar access as a result of the proposed setback design from the southern boundary.



Solar access to north-facing HRW of No. 146 Coppin Street (CBG Architects & Interior Designers, December 2019)

Overshadowing

177. The immediately impacted SPOS is associated with No. 16 Wall Street to the west and No. 146 Coppin Street to the south. The accompanying shadow diagrams (Rev B: TP900 and TP901) indicate that there will be no additional overshadowing caused to No. 14 Wall Street further west nor to No. 2 Wall Place to the south-west.

No. 16 Wall Street

178. The additional overshadowing impacts to No. 16 Wall Street are limited to the morning hours, between 9.00am to 10.00am. Given the east-west orientation of the subject site, between 11.00am to 3.00pm, this neighbouring SPOS will not be impacted by additional shadows.

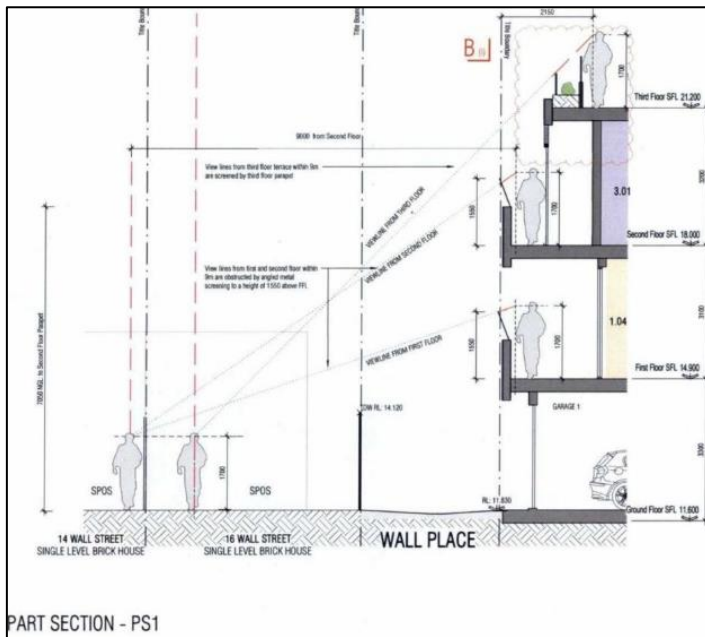
As discussed earlier in the report, a dwelling in a C1Z cannot expect the same level of amenity as would be afforded within a purely residential zone. Nonetheless, given the limited timeframe (1 hour) during the morning in which the greatest impact would occur, the additional shadowing is considered reasonable.

No. 146 Coppin Street

179. The submitted shadow diagrams show that the total SPOS area of No. 146 Coppin Street is well over 100sqm. Whilst this SPOS is mostly impacted due to its southern position from the subject site, the shadow diagrams illustrate that as a result of the proposed architectural form of the building whereby incremental setbacks have been introduced from the southern boundary, this dwelling will continue to maintain 40sqm of unshadowed SPOS, with a minimum dimension of 3m between 9.00am to 3.00pm.
180. Based on this, it is considered that the proposed development will not adversely affect the use of the eastern and southern SPOS areas for outdoor recreation and service needs, generally in accordance with Clause 22.05 of the Scheme. Furthermore, in the context of the subject site in a C1Z where increased densities are encouraged under the purpose of the zone, the above outcome is not considered to be unreasonable.

Overlooking

181. The proposed development has been designed to limit unreasonable overlooking to adjacent sensitive interfaces, with the dwelling at No. 146 Coppin Street to the south, the dwellings at Nos. 14 to 16 Wall Street to the west and No. 2 Wall Place to the south-west being the closest residential buildings. Whilst not strictly applicable to development within the C1Z, the floor plans and overlooking sections clearly demonstrate the 9m overlooking radius as specified in *Clause 55* of the Scheme; with these diagrams confirming that there will be no direct lines of sight provided from HRW or balconies of the proposed development and into neighbouring SPOS or HRW.
182. Overlooking opportunities at ground level from the southern common pedestrian walkway into the SPOS and HRW of No. 146 Coppin Street would be suitably limited by proposed southern boundary fences that are over 2.2m in height (and given that floor levels of the ground floor is less than 800mm above NGL).
183. Views from the east-facing balconies between Levels 1 to 3 will fall within the public realm; i.e. Coppin Street, existing built form or front setbacks of dwellings to the east and south and therefore screening is not required to these balconies.
184. The floor plans also demonstrate the use of either 1.7m high, fixed perforated screening, with a maximum of 25% transparency along the southern perimeter of the south-facing balconies between Levels 1 to 3. On this basis, there will be no unreasonable overlooking into SPOS directly to the south of the land.
185. Angled screening is proposed along the perimeters of the west-facing balconies between Levels 1 to 3. As seen below views from these rear balconies will not hit the ground within 9m as per the standard. Therefore, this outcome is acceptable.



Overlooking section to the west (CBG Architects & Interior Designers, December 2019)

Noise

186. Policy at *Clause 22.05* of the Scheme seeks to ensure new commercial development is adequately managed having regard to its proximity to residential uses. In this instance, the proposed office use does not require a planning permit, however this space will be located adjacent existing residential development, with new dwellings above. Whilst the lack of planning permission required for this use prevents Council controlling hours of operation and employee numbers, it is considered that the limited scale of this overall space (145sqm) would subsequently limit the impacts that any business operating within this space would generate. In addition, a condition will be added ensuring that the development must comply at all times with the *State Environment Protection Policy – Control of Noise from Commerce, Industry and Trade (SEPP N-1)*.
187. It is considered that the residential facet to the proposal is unlikely to result in unacceptable noise emissions to nearby properties given the nature of residential use generally not creating significant noise levels. The location of A/C units on the balconies are acceptable.

Wind

188. A wind assessment was not undertaken as part of the proposal as the height of the overall building is limited to 4 storeys. Wind impacts are of concern with taller built form.

Equitable development

189. The Scheme aims to facilitate equitable development opportunities for neighbouring properties within the context of the site's location and that of adjoining properties. In this instance, the site has direct abuttal with two properties; the first being the single-storey, commercial building to the north (No. 140 Coppin Street) and the second being the single-storey dwelling to the south (No. 146 Coppin Street).

190. Given the GRZ2 zoning of the site to the south, it is unlikely that any development beyond three-storeys (maximum height of 9m) will occur in the future. Furthermore, given the alternate easterly and westerly outlook afforded to all of the proposed apartments, including the substantial setbacks proposed from the southern boundary; future developments to the south can occur without impeding the internal amenity of any dwellings within the proposed development. Therefore, the equitable development opportunities of the southern site are not impeded by the design of this development.
191. The direct abuttal of the proposed, three-storey northern wall with the commercial building to the north would allow a degree of built form to be constructed directly along this boundary, without inhibiting the internal amenity of any dwellings within the proposed development. However, any future developments to the northern site will need to give consideration to the proposed north-facing, centrally located light-court on-site.
192. Coppin Street provides a good degree of separation from any further higher development to the east, with Wall Place to the west also allowing outlook and daylight to be maintained to the west-facing dwellings.
193. As a result of the above, it is considered that the proposal does not unduly compromise or prejudice the future development potential of adjoining properties.

Parking layout, traffic and bicycle parking

Car parking

194. Under the *Clause 52.06-5* of the Yarra Planning Scheme, the development's parking requirements are as follows:

Proposed Use	Quantity/ Size	Statutory Parking Rate	No. of Spaces Required	No. of Spaces On-site	Reduction Required
1 x bedroom dwelling	4	1 space per dwelling	4	0	4
2 x bedroom dwelling	2	1 space per dwelling	2	2	0
3 x bedroom dwelling	1	2 spaces per dwelling	2	2	0
Office (Combined leasable floor area)	145sqm	3 spaces to each 100sqm of leasable area	4	0	4
Total			12	4	8

195. Based on the table above, the development meets the statutory car parking rate associated with Apartment 3.01 and the 2 x bedroom dwellings, with a parking shortfall of 4 resident/visitor car parking spaces for the 1 x bedroom apartments and 4 for the office spaces. Before a requirement for car parking is reduced, the applicant must satisfy the Responsible Authority that the provision of car parking is justified having regard to the assessment requirements of *Clause 52.06-6*.

Availability of Car Parking.

196. The subject site is located within an area containing predominantly time-restricted car parking, with periods ranging from ¼ hour to 2 hours. A large proportion of parking is restricted to 2 hours, extending along both sides of Coppin Street.

197. There are currently two car parking spaces provided along the Coppin Street frontage of the site; these will not be impacted by the development as car parking on-site will be accessed via Wall Place to the rear. Instead, the crossover in front of No. 144 Coppin Street will be made redundant as a result of providing vehicle access to the site from the rear. Therefore, a condition will require this redundant crossover to be demolished and re-instated as standard footpath and kerb and channel. This will allow for existing on-street car parking in front of the subject site to increase from two to three.
198. The applicant provided an amended Traffic Report, dated 11 December 2019 and prepared by Traffic Ground. To ascertain parking availability within the surrounding area, Traffic Ground undertook a parking occupancy survey on Thursday 23rd and Saturday 25th of May 2019 at 12.00pm, 1.00pm, 7.00pm and 8.00pm. The survey area encompassed sections of Coppin Street, Wall Street, Malleson Street, Benson Street, Mary Street, Murray Street, Brady Street, Duke Street and Lord Street. The time and extent of the survey was considered appropriate by Council Engineers.
199. A parking inventory of between 171 to 279 publicly available parking spaces was identified, with 23 of these spaces vacant at 8.00pm on the Saturday. This equates to an occupancy rate of 87%, which indicates that parking was in relatively high demand on weekends. However, this data suggests that short-stay parking overflow from the site could be accommodated within the surrounding streets.

Parking Demand for Office Use.

200. Parking associated with office type developments is generally long-stay parking for employees and short-term parking. In practice, the parking demand generated by the office is expected to be lower than the statutory parking rate of 3 spaces per 100sqm of leasable floor space, since the area has very good access to public transport services. Council's Traffic Engineering Unit highlighted that Council often approves small scale office developments with no on-site car parking. This is based largely on the inner-city location of these offices and the proximity they have to public transport. The proposed office has a similar context and the provision of no on-site parking for the proposed office use is considered appropriate.

Parking Demand for Dwelling Use.

201. Future residents would know up-front that the 1 x bedroom dwellings will have no car parking spaces provided on-site. Council Traffic Engineer Unit raised no concerns with the reduction in residential car parking as data indicates that the 1 x bedroom dwellings have an average car of 0.80 cars per dwelling. Car ownership is influenced by a number of factors and not limited to public transport access, proximity to employment and education centres, affordability issues, environmental concerns, and access to services. Given the location of the subject site; i.e. between two activity centres with access to public transport, combined with the area's coverage of 2P restrictions this would provide regular turnover of parking throughout the day.

Appropriateness of Providing Fewer Spaces than the Likely Parking Demand

202. The additional reduction in car parking being sought by the proposal is supported by the following:
 - (a) The site is within walking distance from the Bridge Road and Swan Street Activity Centres, as well as Church Street which consists of a number of retail, entertainment and commercial premises. Visitors to the site might combine their visit by engaging in other activities or business whilst in the area;
 - (b) Tram services operating along Bridge Road (400m north), Swan Street (350m south) and Church Street (380m west). The site also has access to train services operating from the Burnley Train Station (400m east);
 - (c) The site has good connectivity to the on-road bicycle network, with a generous amount of on-site bicycle parking spaces proposed;

- (d) The lack of opportunities to park on-street in the surrounding area would be a disincentive for employees of the office to commute to work by car, with the short-term parking restrictions allowing employees to park for limited periods if necessary;
- (e) The proposed development is considered to be in line with the objectives contained in Council's *Strategic Transport Statement*. The site is ideally located with regard to sustainable transport alternatives and the reduced provision of on-site car parking would potentially discourage private motor vehicle ownership and use.
- (f) A Flexicar car share pod is located in Lyndhurst Street, approximately 450m north –west of the site.

203. The reduction in the car parking requirement associated with the office and dwelling uses is considered appropriate in the context of the development and the surrounding area.

Car park access and layout

204. As discussed earlier in the report (under Clause 58), the proposed at-grade car parking layout and access shown on the S57A plans and amended Traffic Report was assessed by Council's Traffic Engineering Unit, who confirmed that the width of each garage entrance and the headroom clearance are satisfactory and met all relevant standards and guidelines. The dimensions of the garages were also found to be suitable.

205. Swept path diagrams were submitted, which demonstrated that entering and exiting the garages is satisfactory for the B85 design vehicle. In some instances, a correctional movement would be required, however this is permissible under AS/NZS 2890.1:2004 and supported by Council Engineers. As all of the car parking spaces are allocated to the dwellings, users of the car parks will become accustomed to the manoeuvres required to access these spaces.

206. As stated earlier in the report, the submitted S57A plans were supported by Council's Traffic Engineering Unit in combination with the changes on the Sketch Plan. As such, a condition will address these changes.

Bicycle parking

207. The proposal generates a demand of 3 statutory spaces and provides a total of 14 spaces, thereby exceeding the requirement outlined at *Clause 52.34* of the Scheme. 8 Ned Kelly bicycle parking spaces for the apartments are proposed in an internal bike store accessed from the communal pedestrian entrance. The provision of 2 horizontal bicycle spaces accords with the requirements of AS2890.3-2015, with Clause 2.1(e) of this Standard noting that a minimum of 20% of the bicycle spaces must be provided in the form of horizontal rails. Council's Strategic Transport Unit have confirmed that *resident / employee bicycle spaces and access ways appear to be in accordance with the clearance requirements of AS2890.3*. 2 floor mounted hoops; i.e. 4 visitor spaces are also provided along the Coppin Street frontage.

208. In addition, two shower / change rooms are provided within the office areas which exceeds Council's best practice standards.

209. Council's BESS guidelines encourage the use of fuel efficient and electric vehicles (EV). Council's Strategic Transport Unit have recommended that car parking areas should be electrically wired to be 'EV ready' to allow for easy future provision for electric vehicle charging. However, given the overall scale of the development, it is considered that it is acceptable no EV charging points are installed.

Traffic

210. Given the allocation of all on-site car parking spaces to most of the dwellings, any traffic generated by the site will be restricted to the 4 x 1 bedroom apartments and the office use.

With only 7 dwellings proposed in total the level of traffic that would be generated is considered to be low, and it is unlikely that the traffic associated with the development would have a discernible impact upon traffic levels along Coppin Street and Wall Street.

211. The primary use of Wall Place is currently to access garages (with the exception of No. 2 Wall Place). Increased use of Wall Place by vehicle traffic is therefore considered reasonable, with this outcome supported Council's Traffic Engineers.

Objector concerns

212. The objector concerns are outlined and discussed below:

- (a) *Out of keeping with neighbourhood character / heritage.*

Neighbourhood character and heritage have been discussed in paragraphs 81 to 100.

- (b) *Design and overdevelopment (height, scale, bulk, site coverage and permeability).*

Matters relating to height, scale and bulk are discussed at paragraphs 81 to 100 within the neighbourhood character assessment. Site coverage and permeability are discussed in paragraph 106.

- (c) *Off-site amenity (solar access to north-facing windows, overshadowing, overlooking and noise impacts).*

Solar access to north-facing windows is discussed in paragraph 176. Overshadowing is discussed in paragraph 177 to 180 and noise impacts at paragraph 145 to 146 and 186 to 187. Overlooking is addressed in paragraphs 181 to 185.

- (d) *Car parking, traffic impacts and pedestrian safety.*

Car parking, traffic impacts and pedestrian safety has been discussed in paragraphs 194 to 206 and also within relevant sections of the Clause 58 assessment at paragraphs 131 to 138. Council's Traffic Engineering Unit have deemed Wall Place to have sufficient width and capacity to service vehicles associated with the new dwellings.

- (e) *Impacts during the construction phase (structural, noise, traffic access and pest control)*

This will be managed by via a conditional requirement for a Construction Management Plan, to be approved by Council's Construction Management Unit.

Other matters

213. A notation on the ground level plan states that the *existing sewer vent is to be removed to the satisfaction of the responsible authority*. However, there is no discussion as to whether this sewer vent can or will be relocated to. It appears that if the sewer vent is not relocated (or potentially if it has to be relocated within the site) it may interfere with the turning circles for the cars on the subject site. Therefore, a condition will require written confirmation to be provided from the relevant authority that the sewer vent in the laneway can either be relocated or is no longer required and can be removed. Subject to this written confirmation, a condition will require that the sewer vent is removed or relocated prior to commencement of construction to the satisfaction of the relevant authority and the responsible authority, and at the cost of the permit holder.

Conclusion

Based on the report, the proposal is considered to comply with the relevant policies of the Yarra Planning Scheme and is recommended for approval, subject to conditions.

RECOMMENDATION

That having considered all relevant planning policies, the Committee resolves to issue a Notice of Decision to Grant a Planning Permit PLN19/0364 for the construction of a four-storey building and reduction in the car parking requirements associated with the use of the land for dwellings and offices (no permit required for office use) at Nos. 142 – 144 Coppin Street Richmond VIC 3121, subject to the following conditions:

1. Before the development starts, amended plans to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the plans will be endorsed and will then form part of the permit. The plans must be drawn to scale with dimensions and three copies must be provided. The plans must be generally in accordance with the plans prepared by CBG Architects & Interior Design, dated 19 December 2019 (Rev B: TP100, TP101, TP102, TP103, TP104, TP201, TP200, TP220, TP221, TP230) and dated 02 August 2019 (Rev A: DR06), but modified to show the following:
 - (a) Additional changes made at Ground Level in accordance with the submitted Sketch Plan received on 03 June 2020 (TP100-C);
 - (b) Provision of wall-mounted lighting, and introduction of glazing to the rear, pedestrian entrances;
 - (c) Provision of a plinth below the front window glazing associated with the office tenancies;
 - (d) Decorative wrought-iron gate fronting Coppin Street reduced in height to 1.8m;
 - (e) Location of the private outdoor clotheslines for each apartment;
 - (f) Increased minimum setbacks of 2.25m to Level 2 and Level 3 balcony from the west boundary;
 - (g) Deletion of wing walls to pergolas at Level 3;
 - (h) Design changes to implement recommendations of the Sustainable Management Plan Condition No. 3 of this permit;
 - (i) Design changes to implement any recommendations of the endorsed Waste Management Plan Condition No. 5 of this permit.
2. The development as shown on the endorsed plans must not be altered (unless the Yarra Planning Scheme specifies that a permit is not required) without the prior written consent of the Responsible Authority

Sustainable Management Plan

3. Before the plans are endorsed, an amended Sustainable Management Plan to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the Sustainable Management Plan will be endorsed and will form part of this permit. The Sustainable Management Plan must be generally in accordance with the Sustainable Management Plan prepared by Sustainable Development Consultants and dated February 2020, but modified to include the following:
 - (a) Extend application of ceiling fans to all bedrooms;
 - (b) Increase the size of the PV system; and
 - (c) Provision of natural ventilation for the office tenancies.
4. The provisions, recommendation and requirements of the plans and endorsed Sustainable Development Assessment must be implemented and complied with to the satisfaction of the Responsible Authority.

Waste Management Plan

5. Before the plans are endorsed, an amended Waste Management Plan to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the amended Waste Management Plan will be endorsed and will form part of this permit. The amended Waste Management Plan must be generally in accordance with the Waste Management Plan prepared by R B Waste Consulting and dated 29 January 2020, but modified to include the following:
 - (a) Provision of 1 x 80L waste and 1 x 120L recycle bin for individually rated commercial properties.
 - (b) Commercial and residential streams calculated separately with appropriate bins allocated.
 - (c) Commercial bins and residential bins separated.
 - (d) Detail the bin store plan showing path of access to collection point, hard waste area etc.
 - (e) Remove reference to Council offering hard waste services for commercial properties.
 - (f) Remove reference to Council altering collection services on request.
 - (g) Provision of space to accommodate extra bins that will be required once Councils new kerbside service is introduced later this year.(glass bin and food and green waste bin)
 - (h) Provide an explanation of how any risk relating to waste service will be managed.
 - (i) Addition of a clause regarding potential review into the service if operational requirements change.
6. The provisions, recommendations and requirements of the endorsed Waste Management Plan must be implemented and complied with at all times to the satisfaction of the Responsible Authority.

Landscape Plan

7. Before the development commences, a Landscape Plan to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the Landscape Plan will be endorsed and will form part of this permit. The Landscape Plan must:
 - (a) show the type, location, quantity, height at maturity and botanical names of all proposed plants;
 - (b) indicate the location of all areas to be covered by lawn or other surface materials; and
 - (c) provide a specification of works to be undertaken prior to planting,to the satisfaction of the Responsible Authority.
8. Before the building is occupied, or by such later date as approved in writing by the Responsible Authority, the landscaping works shown on the endorsed Landscape Plan must be carried out and completed to the satisfaction of the Responsible Authority. The landscaping shown on the endorsed Landscape Plan must be maintained by:
 - (a) implementing and complying with the provisions, recommendations and requirements of the endorsed Landscape Plan;
 - (b) not using the areas set aside on the endorsed Landscape Plan for landscaping for any other purpose; and
 - (c) replacing any dead, diseased, dying or damaged plants,to the satisfaction of the Responsible Authority.

Tree Management Plan

9. Before the development commences, a Tree Management Plan to the satisfaction of the Responsible Authority must be prepared by a suitably qualified Arborist and must be submitted to and approved by the Responsible Authority. When approved the Tree Management Plan will be endorsed and will form part of this permit. The Tree Management Plan must make recommendations for the protection of two street trees opposite the site on the western side of Coppin Street, including:
- (a) pre-construction;
 - (b) during construction; and
 - (c) post construction
 - (d) the provision of any barriers;
 - (e) any pruning necessary; and
 - (f) watering and maintenance regimes,

to the satisfaction of the Responsible Authority.

10. The provisions, recommendations and requirements of the endorsed Tree Management Plan must be complied with and implemented to the satisfaction of the Responsible Authority.
11. Before the development starts, or by such later date as approved in writing by the Responsible Authority, the permit holder must provide a bond to the Responsible Authority for the trees on the Coppin Street footpath, in proximity of the site. The bond:
- (a) is to be to the total value of the \$20,251.00 for both trees;
 - (b) must be provided in a manner, and on terms, to the satisfaction of the Responsible Authority;
 - (c) may be held by the Responsible Authority until the buildings and works are completed to the satisfaction of the Responsible Authority; and
 - (d) may be applied by the Responsible Authority to allow for a large replacement planting(s) and costs associated with establishment and maintenance.

Once the buildings and works are completed to the satisfaction of the Responsible Authority, any portion of the bond which has not been applied by the Responsible Authority will be refunded to the permit holder.

12. The use and development must comply at all times with the State Environment Protection Policy – Control of Noise from Commerce, Industry and Trade (SEPP N-1).
13. Before the development is occupied, or by such later date as approved in writing by the Responsible Authority, all new on-boundary walls must be cleaned and finished to the satisfaction of the Responsible Authority.
14. Before the building is occupied, any wall located on a boundary facing public property must be treated with a graffiti proof finish to the satisfaction of the Responsible Authority.
15. All buildings and works must be maintained in good order and appearance to the satisfaction of the Responsible Authority.
16. Before the development is occupied, or by such later date as approved in writing by the Responsible Authority, all screening and other measures to prevent overlooking as shown on the endorsed plans must be installed to the satisfaction of the Responsible Authority. Once installed the screening and other measures must be maintained to the satisfaction of the Responsible Authority.

17. Before the endorsement of plans, written confirmation must be provided from the relevant authority that the sewer vent in the laneway can either be relocated or is no longer required and can be removed. Subject to this written confirmation, the sewer vent is to be relocated prior to commencement to the satisfaction of the relevant authority and the responsible authority, and at the cost of the permit holder.
18. All pipes, fixtures, fittings and vents servicing any building on the land must be concealed in service ducts or otherwise hidden from view to the satisfaction of the Responsible Authority.
19. Before the building is occupied, or by such later date as approved in writing by the Responsible Authority, all external lighting capable of illuminating access to the pedestrian entries and car parking area must be provided. Lighting must be:
 - (a) located;
 - (b) directed;
 - (c) shielded; and
 - (d) of limited intensity.to the satisfaction of the Responsible Authority.
20. The area set aside for the parking of vehicles, together with the associated access lanes as delineated on the endorsed plan must:
 - (a) be designed, provided and completed to the satisfaction of the Responsible Authority;
 - (b) thereafter be maintained to the satisfaction of the Responsible Authority;
 - (c) be made available for such use at all times and not used for any other purpose;
 - (d) be properly formed to such levels that it can be used in accordance with the endorsed plan; and
 - (e) be drained and sealed with an all-weather seal coat;all to the satisfaction of the Responsible Authority.
21. Before the building is occupied, or by such later date as approved in writing by the Responsible Authority, the redundant vehicular crossing on Coppin Street must be demolished and re-instated as standard footpath and kerb and channel:
 - (a) at the permit holder's cost; and
 - (b) to the satisfaction of the Responsible Authority.
22. Prior to the completion of the development, subject to the relevant authority's consent, the relocation of any service poles, street line markings, car parking sensors, service structures, fire hydrants or service pits necessary to facilitate the development must be undertaken:
 - (a) at the permit holder's cost; and
 - (b) to the satisfaction of the Responsible Authority.
23. Before the building is occupied, or by such later date as approved in writing by the Responsible Authority, any damage to Council infrastructure resulting from the development must be reinstated (including the full re-sheeting of the footpath at the front of the property if required by Council):
 - (a) at the permit holder's cost; and
 - (b) to the satisfaction of the Responsible Authority.
24. Before the building is occupied, or by such later date as approved in writing by the Responsible Authority, any redundant vehicular crossing must be demolished and re-instated as standard footpath and kerb and channel:

- (a) at the permit holder's cost; and
- (b) to the satisfaction of the Responsible Authority.

25. Before the development commences, a Construction Management Plan to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the plan will be endorsed and will form part of this permit. The plan must provide for:

- (a) a pre-conditions survey (dilapidation report) of the land and all adjacent Council roads frontages and nearby road infrastructure;
- (b) works necessary to protect road and other infrastructure;
- (c) remediation of any damage to road and other infrastructure;
- (d) containment of dust, dirt and mud within the land and method and frequency of clean up procedures to prevent the accumulation of dust, dirt and mud outside the land,
- (e) facilities for vehicle washing, which must be located on the land;
- (f) the location of loading zones, site sheds, materials, cranes and crane/hoisting zones, gantries and any other construction related items or equipment to be located in any street;
- (g) site security;
- (h) management of any environmental hazards including, but not limited to:
 - (i). contaminated soil;
 - (ii). materials and waste;
 - (iii). dust;
 - (iv). stormwater contamination from run-off and wash-waters;
 - (v). sediment from the land on roads;
 - (vi). washing of concrete trucks and other vehicles and machinery; and
 - (vii). spillage from refuelling cranes and other vehicles and machinery;
- (i) the construction program;
- (j) preferred arrangements for trucks delivering to the land, including delivery and unloading points and expected duration and frequency;
- (k) parking facilities for construction workers;
- (l) measures to ensure that all work on the land will be carried out in accordance with the Construction Management Plan;
- (m) an outline of requests to occupy public footpaths or roads, or anticipated disruptions to local services;
- (n) an emergency contact that is available for 24 hours per day for residents and the Responsible Authority in the event of relevant queries or problems experienced;
- (o) the provision of a traffic management plan to comply with provisions of AS 1742.3-2002 Manual of uniform traffic control devices - Part 3: Traffic control devices for works on roads;

If required, the Construction Management Plan may be approved in stages. Construction of each stage must not commence until a Construction Management Plan has been endorsed for that stage, to the satisfaction of the Responsible Authority.

26. During the construction:

- (a) any stormwater discharged into the stormwater drainage system must be in compliance with Environment Protection Authority guidelines;
- (b) stormwater drainage system protection measures must be installed as required to ensure that no solid waste, sediment, sand, soil, clay or stones from the land enters the stormwater drainage system;
- (c) vehicle borne material must not accumulate on the roads abutting the land;
- (d) the cleaning of machinery and equipment must take place on the land and not on adjacent footpaths or roads; and
- (e) all litter (including items such as cement bags, food packaging and plastic strapping) must be disposed of responsibly.

27. The provisions, recommendations and requirements of the endorsed Construction Management Plan must be implemented and complied with to the satisfaction of the Responsible Authority.
28. The development, once commenced, must be completed to the satisfaction of the Responsible Authority.
29. Except with the prior written consent of the Responsible Authority, demolition or construction works must not be carried out:
 - (a) Monday-Friday (excluding public holidays) before 7 am or after 6 pm;
 - (b) Saturdays and public holidays (other than ANZAC Day, Christmas Day and Good Friday) before 9 am or after 3 pm;
 - (c) Sundays, ANZAC Day, Christmas Day and Good Friday at any time.
30. This permit will expire if:
 - (a) The dwelling use is not commenced within five years of the date of this permit;
 - (b) the development is not commenced within two years of the date of this permit;
 - (c) the development is not completed within four years of the date of this permit.

The Responsible Authority may extend the periods referred to if a request is made in writing before the permit expires or within six months afterwards for commencement or within twelve months afterwards for completion.

Notes:

A building permit may be required before development is commenced. Please contact Council's Building Services on 9205 5555 to confirm.

Provision must be made for drainage of the site to a legal point of discharge. Please contact Council's Building Services on 9205 5555 for further information.

Areas must be provided inside the property line and adjacent to the footpath to accommodate pits and meters. No private pits, valves or meters on Council property will be accepted.

Any services poles, structures or pits that interfere with the proposal must be adjusted, removed or relocated at the Permit Holder's expense after seeking approval from the relevant authority.

All future property owners, residents, employees and occupiers residing within the development approved under this permit will not be permitted to obtain resident, employee or visitor parking permits.

A local law permit (e.g. Asset Protection Permit, Road Occupation Permit) may be required before development is commenced. Please contact Council's Construction Management Branch on Ph. 9205 5585 to confirm.

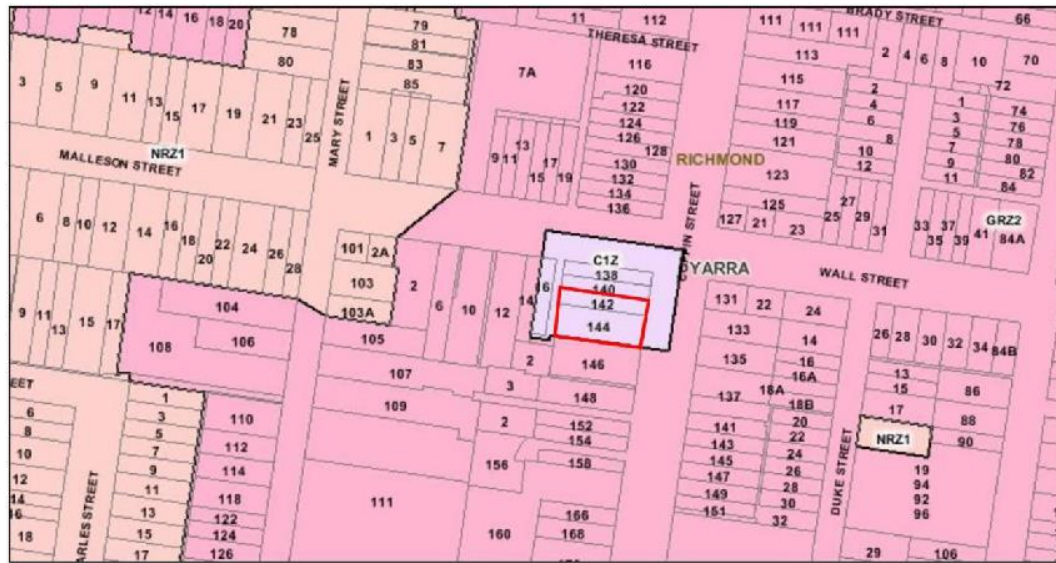
CONTACT OFFICER: Nish Goonetilleke
TITLE: Senior Statutory Planner
TEL: 9205 5005

Attachments

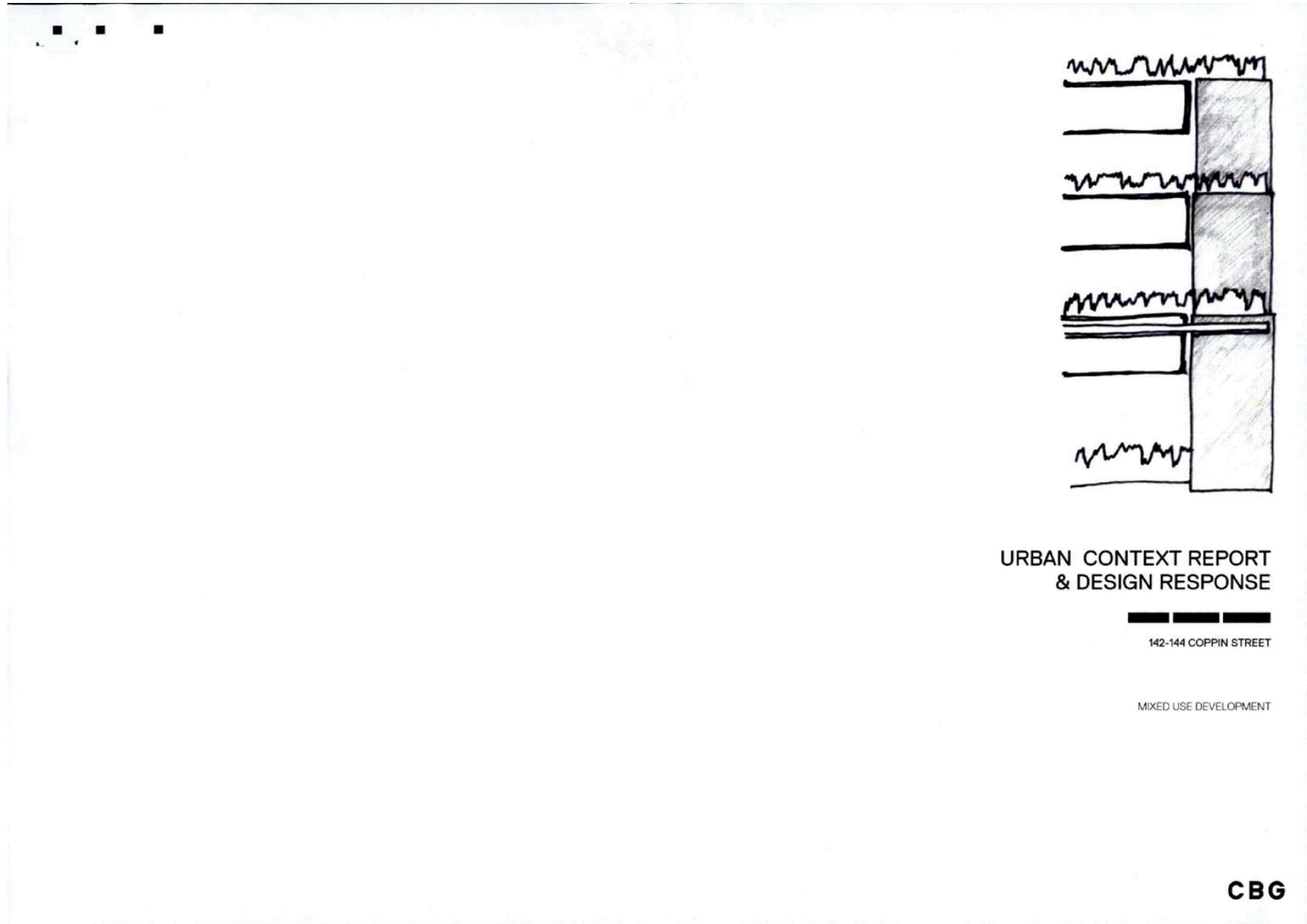
- 1** PLN19/0364 - 142 - 144 Coppin Street, Richmond - Site Location Plan
- 2** PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans
- 3** PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Plans
- 4** PLN19/0364 - 142 - 144 Coppin Street Richmond - Sketch Plan Ground Level (dated 03.06.2020)
- 5** PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report
- 6** PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report
- 7** PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A - Waste Management Plan
- 8** PLN19/0364 - 142 - 144 Coppin Street Richmond - Urban Design Comments Based on Originally Advertised Plans
- 9** PLN190364 - 142 - 144 Coppin Street Richmond - ESD Comments on Originally Advertised Plans
- 10** PLN19/0364 - 142 - 144 Coppin Street Richmond - Council Arborist Comments
- 11** PLN19/0364 - 142 - 144 Coppin Street Richmond - Waste Management Referral Comments Based on S57A Plans
- 12** PLN19/0364 - 142 - 144 Coppin Street Richmond - Engineering Comments Based on S57A Plans
- 13** PLN190364 - 142 - 144 Coppin Street Richmond - Engineering Comments Based on Sketch Plans (dated 03.06.2020)

Attachment 1 - PLN19/0364 - 142 - 144 Coppin Street, Richmond - Site Location Plan

SUBJECT LAND: 142 – 144 Coppin Street Richmond ↑ North  Subject Site



Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans



Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans

URBAN CONTEXT CONTENTS

NUMBER	DRAWING TITLE
DA01	CONTENTS
DA02	SURVEY
DA03	PLANNING ZONES
DA04	PLANNING OVERLAYS
DA05	PRINCIPLE PUBLIC TRANSPORT NETWORK
DA06	SITE CONTEXT - ACCESS, TRANSPORT, AMENITIES
DA07	LOCAL CONTEXT
DA08	SITE CONTEXT
DA09	EXISTING STREETSCAPES - COPPIN STREET
DA10	DESIGN OPPORTUNITIES AND CONSTRAINTS

DESIGN RESPONSE CONTENTS

NUMBER	DRAWING TITLE
DR01	DESIGN RESPONSE - ROOF TOP
DR02	PROPOSED STREETSCAPE - COPPIN STREET
DR03	DESIGN RESPONSE
DR04	TABLE 1 (PART A)
DR04.1	TABLE 1 (PART B)
DR04.2	Unnamed
DR05	ARCHITECTURAL INSPIRATION
DR06	FINISHES
DR07	PERSPECTIVE - EAST
DR08	PERSPECTIVE - EAST SOUTH EAST
DR09	3D MODELS

DATE	REV	DESCRIPTION
02/08/2019	A	RE-ISSUED FOLLOWING COUNCIL REF
11/07/19	A	1) Further details on given to demonstrate adequate circulation space
11/07/19	A	2) Minimum Width and Area of Sitting spaces shown
11/07/19	A	3) Separability of landscape elements shown when compliance is required
11/07/19	A	4) The 14 and 16 Road Street shown in correct order
11/07/19	A	5) Landscaping features shown as detailed line over needs below
11/07/19	A	6) Entry shown to office building shown
11/07/19	A	7) Mail Place width consistent on plans
11/07/19	A	8) Vehicle access to floor area of Office building shown
11/07/19	A	9) Site elevations are noted between office and residential as per Waste Management Report
11/07/19	A	10) Northern Light shown as common property accessed via the common side for maintenance
11/07/19	A	11) Section 32 amended to show Residential setback B17 from commercially zoned property (p. 16 Mail Street)
11/07/19	A	12) PV array shown on Roof Plan as per ESD report
11/07/19	A	13) Noise Abatement measures designed to facilitate harmonious co-existence of residential and commercial use noted
11/07/19	A	14) 3D landscape views showing building integration
11/07/19	A	15) Vehicle decorative elements integrated along Southern facade to break up massing of facade
11/07/19	A	16) Third level central facade noted to add additional "horizontal" elements enhancing the facade look
11/07/19	A	17) The first 3m of the boundary fence from Coppin Street to be 1.2m high in keeping with existing existing
11/07/19	A	18) Building 021 to have 12 primary entry through the common lobby accessed from Coppin Street
11/07/19	A	19) Permeable surface between and from area provided

NOT FOR CONSTRUCTION

REVISIONS	DATE	DESCRIPTION
A	05/06/19	ISSUED FOR TOWN PLANNING
A	01/07/19	RE-ISSUED FOLLOWING COUNCIL REF

MIXED USE DEVELOPMENT
URBAN CONTEXT

CBG ARCHITECTS & INTERIOR DESIGNERS
20 Taper Street, South Melbourne VIC 3205
P: +61 3 9522 3850

This drawing is to be read in conjunction with CBG Architects Pty Ltd.

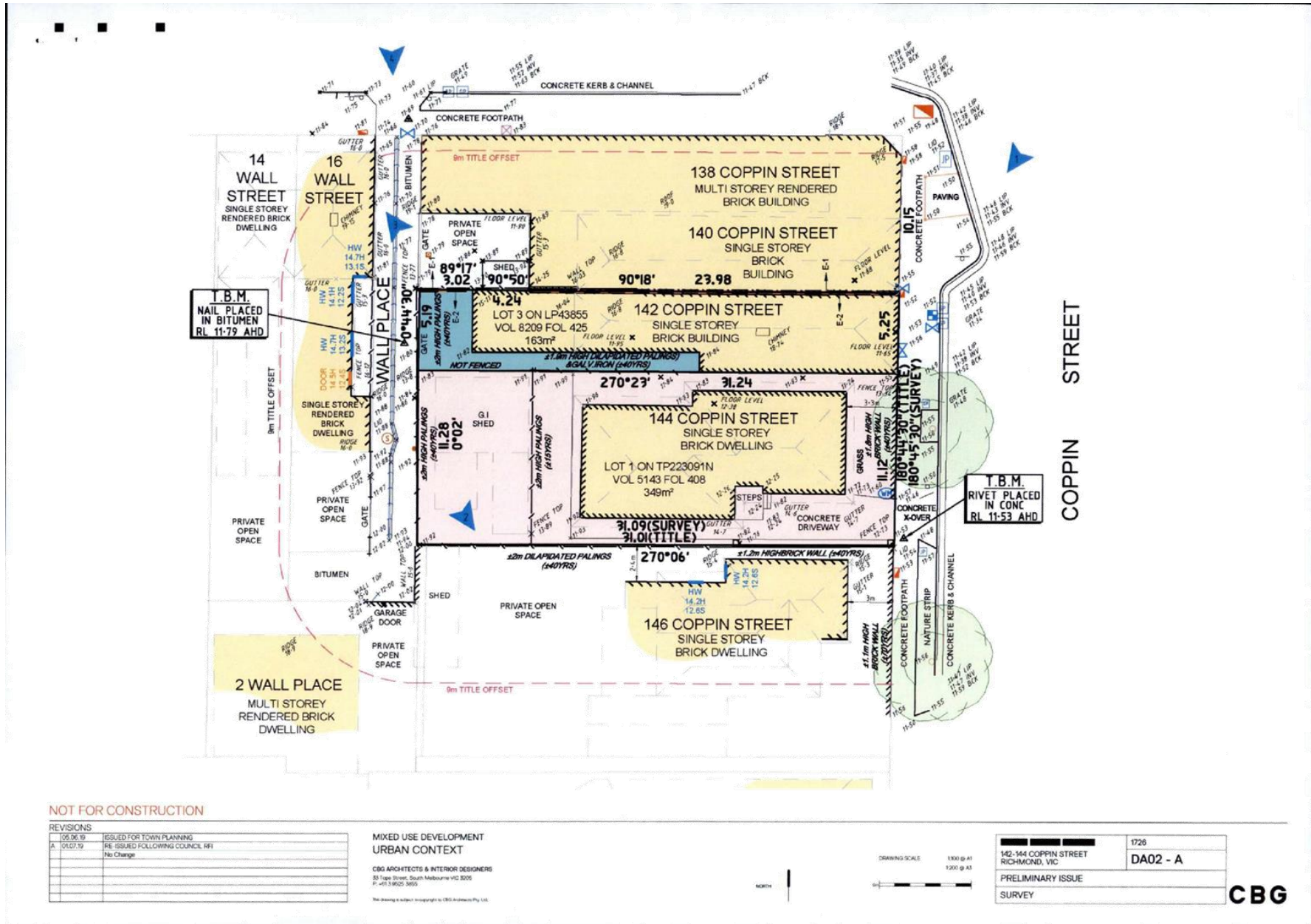
DRAWING SCALE

NA

142-144 COPPIN STREET RICHMOND, VIC	1728 DA01 - A
CONTENTS	

CBG

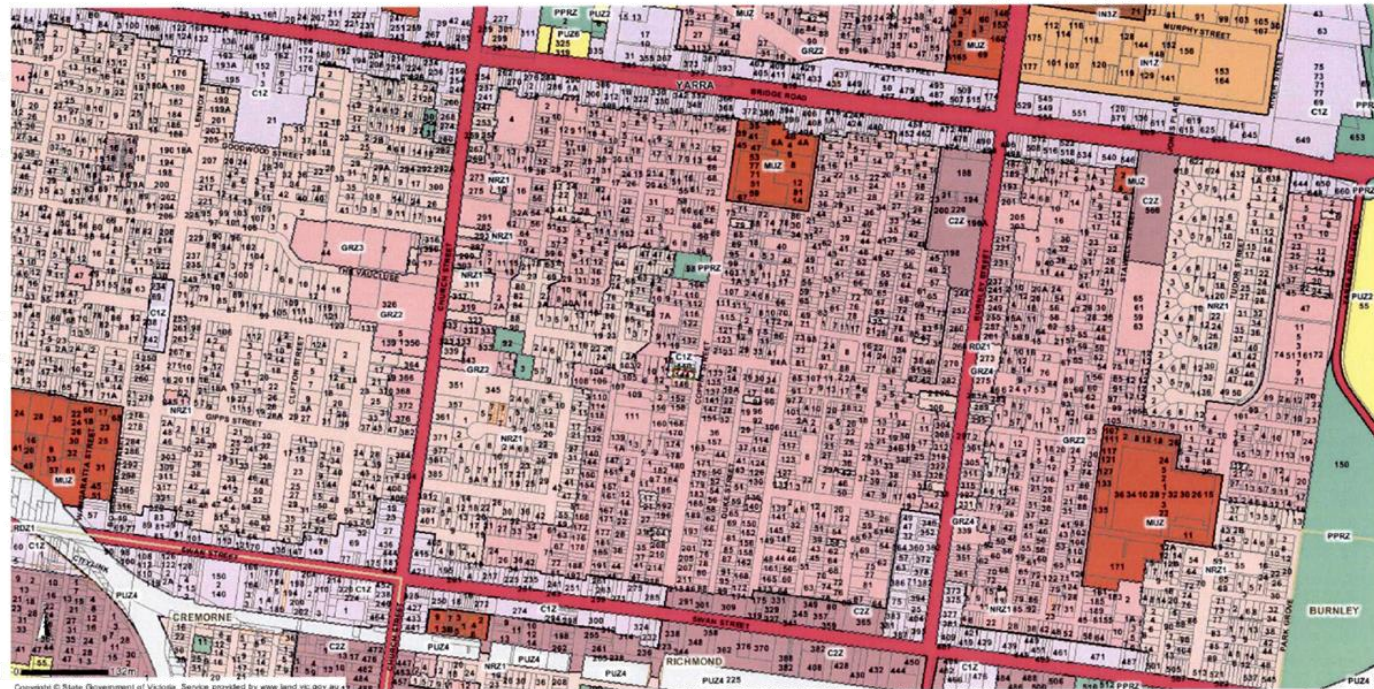
Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans



Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans

ZONES

- C1Z Commercial Zone
- GRZ General Residential Zone
- PPRZ Public Park and Recreation Zone
- Subject Site



NOT FOR CONSTRUCTION

REVISIONS

06.06.19	ISSUED FOR TOWN PLANNING
01.07.19	RE-ISSUED FOLLOWING COUNCIL REF
	No Change

MIXED USE DEVELOPMENT URBAN CONTEXT

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DRAWING SCALE

VARIABLES

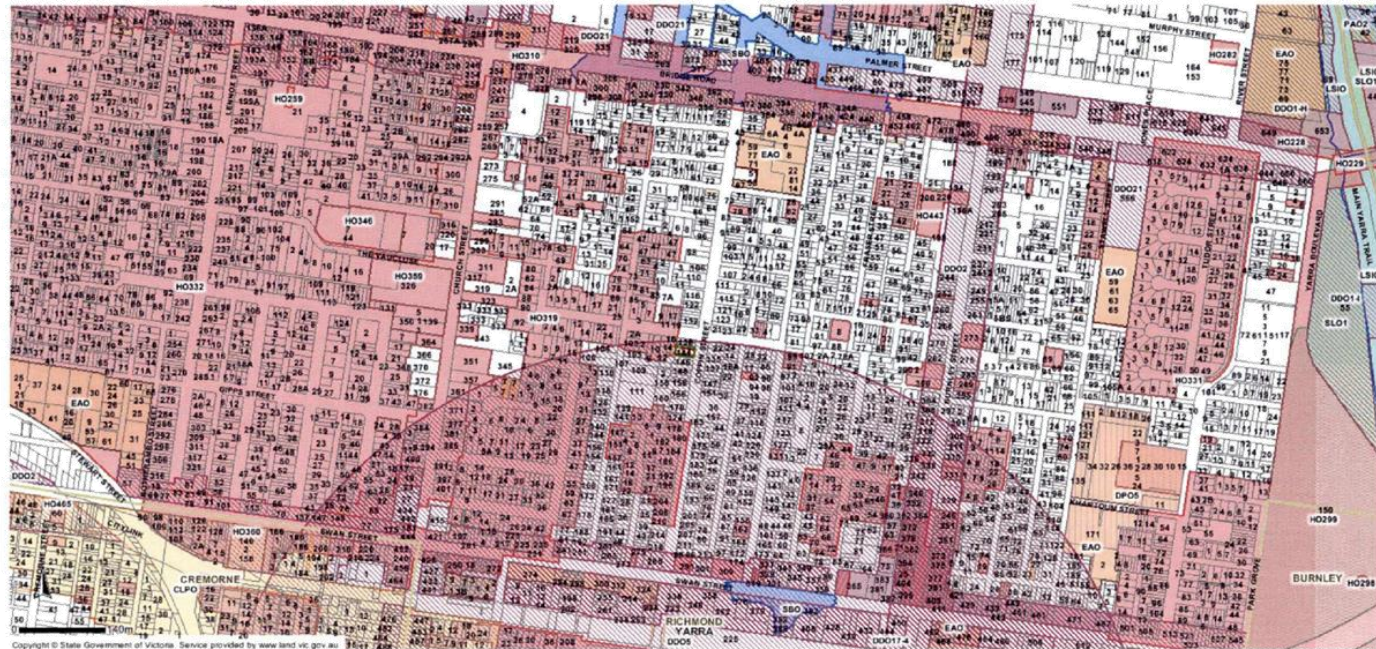
1726
142-144 COPPIN STREET RICHMOND, VIC
DA03 - A
PRELIMINARY ISSUE
PLANNING ZONES

CBG

Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans

OVERLAYS

- Heritage
- Design and Development DDO5
City Link Exhaust Stack Environs
- Subject Site



NOT FOR CONSTRUCTION

REVISIONS

05.06.19	ISSUED FOR TOWN PLANNING
01.07.19	RE-ISSUED FOLLOWING COUNCIL REF
	No Change

MIXED USE DEVELOPMENT URBAN CONTEXT

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DRAWING SCALE

NA

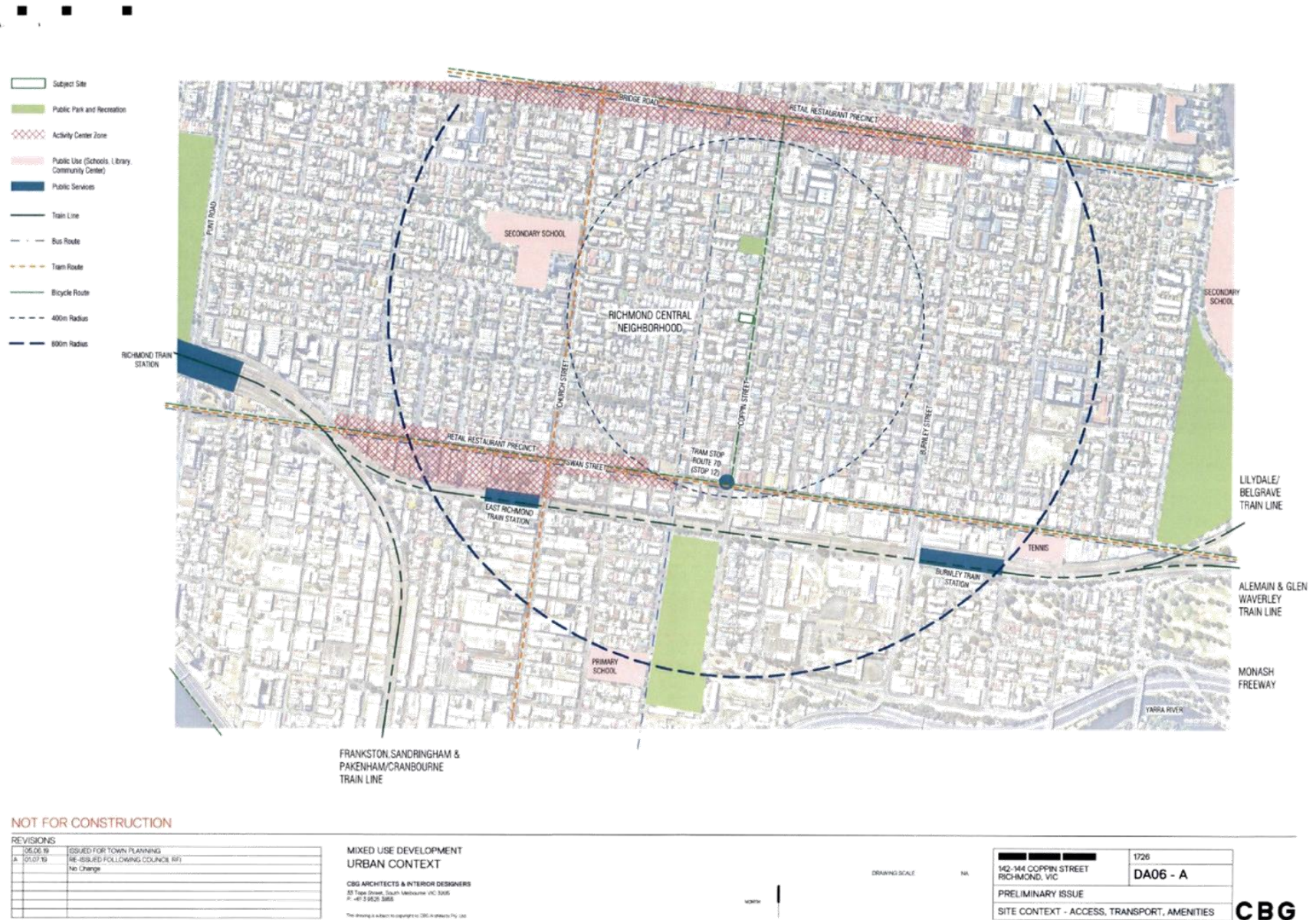
142-144 COPPIN STREET RICHMOND, VIC	1726
PRELIMINARY ISSUE	DA04 - A
PLANNING OVERLAYS	

CBG

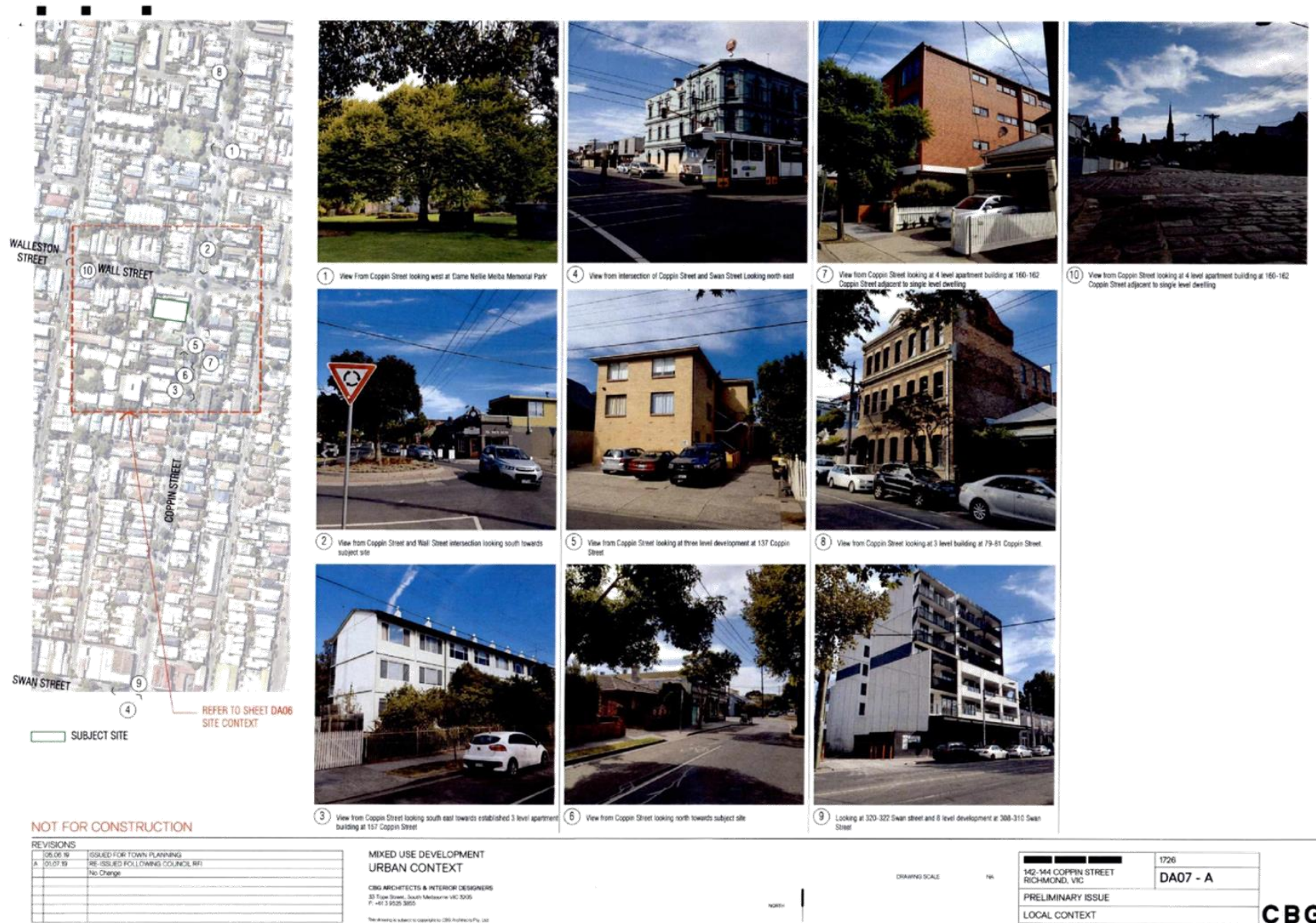
Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans



Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans



Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans



Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans



Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans



EXISTING STREETSCAPE - COPPIN STREET - WEST



EXISTING STREETSCAPE - COPPIN STREET - EAST

NOT FOR CONSTRUCTION

REVISIONS	
05.06.19	ISSUED FOR TOWN PLANNING
A 01.07.19	RE-ISSUED FOLLOWING COUNCIL RPT
	No Change

MIXED USE DEVELOPMENT
URBAN CONTEXT

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DRAWING SCALE

NA

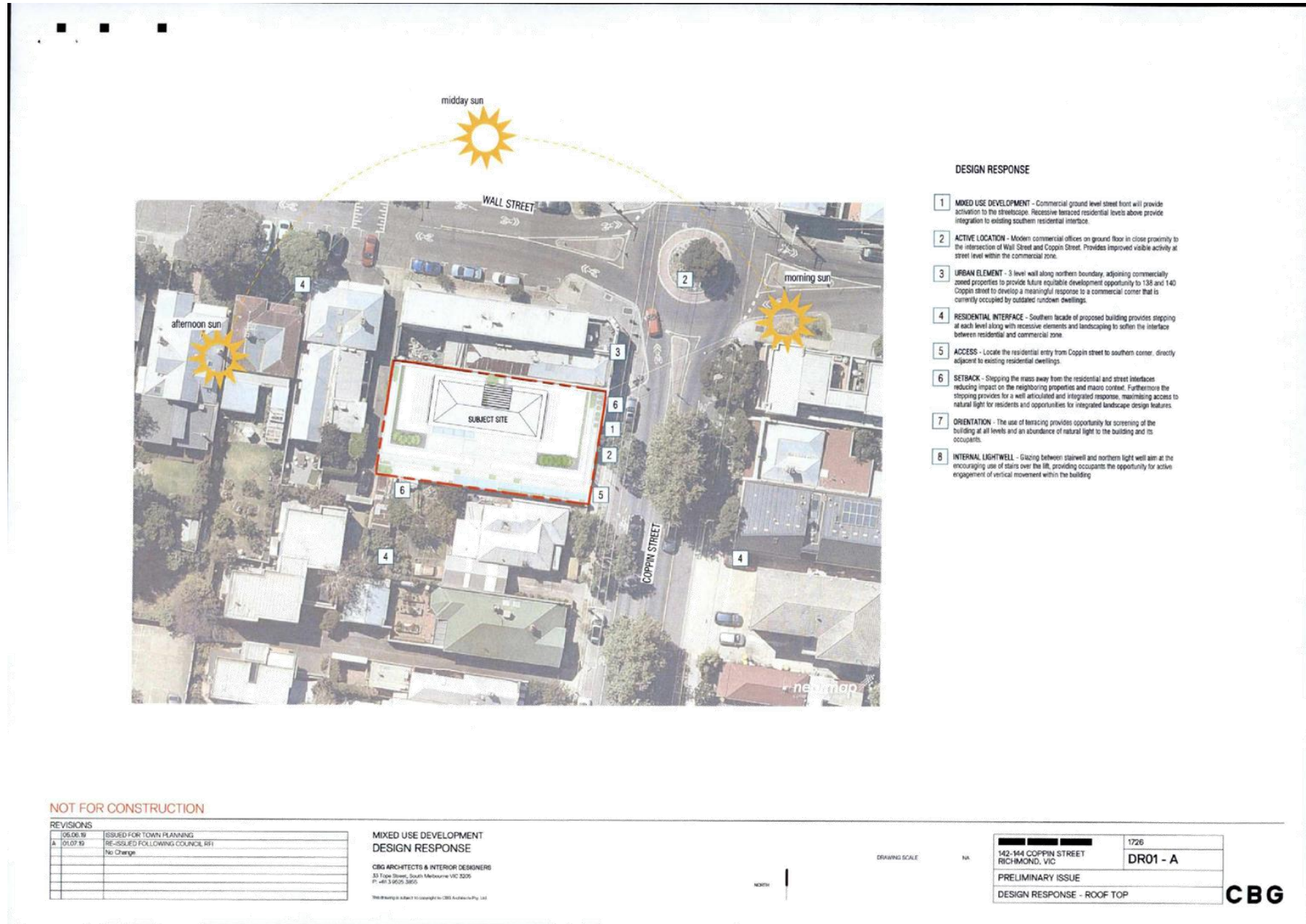
142-144 COPPIN STREET RICHMOND, VIC	1726
PRELIMINARY ISSUE	DA09 - A
EXISTING STREETSCAPES - COPPIN STREET	

CBG

Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans



Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans



Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans



Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans

DESIGN RESPONSES

The proposal adopts the following design responses:

- Demolish site improvements to both properties, whilst retaining the party wall portions of 142 Coppin Street that are included to the party wall easement with 140 Coppin Street.
- Provide the following land use responses:
 - Office tenancies to ground level Coppin Street as active frontage to respond to Clauses 21.04-2 and 34.01.
 - Residential development with:
 - Diversity of dwelling sizes to respond to Clauses 21.04-1, 34.01 and 58.02-2, and
 - Separate entry to ground level Coppin Street as sense of address to respond to Clauses 58.02-5, 58.03-4 and 58.05-2.
 - Mixed use development that minimises provision of car parking, maximises provision of bicycle parking and also enhances walking and use of public transport to respond to Clause 21.06.
- Provide the following building envelope responses:
 - Commercial development footprint and building envelope drawing from the prevailing 2 story on-boundary construction provided to all corners of the Wall and Coppin Streets intersection to respond to Clauses 21.05-2, 21.08, 22.10 and 58.02-1.
 - Vehicle crossover and onsite parking at rear of site with access from Wall Place to respond to Clauses 21.05, 22.07, 22.10, 58.03-6 and 58.03-7.
- Modular and articulate building envelope to respond to Clauses 21.05, 22.10, 58.02-1 and 58.04-1 providing:
 - A predominant 3 level building envelope with substantially recessed uppermost 4th level.
 - Progressively recessed facade lines through adoption of reduced floor plates and balcony locations above the ground level storey.
 - Progressive increases in building setbacks from 146 Coppin Street to each level to provide a stepped building envelope to the south side that minimises daylight reduction and shadow impacts upon 146 Coppin Street through:
 - 2.25m setback to 2nd floor facade
 - 4.30m setback to 3rd floor facade
 - 4.80m and 5.750m setbacks to 4th floor facade.
- Adopt the stepping of built form principles outlined above to:
 - Diminish the visual presence of the upper most levels.
 - Graduate built form away from adjoining residential properties to the south and west.
 - Maintain solar access to adjoining residential properties to the south and west.
 - Provide well integrated balcony outdoor spaces to all levels above ground level.
 - Counter equate development rights to 140 Coppin Street.
- Provide soffit lines to control impacts of western angles.
- Provide well proportioned window / door detailing including articulated reveals and frames to ensure appropriate fenestrated detailing.
- Provide minor feature landscape details at ground level to provide visual interest, softening and reference transition to adjoining residential properties to respond to Clauses 21.05-2 and 58.03-5.
- Provide the following ground level layout responses:
 - Office tenancies and residential entry from Coppin Street all with weather protection.
 - Storage cupboards, waste and recycling bin store, bicycle store, resident lobby, lift riser, stair riser, building services area, mail box facilities and plant room to respond to Clauses 58.04-2 and 58.06-3.
 - Car parking and building services area accessed via Wall Place to respond to Clauses 22.07, 58.03-4 and 58.03-7.
 - Ground level 1 bedroom unit (G01) with courtyard open space.
- Provide the following first floor (second level) layout responses:
 - x 1 bedroom units (1.01 & 1.04), 1 oriented to Coppin Street and 1 oriented to Wall Place with appropriate balcony areas.
 - x 2 bedroom units (1.02 & 1.03), 1 oriented to Coppin Street and 1 oriented to Wall Place with appropriate balcony areas.
- Provide the following second floor (third level) layout responses:
 - 2 x 2 bedroom units (2.01 & 2.02) both oriented to Coppin Street with appropriate balcony areas.
 - 1 x 3 bedroom unit (3.01 2 storeys) oriented to Wall Place with appropriate balcony areas.
- Provide the following third floor (fourth level) layout responses upper floor living, dining and substantial roof top terraces incorporating roof top planters to unit 3.01.
- Provide appropriate setbacks and screening measures to west side building envelope to control overlooking of 15 Wall Street to respond to Clauses 22.07 and 58.04-1.
- Locate and design windows to south elevation to control overlooking of 146 Coppin Street to respond to Clause 58.04-1.

- Provide the following Environmentally Sustainable initiatives as identified by Sustainable Development Consultants to respond to Clauses 21.07, 22.16, 22.17, 58.03-1, 58.03-4, 58.04-3.
 - Energy Efficiency
 - Average energy rating of 6.2 stars with minimum of 5.5 stars to apartments.
 - Cooling load of < 30 metres / m² to apartments.
 - 10% improvement on heating and cooling consumption to offices.
 - Heating and cooling to apartments and offices via individual energy efficient split system air conditioner.
 - Hot water to apartments and offices via individual instantaneous gas hot water units.
 - Indoor lighting via LED lighting and optimised daylight diffusion to apartments.
 - 20% improvement on indoor lighting to offices.
 - External lighting to be controlled by daylight or motion detectors.
 - Appliances e.g. dishwashers to be specified within 1 energy efficiency star of best available.
 - Additional specifications to lifts.
 - Building sealing to be specified and constructed to minimise air leakage.
 - Solar photo voltaic PV system to be specified and provided to roof top.
 - Private outdoor clothes lines to be specified and provided to each apartment.
 - Water efficiency and Stormwater treatment
 - Fittings and fixtures to WFLs star ratings to be specified to all toilets, bathroom taps, showerheads and bath sizes.
 - Rainwater collection from all roof and level 2 balcony to be collected and reused for toilet flushing 10,000 litre capacity rainwater tanks to be integrated to ground floor level.
 - Water efficient appliances (dishwashers) to be specified within 1 Star rating of best available.
 - Drought tolerant planting to be specified and provided to landscaping.
 - Indoor Environment Quality
 - Relevant paints, materials and flooring to be specified with no VOC's.
 - Engineered wood products to be specified with no Formaldehyde.
 - Natural or mechanical ventilation exceeding Australian Standard by minimum 50 to be specified.
 - Daylight access to offices to achieve 41% of primary space with daylight factor of 2% or more.
 - Daylight Access to apartments to achieve:
 - 100% of living areas with daylight factor greater than 1%.
 - 100% of bedroom with daylight factor greater than 0.5%.
 - 70% of apartment to receive 3 hours direct sunlight in all living areas between 9.00am and 3.00pm mid winter.
 - Apartment designed with breezeway paths - door and window hardware to be specified and provided to encourage natural ventilation.
 - Acoustic insulation to be specified and provided to requirements of BCA.
 - Mechanical service noise to be minimised through
 - Specifications and provision of quality air conditioner units and fans.
 - Transport
 - Over provision of bicycle storage and racks - one to each apartment and office and two visitor to Coppin Street frontage.
 - Limited provision of onsite car parking.
 - High public transport accessibility and high walkability neighbourhood.
 - Building Materials as noted to Section 2.5 of Sustainability Management Plan.
 - Construction Waste Management Plan as noted to Section 2.6 of Sustainability Management Plan.
- Adopt neutral palette of materials including white washed brick work, natural concrete patterned finish with charcoal, bronze, perforated metal accents to provide a high level of design materiality.
- Provide dwelling amenity design responses and detailing as set out in table 1 to respond to Clauses 58.07-1, 58.07-2, 58.07-3, 58.05-4, 58.07-4, 58.05-3 and 58.05-1.

NOT FOR CONSTRUCTION

REVISIONS	
05.06.19	ISSUED FOR TOWN PLANNING
01.07.19	RE-ISSUED FOLLOWING COUNCIL RPT
	No Change

**MIXED USE DEVELOPMENT
DESIGN RESPONSE**

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DRAWING SCALE: NA

142-144 COPPIN STREET RICHMOND, VIC	1726 DR03 - A
PRELIMINARY ISSUE	
DESIGN RESPONSE	

CBG

Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans

Table 1 Clause 58 Apartment Development Dwelling Amenity Design Requirements (Section 3 Apartment Design Guidelines for Victoria)

Unit	58.07-1 Functional Layout Std D24	58.07-2 Room Depth Std D25	58.07-3 Windows Std D26	58.05-4 Storage Std D20	58.07-4 Natural Ventilation Std D27	58.05-3 Private Open Space Std D19	58.05-1 Accessibility Std D17
Office 1	N.A	N.A	N.A	N.A	N.A	N.A	N.A
Office 2	N.A	N.A	N.A	N.A	N.A	N.A	N.A
Unit G.01 1 bedroom	Main bedroom 3.4m x 3.0m minimum excluding wardrobe. Living room is over 3.3m wide. Living room area is over 10.0m ² minimum excluding kitchen, dining and circulation space.	Living room is dual aspect (No further requirements). Bedroom ceiling will achieve a minimum 2.4m high ceiling. (2.4 x 2.5 = 6.0m maximum room depth). Bedroom depth is less than 6.0m including robe.	All habitable rooms are served by external windows without reliance on smaller secondary areas.	6.0m ³ minimum internal storage nominated on plans. 4.0m ³ external storage cage = 10.0m ³ minimum total.	Breeze pathway 7.0m shown on plans.	Courtyard open space to the laneway of over 8.0m ² has been provided. Plus a secondary open space of 2.0m located to the East where the A/C condenser is located.	No
Unit 1.01 1 bedroom	Main bedroom 3.4m x 3.0m minimum excluding wardrobe. Living room is over 3.3m wide. Living room area is over 10.0m ² minimum excluding kitchen, dining and circulation space.	Living room is NOT dual aspect. Open plan living room will achieve a minimum 2.4m high ceiling (2.4 x 2.5 = 6.0m maximum room depth). Living room depth is less than 6.0m to the back of the kitchen. Bedroom ceiling will achieve a minimum 2.4m high ceiling. (2.4 x 2.5 = 6.0m maximum room depth). Bedroom depth is less than 6.0m including robe.	All habitable rooms are served by external windows without reliance on smaller secondary areas.	6.0m ³ minimum internal storage nominated on plans. 4.0m ³ external storage cage = 10m ³ minimum total.	Breeze pathway 12.5m shown on plans.	Balcony of over 2.0m x 4.0m usable space shown on plans. Additional space provided for landscaping and a A/C condenser with 1.5m ² space minimum.	Yes (option B bathroom)
Unit 1.02 2 bedroom	Main bedroom 3.4m x 3.0m minimum excluding wardrobe. Second bedroom 3.0m x 3.0m minimum excluding wardrobe. Living room is over 3.6m wide. Living room area is over 12.0m ² minimum excluding kitchen, dining and circulation space.	Living room is NOT dual aspect. Open plan living room will achieve a minimum 2.7m high ceiling (9.0m maximum room depth). Living room depth is less than 9.0m to the back of the kitchen. All bedroom ceiling will achieve a minimum 2.4m high ceiling. (2.4 x 2.5 = 6.0 maximum room depth). Bedroom depths are less than 6.0m including robe.	All habitable rooms are served by external windows without reliance on smaller secondary areas.	10.0m ³ minimum internal storage nominated on plans. 4.0m ³ external storage cage = 14.0m ³ minimum total.	Breeze pathway 14.5m shown on plans.	Balcony of over 2.0m x 4.0m usable space shown on plans. Additional space provided for landscaping. A/C condenser not on balcony.	No
Unit 1.03 2 bedroom	Main bedroom 3.4m x 3.0m minimum excluding wardrobe. Second bedroom 3.0m x 3.0m minimum excluding wardrobe. Living room is over 3.6m wide. Living room area is over 12.0m ² minimum excluding kitchen, dining and circulation space.	Living room is NOT dual aspect. Open plan living room will achieve a minimum 2.7m high ceiling (9.0m maximum room depth). Living room depth is less than 9.0m to the back of the kitchen. All bedroom ceiling will achieve a minimum 2.4m high ceiling. (2.4 x 2.5 = 6.0 maximum room depth). Bedroom depths are less than 6.0m including robe.	All habitable rooms are served by external windows without reliance on smaller secondary areas.	10.0m ³ minimum internal storage nominated on plans. 4.0m ³ external storage cage = 14.0m ³ minimum total.	Breeze pathway 12.5m shown on plans.	Balcony of over 2.0m x 4.0m usable space shown on plans. Additional space provided for landscaping. A/C condenser not on balcony.	Yes (option B bathroom)

NOT FOR CONSTRUCTION

REVISIONS

06.08.19	ISSUED FOR TOWN PLANNING
01.07.19	RE ISSUED FOLLOWING COUNCIL RPT
	No Change

MIXED USE DEVELOPMENT
DESIGN RESPONSE

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DRAWING SCALE

NA

142-144 COPPIN STREET RICHMOND, VIC	1728
DR04 - A	
PRELIMINARY ISSUE	
TABLE 1 (PART A)	

CBG

Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans

Unit	58.07-1 Functional Layout Std D24	58.07-2 Room Depth Std D25	58.07-3 Windows Std D26	58.05-4 Storage Std D20	58.07-4 Natural Ventilation Std D27	58.05-3 Private Open Space Std D19	58.05-1 Accessibility Std D17
Unit 1.04 1 bedroom	Main bedroom 3.4m x 3.0m minimum excluding wardrobe. Living room is over 3.3m wide. Living room area is over 10.0m ² minimum excluding kitchen, dining and circulation space.	Living room is NOT dual aspect. Open plan living room will achieve a minimum 2.4m high ceiling (2.4 x 2.5 = 6.0m maximum room depth). Living room depth is less than 6.0m to the back of the kitchen. Bedroom ceiling will achieve a minimum 2.4m high ceiling. (2.4 x 2.5 = 6.0m maximum room depth). Bedroom depth is less than 6.0m including robe.	All habitable rooms are served by external windows without reliance on smaller secondary areas.	6.0m ² minimum internal storage nominated on plans. 4.0m ² external storage cage = 10m ² minimum total.	Breeze pathway 12.5m shown on plans.	Balcony of over 2.0m x 4.0m usable space shown on plans. Additional space provided for a A/C condenser with 1.5m ² space minimum.	Yes (option B bathroom)
Unit 2.01 1 bedroom	Main bedroom 3.4m x 3.0m minimum excluding wardrobe. Living room is over 3.3m wide. Living room area is over 10.0m ² minimum excluding kitchen, dining and circulation space.	Living room is NOT dual aspect. Open plan living room will achieve a minimum 2.4m high ceiling (2.4 x 2.5 = 6.0m maximum room depth). Living room depth is less than 6.0m to the back of the kitchen. Bedroom ceiling will achieve a minimum 2.4m high ceiling. (2.4 x 2.5 = 6.0m maximum room depth). Bedroom depth is less than 6.0m including robe.	All habitable rooms are served by external windows without reliance on smaller secondary areas.	6.0m ² minimum internal storage nominated on plans. 4.0m ² external storage cage = 10m ² minimum total.	Breeze pathway 12.5m shown on plans.	Balcony of over 1.8m x 4.5m usable space shown on plans. Additional space provided for landscaping and a A/C condenser with 1.5m ² space minimum.	Yes (option B bathroom)
Unit 2.02 1 bedroom	Main bedroom 3.4m x 3.0m minimum excluding wardrobe. Living room is over 3.3m wide. Living room area is over 10.0m ² minimum excluding kitchen, dining and circulation space.	Living room is dual aspect (No further requirements). Bedroom ceiling will achieve a minimum 2.4m high ceiling. (2.4 x 2.5 = 6.0m maximum room depth). Bedroom depth is less than 6.0m including robe.	All habitable rooms are served by external windows without reliance on smaller secondary areas.	6.0m ² minimum internal storage nominated on plans. 4.0m ² external storage cage = 10m ² minimum total.	Breeze pathway 12.5m shown on plans.	Balcony of over 1.8m x 4.5m usable space shown on plans. Additional space provided for landscaping and a A/C condenser with 1.5m ² space minimum.	No
Unit 3.01 3 bedroom (2 Levels)	Main bedroom 3.4m x 3.0m minimum excluding wardrobe. Second bedroom 3.0m x 3.0m minimum excluding wardrobe. Third bedroom 3.0m x 3.0m minimum excluding wardrobe. Living room is over 3.6m wide. Living room area is over 12.0m ² minimum excluding kitchen, dining and circulation space.	Living room is dual aspect (No further requirements). All bedroom ceilings will achieve a minimum 2.4m high ceiling. (2.4 x 2.5 = 6.0m maximum room depth). Bedroom depths are less than 6.0m including robe.	All habitable rooms are served by external windows without reliance on smaller secondary areas.	12.0m ² minimum internal storage nominated on plans. 6.0m ² external storage room = 18m ² minimum total.	Multiple breeze pathways exist on both levels ranging from 6.5m to 16.5m ² as shown on plans.	Balcony of over 2.4m x 5.0m usable space shown on plans. Additional space provided for landscaping and a A/C condenser with 1.5m ² space minimum.	No
4/8 units designed to Std D17 50%							

NOT FOR CONSTRUCTION

REVISIONS

05.06.19	ISSUED FOR TOWN PLANNING
01.07.19	RE ISSUED FOLLOWING COUNCIL REF
	No Change

MIXED USE DEVELOPMENT DESIGN RESPONSE

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DRAWING SCALE

NA

142-144 COPPIN STREET RICHMOND, VIC	1728
DR04.1 - A	
PRELIMINARY ISSUE	
TABLE 1 (PART B)	

CBG

Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans



TEXTURED GEOMETRIES



DISTANT NORTH WESTERN VIEWS OVER RICHMOND



LANDSCAPED COURTYARD



CONTEMPORARY SHAPES



PAINTED BRICKS



EXISTING AND NEW



INDUSTRIAL DETAILS



LANDSCAPED TERRACE



CONTEMPORARY USE OF THE CONTEXTS PERIOD MATERIALS

NOT FOR CONSTRUCTION

REVISIONS		
A	05.06.19	ISSUED FOR TOWN PLANNING
	01.07.19	RE-ISSUED FOLLOWING COUNCIL REF
		No Change

**MIXED USE DEVELOPMENT
DESIGN RESPONSE**

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142-144 COPPIN STREET RICHMOND, VIC	1726
PRELIMINARY ISSUE	DR05 - A
ARCHITECTURAL INSPIRATION	

CBG

Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans



Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans



PERSPECTIVE INFORMATION

- View from eastern footpath of Coppin Street looking front on at subject site.
- Perspective makes visible the architectural response to considerable transition from commercial zone to residential zone, through increased setbacks and integration of layered landscaped terraces
- Three level wall abutting commercial zoned property to provide future opportunity for equitable development.
- Recessive third floor is not visible from streetscape when view from the opposing side of Coppin Street

NOT FOR CONSTRUCTION

REVISIONS

05.06.19	ISSUED FOR TOWN PLANNING
A 01.07.19	RE-ISSUED FOLLOWING COUNCIL REF
	No Change

MIXED USE DEVELOPMENT
DESIGN RESPONSE

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DRAWING SCALE

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142-144 COPPIN STREET RICHMOND, VIC	1726
PRELIMINARY ISSUE	DR07 - A
PERSPECTIVE - EAST	

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Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans

A101



DATE **REV** **DESCRIPTION**

02.08.2019	A	RE-ISSUED FOLLOWING COUNCIL RPT add vertical decorative concrete elements integrated along Southern facade to break up massing of solids
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PERSPECTIVE INFORMATION

- View from eastern footpath of Coppin Street looking north west towards subject site.
- Perspective makes visible the architectural response to considerable transition from commercial zone to residential zone, through increased setbacks and integration of layered landscaped terraces
- Three level well abutting commercial zoned property to provide future opportunity for equitable development.
- Recessive third floor is not visible from streetscape when view from the opposing side of Coppin Street

NOT FOR CONSTRUCTION

REVISIONS

05.08.19	ISSUED FOR TOWN PLANNING
01.07.19	RE-ISSUED FOLLOWING COUNCIL RPT

**MIXED USE DEVELOPMENT
DESIGN RESPONSE**

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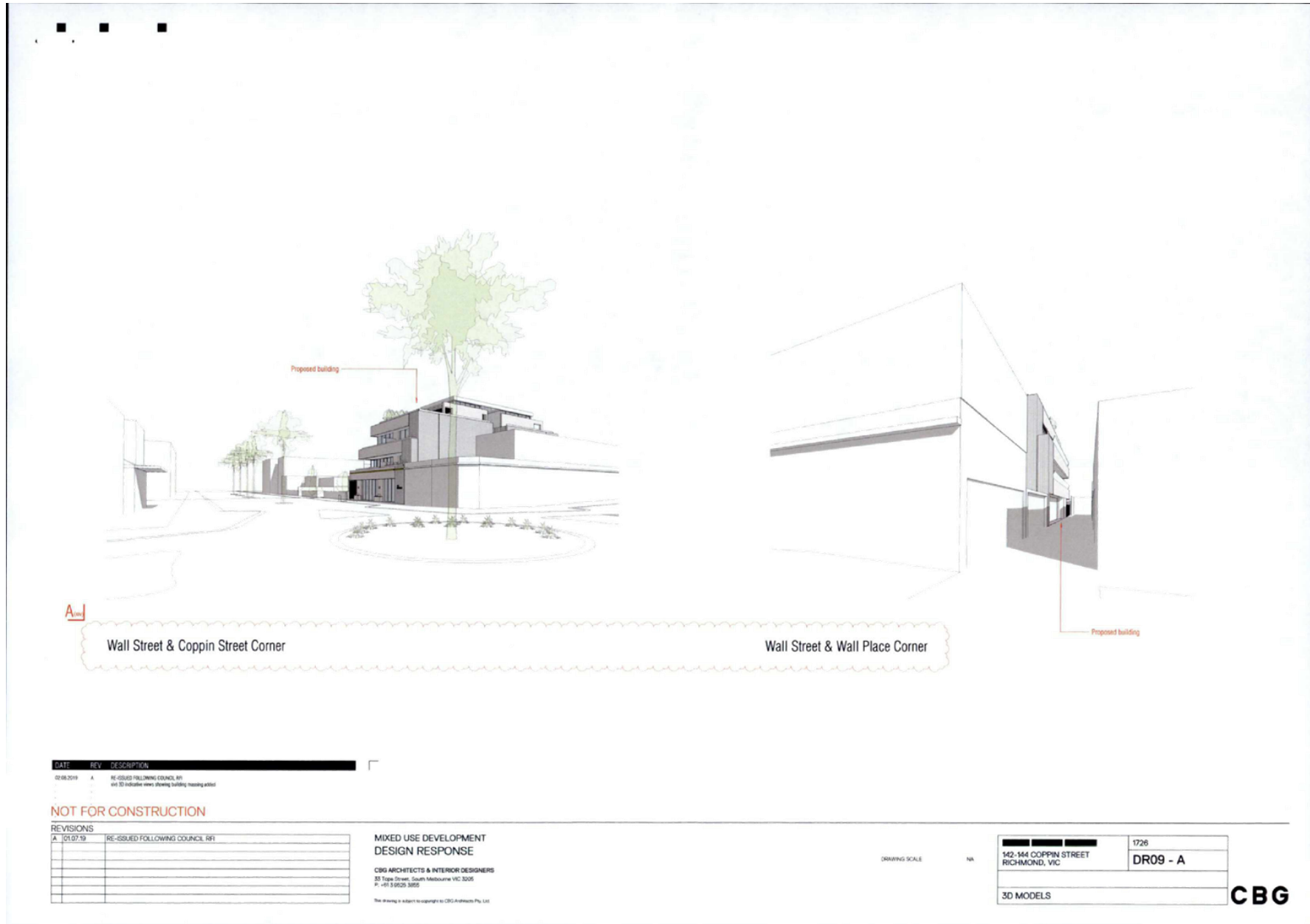
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DRAWING SCALE **NA**

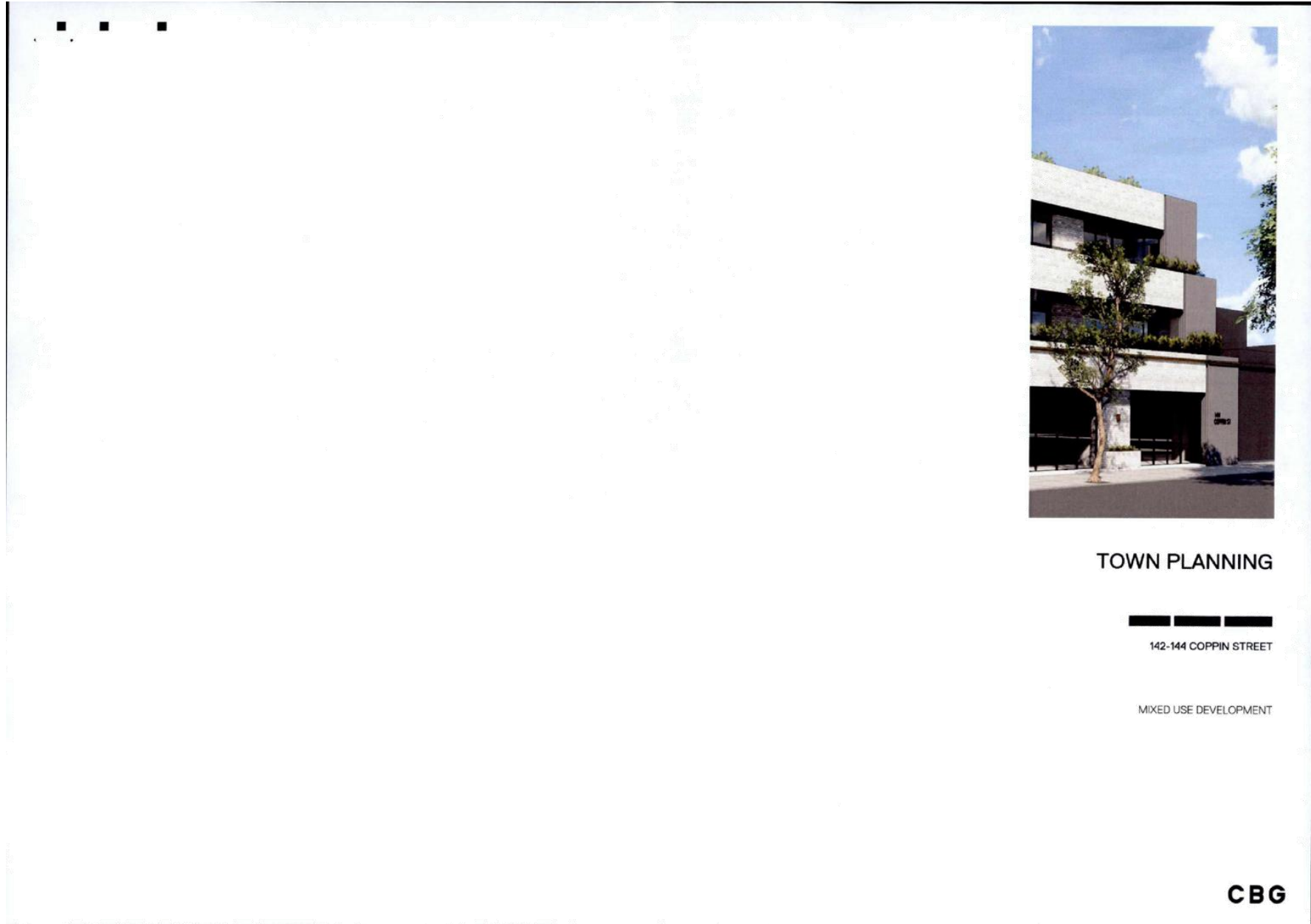
142, 144 COPPIN STREET RICHMOND, VIC	1726 DR08 - A
PRELIMINARY ISSUE	
PERSPECTIVE - EAST SOUTH EAST	

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Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans



Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans



Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans

TOWN PLANNING DRAWING LIST

NUMBER	DRAWING TITLE
TP002	GENERAL NOTES & SCHEDULES
TP100	GROUND FLOOR PLAN
TP101	FIRST FLOOR PLAN
TP102	SECOND FLOOR PLAN
TP103	THIRD FLOOR PLAN
TP104	ROOF PLAN
TP200	ELEVATIONS - NORTH & WEST
TP201	ELEVATIONS - SOUTH & EAST
TP220	SECTIONS
TP221	SECTIONS
TP230	PART SECTION - NORTH FACING WINDOW
TP900	SHADOW PLAN 6AM, 10AM, 10.30AM, 11AM
TP901	SHADOW PLAN 12NOON, 1PM, 2PM & 3PM
TP920	146 COPPIN ST - NORTH FACING WINDOW

DATE	REV	DESCRIPTION
02.06.2019	A	RE-ISSUE FOLLOWING COUNCIL REF <ul style="list-style-type: none"> i) Furniture shown on plans to demonstrate adequate circulation space ii) Minimum width and form of entry spaces shown iii) Operability of rollable screens shown when compliance is required iv) 80% and 100% Street shown as agreed screen v) Carriageway boundaries shown as dashed line over levels below vi) Entry doors to office reception shown vii) Roof Plans with levelled on plans viii) Site conditions are noted between office and residential as per Waste Management Report ix) Section 1/2 shown as common property accessed via the common stair for maintenance x) Section 1/2 extended to show residential vehicles 877 from commerciality zoned property (c) 1/1 that Street xi) Primary shown on Roof Plan as per ESD report xii) Screen observation measures designed to facilitate surveillance (i) evidence of residential and commercial use noted xiii) 3D indication when screening building meeting wall xiv) Vehicle observation camera elements are placed along building facade to break up massing of building xv) Third level material finishes noted to add additional "movement" overhead connecting the respective block xvi) The top line of the boundary fence from Coppin Street to be 1.2m high in keeping with existing meeting xvii) Damping 50% to low to primary and through for common lobby accessed from Coppin Street xviii) Perimeter screen located and level area assessed

NOT FOR CONSTRUCTION

REVISIONS	
05.06.19	ISSUED FOR TOWN PLANNING
A 01.07.19	RE-ISSUED FOLLOWING COUNCIL REF

MIXED USE DEVELOPMENT
TOWN PLANNING

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DRAWING SCALE

NA

142, 144 COPPIN STREET RICHMOND, VIC	1726 TP001 - A
PRELIMINARY ISSUE	
CONTENTS	

CBG

Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans

GENERAL NOTES

- All apartments to have a minimum energy rating and overall development average energy rating in accordance with Sustainability Management Plan S3801 SMP V2 Dated July 2019
- All apartments to have individual high efficiency instantaneous gas hot water systems on balconies and screened from view
- Windows to have high performance glazing as required to meet energy requirements
- High quality indoor environment to be achieved through the use of better materials, more natural light and the provision of fresh air to occupants
- Native species of plants to be grown throughout the development where possible
- All A/C condensers to be screened from view by parapets or screening

ACCESSIBILITY NOTES

Apartment noted as 'Clause 58.05-1 compliant' will have minimum:

- A clear opening width of at least 850mm at the entrance to the dwelling and main bedroom
- A clear path with a minimum width of 1.2 meters that connects the dwelling entrance to the main bedroom, an adaptable bathroom and the living area
- A main bedroom with access to an adaptable bathroom in accordance with tables D4 of clause 58.05-1

PRIVATE OPEN SPACE

The development proposal provides the following:

DWELLING TYPE	MINIMUM AREA	MINIMUM ENCLOSURE
1 BED	8 square meters	1.8 meters
2 BED	8 square meters	2.0 meters
3 BED	12 square meters	2.4 meters

NOTE: Where conditions are shown on balconies, an additional 1.5m² has been provided

FUNCTIONAL LAYOUT OBJECTIVE

(TABLE D7)

DWELLING TYPE	MINIMUM WIDTH	MINIMUM DEPTH
Main Bedroom	3.0 meters	3.4 meters
All Other Bedrooms	3.0 meters	3.0 meters

NOTE: Wardrobes are provided in addition to the minimum internal room dimensions

(TABLE D8)

DWELLING TYPE	MINIMUM WIDTH	MINIMUM AREA
Studio & 1 Bedroom	2.3 meters	13.0 square meters
2 or More Bedrooms	3.6 meters	12.0 square meters

NOTE: Living area dimensions are including dining and kitchen area

NATURAL VENTILATION

○ N - OPTIONAL WINDOW
 ○ LDR - OPTIONAL WINDOW
 ○ S - OPTIONAL SLIDING DOOR

NOTE: Only habitable rooms are shown as 'Optional to show Minimum Compliance additional windows may be required subject to compliance with modelling algorithm

SITE SUMMARY

SITE AREA: 512 m²
 SITE COVERAGE: 477m²
 SITE PERMEABILITY: 26m²

Apartment Summary

BEDROOMS	APARTMENT COUNT
1	5
2	2
3	2
Total Apartments	9

LANDSCAPE NOTE

Landscaping shown is INDICATIVE ONLY. Exact number and location of planting and planter pots and planting to be confirmed on site.

PARKING NOTES

The garage design, including all levels, ramp grades, transitions, headroom clearances, and dimensions of carparks to be in accordance to AS/NZ 2980.1-2004, and to the satisfaction of the responsible authority.

- All mechanical venting of the garage required to occur internally within site
- Car spaces to be typically 2500 x 4800 unless otherwise specified
- Allow for minimum head clearance of 2.2m to all areas of carpark
- Need Kelly staggered wall mounted bike storage (or similar) @ 500mm centers
- Allow for storage cage to all units

PARKING ALLOCATION

Garage and associated parking to be allocated to APT 3.01 (Penthouse)

Car Parking - Allocation

ALLOCATION	CAR SPACES
Residential	2
Total	2

Bike Parking - Breakdown

ALLOCATION	TYPE	BIKE SPACES
Ground Floor SPL		
Office	Floor Based Hoop	2
Residential	Wall Based	8
Visitor	Hanging	4
	Floor Based Hoop	4
Grand total		14

DATE REV DESCRIPTION

02.08.2019	A	RE-ISSUED FOLLOWING COUNCIL REF
12.08.2019	A	RE-ISSUED FOLLOWING COUNCIL REF

NOT FOR CONSTRUCTION

REVISIONS

05.06.19	ISSUED FOR TOWN PLANNING
01.07.19	RE-ISSUED FOLLOWING COUNCIL REF
12.09.19	RE-ISSUED FOLLOWING COUNCIL FURTHER REF

MIXED USE DEVELOPMENT TOWN PLANNING

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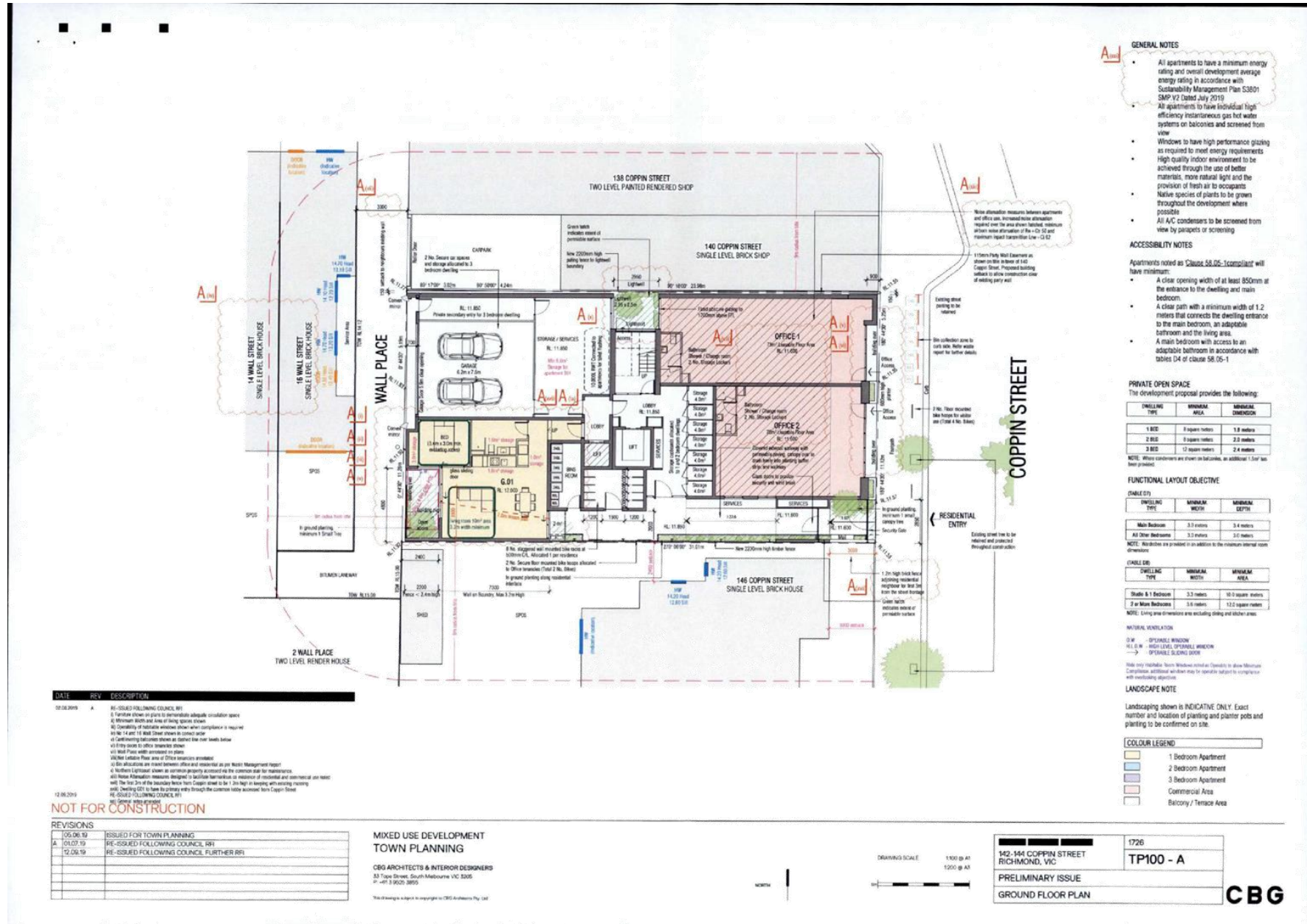
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DRAWING SCALE: NA

142-144 COPPIN STREET RICHMOND, VIC	1728 TP002 - A
PRELIMINARY ISSUE	
GENERAL NOTES & SCHEDULES	

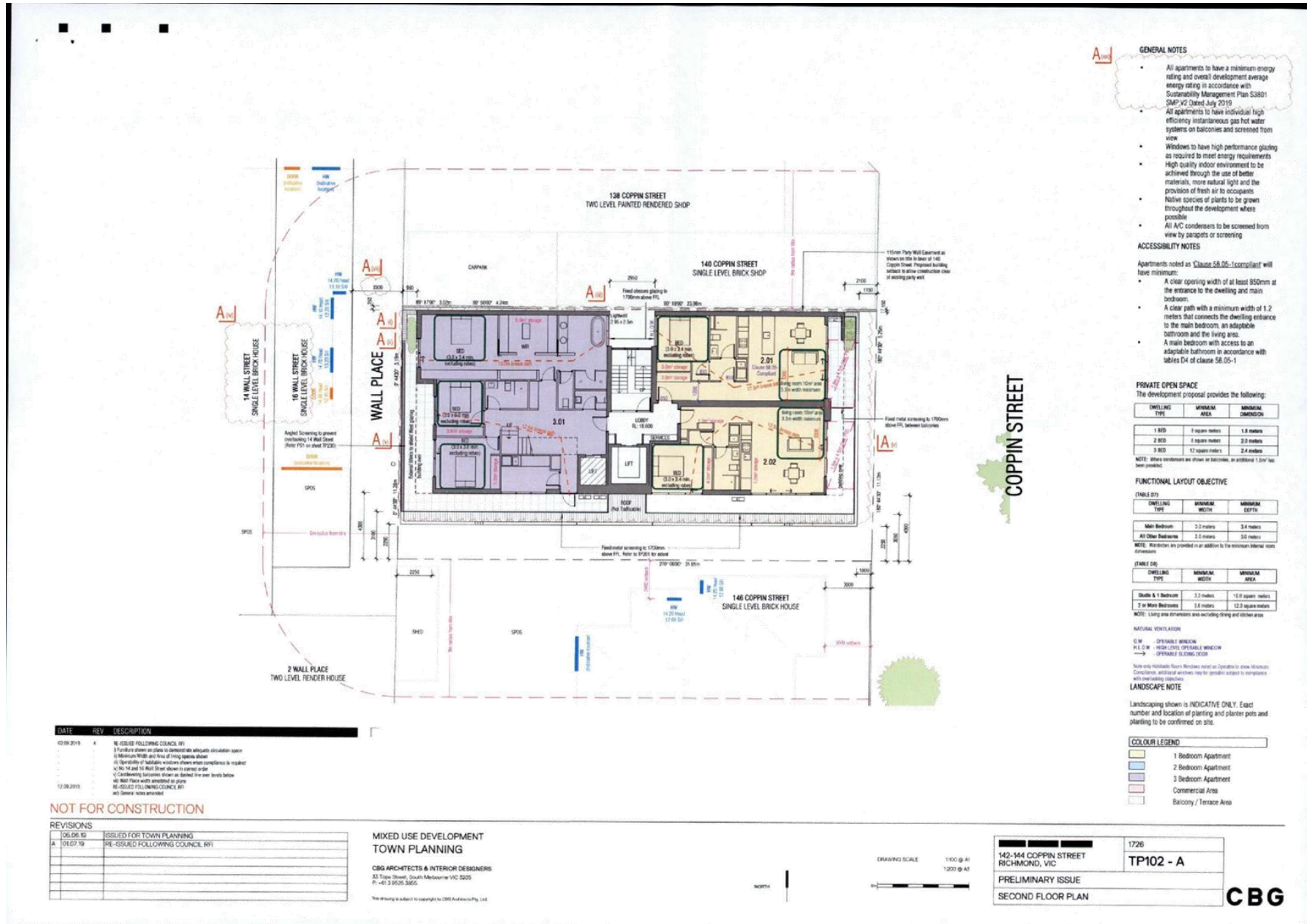
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Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans

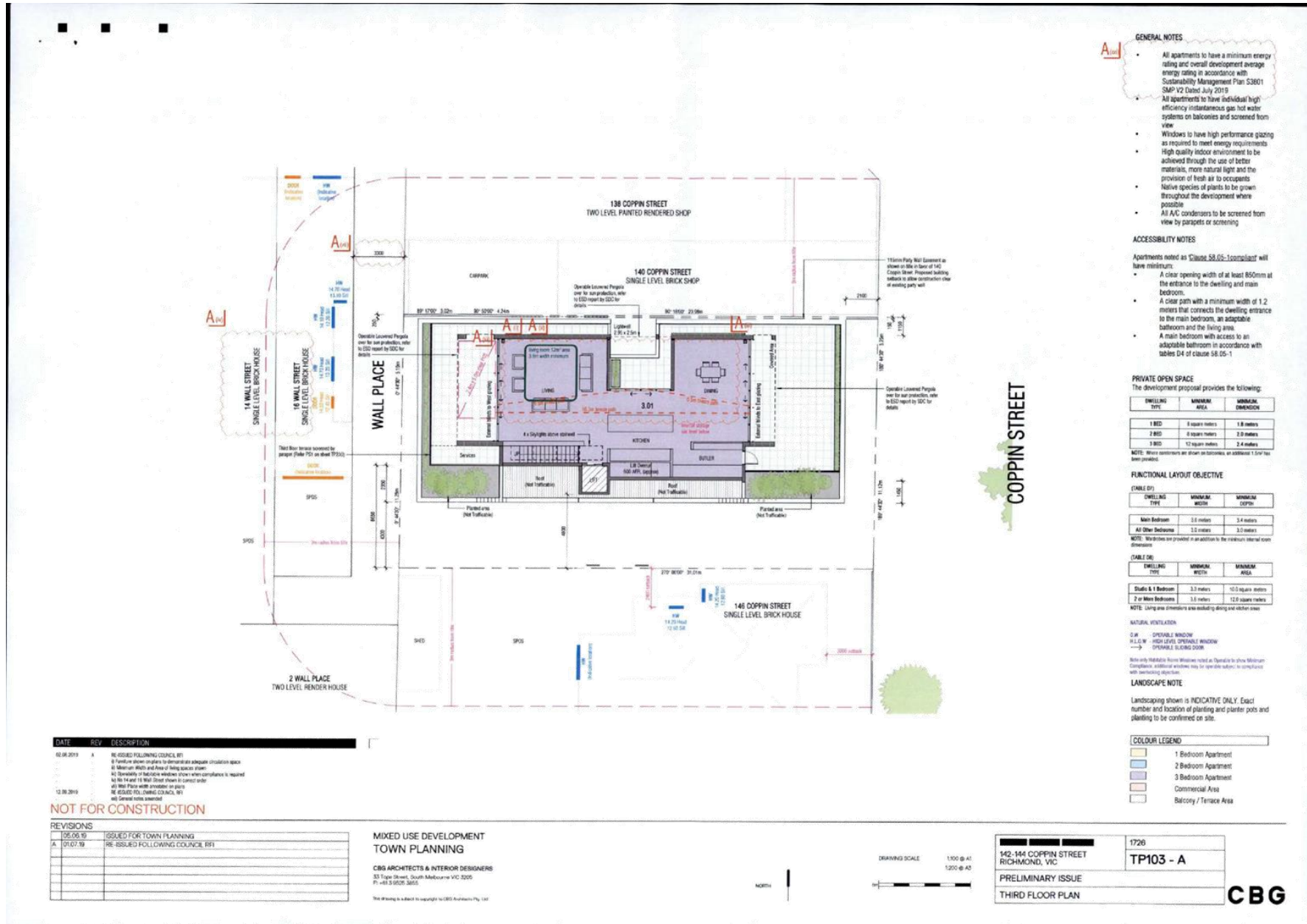




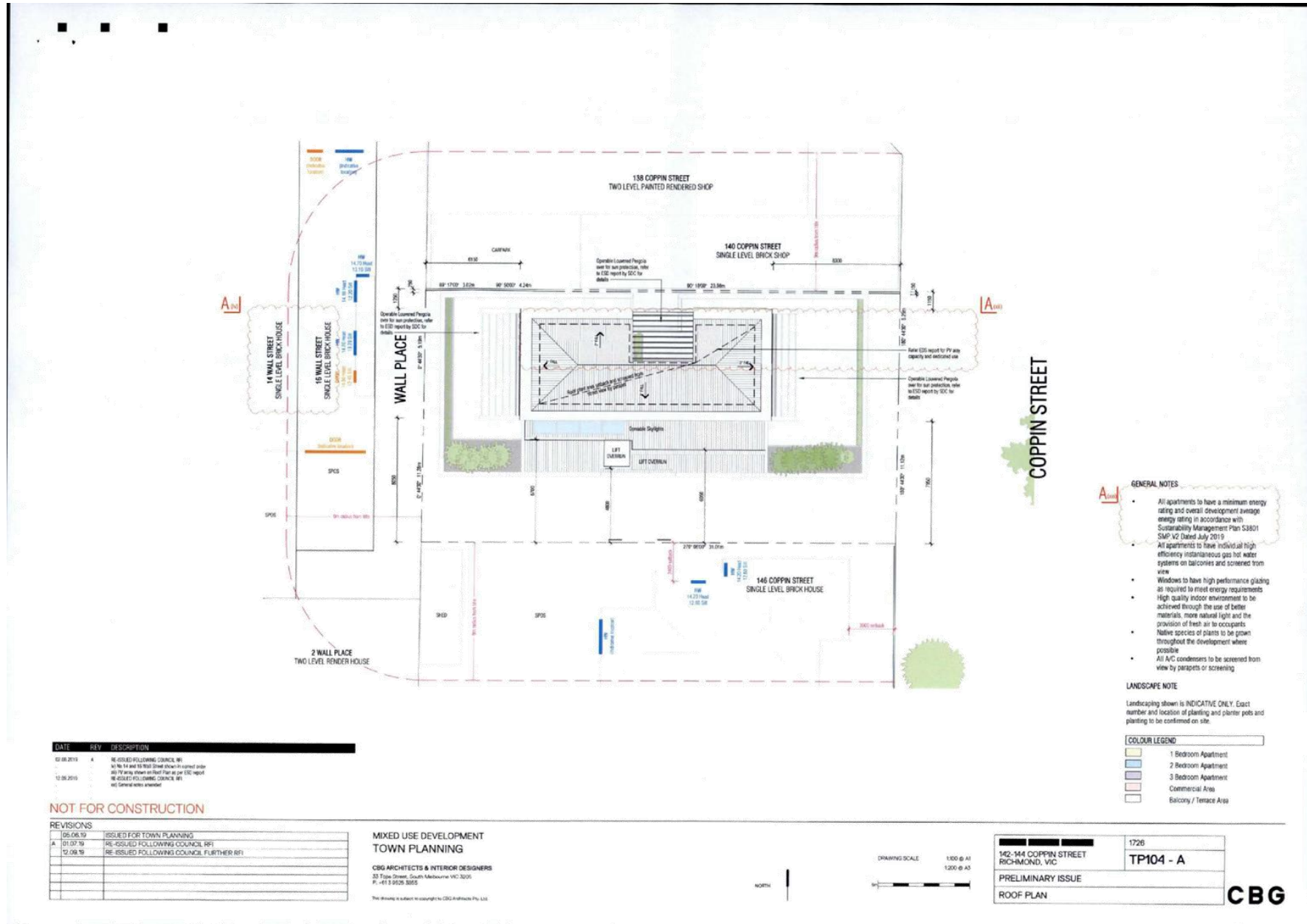
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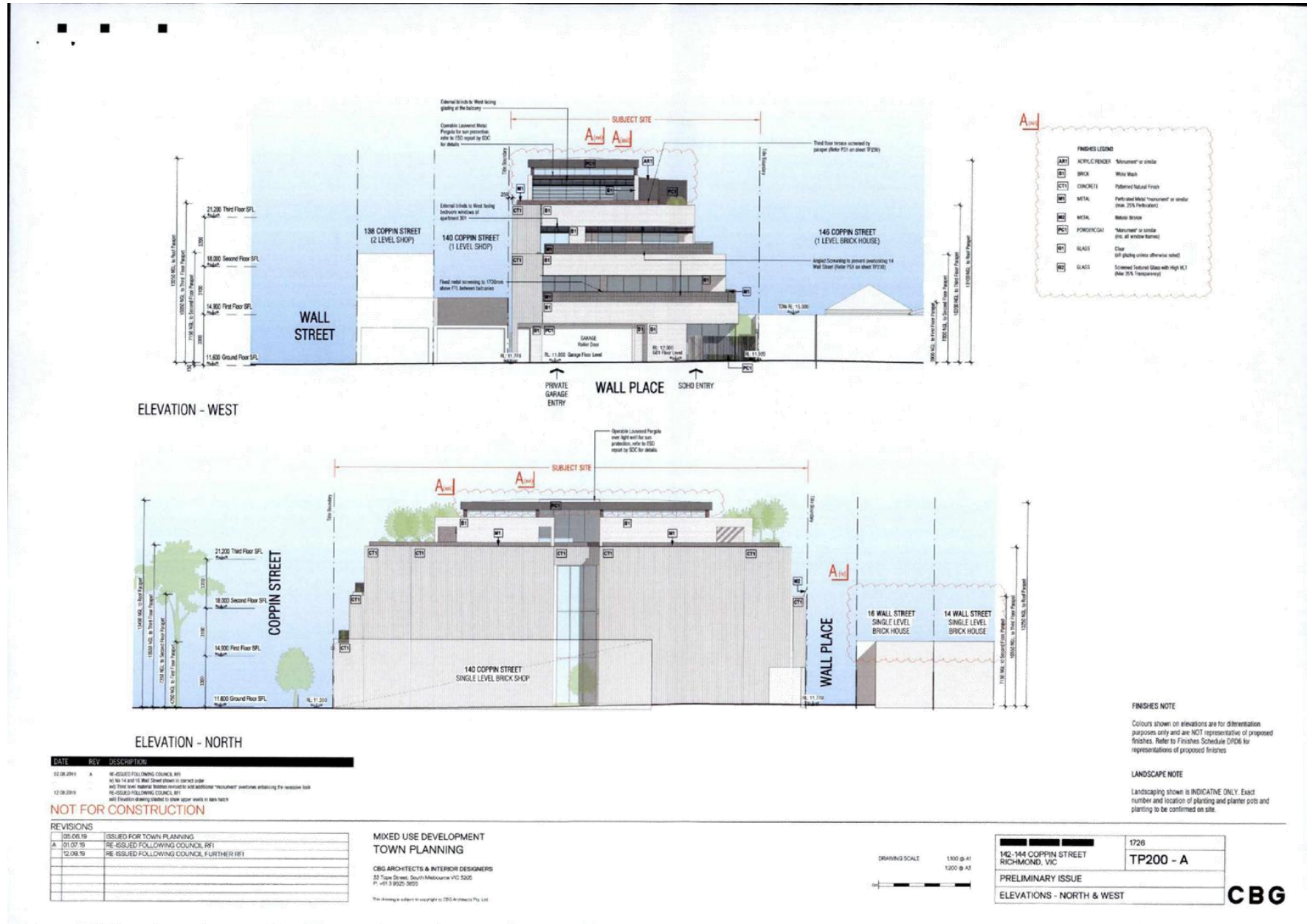
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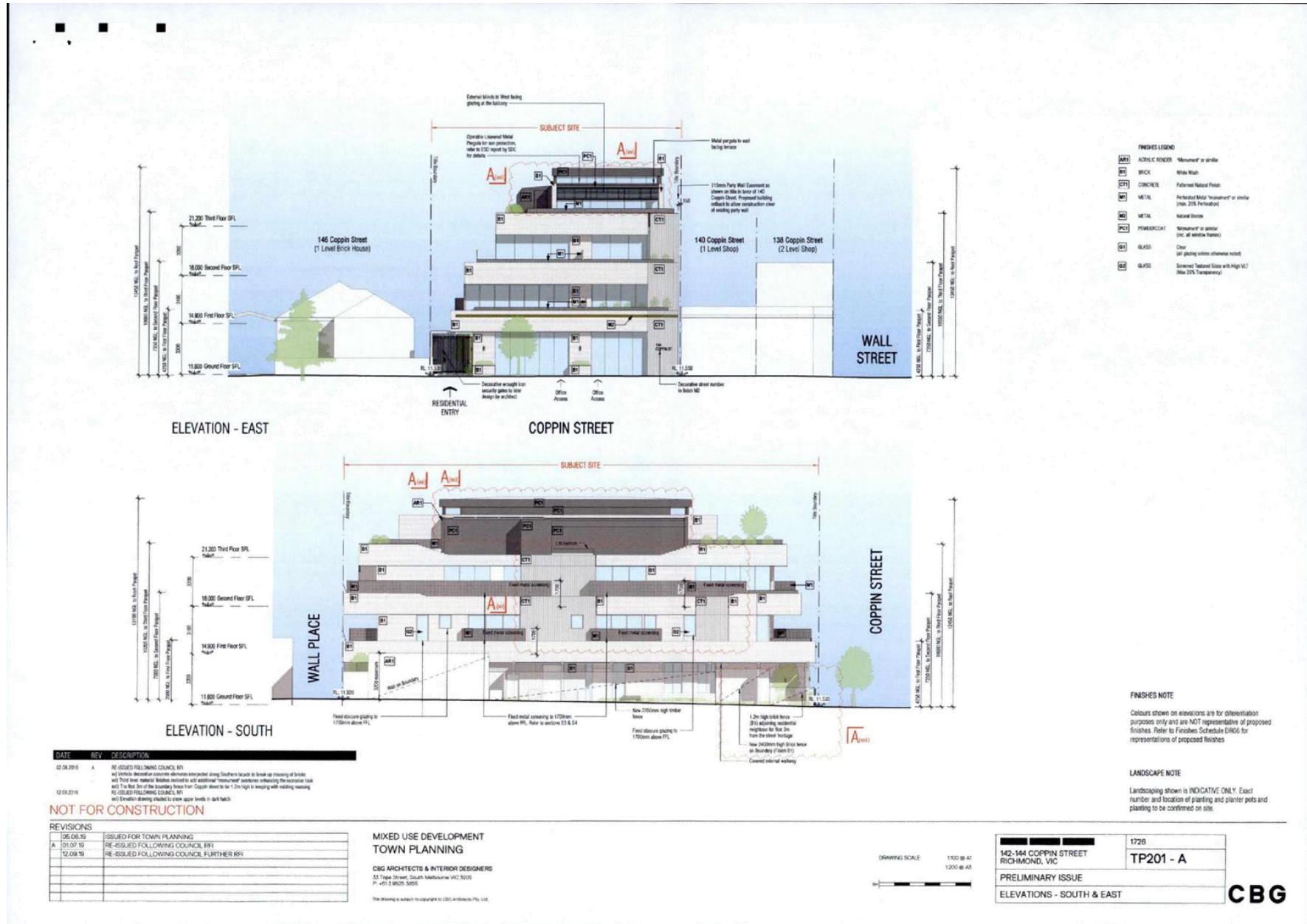
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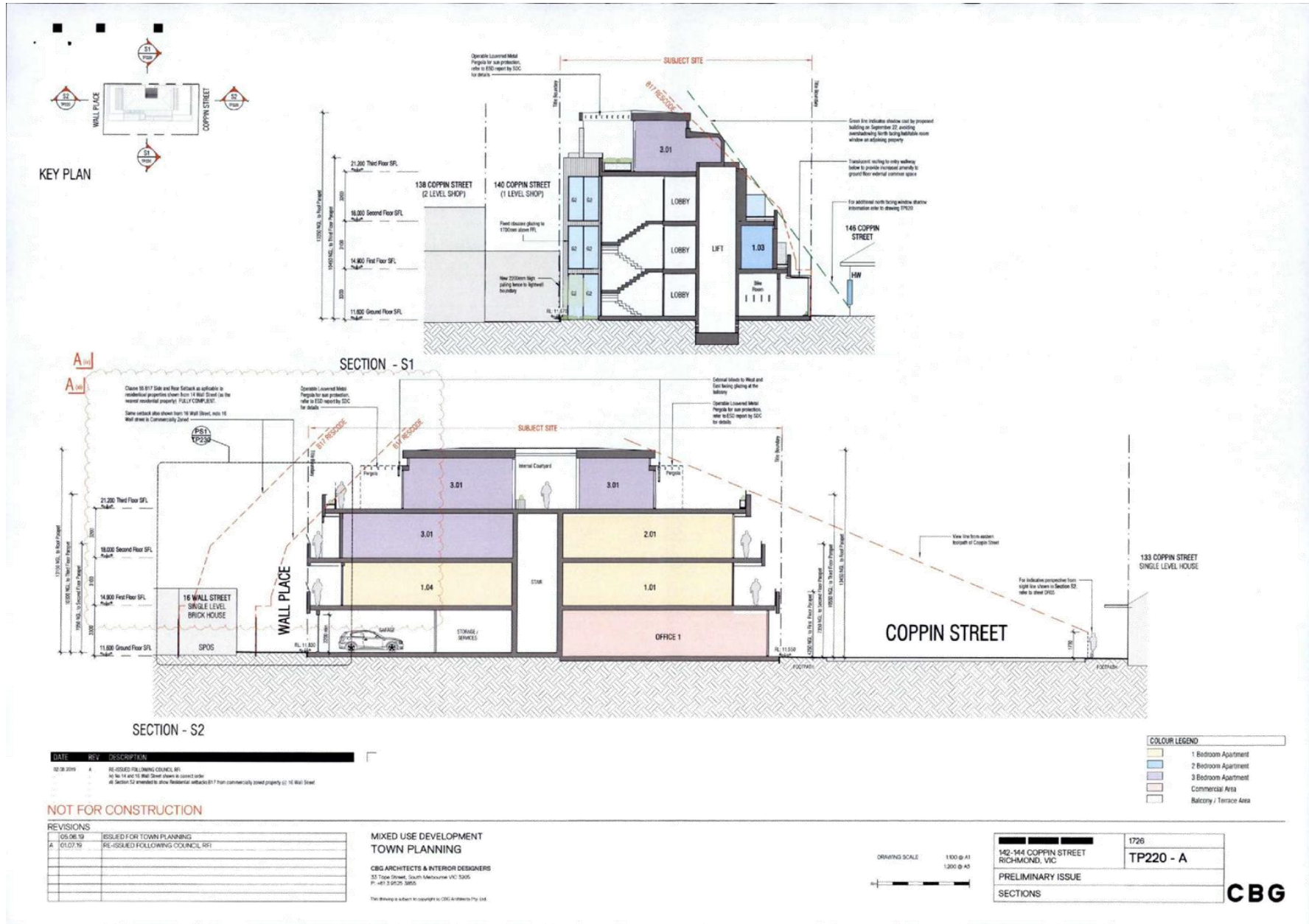
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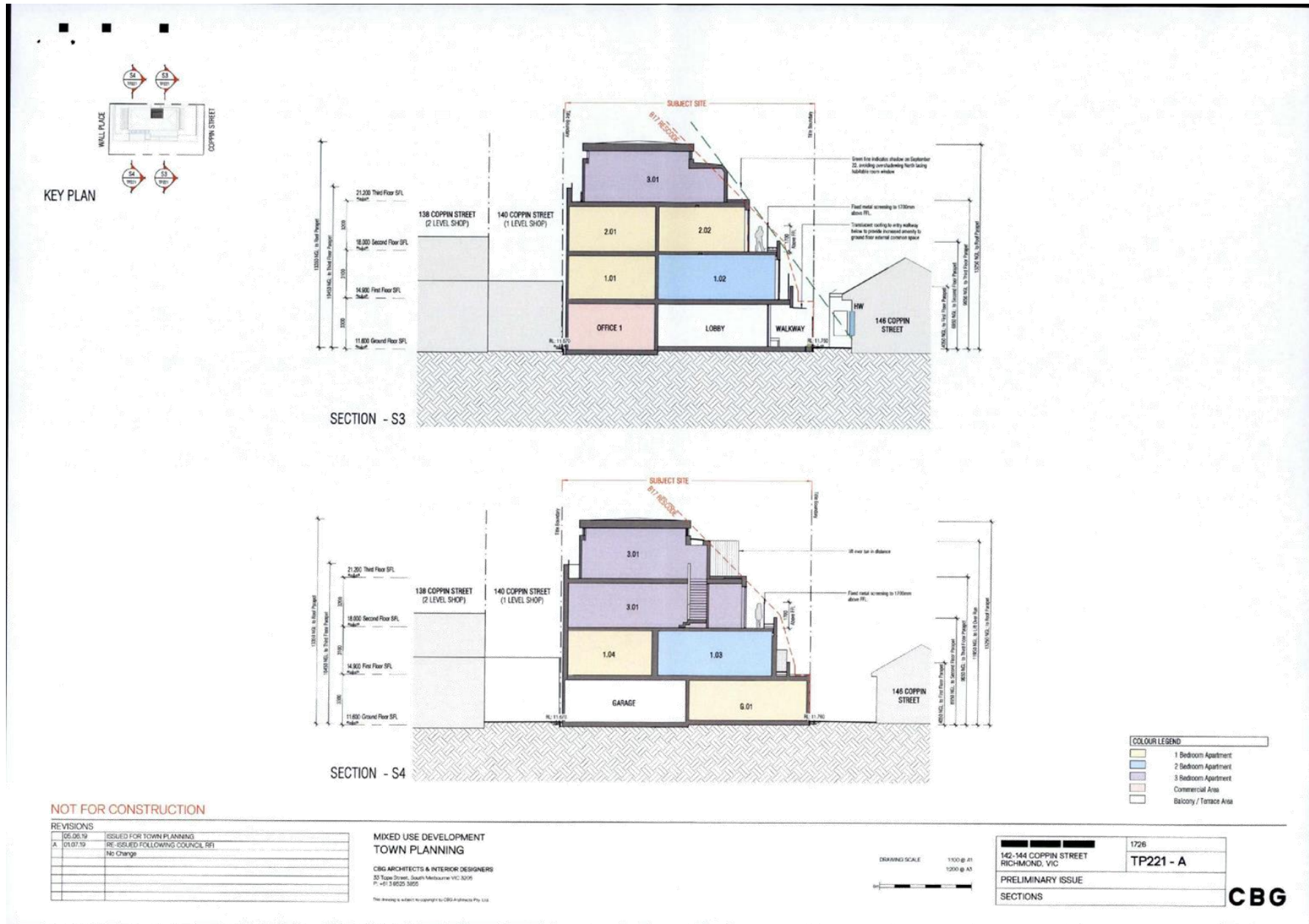
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Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans



Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans



Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans



PART SECTION - PS1

NOT FOR CONSTRUCTION

REVISIONS	
06.06.19	ISSUED FOR TOWN PLANNING
A 09.07.19	RE-ISSUED FOLLOWING COUNCIL RPT
	No Change

MIXED USE DEVELOPMENT
TOWN PLANNING

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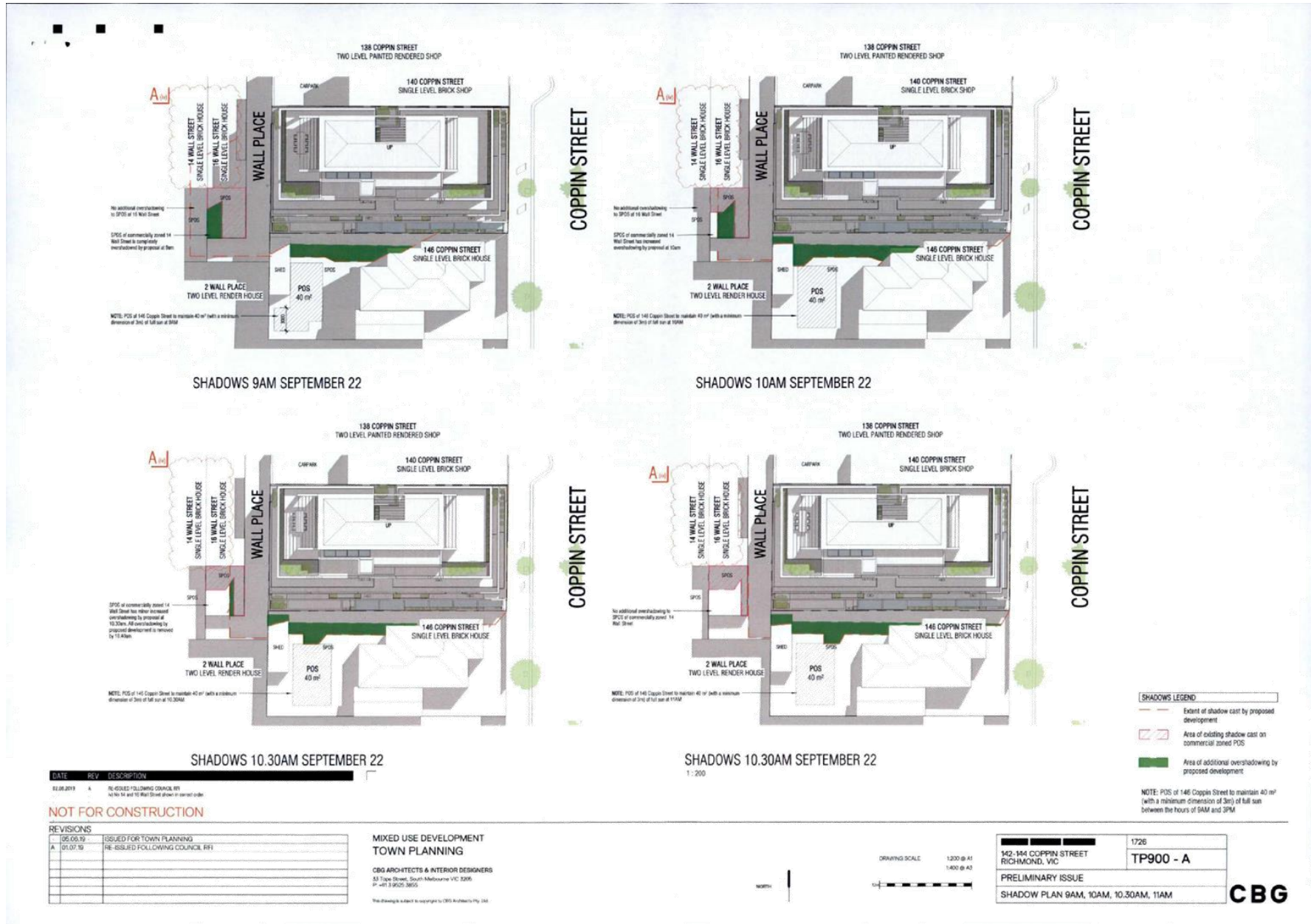
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1:000 @ A3

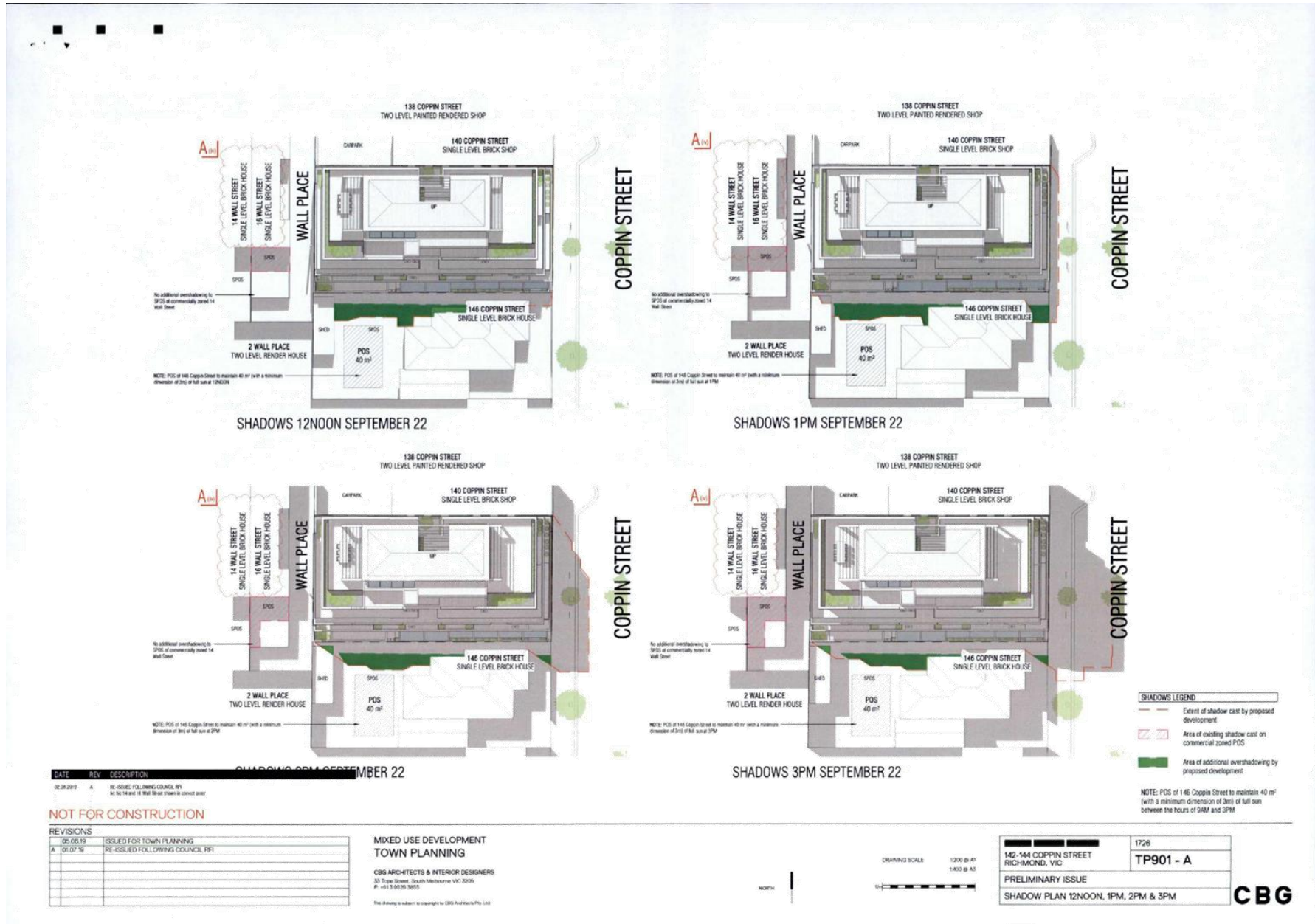
142-144 COPPIN STREET RICHMOND, VIC	1726
TP230 - A	
PRELIMINARY ISSUE	
PART SECTION - NORTH FACING WINDOW	

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Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans



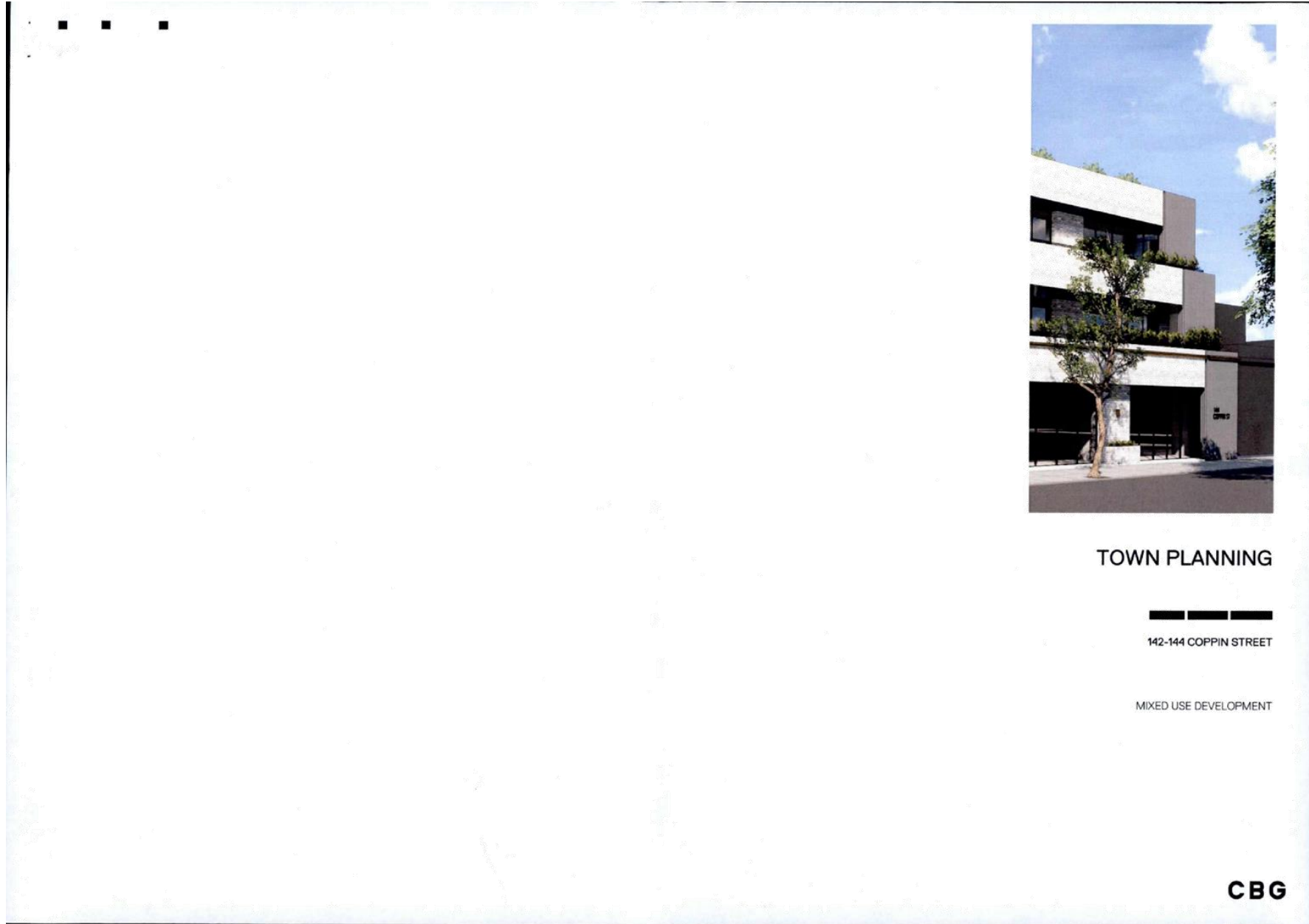
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Attachment 2 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Previously Advertised Plans



Attachment 3 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Plans



Attachment 3 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Plans

TOWN PLANNING DRAWING LIST

NUMBER	DRAWING TITLE
TP002	GENERAL NOTES & SCHEDULES
TP100	GROUND FLOOR PLAN
TP101	FIRST FLOOR PLAN
TP102	SECOND FLOOR PLAN
TP103	THIRD FLOOR PLAN
TP104	ROOF PLAN
TP200	ELEVATIONS - NORTH & WEST
TP201	ELEVATIONS - SOUTH & EAST
TP220	SECTIONS
TP221	SECTIONS
TP230	PART SECTION - NORTH FACING WINDOW
TP900	SHADOW PLAN 8AM, 10AM, 10:30AM, 11AM
TP901	SHADOW PLAN 12NOON, 1PM, 2PM & 3PM
TP920	142 COPPIN ST - NORTH FACING WINDOW

NOT FOR CONSTRUCTION

REVISIONS

06.00.19	ISSUED FOR TOWN PLANNING
A 06.07.19	RE-ISSUED FOLLOWING COUNCIL RPT
B 10.12.19	RE-ISSUED FOLLOWING COUNCIL URBAN DESIGN & TRAFFIC ADVICE
	No Change

MIXED USE DEVELOPMENT
TOWN PLANNING

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DRAWING SCALE: NA

142-144 COPPIN STREET RICHMOND, VIC	1726
PRELIMINARY ISSUE	TP001 - B
CONTENTS	

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Attachment 3 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Plans

GENERAL NOTES

- All apartments to have a minimum energy rating and overall development average energy rating in accordance with Sustainability Management Plan S3891 SMP V3 Dated Feb 2020
- All apartments to have individual high efficiency instantaneous gas hot water systems on balconies and screened from view
- Windows to have high performance glazing as required to meet energy requirements
- High quality indoor environment to be achieved through the use of better materials, more natural light and the provision of fresh air to occupants
- Native species of plants to be grown throughout the development where possible
- All A/C condensers to be screened from view by parapets or screening

ACCESSIBILITY NOTES

Apartments noted as 'Clause 58.05-1compliance' will have minimum:

- A clear opening width of at least 850mm at the entrance to the dwelling and main bedroom
- A clear path with a minimum width of 1.2 meters that connects the dwelling entrance to the main bedroom, an adaptable bathroom and the living area
- A main bedroom with access to an adaptable bathroom in accordance with tables D4 of clause 58.05-1

PRIVATE OPEN SPACE

The development proposal provides the following:

DWELLING TYPE	MINIMUM AREA	MINIMUM DIMENSIONS
1 BED	8 square meters	3.0 meters
2 BED	8 square meters	3.0 meters
3 BED	12 square meters	3.4 meters

NOTE: Where condensers are shown on balconies, an additional 1.5m² has been provided.

FUNCTIONAL LAYOUT OBJECTIVE

(TABLE D7)

DWELLING TYPE	MINIMUM WIDTH	MINIMUM DEPTH
Main Bedrooms	3.0 meters	3.4 meters
All Other Bedrooms	3.0 meters	3.0 meters

NOTE: Where doors are provided in an addition to the minimum lateral width dimensions.

(TABLE D8)

DWELLING TYPE	MINIMUM WIDTH	MINIMUM AREA
Double & 1 Bedroom	3.3 meters	15.2 square meters
2 or More Bedrooms	3.0 meters	12.0 square meters

NOTE: Living area dimensions are including dining and kitchen areas

NATURAL VENTILATION

0.1 W - OPENABLE WINDOW
0.1.2 W - HIGH LEVEL, OPENABLE WINDOW
→ - OPENABLE SLEEPING DOOR

Note: Only windows from which fresh air is drawn to be shown. Minimum dimensions, additional windows may be required to meet compliance with ventilation objectives.

SITE SUMMARY

SITE AREA: 512 m²
SITE COVERAGE: 477m²
SITE PERMEABILITY: 17m²

Apartment Summary

BEDROOMS	APARTMENT COUNT
1	4
2	2
3	1
Total Apartments	7

LANDSCAPE NOTE

Landscaping shown is INDICATIVE ONLY. Exact number and location of planting and planter pots and planting to be confirmed on site.

PARKING NOTES

The garage design, including all levels, ramp grades, transitions, headroom clearances, and dimensions of carparks to be in accordance to AS/NZ 2980:1-2004, and to the satisfaction of the responsible authority.

- All mechanical venting of the garage required to occur internally within site
- Car spaces to be typically 2500 x 4900 unless otherwise specified
- Allow for minimum head clearance of 2.2m to all areas of carpark
- Hand Kelly staggered wall mounted bike storage (or similar) @ 500mm centers
- Allow for storage cage to all units

PARKING ALLOCATION

Garage 1 and associated parking to be allocated to APT 3.01 (Penthouse)
Garage 2 and associated parking to be allocated one each to APT 1.02 & 1.03

Car Parking - Allocation

ALLOCATION	CAR SPACES
Residential	4
Total	4

Bike Parking - Breakdown

ALLOCATION	TYPE	BIKE SPACES
Ground Floor SFL		
Office	Floor Based Hoop	2
Residential	Wall Based Hanging	8
Visitor	Floor Based Hoop	4
Grand total		14

DATE	REV	DESCRIPTION
19.12.2019	0	RESUBMITTED FOLLOWING COUNCIL URBAN DESIGN & TRAFFIC ADVICE 1) Apartment 301 removed and replaced with 3 additional car spaces allocated one to each of the 2 bedroom apartments 2) Permeability provided following council advice

REVISIONS

REV	DATE	DESCRIPTION
06.06.19		ISSUED FOR TOWN PLANNING
A	01.07.19	RE-ISSUED FOLLOWING COUNCIL RPT
	12.09.19	RE-ISSUED FOLLOWING COUNCIL FURTHER RPT
B	10.12.19	RE-ISSUED FOLLOWING COUNCIL URBAN DESIGN & TRAFFIC ADVICE

NOT FOR CONSTRUCTION

MIXED USE DEVELOPMENT
TOWN PLANNING

CBG ARCHITECTS & INTERIOR DESIGNERS
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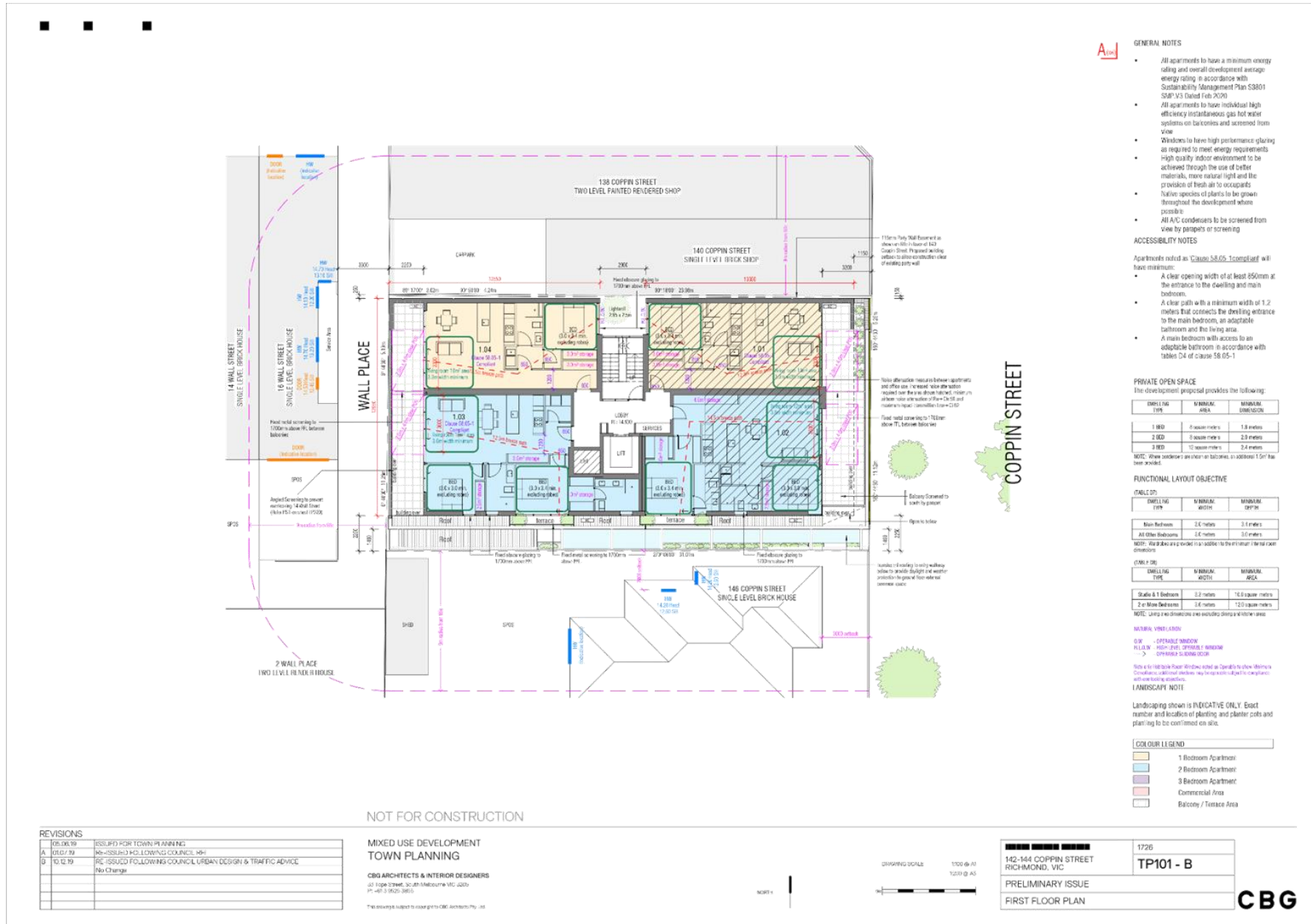
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142-144 COPPIN STREET RICHMOND, VIC		1729 TP002 - B
PRELIMINARY ISSUE		
GENERAL NOTES & SCHEDULES		

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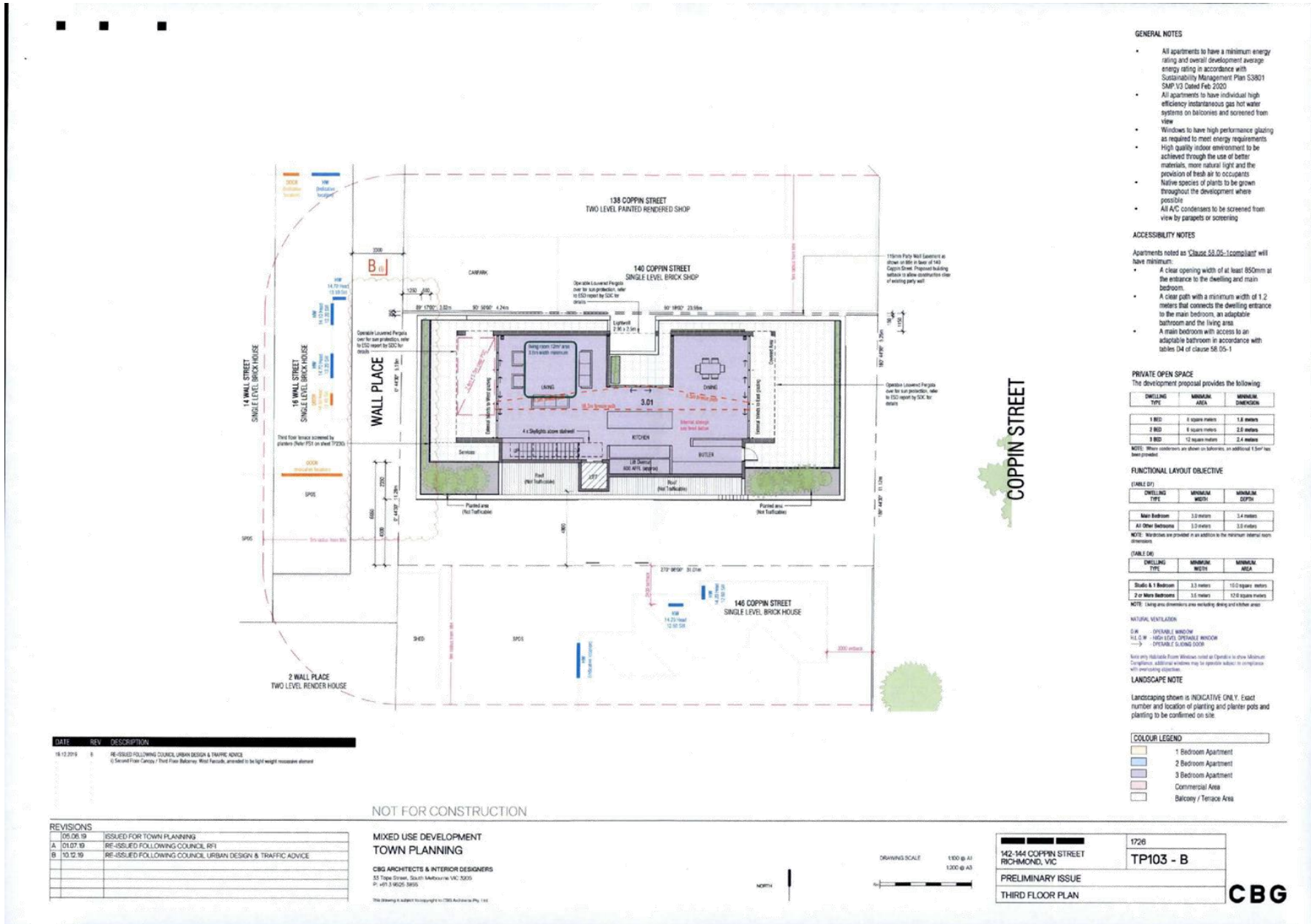


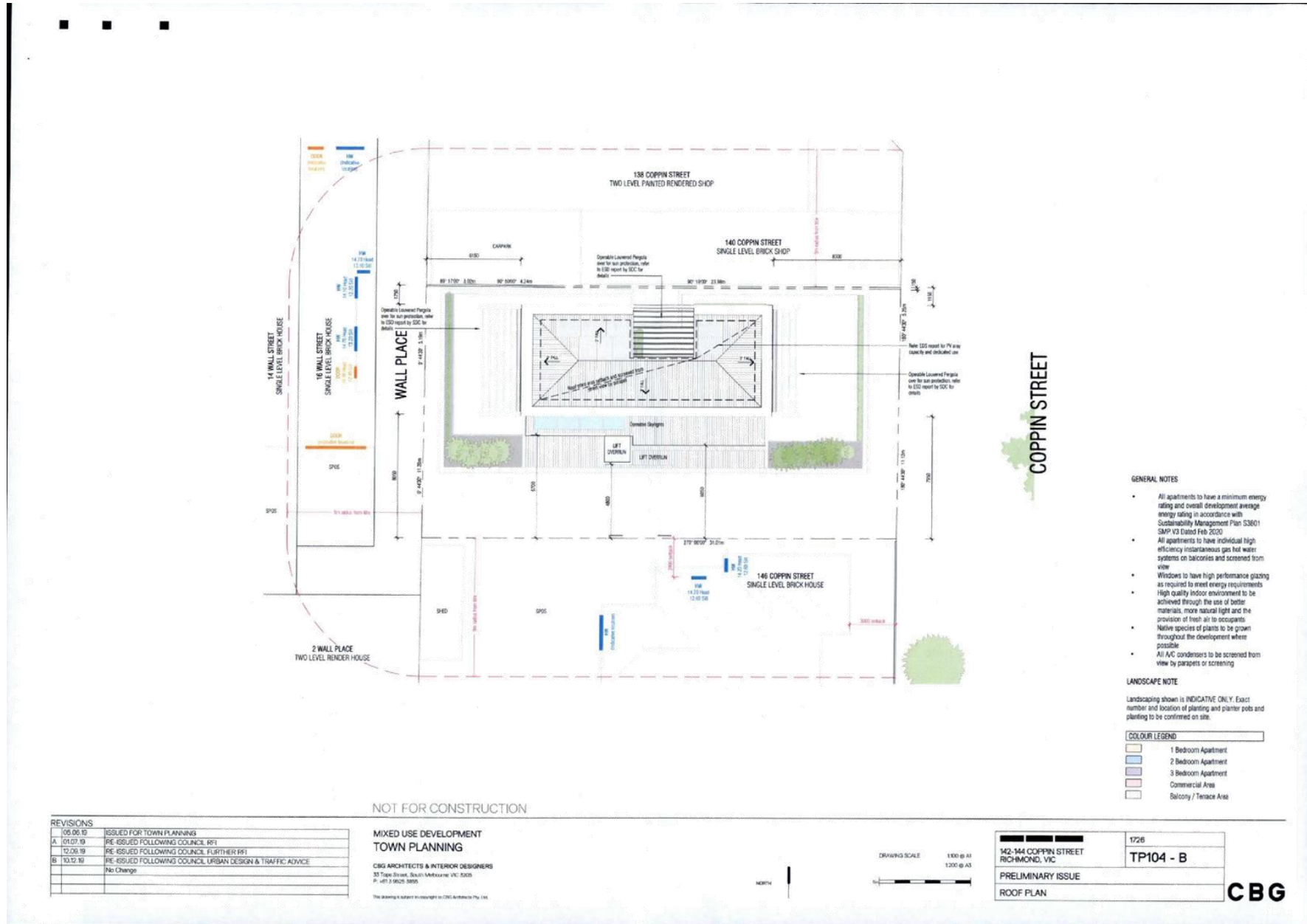
Attachment 3 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Plans



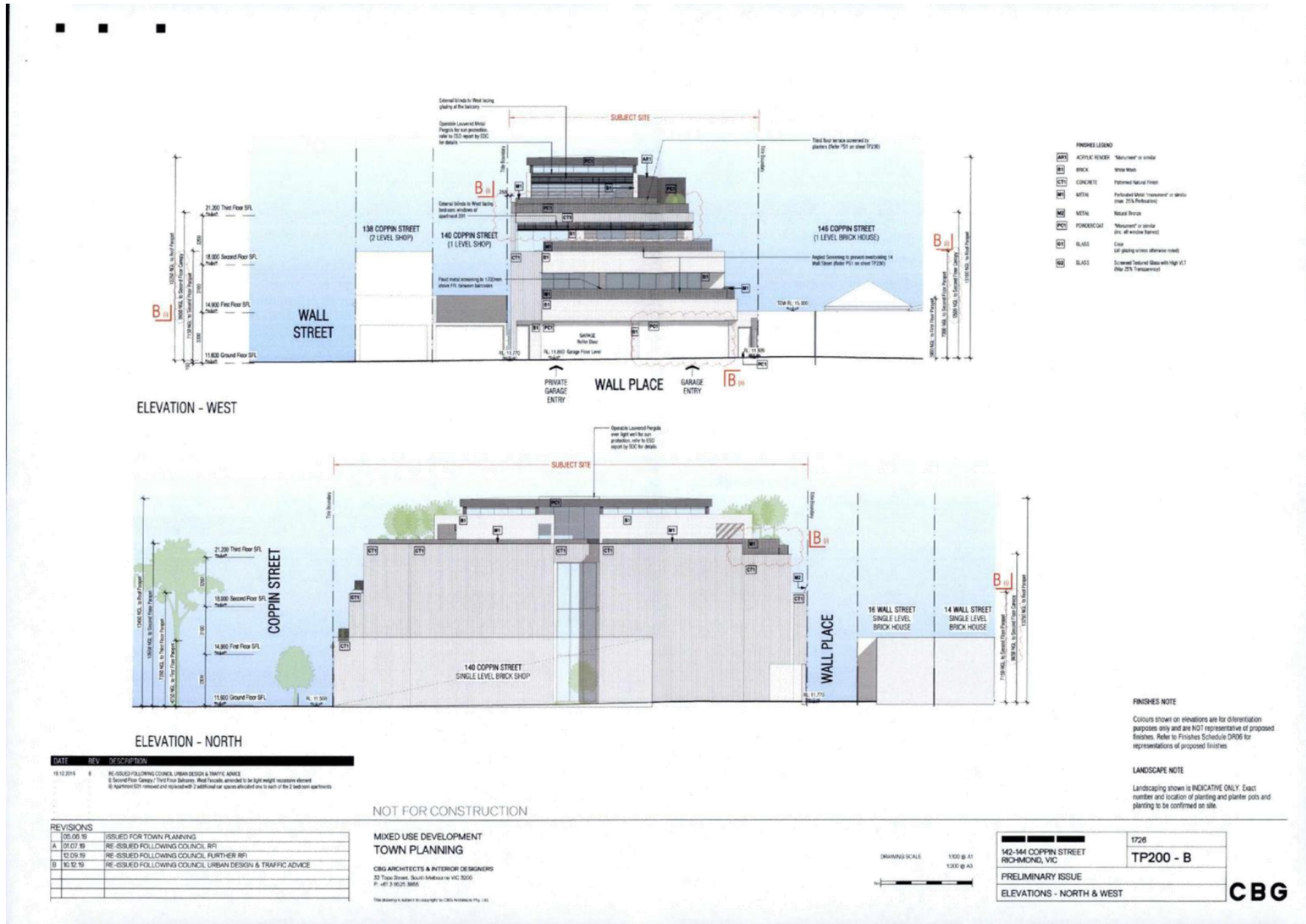


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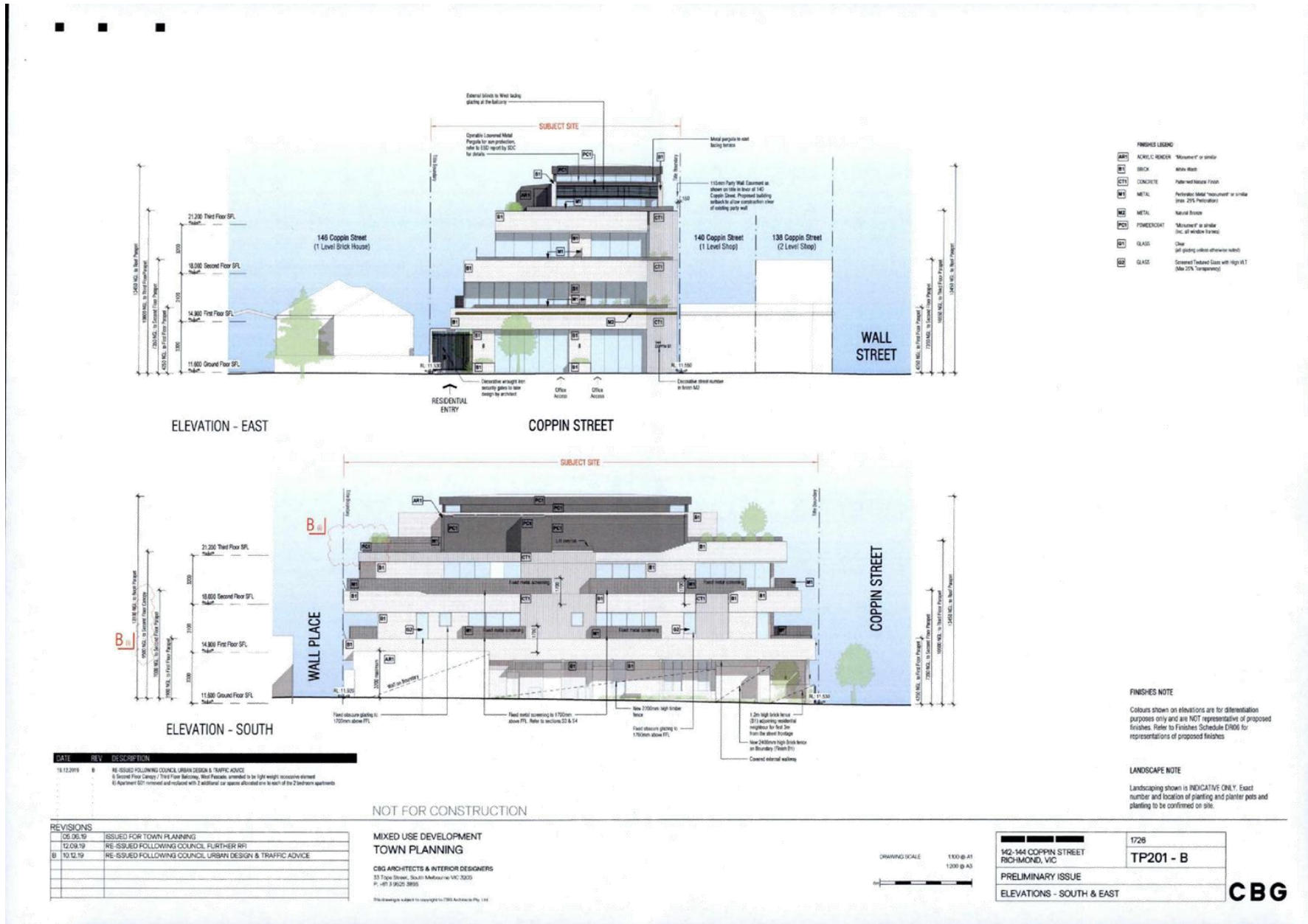




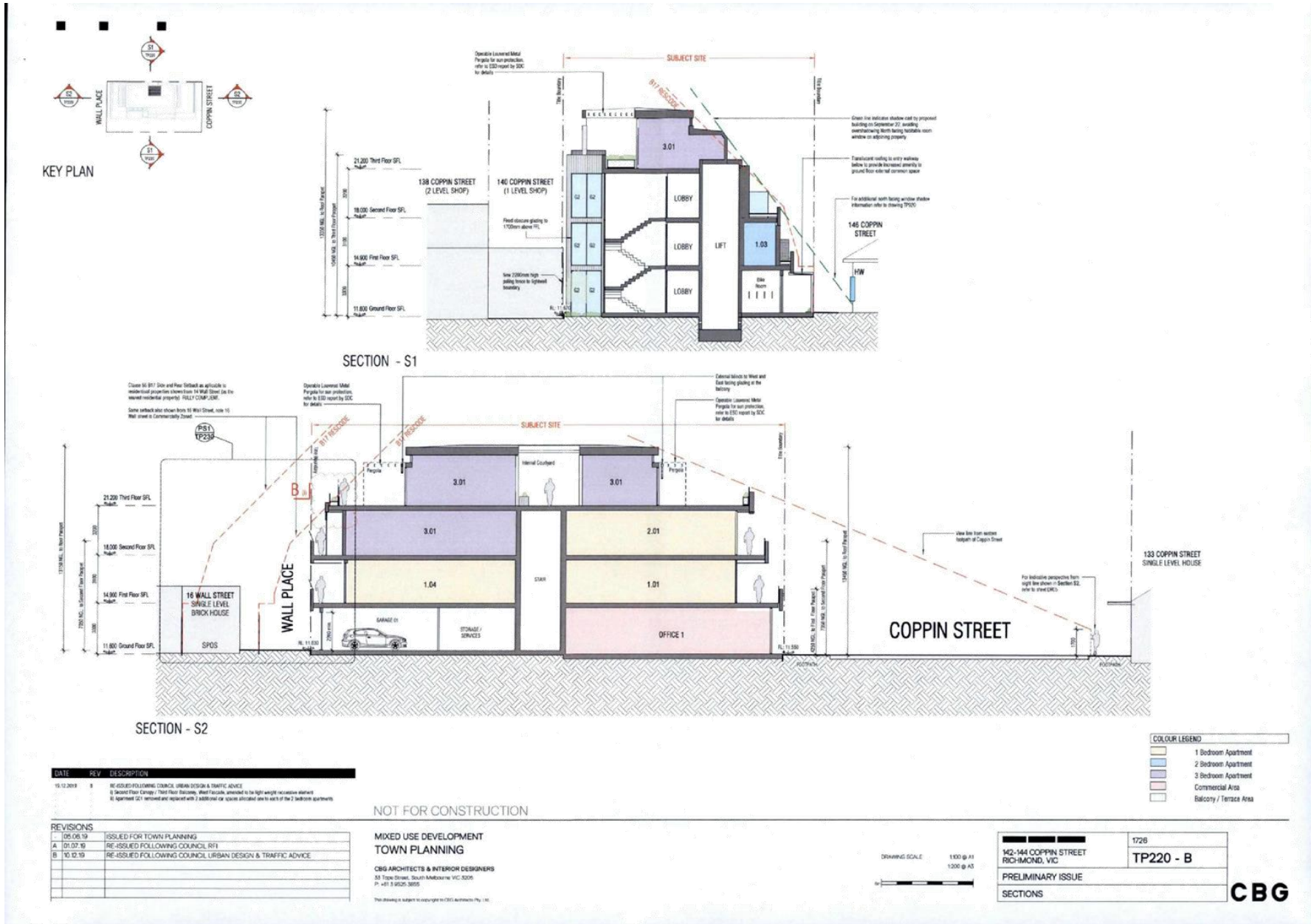
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Attachment 3 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Plans



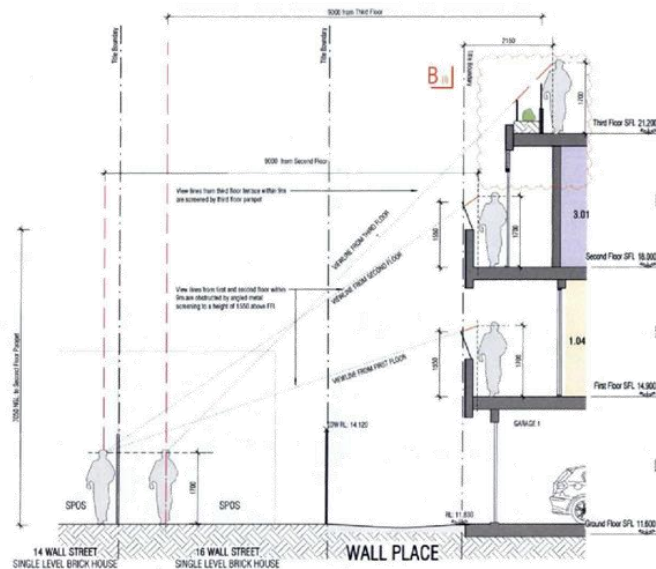
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Attachment 3 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Plans



Attachment 3 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Plans



PART SECTION - PS1

DATE	REV	DESCRIPTION
19-12-2019	0	RE-ISSUED FOLLOWING COUNCIL URBAN DESIGN & TRAFFIC ADVICE (1) Second Floor Canopy / Third Floor Balcony, West Facade, amended to be light weight recessive element

REVISIONS	
05.06.19	ISSUED FOR TOWN PLANNING
A 01.07.19	RE-ISSUED FOLLOWING COUNCIL RF1
	No Change
B 10.12.19	RE-ISSUED FOLLOWING COUNCIL URBAN DESIGN & TRAFFIC ADVICE

NOT FOR CONSTRUCTION

MIXED USE DEVELOPMENT
TOWN PLANNING

CBG ARCHITECTS & INTERIOR DESIGNERS
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P: +61 3 9525 3055

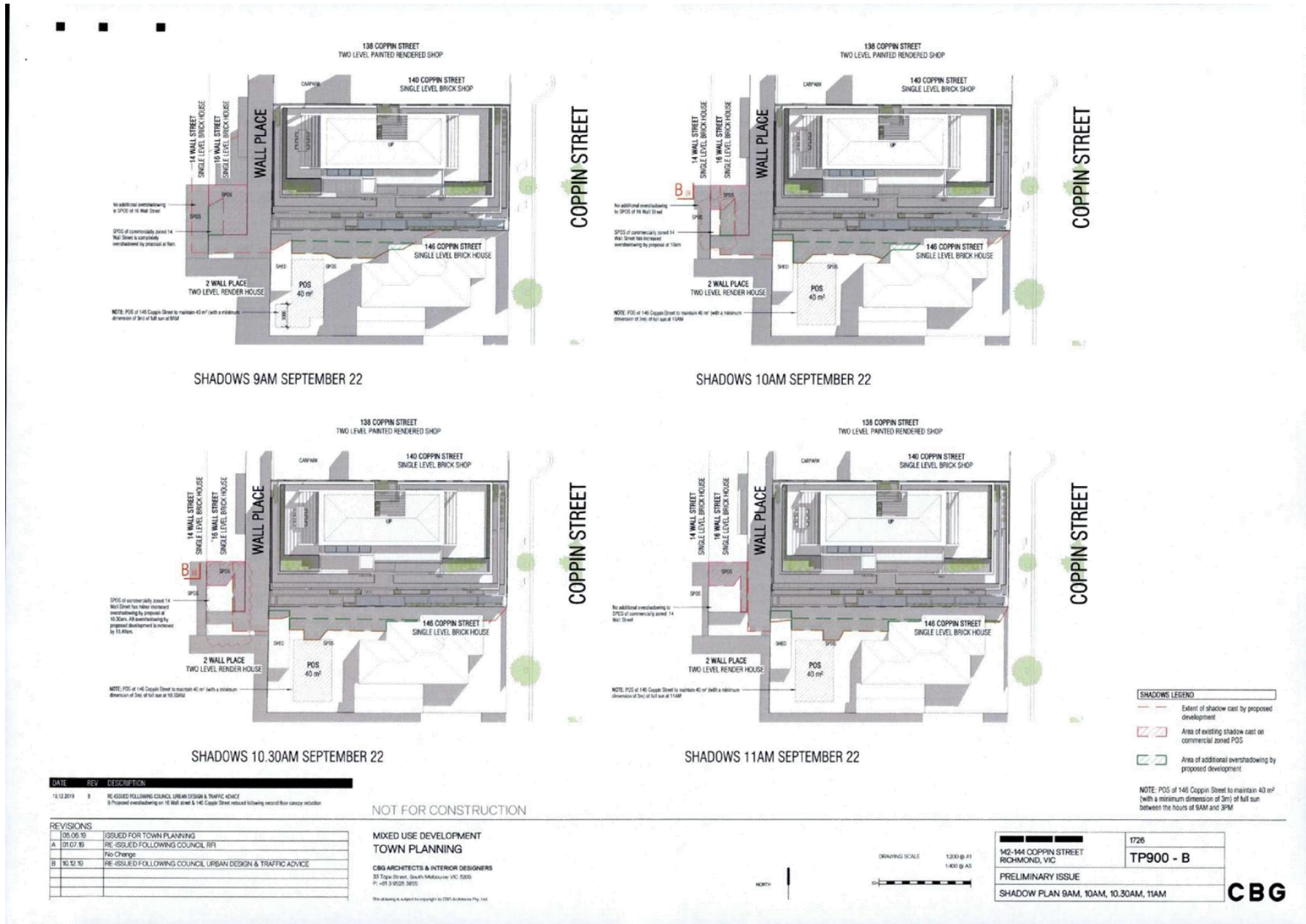
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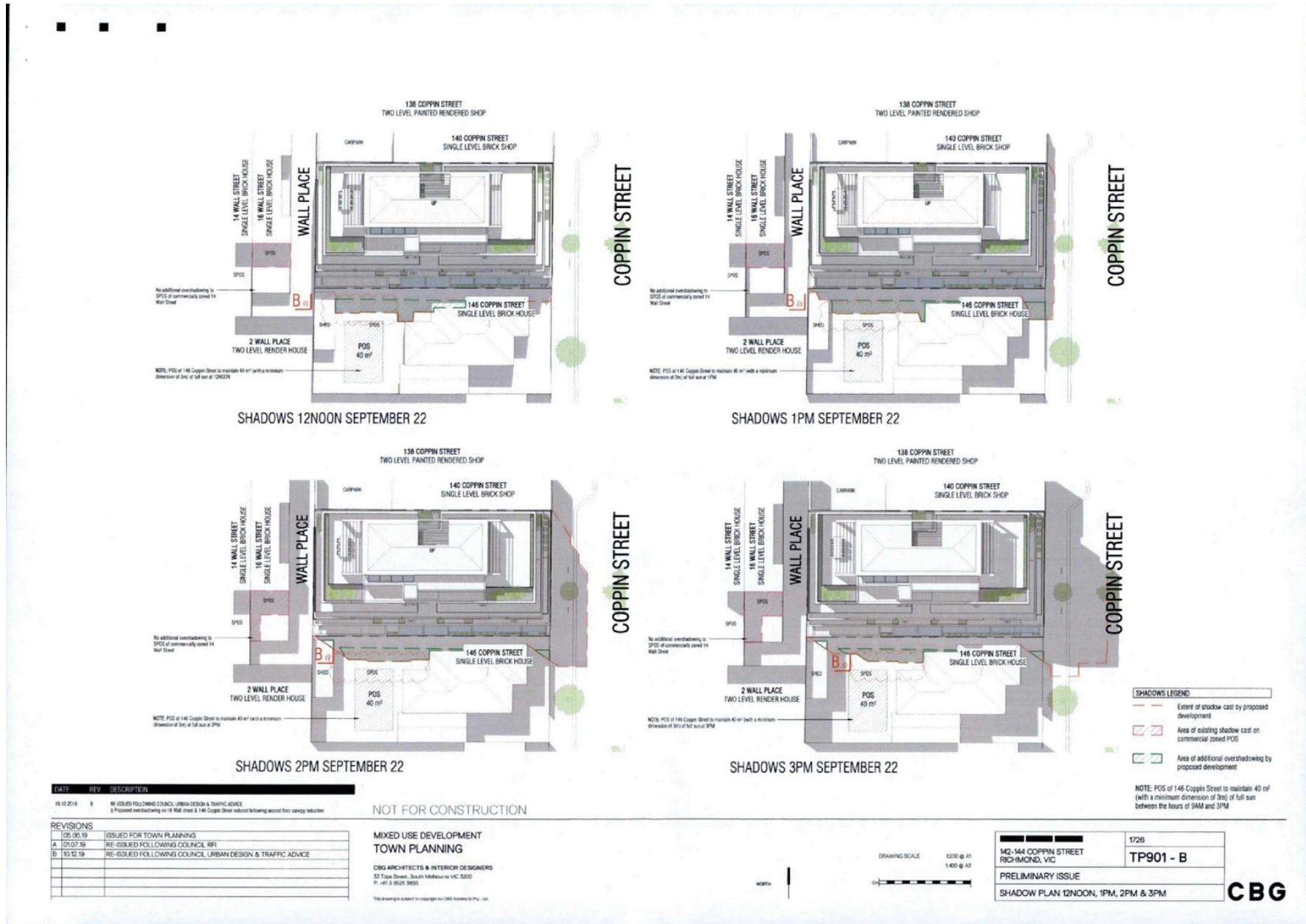
142-144 COPPIN STREET RICHMOND, VIC	1726
TP230 - B	
PRELIMINARY ISSUE	
PART SECTION - NORTH FACING WINDOW	

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Attachment 3 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Plans



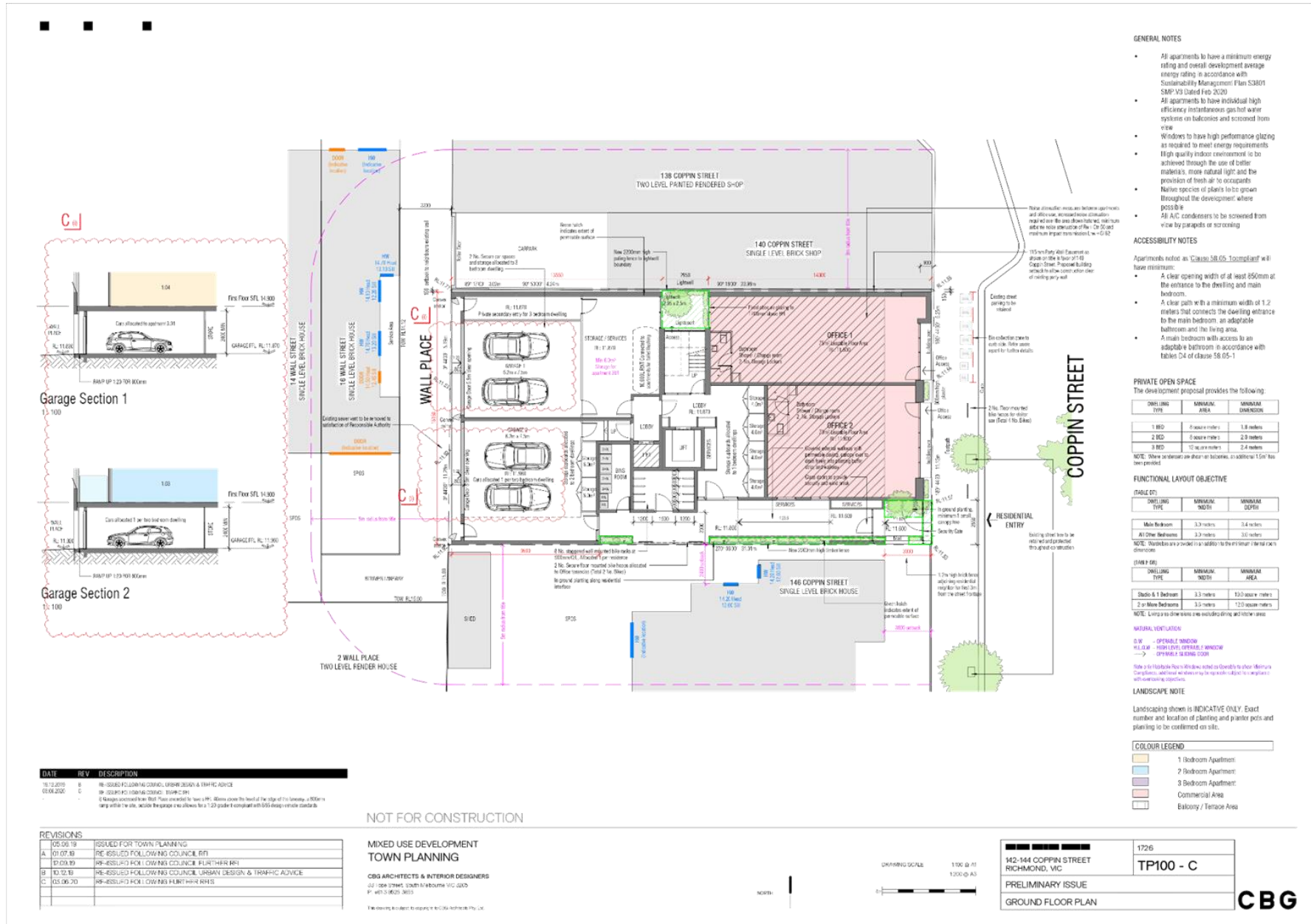
Attachment 3 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Plans



Attachment 3 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Plans



Attachment 4 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Sketch Plan Ground Level (dated 03.06.2020)



Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

**SUSTAINABLE DEVELOPMENT
CONSULTANTS**

CREATE A BETTER PLACE TO LIVE.

142-144 Coppin Street, Richmond
Sustainability Management Plan



SUSTAINABLE DEVELOPMENT
CONSULTANTS

Proposed Mixed Use Development 142-144 Coppin Street, Richmond

Sustainability Management Plan

February 2020

S3801 SMP.V3

PREPARED BY:

Sustainable Development Consultants

2nd Floor, 555 Riversdale Rd.
Camberwell VIC 3124

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Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

SUSTAINABLE DEVELOPMENT CONSULTANTS

Table of Contents

1. Introduction.....	5
1.1 Site and Development Description.....	5
1.2 City of Yarra Requirements	6
1.3 ESD Assessment Tools	8
1.3.1 Built Environment Sustainability Scorecard (BESS)	8
1.3.2 FirstRate5.....	8
1.3.3 Melbourne Water STORM Tool.....	8
2. Sustainability Initiatives.....	9
2.1 Energy Efficiency	9
2.2 Water Efficiency & Stormwater Treatment.....	11
2.3 Indoor Environment Quality	12
2.4 Transport.....	13
2.5 Building Materials	16
2.6 Construction, Building and Waste Management.....	17
2.7 Urban Ecology.....	18
3. Implementation of Initiatives.....	18
Appendix 1 – BESS Assessment.....	20
Appendix 2 – FirstRate5 Sample Energy Rating Results	21
Appendix 3 – STORM Assessment & WSUD Report.....	24
Objectives	24
Stormwater Management Initiatives.....	25
Stormwater Quality Modelling Results.....	27
Stormwater Runoff Treatment during the Construction Stage.....	28
Rainwater Tank/OSD Maintenance.....	30
Pest Control	30
Inspections.....	30
Clean Out Procedures.....	32
Monitoring System	32
Maintenance Summary	33
Guidelines and Further Information	33
Appendix 4 – Indoor Environment Quality Daylight Assessment.....	34
Office areas.....	34
Dwellings.....	35
Design and Performance.....	35
Results.....	35
Appendix 5 – VOC and Formaldehyde Emissions Limits	38

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

SUSTAINABLE DEVELOPMENT CONSULTANTS

Revision	Date of Issue	Description	Author	Approved
V1	30-05-2019	Final for Council Submission	NC	BdW
V2	31-07-2019	Final for Council Submission - updated energy ratings and daylight modelling information	NC	BdW
V3	12-02-2020	Final for Council Submission – updated energy ratings and daylight modelling information	NC	BdW

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

SUSTAINABLE DEVELOPMENT CONSULTANTS

1. Introduction

This Sustainability Management Plan (SMP) has been prepared to assist the design, construction and operation of the proposed mixed-use development (offices and residential apartments) located at 142-144 Coppin Street, Richmond, to achieve a range of best-practice sustainable development objectives.

Sustainable Development Consultants have assessed the proposed development and provided input to the design team. This SMP captures initiatives necessary to ensure that the development meets the sustainability requirements of the City of Yarra, in particular the ESD requirements as set out in Local Planning Policy Clause 22.17 *Environmentally Sustainable Development*, and Clause 53.18 *Stormwater Management in Urban Development* of the Yarra Planning Scheme.

1.1 Site and Development Description

The site is located at 142-144 Coppin Street, Richmond, approximately 3km south-east of the Melbourne CBD. The proposed development consists of four levels comprising eight residential apartments and two offices. The site is located within a well-established inner urban area with convenient access to many services, entertainment options, cultural assets, and the Swan Street major activity centre. There are several train, tram and bus routes within easy walking distance of the site, which will provide good public transport access to other inner suburbs and the Melbourne CBD.

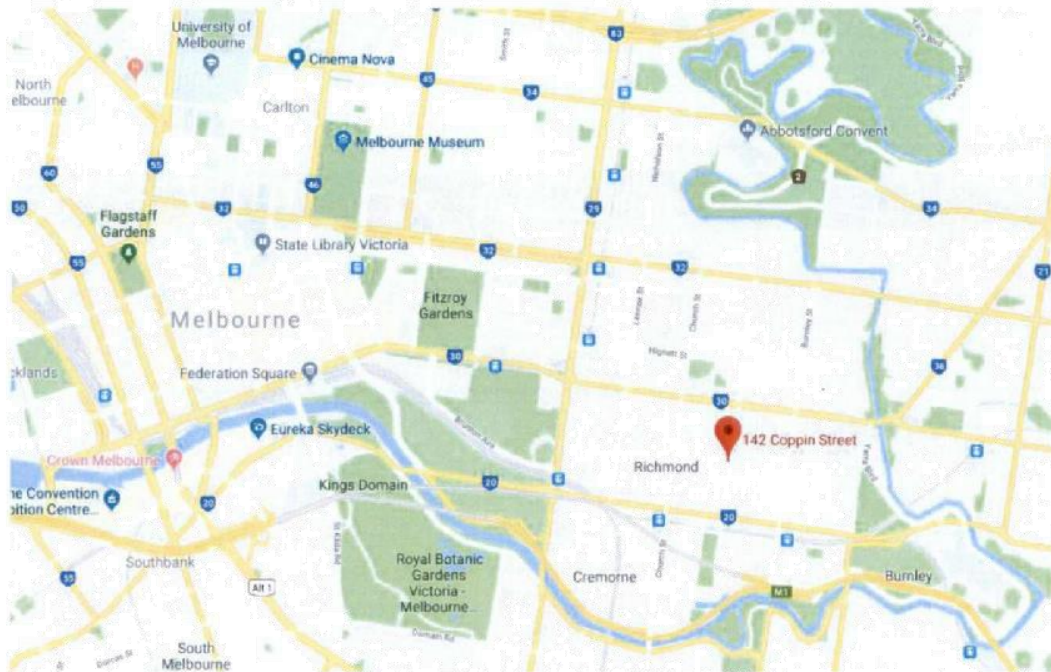


Figure 1: Location of 142-144 Coppin Street, Richmond (Source: Google Maps)

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

SUSTAINABLE DEVELOPMENT CONSULTANTS



Figure 2: Aerial view of site (Source: Nearmap marked by SDC)

The Development Summary is as follows:

Area Type	Inclusions
Total Site Area	512m ²
Ground	Office 1 - 75m ²
	Office 2 - 70m ²
	14 x bicycle parking spaces
	4 x tenant car parking spaces
Level 1	Apartment 101 - 60m ²
	Apartment 102 - 79m ²
	Apartment 103 - 79m ²
	Apartment 104 - 60m ²
Level 2	Apartment 201 - 60m ²
	Apartment 202 - 57m ²
	Apartment 301 (lower level) - 125m ²
Level 3	Apartment 301 (upper level) - 122m ²

This SMP is based on town planning drawings by CBG Architects, Ref No. 1726, Revision B, dated 10.12.19.

1.2 City of Yarra Requirements

The City of Yarra requires proposed developments to include a Sustainability Management Plan (SMP) as part of the town planning application. The SMP will need to establish how the proposed development will address the objectives of Clause 22.17 *Environmentally Sustainable Development* and achieve best-practice standards from

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

SUSTAINABLE DEVELOPMENT CONSULTANTS

the building design stage through to construction and operation. This SMP also addresses Building Materials, Building Management, and Innovation considerations and incorporates initiatives to demonstrate improved stormwater management relative to objectives outlined in Clause 53.18 *Stormwater Management in Urban Development* of the Yarra Planning Scheme.

As per the *Environmentally Sustainable Development Local Planning Policy*, the City of Yarra has identified the following key elements to be addressed as part of Clause 22.17:

- Energy Performance;
- Water Resources;
- Stormwater Management;
- Indoor Environment Quality;
- Construction and Waste Management;
- Transport; and
- Urban Ecology.

Key Council Nominated Objectives from the Environmentally Sustainable Development Policy Clause 22.17 are as follows:

Energy performance:	<ul style="list-style-type: none"> • Improve the efficient use of energy, by ensuring development demonstrates design potential for ESD initiatives at the planning state; • Reduce total operating greenhouse gas emissions; and • Reduce energy peak demand through particular design measures (e.g. appropriate building orientation, shading to glazed surfaces, optimise glazing to exposed surfaces, space allocation for solar panels and external heating and cooling systems).
Water efficiency and stormwater management:	<ul style="list-style-type: none"> • Improve water efficiency; • Reduce total operating potable water use; • Encourage collection and reuse of stormwater; • Achieve best practice stormwater quality outcomes; • Incorporate water sensitive urban design, including stormwater re-use; • Reduce stormwater run-off impacts; and • Improve water quality.
IEQ:	<ul style="list-style-type: none"> • Healthy indoor environmental quality for wellbeing of natural occupants; • Achieve thermal comfort levels with minimised need for mechanical heating, ventilation and cooling; • Reduce indoor air pollutants by encouraging use of materials with low toxic chemicals; and • Minimise noise levels and noise transfer within and between buildings.
Waste Management:	<ul style="list-style-type: none"> • Promote waste avoidance, reuse and recycling during the design, construction and operation stages of development; and • Ensure durability and long-term reusability of building materials.
Transport:	<ul style="list-style-type: none"> • Ensure that the built environment is designed to promote the use of walking, cycling and public transport and minimise car dependency.
Urban Ecology	<ul style="list-style-type: none"> • Protect and enhance biodiversity within the municipality; • Provide environmentally sustainable landscapes and natural habitats, and minimise the urban heat island effect; • Encourage the retention of significant trees; • Encourage the planting of indigenous vegetation; and • Encourage the provision of space for productive gardens.

1.3 ESD Assessment Tools

There are a number of calculators and modelling programs available in Victoria to help assess proposed developments against benchmarks set by the Victorian government, city councils and the Building Code of Australia. Different tools are designed to assess different aspects of the development including:

- Built Environment Sustainability Scorecard (BESS) which covers the overall sustainability of the development;
- FirstRate5, which covers the energy efficiency performance of the building fabric; and
- The Stormwater Treatment Objective – Relative Measure (STORM) calculator, which addresses stormwater quality considerations for the development.

All tools have minimum compliance requirements. FirstRate5 and STORM has requirements that are mandatory for Victoria. The BESS tool is typically used to demonstrate that a development meets sustainability benchmark requirements as part of a planning permit application for the participating council.

1.3.1 BUILT ENVIRONMENT SUSTAINABILITY SCORECARD (BESS)

BESS was developed by the Council Alliance for a Sustainability Built Environment (CASBE). This tool assesses the energy and water efficiency, thermal comfort and overall environmental sustainability performance of new buildings or alterations. It was created to demonstrate that new developments meet sustainability requirements as part of a planning permit application.

A BESS assessment has been conducted for the proposed development. This provides a guide as to the level of sustainability achieved by the proposed development in line with the ESD of the objective.

Each target area within the BESS tool generally receives a score between 1% and 100%. A minimum score of 50% is required for the energy, water, stormwater and IEQ areas. An overall score of 50% for the project represents 'Best Practice' while a score over 70% represents 'Excellence.' Results of the BESS assessment can be found in Appendix 1.

1.3.2 FIRSTRATE5

The energy efficiency of the dwelling's thermal envelope has been assessed using FirstRate5, which is an energy modelling software program to rate dwellings on a 10-Star scale. The tool uses the AccuRate engine (as a nationally recognised energy benchmarking) to rate dwellings based on climate zone, materials used in a structure, positioning, orientation and building sealing. Higher scores are achieved primarily through better material selection, improvements in glazing, and insulation. It is noted that the 2017 BCA (Building Code of Australia) will apply to this development. The development has been modelled to predict the average heating and cooling energy use of the development. The results of the FirstRate5 assessments can be found in Appendix 2.

1.3.3 MELBOURNE WATER STORM TOOL

Melbourne Water has developed the STORM calculator to simplify the analysis of stormwater treatment methods. The calculator is designed for the general public to be able to assess simple Water Sensitive Urban Design (WSUD) measures on their property and has been developed specifically for small developments. The STORM Calculator is able to display the amount of treatment that typical WSUD measures will provide in relation to best practice targets. However, it does not include all of the types of treatment measures available. It has been restricted to rainwater tanks, ponds, wetlands, rain garden trenches, infiltration systems, buffers and swales. The results of the STORM assessment can be found in Appendix 3.

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

SUSTAINABLE DEVELOPMENT CONSULTANTS

2. Sustainability Initiatives

The following sections outline the initiatives which will be included in the development and implemented throughout the design and construction process. Initiatives that go towards meeting BESS include the tool reference associated (e.g. BESS Management 4.1). Some initiatives without the BESS reference have also been included, since they also contribute to the overall sustainability of the development.

These sections, as well as nominating the sustainability initiatives, also identify the party/parties responsible for implementation of the initiative, and the stage at which implementation will be demonstrated. The following are the broad project stages:

1	Design Development	<ul style="list-style-type: none"> Consultants develop conceptual design drawing to a detailed stage suitable as a basis for preparing working drawings - Integration of architectural, services, structure and site attributes Checking compliance with all statutory requirements, codes and standards Arranging special surveys or reports as required
2	Construction Documentation	<ul style="list-style-type: none"> Architectural and services drawing sets completed All specialist reports completed All necessary planning and building consents obtained as required by authorities
3	Construction	<ul style="list-style-type: none"> All work carried out onsite – site preparation, construction, alteration, extension, demolition Purchase of all materials / certification Evidence gathering from subcontractors Commissioning
4	Post Occupancy	<ul style="list-style-type: none"> Operation and Maintenance Education – Building Users Guides

2.1 Energy Efficiency

The proposed development will minimise energy use through efficiently designed building envelopes, and efficient hot water systems, heating & air conditioning and lighting.

Design Requirements	Responsibility & Implementation	Project Stage
Building Envelope (Management 2.2; Energy 1.2)		
The residential dwellings will achieve an average energy rating of 6.6 Stars with no apartment achieving less than 5 stars. Additionally, all apartment samples for the development meet the cooling load requirement of ≤ 30 MJ/m ² (Victorian Planning Provisions, Clause 55.07 Standard B35). These results will be achieved with a choice of appropriate building fabric (e.g. double glazing with energy efficient frames) that are outlined within the preliminary sample energy report provided as Appendix 2. A 10% improvement on heating and cooling consumption in comparison to a reference case defined by the NCC 2016 BCA Section J will be provided for the offices.	Architect	Construction Documentation
Heating and Cooling Systems (BESS Energy 2.1 & 2.3)		
Heating and cooling in the residential dwellings and offices will be provided by energy efficient split system air conditioners (within one-star energy rating of the best available).	Mechanical Engineer	Design Development
Hot Water System (BESS Energy 2.4; BESS Energy 3.2)		
Hot water will be provided via individual instantaneous gas hot water units. The selected systems will be within one-star energy/gas rating of the best available.	Services Consultant	Design Development
Indoor Lighting (BESS Energy 3.5)		

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

SUSTAINABLE DEVELOPMENT CONSULTANTS

Design Requirements	Responsibility & Implementation	Project Stage
<p>Energy consumption from artificial lighting within the development will be reduced by using LED lighting and by optimising the daylight diffusion. A lighting level of 4.0 W/m² will not be exceeded in the dwellings and minimum 20% reduction will be achieved in other areas such as corridors.</p> <p>The office spaces will provide a 20% improvement on the BCA maximums as listed in Table J6.2a of the 2016 BCA.</p>	Electrical Engineer/ Architect	Design Development
External Lighting (BESS Energy 3.3)		
<p>External lighting will be controlled by daylight sensors and-or motion detectors. This will reduce energy consumption by ensuring the lights are only switched on when required.</p>	Electrical Engineer	Design Documentation
Energy Efficient Appliances		
<p>All appliances provided as part of the base building work (e.g. dishwashers) will be selected within one energy efficiency star of the best available.</p>	Developer	Construction Documentation
Lifts		
<p>Lifts will be specified that include:</p> <ul style="list-style-type: none"> • Suspension specifically designed to reduce friction; • Adjustable speed motors; • Gearless or planet drive gears to reduce drive losses; • Measures to specifically reduce stand-by consumption such as: <ul style="list-style-type: none"> ○ Switching off control devices when the lift is not in motion & using more efficient power supply units (e.g. Switched units, transformers); and ○ LED lights and displays. <p>The design places the lift directly opposite stairs in the development, thus making it easier for occupants to have the choice of using the stairs.</p>	Services Consultant	Construction Documentation
Building Sealing		
<p>All windows, doors, and pipe penetrations will be constructed to minimise air leakage as required by the provisions outlined in Section J3 of the 2016 BCA. This will include the use of seals around operable windows and doors as well as caulking to pipe penetrations, and the addition of self-closing louvers or dampers to exhaust fans.</p>	Architect	Design Development
Solar Photovoltaic (PV) System (BESS Energy 4.2)		
<p>The development will include a solar PV system minimum 2kW (8 x 250 watt panels, typically 1.0m x 1.6m each in size) for renewable energy generation. This will offset a portion of greenhouse gas emissions and energy use from central services for the development (lighting, pumps etc.) by producing approximately 2,932kWh of renewable electricity on-site per year¹.</p>	Electrical Engineer	Construction Documentation
Clothes Drying		
<p>A private outdoor clothesline will be provided for each dwelling.</p>	Architect	Construction Documentation

¹ Energy generation estimate based on automated BESS calculations.

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

SUSTAINABLE DEVELOPMENT CONSULTANTS

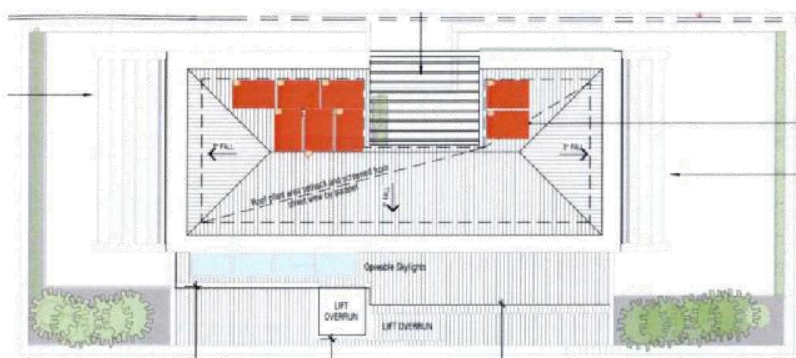


Figure 3: Location of the solar PV on the roof level

2.2 Water Efficiency & Stormwater Treatment

Water will be used efficiently in the development through the installation of efficient fixtures and fittings, and via collection and reuse of rainwater which helps to reduce mains water requirements and divert stormwater from drains during rainfall events.

Design Requirements	Responsibility & Implementation	Project Stage
Fixtures and Fittings (BESS Water 1.1)		
<p>The development will include efficient fittings and fixtures to reduce the volume of mains water used in the development. The following Water Efficiency Labelling Scheme (WELS) star ratings will be specified:</p> <ul style="list-style-type: none"> • Toilets – 4 Star; • Taps (bathroom) – 5 Star; and • Showerheads – 3 Star (>6.0 but ≤7.5L/min); and • Bath – Medium Sized Contemporary 	Architect / Services Consultant	Construction Documentation
Rainwater Collection and Reuse (Water 2.1 & STORM Requirement)		
<p>Runoff from all roof area and Level 3 balcony areas will be stored in a rainwater tank(s) with an effective capacity of 10,000L and will be located in the ground floor storage/services area.</p> <p>The rainwater system will include a Rainceptor (or equivalent device), which will act as a filter to prevent any pollutants entering the tank from the trafficable balcony areas. The stored water will be used for toilet flushing for all toilets. The rainwater tank(s) will help to reduce the mains water demand of the development.</p> <p>For more detail on the WSUD response, refer to Appendix 3.</p>	Services Consultant	Design Development
Water Efficient Appliances (BESS Water)		
<p>All water-using appliances (e.g. dishwasher) provided in the development as part of the base building work will be selected within one WELS rating star of the best available.</p>	Developer	Design Development
Landscape Irrigation (BESS Water 3.1)		
<p>Drought tolerant plants will be preferred for the proposed landscaping/ planting included on site. Native species of plants are to be grown throughout the development where possible. The selected plants should require no irrigation system.</p>	Landscape Architect	Construction Documentation

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

SUSTAINABLE DEVELOPMENT CONSULTANTS

2.3 Indoor Environment Quality

Indoor Environment Quality (IEQ) addresses initiatives which help to create a healthy indoor environment free from toxins with ample supply of daylight and outside air.

Design Requirements	Responsibility & Implementation	Project Stage
Volatile Organic Compounds (VOCs)		
All paints, adhesives and sealants and flooring will not exceed limits outlined in Appendix 5. Alternatively, products will be selected with no VOCs. Paints such as eColour, or equivalent, should be considered.	Architect	Construction Documentation
Formaldehyde Minimisation		
All engineered wood products will have 'low' formaldehyde emissions, certified as E0 or better. Alternatively, products will be specified with no formaldehyde. Emissions limits are listed in Appendix 5. Products such as Ecological Panel – 100% post-consumer recycled wood (or similar) will be considered for use within the development.	Architect	Construction Documentation
Commercial Premises Ventilation		
Standard natural or mechanically ventilation with air flow rates exceeding AS1668.1 requirements by at least 50% will be provided in the office tenancies.	Services Consultant	Construction Documentation
Artificial Lighting Level		
An illuminance of 300 lux (min.) will be provided for task areas to ensure that there is adequate light to carry out tasks in these areas.	Electrical Engineer	Construction Documentation
Daylight Access and Improvement (BESS IEQ 1.1, 1.2, 1.3, 1.4, 1.5)		
Ample daylight will be provided to the office spaces via large windows to the eastern aspect of the building. Using the Green Star daylight hand calculation method, it has been demonstrated that 42% of primary office spaces achieve a daylight factor of 2% or greater. For dwellings it has been shown that: <ul style="list-style-type: none"> • 100% living areas achieve a daylight factor greater than 1%; • 82% bedrooms achieve a daylight factor greater than 0.5%; and • At least 70% of dwellings receive at least 3 hours of direct sunlight in all living areas between 9am and 3pm in mid-winter. Additionally, to supplement daylight penetration through windows/openings, light internal colours will be used to allow for a better internal reflection of daylight. Please refer to Appendix 4 for further details.	Architect	Construction Documentation
Effective Natural Ventilation (BESS IEQ 2.1)		
All dwellings will have access to natural ventilation through the provision of operable windows. Refer Figure 4 for example breeze paths. Fly screens, window locks, and magnetic door catches will be included in breeze paths (to prevent openings slamming shut) to further encourage natural ventilation in the dwellings.	Architect	Construction Documentation
Acoustic Comfort		
Acoustic comfort will be achieved in the building by limiting the internal ambient noise levels. Acoustic insulation will be installed as required by the BCA. Noise from mechanical services will be kept to a minimum using good quality, quiet air conditioners and fans.	Acoustic/Mechanical Engineer	Construction Documentation
Mechanical Exhaust		

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

SUSTAINABLE DEVELOPMENT CONSULTANTS

Design Requirements	Responsibility & Implementation	Project Stage
All kitchens and bathrooms will have a separate dedicated exhaust fan which will not be recycled to any enclosed space within the building.	Mechanical Engineer	Construction Documentation



Figure 4: Example breeze paths

2.4 Transport

The development is close to a variety of commercial and retail businesses which will provide occupants with access to a number of cafes, grocery stores, restaurants and community facilities. In addition, there is convenient access to a variety of train and bus routes which enable commuting without requiring a car.

Design Requirements	Responsibility & Implementation	Project Stage
Cycling Facilities (BESS Transport 1.1) Eight staggered wall mounted bicycle racks will be provided in a secure storage space on the ground level for residents, one for each dwelling, accessible from the external entrance walkway. Two secure floor mounted bicycle hoops will be provided for office tenancies allowing for the storage of two bicycles, located in the external entrance walkway. End of trip facilities in offices include the provision of one shower and changing facilities, and two storage lockers, in each office. Two secure floor mounted bicycle hoops will be provided for residential and non-residential visitor use allowing for the storage of four bikes, located on the Coppin Street footpath.	Architect	Design Development

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

SUSTAINABLE DEVELOPMENT CONSULTANTS

Design Requirements	Responsibility & Implementation	Project Stage
Car Parking		
Four car parking spaces will be provided for residents in a secure garage accessible from the rear of the development via Wall Place.	Architect	Design Development
Public Transport		
The site is located close to Swan Street and within a 1km walking distance of numerous public transport options, including:		
Train Lines (from Richmond & East Richmond Stations) <ul style="list-style-type: none"> - Alamein - Belgrave - Cranbourne - Frankston - Glen Waverley - Lilydale - Pakenham - Sandringham 		
Tram Routes <ul style="list-style-type: none"> - 48: North Balwyn – Victoria Harbour Docklands - 70: Waterfront City Docklands – Wattle Park - 75: Vermont South – Etihad Stadium Docklands - 78: Balaclava – North Richmond 		
Bus Routes <ul style="list-style-type: none"> - 246: Elsternwick – Clifton Hill - 605: Flagstaff Station – Gardenvale - 969: City - Ringwood 		
	Inherent in Location	

Residents and office staff will be able to access many daily needs on foot or by bicycle instead of requiring a car. One of the tools used to assess the amenities available around a development is Walk Score. This tool identifies walkable neighbourhoods - neighbourhoods which encourage occupants to live and shop locally. High scores are up to 100 points, while an average score is around 50. The proposed site at 142-144 Coppin Street, Richmond achieves a Walk Score of 94 points (deemed a "Walker's Paradise") due to the site's proximity to a large number of services and amenities. Daily errands will not require a car.

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

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142 Coppin Street

Richmond, Melbourne, 3121

Commute to **Downtown Melbourne**

8 min 24 min 19 min 54 min View Routes

Favorite

Map

Nearby Apartments

Walk Score
94

Walker's Paradise

Daily errands do not require a car.

Transit Score
86

Excellent Transit

Transit is convenient for most trips.

About your score

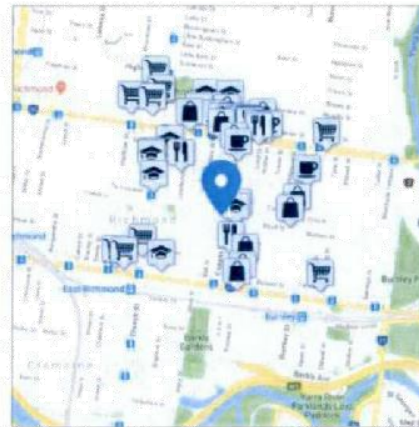
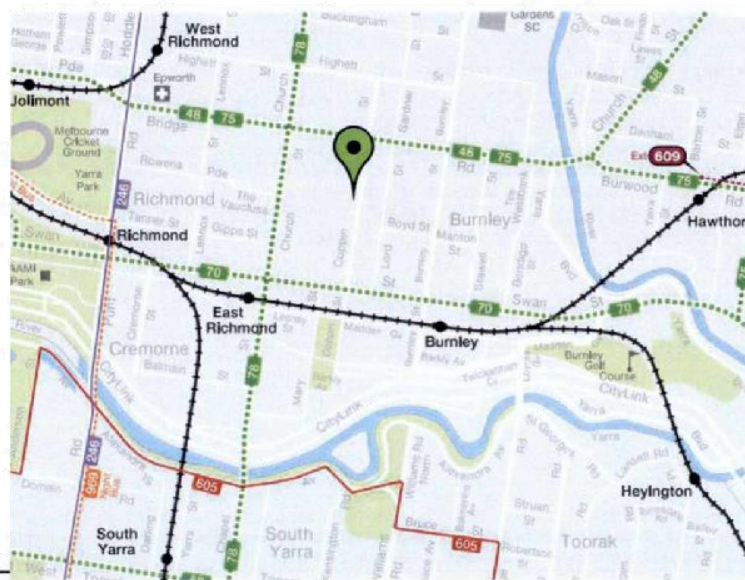


Figure 5: Walk Score result for the project site (Source: www.walkscore.com)



142-144 COPPIN STREET, RICHMOND | S3801 | SMP.V3

PG. 15

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

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Figure 6. PTV Local Area Map indicating the public transport options surrounding 142-144 Coppin Street, Richmond (green balloon)

2.5 Building Materials

Materials initiatives help to reduce the use of virgin materials, reduce waste, and promote the use of materials with lower embodied energy and environmental impacts generally.

Design Requirements	Responsibility & Implementation	Project Stage
Timber All timber used in the development will be Forest Stewardship Council (FSC) or Program for the Endorsement of Forest Certification (PEFC) certified or recycled / reused.	Architect	Construction Documentation
Steel Unless prevented by structural engineering considerations or product unavailability, steel for the development will be sourced from a Responsible Steel Maker ² .	Builder / Structural Engineer	Construction Documentation
PVC All standard uses of cables, pipes, flooring and blinds within the development will either not contain any PVC or will be sourced from an ISO 14001 (Environmental Management System) certified supplier.	Architect	Construction Documentation
Flooring All flooring will be selected from products/materials certified under any of the following: <ul style="list-style-type: none"> • Carpet Institute of Australia Limited, Environmental Certification Scheme (ECS) v1.2; • Ecospecifier GreenTag GreenRate v3.2; • Good Environmental Choice (GECA); and/or • The Institute for Market Transformation to Sustainability (MTS) Sustainable Materials Rating Technology Standard Version 4.0 – SmaRT 4.0. Alternatively, flooring coverings must be durable, include some eco-preferred content, be modular and/or come from a manufacturer with a product stewardship program and ISO 14001 certification.	Architect	Construction Documentation
Insulation Recycled Content Any bulk insulation specified and installed in the development will have a minimum 20% post-consumer recycled material content.	Architect	Construction Documentation

² A Responsible Steel Maker must have facilities with a currently valid and certified ISO 14001 Environmental Management System (EMS) in place and be a member of the World Steel Association's (WSA) Climate Action Program (CAP).

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

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Figure 7: Examples of approved environmental labels for products which may be incorporated for the development

2.6 Construction, Building and Waste Management

Design Requirements	Responsibility & Implementation	Project Stage
Construction Waste Management Plan		
<p>The builder will develop a construction waste management plan for the pre-construction, infrastructure service works and construction phases. This will include the following:</p> <ul style="list-style-type: none"> • Waste generation; • Any waste systems; • Minimisation Strategy; • Performance / Reduction targets; • Bin quantity and size; • Collection frequency; • Waste contractors; • Signage; and • Monitoring and reporting including frequency and method. <p>The development will target 80% of all demolition, land clearing, infrastructure works and built form construction waste to be re-used or recycled.</p> <p>The waste management plan will require that all hazardous substances, pollutants and contaminants must be managed and disposed of in accordance with all state regulatory requirements. Where these materials are treated or used on site, they must be in accordance with a sanctioned remediation process.</p>	Builder	Construction Documentation
Metering and Monitoring (BESS Management 3.1, 3.2, 3.3)		
<p>Separate utility meters (electricity, water and gas) will be provided for all dwellings and office spaces, which will allow occupants to monitor and reduce their consumption.</p> <p>Separate utility meters will also be provided for all central services (such as residential lobby and lift).</p>	Services Consultant	Construction Documentation
Building Users' Guide (BUG) (BESS Management 4.1)		
<p>A BUG will be developed for residents and office tenants, building facilities management and the building owner. The BUG will be comprehensive and will include descriptions of the systems installed in the building, and sustainable transport in the area.</p>	Owner/ Building Facilities Manager	Design Development
Operational Waste Management & Storage (BESS Waste 2.2)		

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

SUSTAINABLE DEVELOPMENT CONSULTANTS

Design Requirements	Responsibility & Implementation	Project Stage
<p>The development will contain a central bin storage area on the ground floor for residents, accessible via the southern external walkway. The area will be sufficiently sized for both waste and recycling.</p> <p>General waste and the recycling bins will be located adjacent to each other, so that it is equally convenient to access each type of bin. Labelling and colour coordination will be used to clearly distinguish the two types of bins.</p>	Architect	Design Development

2.7 Urban Ecology

Design Requirements	Responsibility & Implementation	Project Stage
Vegetation (BESS Urban Ecology 2.1)		
Approximately 10% of the site will comprise vegetation, through a combination of permeable ground floor landscaped areas and upper storey landscaping on balconies and terraces. This will enhance the urban ecology of the site.	Landscape Planner	Design Development
Private Open Space (BESS Urban Ecology 2.4)		
A tap and floor waste will be provided for each primary outdoor space to allow occupants to more easily water plants and thus encourage urban landscaping around the development.	Architect/ Landscape Architect	Design Development
Refrigerant ODP		
All HVAC refrigerants used in the development will be selected to have an Ozone Depletion Potential (ODP) of zero.	Services Consultant	Construction Documentation
Insulation Ozone Depleting Potential		
All thermal insulation used in the development will not contain any ozone-depleting substances and will not use any in its manufacturing.	Architect	Design Development

3. Implementation of Initiatives

The proposed development will meet best practice sustainability requirements through a number of initiatives such as an optimised thermal envelope, a solar PV system, and the specification of environmentally preferred materials.

The initiatives that have been included within this SMP are all have a proven track record to serve their individual purpose and can be easily maintained with any failures obvious to the occupants of the development. This helps to ensure the ongoing sustainability of the development as the systems installed in the beginning are maintained for purpose throughout the life of the office tenancies.

The provisions, recommendations and requirements of this endorsed SMP must be implemented and complied with to the satisfaction of the Responsible Authority. With appropriate implementation, management, monitoring

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

SUSTAINABLE DEVELOPMENT CONSULTANTS

and maintenance the initiatives outlined within this SMP will serve to provide the building tenants with lower running costs, as well as benefit the environment.

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

SUSTAINABLE DEVELOPMENT CONSULTANTS

Appendix 1 – BESS Assessment

142-144 Coppin St, Richmond 3121 Richmond

Site area: 512 m² · Building Floor Area: 787 m²

Date of Assessment: 11 Feb 2020 · Version: V3, 1.6.1-B.260

Applicant: nick@sdconsultants.com.au

Project Identifier

348AEC52

(Previously #32795)

Published

<http://bess.net.au/projects/348AEC52-V1>

Your BESS score is

+ 60%



0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

50% +

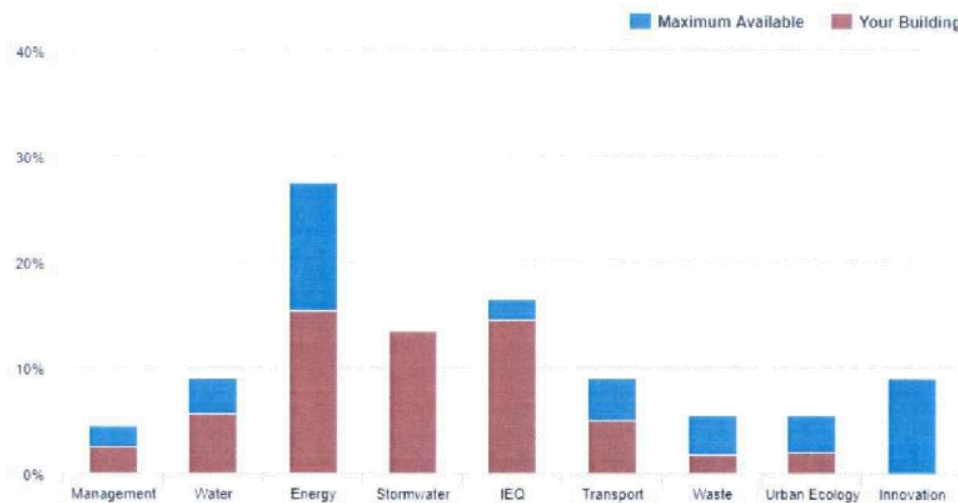
Best Practice

70% +

Excellence

% of Total	Category	Score	Pass
3 %	Management	56 %	
6 %	Water	62 %	✓
15 %	Energy	56 %	✓
14 %	Stormwater	100 %	✓
15 %	IEQ	88 %	✓
5 %	Transport	55 %	
2 %	Waste	33 %	
2 %	Urban Ecology	36 %	
0 %	Innovation	0 %	

How did this Development Perform in each Environmental Category?



142-144 COPPIN STREET, RICHMOND | S3801 | SMP.V3

PG. 20

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

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Appendix 2 – FirstRate5 Sample Energy Rating Results

The FirstRate5 energy rating program is the primary modelling method used in Victoria to indicate the required energy for heating and cooling based on the building's thermal envelope. It does not take into account any heating or cooling systems installed; it only assesses walls, roof and floor materials; levels of insulation, building orientation, glazing and the area layout. The 142-144 Coppin Street, Richmond development is located in Climate Zone 21 (Melbourne) and is required by the BCA to achieve an average energy rating of at least 6.0 stars (114MJ/m²) for the overall development, with each dwelling achieving a minimum energy rating of at least 5.0 stars (149MJ/m²).

Table 1: The following are the scores achieved by the sample dwellings assessed for the development

Dwelling	Star Rating	Energy Use (MJ/m ²)	Heating Energy (MJ/m ²)	Cooling Energy (MJ/m ²)	Net Conditioned Floor Area (m ²)
102	7.3	73.7	60.1	13.6	71.3
103	6.7	91.5	75.9	15.6	69.9
104	6.6	94.1	79.3	14.8	53.3
202	6.3	104.4	82.2	22.2	50.8
301	6.7	92.6	64.7	27.9	230.2

Table 2: Justification of thermally similar dwellings

Dwelling	Thermally Similar Dwelling	Justification	Star Rating
102	-	Thermally unique	7.3
103	-	Thermally unique	6.7
104	101 & 201	Similar layout, orientation and exposed sides	6.6
202	-	Thermally unique	6.3
301	-	Thermally unique	6.7
Average			6.6

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

SUSTAINABLE DEVELOPMENT CONSULTANTS

The sample ratings have been completed with the following inputs:

Building Element	Description
External Walls	<p>External walls were modelled as a mix of brick veneer and concrete based on elevations.</p> <p>All external wall types will require additional <u>R2.5</u> insulation to be added.</p> <p>Some options include:</p> <ul style="list-style-type: none"> • CSR Bradford Gold Wall Batts (R2.5) • Knauf Earthwool External Wall Batts HD (R2.5) <p>Insulation material with minimum 20% recycled material content will be selected.</p>
Party Walls	<p>Party walls separating neighbouring dwellings are assumed as double stud walls with total <u>R2.0</u> insulation added to both studs.</p> <p>Party walls separating a dwelling from a lift shaft, or communal hallway or stairwell, are assumed to have total <u>R2.0</u>.</p>
Internal Walls	Internal walls within a dwelling do not require insulation.
Floor	<p>Floors on grade are assumed as concrete slab and do not require additional insulation to be added beneath the slab. Floors between levels are assumed as suspended concrete slab with air gap and plasterboard with no additional insulation.</p> <p>Floors exposed to outside (overhangs or over garage) will require <u>R2.5</u> insulation.</p>
Floor Coverings	Floor coverings are assumed as carpets in bedrooms, floating timber in living/kitchen, living, corridors and stairs, and tiles in bathrooms and laundry rooms.
Roof Insulation	<p>The top-level roof has been modelled as flat metal deck and will require a minimum <u>R5.0</u> insulation and antiglare foil to be added within the ceiling space.</p> <p>The sections of lower level ceiling/roof which are exposed to open air above will require a minimum <u>R2.5</u> insulation provided within the ceiling/roof space.</p>
Windows and Glazing	<p><u>Apartments 101, 102, 103, 104 & 201:</u></p> <p>All glazing must achieve the following window system specifications (glass and frame combined):</p> <ul style="list-style-type: none"> • U value = 4.1, SHGC = 0.47 (awning) • U value = 4.1, SHGC = 0.52 (fixed and sliding) <p>These values are typically found in double glazed argon-filled clear low-e windows with aluminium frames. Other glass/frame systems may be used provided they meet the thermal performance values outlined above.</p> <p><u>Apartment 202 & 301:</u></p> <p>All glazing must achieve the following window system specifications (glass and frame combined):</p> <ul style="list-style-type: none"> • U value = 2.4, SHGC = 0.4 (sliding) • U value = 2.0, SHGC = 0.55 (fixed) • U value = 2.7, SHGC = 0.42 (hinged) <p>These values are typically found in Capral Futureline double glazed argon-filled clear low-e windows with thermally broken aluminium frames. Other glass/frame systems may be used provided they meet the thermal performance values outlined above.</p>
External blinds to windows	<p><u>Apartment 202:</u></p> <p>External adjustable awning on east facing glazing.</p>

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

SUSTAINABLE DEVELOPMENT CONSULTANTS

Building Element	Description
	Apartment 301: External adjustable awnings on all west facing bedroom glazing, and top floor east and west facing sliding door glazing.
External shading	Apartment 301: North, east and west pergola shading on top floor will be adjustable, allowing 100% shading in summer and 50% shading in winter.
Ceiling fans	Apartment 202: One ceiling fan in the Kitchen/Living area. Apartment 301: One ceiling fan per bedroom, and three in the top floor Kitchen/Living area.
Building Sealing	All doors, windows, exhaust fans and openings will be sealed so as to not allow for air infiltration into the dwelling. Exhaust fans have been assumed in all kitchens and bathrooms and must include a self-closing louvre or damper which seal shut when not in use.
Downlights	All recessed down light fittings that have openings allowing air to pass through to a ceiling cavity (e.g. adjustable down lights) shall be fitted with a cover that allows for ceiling insulation to closely enclose the sides and top of the down light.

Note: The above building elements may vary as the plans are refined for building approval, however the development will maintain a minimum average energy rating of 6.6 Stars.

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

SUSTAINABLE DEVELOPMENT CONSULTANTS

Appendix 3 – STORM Assessment & WSUD Report

Objectives

The quality and quantity of stormwater leaving a site can have a significant impact on the surrounding infrastructure and waterways. Impervious surfaces move water quickly and efficiently out of built up areas straight into stormwater infrastructure, which in turn quickly moves the untreated water into natural watercourses. This process does not treat the stormwater and as the water flows into natural water courses, it causes erosion and pollution of those waterways with the rubbish, sediments, pathogens, and other pollutants off the impervious surfaces into the stormwater drains.

The City of Yarra recognises the importance of stormwater management and the effects on the surrounding environment as required by Clause 53.18. Part of this SMP includes addressing how the proposed development responds to the principles and requirements of Water Sensitive Urban Design (WSUD). The main objectives for WSUD are:

- To achieve the best practice water quality performance objectives as set out in the Urban Stormwater Best Practice Environmental Management Guidelines, Victoria Stormwater Committee 1999 (as amended). Currently, these water quality performance objectives are:
 - Suspended Solids - 80% retention of typical urban annual load;
 - Total Nitrogen - 45% retention of typical urban annual load;
 - Total Phosphorus - 45% retention of typical urban annual load; and
 - Litter - 70% reduction of typical urban annual load.
- To promote the use of water sensitive urban design, including stormwater re-use.
- To mitigate the detrimental effect of development on downstream waterways, by the application of best practice stormwater management through water sensitive urban design for new developments.
- To minimise peak stormwater flows and stormwater pollutants to improve the health of water bodies, including creeks, rivers and bays.
- To reintegrate urban water into the landscape to facilitate a range of benefits including microclimate cooling, local habitat and provision of attractive spaces for community use and wellbeing.

New developments must also incorporate treatment measures that improve the quality of water and reduce flow of water discharged into waterways (such as collection and use of rainwater/stormwater on site) and encourage the use of measures to prevent litter being carried off-site in stormwater flows. The proposed development has addressed these requirements by identifying the impervious surfaces within the site and implementing treatments to mitigate the impacts of stormwater leaving the site. To assess these initiatives, the STORM tool – which is an industry accepted tool – was used to determine the treatment effectiveness of these initiatives.




Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

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Stormwater Management Initiatives

Stormwater treatment initiatives will need to be implemented. The following section presents the different surfaces that have been identified for treatment, and the required treatment. The initiatives to manage stormwater flows for the building area will underpin the overall performance of the building and its ability to meet stormwater management objectives. Refer Figure 8 and Figure 9 for site catchment delineation.

Table 3: List of areas and stormwater treatment measures

Surfaces	Marking	Topographic Area (m ²)	Required Treatment
Roof Catchment Area		189	Runoff from the non-trafficable roof areas and third floor balcony areas will be diverted to rainwater tank(s) with an effective storage capacity of at least 10,000L. It will include a Rainceptor (or equivalent), which will act as a filter to prevent any pollutants entering the tank from the trafficable balcony areas. Collected rainwater will be used for all toilet flushing in the development. Any overflow from the tank(s) or runoff from the remaining impervious areas will be diverted to the legal point of discharge (LPD).
Balcony Catchment Area		108	
Remaining impervious Area		202	Runoff from remaining impervious areas will be diverted directly to the Legal Point of Discharge (LPD) onsite.
Permeable		13	Ground floor landscaped area unobstructed by upper levels assumed to be 100% permeable, therefore requires no further treatment.

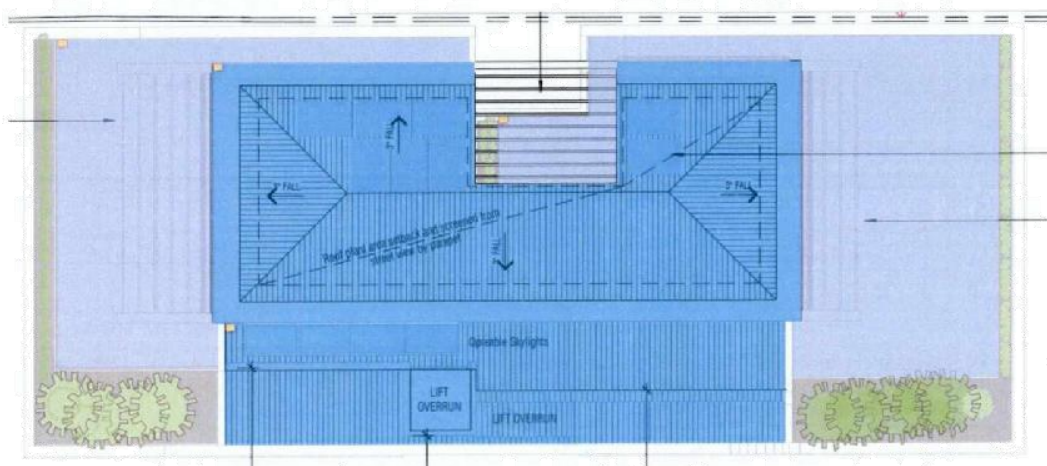


Figure 8: Site catchment delineation (roof and third floor balconies)

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

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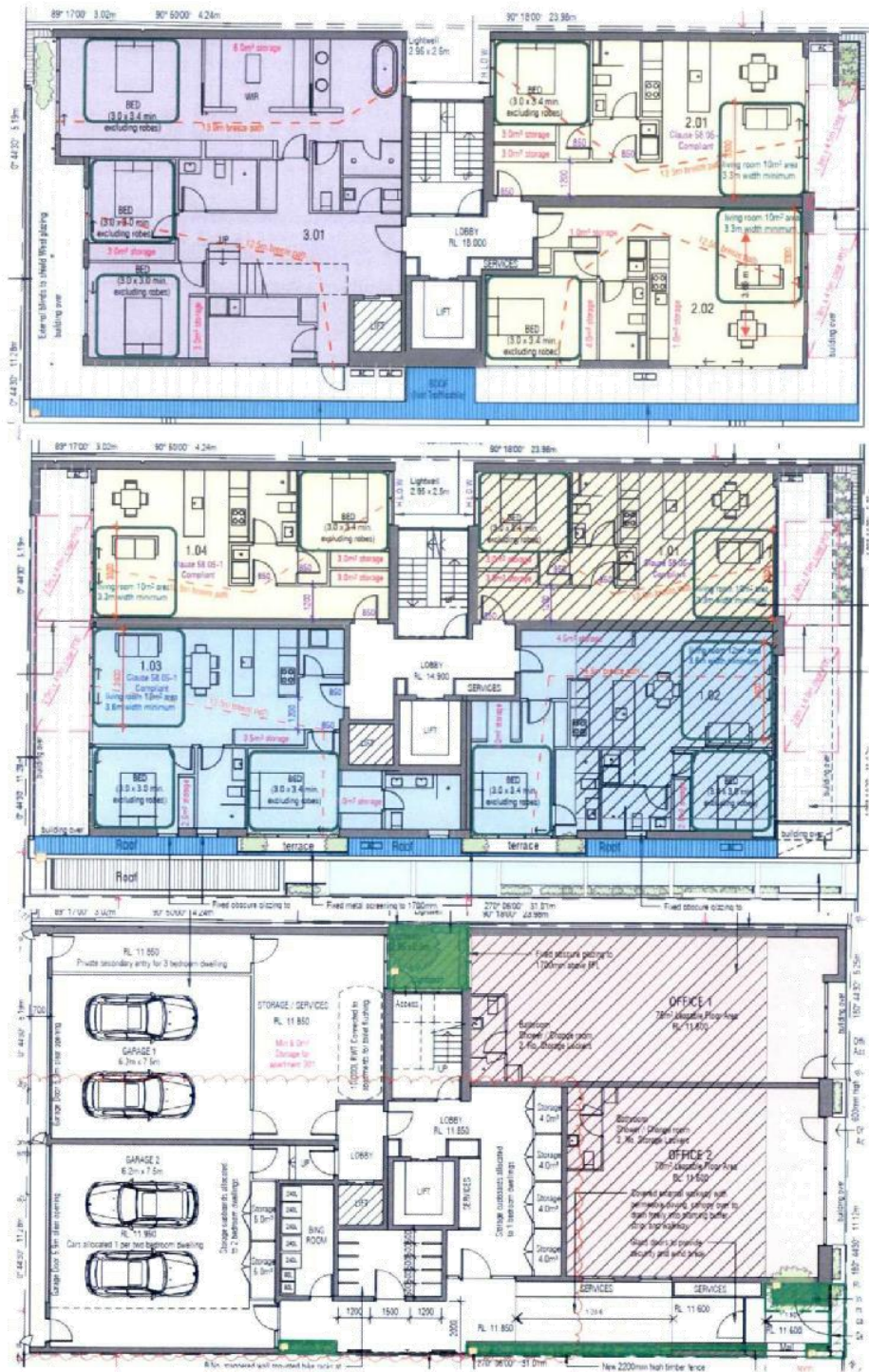


Figure 9: Site catchment delineation (lower level roof catchment and ground level permeable area)

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

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Stormwater Quality Modelling Results

The impervious surfaces and recommended treatments have been applied to the STORM tool and as a result, the proposed development has achieved a score of 101%. With the proposed stormwater treatment measures incorporated into the development at 142-144 Coppin Street, Richmond, the design will meet the minimum performance standards required by the City of Yarra.

Note that 20 occupants have been selected for the assessment based on 11 bedrooms in residential dwellings in addition to an assumption of 4 employees for each office space.



STORM Rating Report

TransactionID: 910445
 Municipality: YARRA
 Rainfall Station: YARRA
 Address: 142-144 Coppin Street

3121
 VIC VIC
 Assessor: SDC
 Development Type: Residential - Mixed Use
 Allotment Site (m2): 512.00
 STORM Rating %: 101

Description	Impervious Area (m2)	Treatment Type	Treatment Area/Volume (m2 or L)	Occupants / Number Of Bedrooms	Treatment %	Tank Water Supply Reliability (%)
Roof & 3F balconies	297.00	Rainwater Tank	10,000.00	20	170.00	82.00
Remaining impervious	202.00	None	0.00	0	0.00	0.00

Figure 10: STORM Assessment

Stormwater Runoff Treatment during the Construction Stage

Treatment – Various

Stormwater management in the construction stage will include measures which will be put in place to minimise the likelihood of contaminating stormwater discharge from the site as well as reduce the velocity of the flows generated from the building as it is being constructed. This will mean ensuring buffer strips are in place, and the site will be kept clean from any loose rubbish. More information is available from *"Keeping Our Stormwater Clean – A Builder's Guide"* by Melbourne Water³. The diagram below is an illustration of the various objectives which assist in minimising the impacts of stormwater runoff typical during the construction phase. Typical pollutants that are generated from a construction site during a rainfall event include:

- Dust
- Silt
- Mud
- Gravel
- Stockpiled materials
- Spills/oils
- Debris/litter

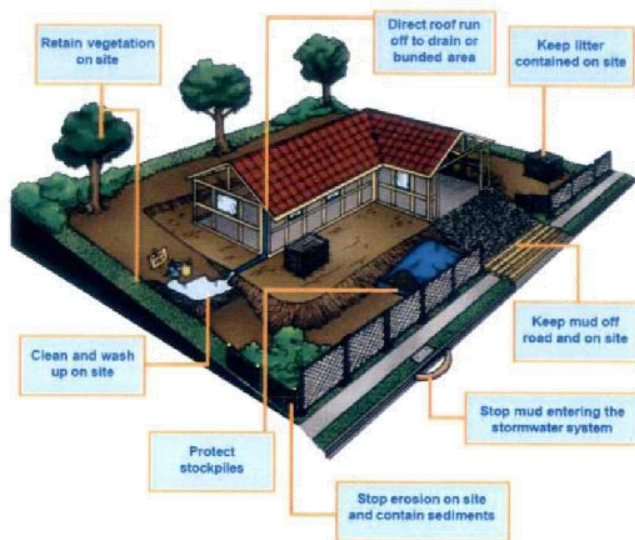


Figure 11: Stormwater will be effectively managed during construction phase according to the requirements listed in *"Keeping Our Stormwater Clean – A Builder's Guide"*.

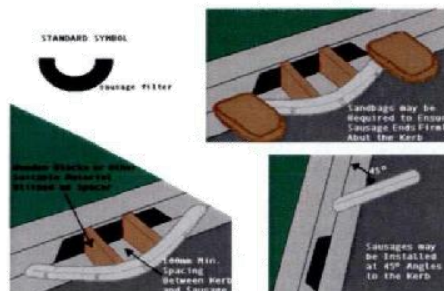
To reduce the impacts and minimise the generation of these pollutants the following measures are proposed. The symbols embedded within each image are typically used for Construction Environmental Management Plans.

³ For copies please contact Melbourne Water on 131 722.

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

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Gravel Sausage filters – to be placed at the entrance of pits/side stormwater inlets. These permeable sacks will filter the suspended soils and sediments and any other litter carried by the stormwater to prevent the pollutants entering the system.



Silt Fences Under Grates - Silt fence material may be placed under the grate of surface-entry inlets to prevent sediment from entering the stormwater system.



Temporary Rumble Grids – these are designed to open the tread on tires and vibrate mud and dirt off the vehicle (in particular the chassis). This will heavily minimise the amount of soil/dirt deposited on local roads where it can be washed (by rainfall or other means) into the stormwater drains.



Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

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Rainwater Tank/OSD Maintenance

PEST CONTROL

The rainwater harvesting and detention systems will be installed with a mesh insect cover over the inlet pipe to ensure the tanks do not become a breeding ground for pests. Mesh needs to be installed over overflow pipes. If an access opening is present, it needs to be properly sealed. The tanks should be washed or flushed out prior to use. All inlets and outlets should be correctly sealed to prevent insects entering. Connection to the toilets in the building should be tested (e.g. dye test or equivalent).

INSPECTIONS

Inspections of roof areas and gutters leading to the tanks should take place every 6 months. Rainwater in the tanks should be checked every 6 months for mosquito infestation. The rainwater tanks should be examined annually for sediment build up. The following tips for inspection have been sourced from City of Port Phillip's "Maintenance Manual - Rainwater Tanks⁴."

Leaf litter/debris in gutters

Inspect the gutters for presence of litter/debris.

Blocked downpipe

Check if water is spilling from the edge of the gutters and ensure that the downpipes are not blocked.

First flush diverter clogging

To ensure the diverters function properly, clean out by unscrewing the cap at the base of the diverters and remove the filter. Wash the filter with clean water as well as the flow restrictor inside the cap.

Debris on the mesh cover over inlets/outlets

Ensure that the mesh cover over inlets and outlets are clean of leaves and debris.

Dirt and debris around the tank base or side

Keep leaf build-up, sticks, and other items off the lid of the rainwater tanks and ensure there is no debris on the base, bottom lip and walls of the tanks.

Stagnant water or mosquitos

Ensure that the harvested rainwater does not smell. Check for signs of mosquito infestation.

Pump condition

Ensure the pumps are operating regularly by monitoring the sound. Check that pumps are kept clear of surface water (flooding), vegetation, and have adequate ventilation.

Mains backup or pump operation

If the mains backup switching device fails, it may not be noticed for a long time. Consider a manual operating system to ensure continuous operation.

Overflow

Check that the overflow is not blocked and that there is a clear path for water to safely spill from the tank through the overflow pipe when full. Check that a clean mesh screen is safely in place to prevent mosquitoes entering the tank.

Sediment/debris build-up in tank (more than 20mm)

Inspect the sludge build-up in the bottom of the tank and ensure that it is no more than 20mm thick. When the sludge builds up to be more than 20mm, the rainwater tank can be emptied and washed with a high-pressure washer or hose.

⁴ From the City of Port Phillip website: www.portphillip.vic.gov.au/Maintenance_Manual_Rainwater_Tank.pdf

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

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Base area

Tanks must be fully supported by a flat and level base. Check for any movement, cracks or damage to the slab or pavers. If damage is observed, empty the tank and have the fault corrected to prevent further damage.

Monitoring the water level

Ensure the monitoring system (be it digital or a simple float system) is functioning properly by checking the water level in the rainwater tanks.

Rainwater Tank Maintenance

The following diagram identifies the key items which are important for rainwater tanks and their maintenance.

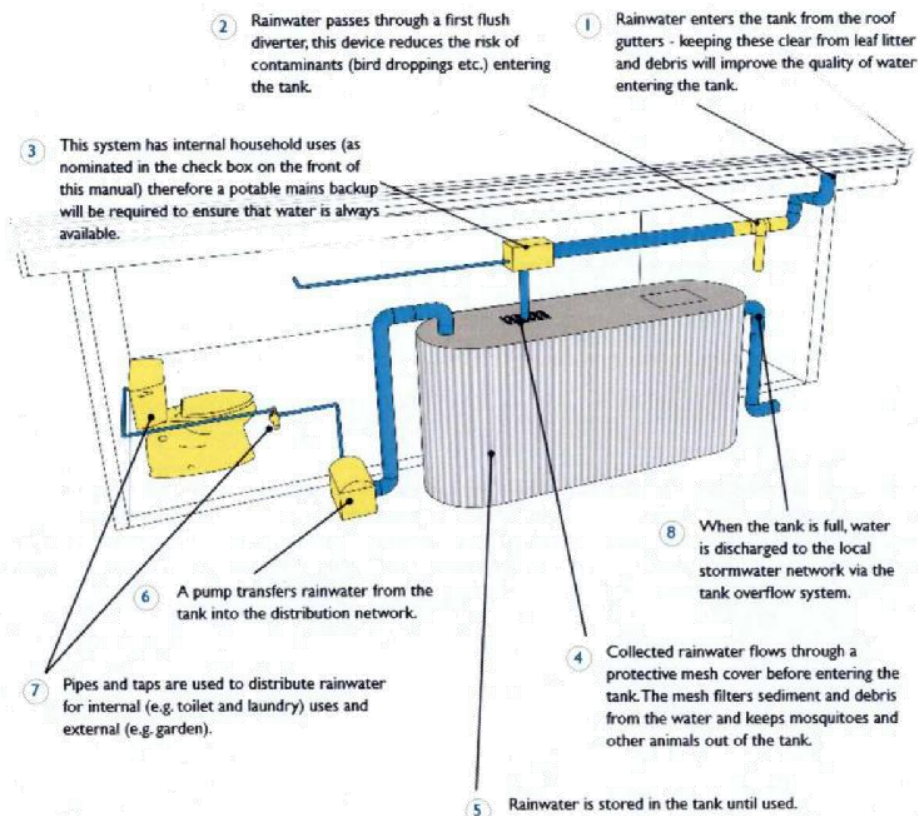


Figure 12: Diagram identifying the key items for rainwater tanks and their operation and maintenance (Source: City of Port Phillip Maintenance Manual Rainwater Tanks)

Please note that the above image is not representative of the type of tank to be installed for this project, however the maintenance aspects are very similar. This should be used as a guide along with the As Built drawings for the site which will be provided in the developments Operations and Maintenance manual.

CLEAN OUT PROCEDURES

Maintenance of the rainwater tanks and all pump systems will be in accordance with the manufacturer's specifications.

To reduce blockage, a 100-micron screen filter and 5-micron cartridge filter should be installed. With this leaf blocking system installed, the roof and gutters onsite should be checked, maintained and cleaned annually to avoid blockages from occurring.

Gutters should be inspected to ensure they do not contain ponded water and be cleaned if necessary. Water ponding in gutters should be avoided as this provides a breeding ground for mosquitos; tank(s) should also not become breeding grounds for mosquitoes. If mosquitoes are detected in the tank(s), remedial steps need to occur to prevent breeding. If mosquitoes or other insects are found in rainwater tanks, the point of entry should be located and repaired.

There is no ideal treatment to kill mosquito larvae present in rainwater. The two commonly recognized treatments involve adding chemicals (medicinal or liquid paraffin, or kerosene) to tanks, which defeats one of the advantages of collecting rainwater. In addition, problems have been reported with both types of treatment. Tanks can be treated by adding a small quantity of medicinal or liquid paraffin or kerosene. The recommended dose of kerosene is 35mL or two and a half tablespoons for a 15,000L tank. When using paraffin, the dose is double that required for kerosene. Paraffin can be used in all types of tanks, but there have been reports of coagulation after a time and of deposits forming on the sides of tanks. Kerosene is not suitable for use in tanks coated with Aguaplate® and may not be suitable for use in tanks constructed of, or lined with, plastic. If in doubt, consult the manufacturer of the tank. Used carefully, kerosene will not result in risks to human health, but excess quantities can taint the water and very high doses can be poisonous to humans. Kerosene added to the surface will not mix through the body of rainwater in the tank and it will either evaporate or be washed out of the tank by overflow. Kerosene should not be added to tanks when water levels are low. Another option would be adding a very small amount of chlorine (approximately 4 parts per million) to kill off mosquitos and bacteria causing odours. The chlorine will disinfect the water and then evaporate. Chlorine tablets from a pool supplier can be used.

Note: Commercial or industrial kerosene, for example power kerosene for tractors etc. **should not** be used in rainwater tanks.

MONITORING SYSTEM

A simple way to ensure the tanks are operating as intended would be through the installation of a smart monitoring device such as OneBox. These systems allow users to operate tanks remotely from internet or smartphone, monitor and control the tanks in real time, allow automatic release of stored water prior to storm events, alert users if there is any blockage and view tank history and usage patterns. Alternatively, on site tank gauges can help those familiar with the tank know if the tank is not working correctly.

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

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MAINTENANCE SUMMARY

The following need to take place onsite to ensure compliance with WSUD requirements and maintain operation of the rainwater tanks/OSD and connections onsite.

Table 1: List of maintenance tasks for rainwater tanks and recommended frequencies

Task	When?	Requirement
Inspect rainwater tank	Every 6 months	Check for any damage/compression
		Check any blockage of first flush diverter
		Correct operation of potable mains back up switch
		Check that mesh covers have not deteriorated and intact.
		Check that supporting base is free of cracks and movement.
Inspect pumps	Every 1 year	Mosquito infestation
		Remove sediment build up
		Serviced to prolong the pump life
Inspect roofs & gutters	Every 6 months	Clean out of leaves / debris
		Remove any overhanging branches onsite

GUIDELINES AND FURTHER INFORMATION

Melbourne Water resources:

- <https://www.melbournewater.com.au/planning-and-building/stormwater-management/options-treating-stormwater/raingardens>
- <https://www.melbournewater.com.au/community-and-education/help-protect-environment/raingardens>

Guidelines for raingarden planning, design, construction and maintenance guidelines, developed by the Cooperative Research Centre for Water Sensitive Cities, with support from Melbourne Water:

- <https://watersensitivecities.org.au/content/stormwater-biofilter-design/>

For further detail on raingarden design, see Chapter 5 and 6 WSUD Engineering Procedures:

- <http://www.publish.csiro.au/book/4974>

Appendix 4 – Indoor Environment Quality Daylight Assessment

Office areas

The following hand calculations are included to show the daylight amenity in the office areas of the proposed development. The daylight mark-ups are included below, with the red area showing the nominated net floor space and the yellow area showing the amount of nominated net floor space with a Daylight Factor of 2% or greater (based on the Green Star Daylight Hand Calculation methodology).

From the hand calculation, it has been found that 42% of the nominated floor area achieves a daylight factor of at least 2%.

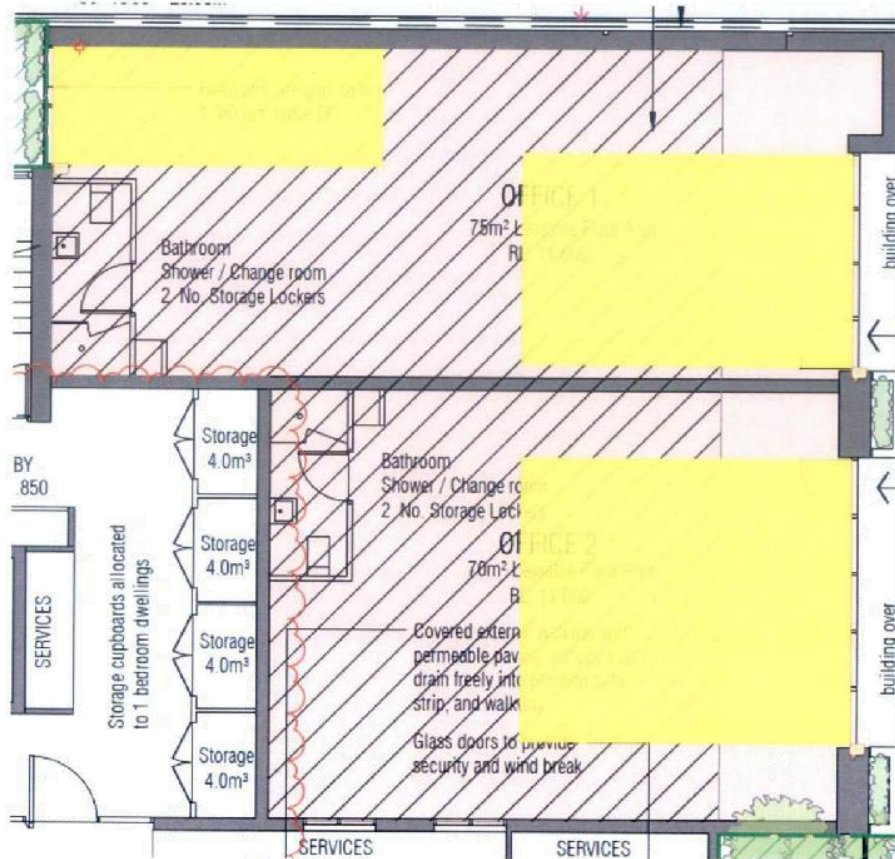


Table 5: Nominated and daylight compliant areas

Area	Nominated Area (m²)	Daylight Compliant Area (m²)
Office 1	70	30
Office 2	64	26
Total	134	56

$$\% \text{ Area Daylight Compliant} = \frac{\text{Daylight Compliant Area}}{\text{Nominated Area}} = \frac{56}{134} = 41.8\%$$

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

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Dwellings

Sustainable Development Consultants have modelled the design of the mixed-use residential development proposed for 142-144 Coppin Street, Richmond using the 3D modelling program Autodesk Ecotect Analysis 2011 and the Radiance plugin.

The daylight modelling was undertaken to check on the effectiveness of the proposed design in a set of future equitable development scenarios for the sites to the north and south. The future scenario modelled can be viewed in Figure 1 below, but is essentially based on a replication of the height and setbacks provided within the subject site.

DESIGN AND PERFORMANCE

We have made the assumption that the windows will be clear low-e glazing (VLT of 60%).

Windows in the light courts and which are noted to be privacy up to 1.7m have been modelled as obscured privacy glass with a VLT of 40%.

The floors were modelled with a reflectivity of 0.3 (30%) as is typical for a carpet or dark wooden floor.

The balconies / terraces were modelled with a reflectivity of 0.4 (40%) as is typical for a light-coloured external floor tile.

The external walls were modelled with a reflectivity of 0.5 (50%) and the internal walls modelled as being lighter in colour with a reflectivity of 0.7 (70%).

Ceilings were assumed as white with a reflectivity of 0.7 (70%).

Balustrades and privacy screening was modelled solid to reflect a worst case scenario.

Window heights (vision glass) to the bedrooms and living areas are modelled as per the elevations, typically with 2400mm high vision glazing.

The apartments on level 1 have been modelled in detail with the internal partitions and windows built into the model. All elements that could overshadow or reflect light into the bedrooms and living rooms are deemed important for the assessment and were included in the model. In addition, all balustrades were included at a height of 1m high, with privacy screening modelled to 1.7m.

RESULTS

The modelling was undertaken using a uniform design sky which is used to generate daylight factors across the bedrooms and living zones. The desired daylight factor for a bedroom as outlined in the SDAPP guidelines is 0.5% achieved across 90% of the floor area of the room, with living zones required to provide 1% daylight factor across 90% of the floor area of the room.

Please see the results of the modelling below for confirmation of the predicted daylight factors within the development and an analysis of the appropriateness of the design to provide good internal daylight amenity and energy efficiency (i.e. not relying on artificial lighting during the day).

The figures below have the following colour scale:

- Yellow (acceptable daylight in bedrooms and living rooms (over 1% daylight factor));
- Red to orange and dark yellow (acceptable daylight in bedrooms, only acceptable in living zones if small amounts present (0.5%-1% daylight factor)); and
- Blue to purple (typically unacceptable in living zones and bedrooms, small amounts acceptable in bedrooms (<0.5% daylight factor)).

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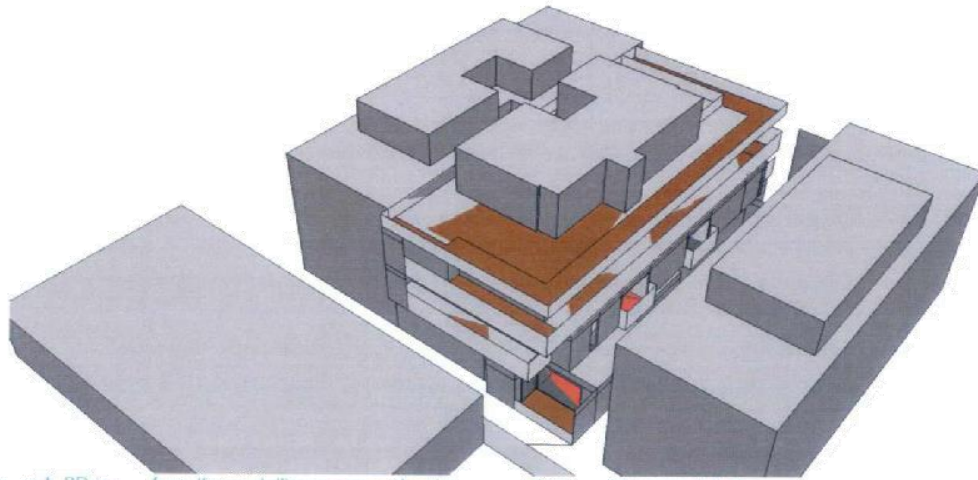


Figure 1: 3D image from the modelling program showing surrounding conditions modelled.

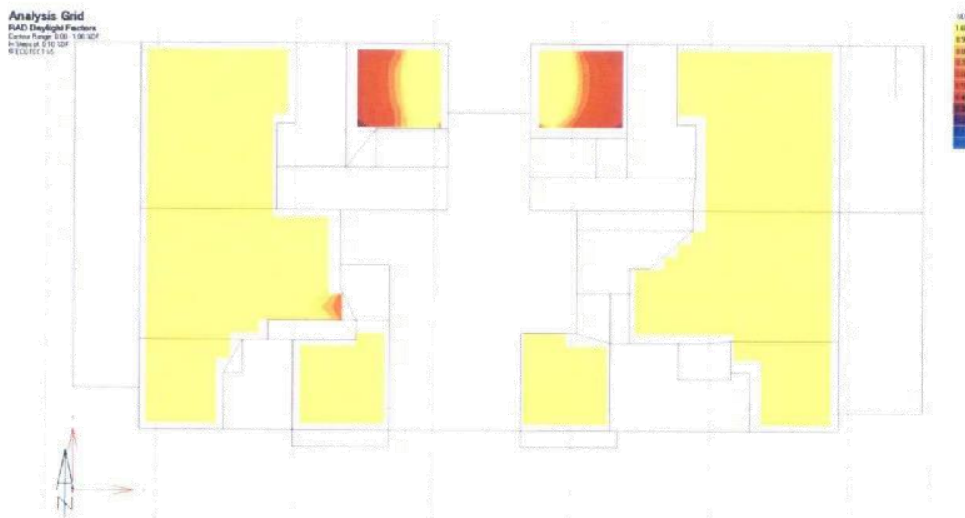


Figure 2: Level 1 Apartments Daylight Modelling Results

The results above demonstrate that the proposed design works very well for the provision of daylight throughout the development.

The living zones achieve excellent internal daylight amenity due to the east and west outlook away from future large development sites. Additionally, even with large balcony overhangs, the depth of the living zones is very reasonable and with wide windows provides excellent daylight across the whole living zone in all these apartments. The apartments on Level 2 and 3 will only perform better.

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

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All bedrooms except for 2 are predicted to achieve the best practice internal daylight amenity. The two bedrooms which fall slightly below this level (they achieve 75% of the room area at over 0.5% daylight factor and 25% of the room at 0.4% daylight factor, instead of the desired 90% of the room over 0.5% daylight factor) are bedroom of Apartment 1.01 and 1.04 which come off the northern light well.

Under the future scenario modelled with a total light well size of 3m wide by 5m deep (2.5m deep on each side of the boundary) this is a good outcome. Certainly, under the current surrounding development scenario these bedrooms will achieve much higher levels of daylight.

To optimise these rooms to achieve the desired daylight level I recommend that a requirement be made to use a higher VLT obscure glazing (such as fluted glass or acid etched glass) which will allow more light into the room and tip it over the desired daylight level (see figure 3 below). These solutions provide the privacy required to stop overlooking whilst allowing more daylight to penetrate the rooms, this is done by refracting the light through the glazing in a way that people can't make out the shape on the other side, whilst still letting all the light in that a clear window would.



Figure 3: Level 1 Apartments Daylight Modelling Results (Optimised)

Overall the daylight modelling assessment has demonstrated that the proposed project will provide good internal daylight amenity to all occupants and can provide best practice to all occupants under a future equitable development scenario with a minor specification note added to plans.

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

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Appendix 5 – VOC and Formaldehyde Emissions Limits

Table 6: Maximum Volatile Organic Compound Levels for construction materials (Source: Green Building Council Australia - Green Star Design and As Built v1.2 2017 Manual)

Product Type/Subcategory	Max TVOC Content (g/L of ready-to-use product)
Paints, Adhesives and Sealants	
General purpose adhesives and sealants	50
Interior wall and ceiling paint, all sheen levels	16
Trim, varnishes and wood stains	75
Primers, sealers and prep coats	65
One and two pack performance coatings for floors	140
Acoustic sealants, architectural sealant, waterproofing membranes and sealant, fire retardant sealants and adhesives	250
Structural glazing adhesive, wood flooring and laminate adhesives and sealants	100
Carpets	
ASTM D5116 - Total VOC limit	0.5 mg/m ² per hour
ASTM D5116 - 4-PC (4-Phenylcyclohexene)	0.05mg/m ² per hour
ISO 16000 / EN 13419 - TVOC at three days	0.5 mg/m ² per hour
ISO 10580 / ISO/TC 219 (Document N238) - TVOC at 24 hours	0.5 mg/m ² per hour

Table 7: Maximum Formaldehyde levels for processed wood products. (Source: Green Building Council Australia - Green Star Design and As Built v1.2 2017 Manual)

Formaldehyde emission limit values for different testing methods	
Test Method	Emission Limit/ Unit of Measurement
AS/NZS 2269:2004, testing procedure AS/NZS 2098.11:2005 method 10 for Plywood	≤1mg/ L
AS/NZS 1859.1:2004 - Particle Board, with use of testing procedure AS/NZS 4266.16:2004 method 16	≤1.5 mg/L
AS/NZS 1859.2:2004 - MDF, with use of testing procedure AS/NZS 4266.16:2004 method 16	≤1mg/ L
AS/NZS 4357.4 - Laminated Veneer Lumber (LVL)	≤1mg/ L
Japanese Agricultural Standard MAFF Notification No.701 Appendix Clause 3 (11) - LVL	≤1mg/ L
JIS A 5908:2003- Particle Board and Plywood, with use of testing procedure JIS A 1460	≤1mg/ L
JIS A 5905:2003 - MDF, with use of testing procedure JIS A 1460	≤1mg/ L
JIS A1901 (not applicable to Plywood, applicable to high pressure laminates and compact laminates)	≤0.1 mg/m ² hr
ASTM D5116 (applicable to high pressure laminates and compact laminates)	≤0.1 mg/m ² hr
ISO 16000 part 9, 10 and 11 (also known as EN 13419), applicable to high pressure laminates and compact laminates	≤0.1 mg/m ² hr (at 3 days)
ASTM D6007	≤0.12mg/m ³
ASTM E1333	≤0.12mg/m ³
EN 717-1 (also known as DIN EN 717-1)	≤0.12mg/m ³
EN 717-2 (also known as DIN EN 717-2)	≤3.5mg/m ³ hr

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

11/02/2020

BESS - 142-144 Coppin St (SMP.V3)

BESS Report



This BESS report outlines the sustainable design commitments of the proposed development at 142-144 Coppin St Richmond VIC 3121. The BESS report and accompanying documents and evidence are submitted in response to the requirement for a Sustainable Design Assessment or Sustainability Management Plan at Yarra City Council.

Note that where a Sustainability Management Plan is required, the BESS report must be accompanied by a report that further demonstrates the development's potential to achieve the relevant environmental performance outcomes and documents the means by which the performance outcomes can be achieved.

142-144 Coppin St, Richmond 3121 Richmond

Site area: 512 m² · Building Floor Area: 787 m² ·

Date of Assessment: 11 Feb 2020 ·

Version: V3, 1.6.1-B.260 ·

Applicant: nick@sdconsultants.com.au

Project Identifier

348AEC52

(Previously #32795)

Published

<http://bess.net.au/projects/348AEC52-V1>

Your BESS score is

+ 60%



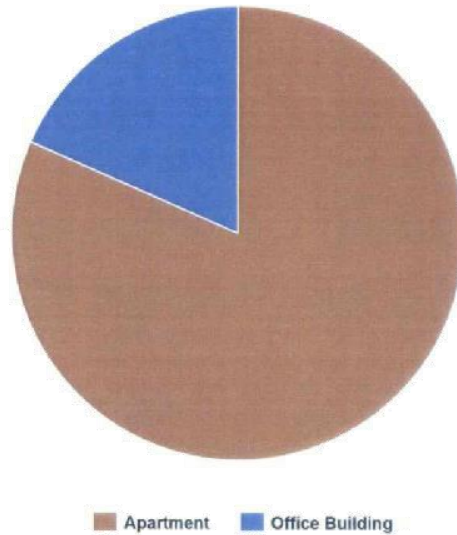
% of Total	Category	Score	Pass
3 %	Management	56 %	
6 %	Water	62 %	✓
15 %	Energy	56 %	✓
14 %	Stormwater	100 %	✓
15 %	IEQ	88 %	✓
5 %	Transport	55 %	
2 %	Waste	33 %	
2 %	Urban Ecology	36 %	
0 %	Innovation	0 %	

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

11/02/2020

BESS - 142-144 Coppin St (SMP.V3)

Building Composition



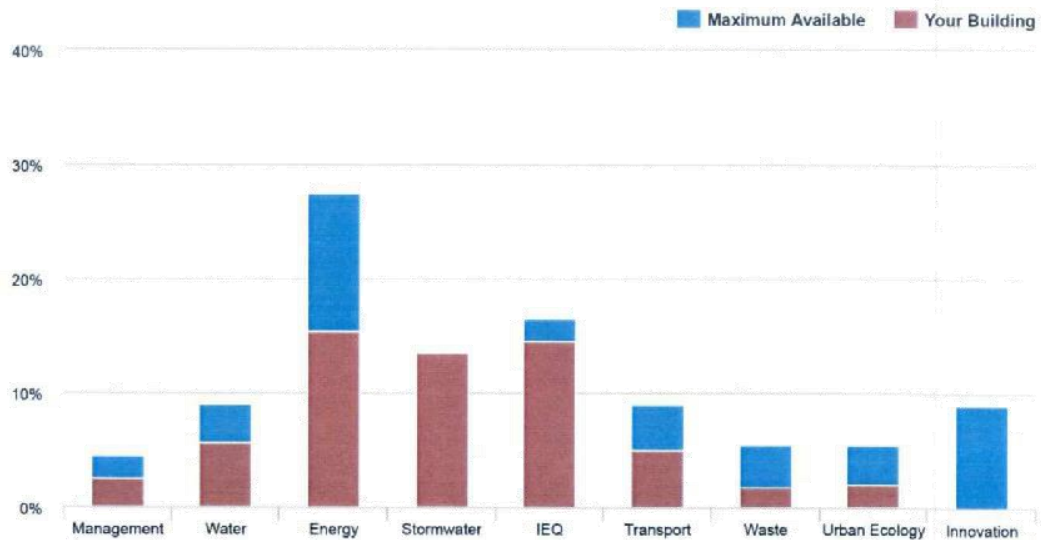
Dwellings

Type	Name	Quantity	Area
Apartment	102	1	79 m ²
Apartment	103	1	79 m ²
Apartment	104	3	60 m ²
Apartment	202	1	57 m ²
Apartment	301	1	247 m ²

Non-Residential Spaces

Office Building 145 m²

How did this Development Perform in each Environmental Category?

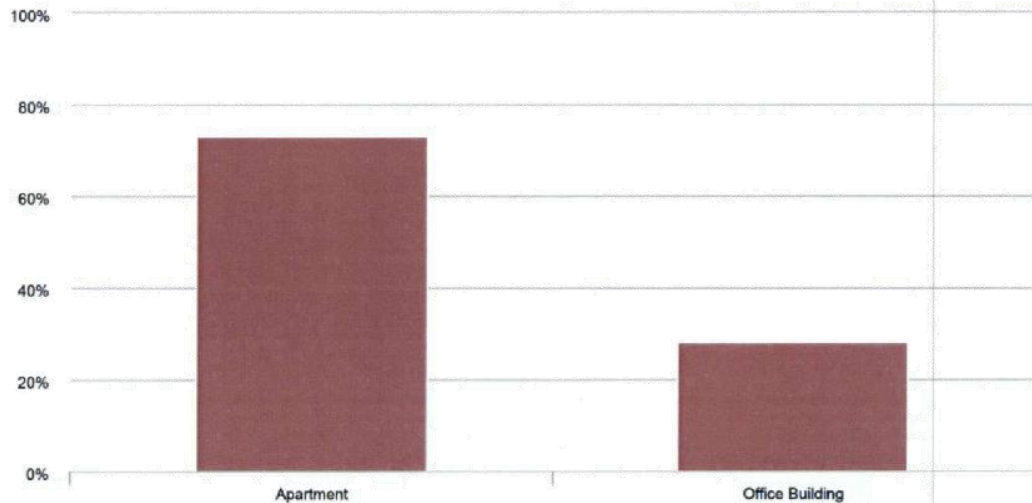


Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

11/02/2020

BESS - 142-144 Coppin St (SMP.V3)

How does each Dwelling or Non-Residential Space type perform?



Sustainable design commitments by category

The sustainable design commitments for this project are listed below. These are to be incorporated into the design documentation and subsequently implemented.

Management

56% - contributing 3% to overall score

Credit	Disabled	Scoped out	Score
Management 2.2 Thermal Performance Modelling - Multi-Dwelling Residential			100 %
Management 3.1 Metering			100 %
Management 3.2 Metering			100 %
Management 3.3 Metering			82 %
Management 4.1 Building Users Guide			100 %
Management 2.2 Thermal Performance Modelling - Multi-Dwelling Residential			100%
Score Contribution	This credit contributes 20.4% towards this section's score.		

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

11/02/2020

BESS - 142-144 Coppin St (SMP.V3)

Aim

To encourage and recognise developments that have used modelling to inform passive design at the early design stage

Questions

Have preliminary NatHERS ratings been undertaken for all thermally unique dwellings?

Apartment

Yes

Management 3.1 Metering

100%

Score Contribution

This credit contributes 10.2% towards this section's score.

Aim

To provide building users with information that allows monitoring of energy and water consumption

Questions

Have utility meters been provided for all individual dwellings?

Apartment

Yes

Management 3.2 Metering

100%

Score Contribution

This credit contributes 2.3% towards this section's score.

Aim

To provide building users with information that allows monitoring of energy and water consumption

Questions

Have utility meters been provided for all individual commercial tenants?

Office Building

Yes

Management 3.3 Metering

82%

Score Contribution

This credit contributes 12.5% towards this section's score.

Aim

To provide building users with information that allows monitoring of energy and water consumption

Notes

Office spaces do not have common area services

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

11/02/2020

BESS - 142-144 Coppin St (SMP.V3)

Questions

Have all major common area services been separately submetered?

Apartment

Yes

Management 4.1 Building Users Guide

100%

Score Contribution

This credit contributes 12.5% towards this section's score.

Aim

To encourage and recognise initiatives that will help building users to use the building efficiently

Questions

Will a building users guide be produced and issued to occupants?

Project wide

Yes

Water

62% - contributing 6% to overall score

Credit

Disabled Scoped out Score

Water 1.1 Potable Water Use Reduction (Interior Uses)

50 %

Water 2.1 Rainwater Collection & Reuse (Additional Uses)

100 %

Water 3.1 Water Efficient Landscaping

100 %

Water Approaches

What approach do you want to use Water?

Use the built in calculation tools

Are you installing a rainwater tank?

Yes

Water fixtures, fittings and connections

		Office Building	102	103
Showerhead	Scope out	3 Star WELS (> 6.0 but <= 7.5)	3 Star WELS (> 6.0 but <= 7.5)	3 Star WELS (> 6.0 but <= 7.5)
Bath	Scope out	Scope out	Scope out	Scope out
Kitchen Taps	> 5 Star WELS rating	> 5 Star WELS rating	> 5 Star WELS rating	> 5 Star WELS rating
Bathroom Taps	> 5 Star WELS rating	> 5 Star WELS rating	> 5 Star WELS rating	> 5 Star WELS rating

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

11/02/2020

BEES - 142-144 Coppin St (SMP.V3)

	Office Building	102	103
Dishwashers	> 5 Star WELS rating	> 5 Star WELS rating	> 5 Star WELS rating
WC	> 4 Star WELS rating	> 4 Star WELS rating	> 4 Star WELS rating
Urinals	Scope out	Scope out	Scope out
Washing Machine Water Efficiency	Scope out	> 5 Star WELS rating	> 5 Star WELS rating
Rainwater connected to: Toilets	Yes	Yes	Yes
	104	202	301
Showerhead	3 Star WELS (> 6.0 but <= 7.5)	3 Star WELS (> 6.0 but <= 7.5)	3 Star WELS (> 6.0 but <= 7.5)
Bath	Scope out	Scope out	Medium Sized Contemporary Bath
Kitchen Taps	> 5 Star WELS rating	> 5 Star WELS rating	> 5 Star WELS rating
Bathroom Taps	> 5 Star WELS rating	> 5 Star WELS rating	> 5 Star WELS rating
Dishwashers	> 5 Star WELS rating	> 5 Star WELS rating	> 5 Star WELS rating
WC	> 4 Star WELS rating	> 4 Star WELS rating	> 4 Star WELS rating
Urinals	Scope out	Scope out	Scope out
Washing Machine Water Efficiency	> 5 Star WELS rating	> 5 Star WELS rating	> 5 Star WELS rating
Rainwater connected to: Toilets	Yes	Yes	Yes

Rainwater Tanks

	Tank
What is the total roof area connected to the rainwater tank? Square Metres	297.0
Tank Size Litres	10000.0

Water 1.1 Potable Water Use Reduction (Interior Uses)

50%

Score Contribution	This credit contributes 50.0% towards this section's score.
Aim	Water 1.1 Potable water use reduction (interior uses) What is the reduction in total water use due to efficient fixtures, appliances, and rainwater use? To achieve points in this credit there must be >25% potable water reduction. You are using the built in calculation tools. This credit is calculated from information you have entered above.
Criteria	Percentage reduction in potable water use

Questions

Percentage Achieved ? Percentage %

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

11/02/2020

BESS - 142-144 Coppin St (SMP.V3)

Project wide

%

Calculations

Annual Water Consumption (kL) (Reference)

Project wide

1104

Annual Water Consumption (kL) (Proposed)

Project wide

640

% Reduction in Potable Water Consumption Percentage %

Project wide

42 %

Water 2.1 Rainwater Collection & Reuse (Additional Uses)

100%

Score Contribution

This credit contributes 25.0% towards this section's score.

Aim

What is the additional reduction in potable (mains) water use due to rainwater harvesting? Additional water uses for rainwater include non-potable demands such as irrigation, pools, commercial process uses and taps for washdown. Note: tank water will only be available for additional uses if it not required for internal uses. If the property uses an alternative water source, the alternative water source is deemed to meet 90% of additional non-potable water use requirements. You are using the built in calculation tools. This credit is calculated from information you have entered above in the rainwater tanks section.

Criteria

What is the additional reduction in potable (mains) water use due to using rainwater or an alternative water source?

Questions

Percentage Achieved ? Percentage %

Project wide

%

Calculations

Rainwater collection & reuse (additional uses) Percentage %

Project wide

100 %

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

11/02/2020

BESS - 142-144 Coppin St (SMP.V3)

Water 3.1 Water Efficient Landscaping

100%

Score Contribution	This credit contributes 12.5% towards this section's score.
Aim	Are water efficiency principles used for landscaped areas? This includes low water use plant selection (e.g. xeriscaping) and specifying water efficient irrigation (e.g. drip irrigation with timers and rain sensors). Note: food producing landscape areas and irrigation areas connected to rainwater or an alternative water source are excluded from this section.
Notes	Native species of plants to be grown throughout the development where possible
Questions	
Will water efficient landscaping be installed?	
Project wide	
Yes	

Energy

56% - contributing 15% to overall score

Credit	Disabled	Scoped out	Score
Energy 1.1 Thermal Performance Rating - Non-Residential			12 %
Energy 1.2 Thermal Performance Rating - Residential			17 %
Energy 2.1 Greenhouse Gas Emissions			82 %
Energy 2.3 Electricity Consumption			100 %
Energy 2.4 Gas Consumption			82 %
Energy 3.1 Carpark Ventilation			N/A
Energy 3.2 Hot Water			82 %
Energy 3.4 Clothes Drying			100 %
Energy 3.6 Internal Lighting - Residential Multiple Dwellings			100 %
Energy 3.7 Internal Lighting - Non-Residential			100 %
Energy 4.1 Combined Heat and Power (cogeneration / trigeneration)			N/A
Energy 4.2 Renewable Energy Systems - Solar			82 %

OFFICE ENERGY CONSUMPTION FIGURES Office tenancies average Victorian energy intensity = 424 MJ/m².a; Office NFA = 141m² HVAC consumption = energy intensity x 18% =

Notes 424 x 141m² x 18% / 3.6 = 2,989kWh Hot Water consumption = energy intensity x 3% = 424 x 141m² x 3% = 1,794MJ Note: 18% and 3% are used as an average proportion of energy end use in an office

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

11/02/2020

BESS - 142-144 Coppin St (SMP.V3)

Dwellings Energy Approaches

What approach do you want to use for Energy? Use the built in calculation tools

Are you installing a solar photovoltaic (PV) system? Yes

Gas Supply Natural Gas

Dwelling Energy Profiles

	102	103	104
Below the floor is	Another Occupancy	Ground or Carpark	Ground or Carpark
Above the ceiling is	Another Occupancy	Another Occupancy	Outside
Exposed sides	2	2	3
NatHERS Annual Energy Loads - Heat MJ/sqm	60.1	75.9	79.3
NatHERS Annual Energy Loads - Cool MJ/sqm	13.6	15.6	14.8
NatHERS star rating	7.3	6.7	6.6
Type of Heating System	D Reverse cycle space	D Reverse cycle space	D Reverse cycle space
Heating System Efficiency	5 Star	5 Star	5 Star
Type of Cooling System	Refrigerative space	Refrigerative space	Refrigerative space
Cooling System Efficiency	5 Stars	5 Stars	5 Stars
Type of Hot Water System	J Gas Instantaneous 6 star	6J Gas Instantaneous 6 star	6J Gas Instantaneous 6 star
Clothes Line	D Private outdoor clothesline	D Private outdoor clothesline	D Private outdoor clothesline
Clothes Dryer	A No clothes dryer	A No clothes dryer	A No clothes dryer

	202	301
Below the floor is	Another Occupancy	Another Occupancy
Above the ceiling is	Another Occupancy	Outside
Exposed sides	2	4
NatHERS Annual Energy Loads - Heat MJ/sqm	82.2	64.7
NatHERS Annual Energy Loads - Cool MJ/sqm	22.2	27.9
NatHERS star rating	6.3	6.7
Type of Heating System	D Reverse cycle space	D Reverse cycle space
Heating System Efficiency	5 Star	5 Star
Type of Cooling System	Refrigerative space	Refrigerative space
Cooling System Efficiency	5 Stars	5 Stars
Type of Hot Water System	J Gas Instantaneous 6 star	J Gas Instantaneous 6 star
Clothes Line	D Private outdoor clothesline	D Private outdoor clothesline

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

11/02/2020

BESS - 142-144 Coppin St (SMP.V3)

	202	301
Clothes Dryer	A No clothes dryer	A No clothes dryer

Non-Residential Spaces Energy Profiles

	Office Building
Heating, Cooling & Comfort Ventilation - Electricity - baseline	kWh 2989.0
Heating, Cooling & Comfort Ventilation - Electricity - proposed	kWh 2690.0
Hot Water - Gas - baseline	MJ 1794.0
Hot Water - Gas - proposed	MJ 1794.0

Solar Photovoltaic systems

	Solar
System Size (lesser of inverter and panel capacity)	kW peak 2.0
Orientation (which way is the system facing)?	North
Inclination (angle from horizontal) Angle (degrees)	30.0
Which Building Class does this apply to?	Apartment

Energy 1.1 Thermal Performance Rating - Non-Residential 12%

Score Contribution	This credit contributes 7.7% towards this section's score.
Aim	Reduce reliance on mechanical systems to achieve thermal comfort in summer and winter - improving comfort, reducing greenhouse gas emissions, energy consumption, and maintenance costs.
Criteria	What is the % reduction in heating and cooling energy consumption against the reference case (NCC 2016 BCA Volume 1 Section J)

Questions

Criteria Achieved ?

Office Building

Yes

Calculations

Total Improvement Percentage %

Office Building

10 %

Energy 1.2 Thermal Performance Rating - Residential 17%

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

11/02/2020

BESS - 142-144 Coppin St (SMP.V3)

Score Contribution	This credit contributes 25.5% towards this section's score.
Aim	Reduce reliance on mechanical systems to achieve thermal comfort in summer and winter - improving comfort, reducing greenhouse gas emissions, energy consumption, and maintenance costs.
Criteria	What is the average NatHERS rating?

Questions

NATHERS Rating ? Stars

Apartment

6.0

Calculations

Average NATHERS Rating (Weighted) Stars

Apartment

6.7

Energy 2.1 Greenhouse Gas Emissions

82%

Score Contribution	This credit contributes 10.4% towards this section's score.
Aim	Reduce the building's greenhouse gas emissions
Criteria	Are greenhouse gas emissions >10% below the benchmark

Questions

Criteria Achieved ?

Calculations

Reference Building with Reference Services (BCA only) kg CO2

Apartment	Office Building
36266.2	3649.0

Proposed Building with Proposed Services (Actual Building) kg CO2

Apartment	Office Building
10504.8	3293.2

% Reduction in GHG Emissions Percentage %

Apartment	Office Building
71 %	9 %

Energy 2.3 Electricity Consumption

100%

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

11/02/2020

BEES - 142-144 Coppin St (SMP.V3)

Score Contribution This credit contributes 10.4% towards this section's score.

Aim Reduce consumption of electricity

Criteria Is the annual electricity consumption >10% below the benchmark

Questions

Criteria Achieved ?

Calculations

Reference kWh

Apartment	Office Building
26353.9	2989.0

Proposed kWh

Apartment	Office Building
6562.5	2690.0

Improvement Percentage %

Apartment	Office Building
75 %	10 %

Energy 2.4 Gas Consumption 82%

Score Contribution This credit contributes 10.4% towards this section's score.

Aim Reduce consumption of electricity

Criteria Is the annual gas consumption >10% below the benchmark?

Questions

Criteria Achieved ?

Calculations

Reference MJ

Apartment	Office Building
95559.2	1794.0

Proposed MJ

Apartment	Office Building
52511.9	1794.0

Improvement Percentage %

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

11/02/2020

BESS - 142-144 Coppin St (SMP.V3)

Apartment	Office Building
45 %	0 %

Energy 3.1 Carpark Ventilation N/A

This credit was scoped out: N/A - proposed development doesn't not include basement carpark

Energy 3.2 Hot Water 82%

Score Contribution	This credit contributes 5.2% towards this section's score.
Criteria	Does the hot water system use >10% less energy (gas and electricity) than the reference case?

Questions

Criteria Achieved ?

Calculations

Reference kWh

Apartment	Office Building
26544.2	498.3

Proposed kWh

Apartment	Office Building
14629.6	498.3

Improvement Percentage %

Apartment	Office Building
44 %	0 %

Energy 3.4 Clothes Drying 100%

Score Contribution	This credit contributes 4.3% towards this section's score.
Criteria	Does the combination of clothes lines and efficient dryers reduce energy (gas+electricity) consumption by more than 10%?

Questions

Criteria Achieved ?

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

11/02/2020

BEES - 142-144 Coppin St (SMP.V3)

Calculations

Reference kWh

Apartment

3400.9

Proposed kWh

Apartment

680.2

Improvement Percentage %

Apartment

80 %

Energy 3.6 Internal Lighting - Residential Multiple Dwellings

100%

Score Contribution This credit contributes 8.5% towards this section's score.

Aim Reduce energy consumption associated with internal lighting

Questions

Is the maximum illumination power density (W/m2) in at least 90% of the relevant Building Class at least 20% lower than required by Table J6.2a of the NCC BCA (2013) Volume 1 Section J (Class 2 to 9) and clause 3.12.5.5 NCC BCA (2013) Volume 2 Section J (Class 1 and 10)

Apartment

Yes

Energy 3.7 Internal Lighting - Non-Residential

100%

Score Contribution This credit contributes 1.9% towards this section's score.

Aim Reduce energy consumption associated with internal lighting

Questions

Is the maximum illumination power density (W/m2) in at least 90% of the relevant building class at least 20% lower than required by Table J6.2a of the NCC 2016 BCA Volume 1 Section J (Class 2 to 9)

Office Building

Yes

Energy 4.1 Combined Heat and Power (cogeneration / trigeneration)

N/A

This credit was scoped out: No cogeneration or trigeneration system in use.

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

11/02/2020

BESS - 142-144 Coppin St (SMP.V3)

This credit was disabled: No cogeneration or trigeneration system in use.

Aim	Reduce energy consumption
Criteria	Does the CHP system reduce the class of buildings GHG emissions by more than 25%?

Energy 4.2 Renewable Energy Systems - Solar

82%

Score Contribution	This credit contributes 5.2% towards this section's score.
Aim	To encourage the installation of on-site renewable energy generation
Criteria	Does the solar power system provide 5% of the developments estimated energy consumption?

Questions

Criteria Achieved ?

Calculations

Solar Power - Energy Generation per year kWh

Apartment

2606.1

% of Building's Energy Percentage %

Apartment

12 %

Stormwater

100% - contributing 14% to overall score

Credit	Disabled	Scoped out	Score
Stormwater 1.1 Stormwater Treatment			100 %

Notes

Runoff from the non-trafficable roof areas and third floor balcony areas (totalling 297m²) will be diverted to rainwater tank(s) with an effective storage capacity of at least 10,000L. It will include a Rainceptor (or equivalent), which will act as a filter to prevent any pollutants entering the tank from the trafficable balcony areas. Collected rainwater will be used for all toilet flushing in the development. Any overflow from the tank(s) or runoff from the remaining impervious areas will be diverted to the legal point of discharge (LPD).

Which stormwater modelling are you using? Melbourne Water STORM tool

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

11/02/2020

BEES - 142-144 Coppin St (SMP.V3)

Stormwater 1.1 Stormwater Treatment

100%

Score Contribution	This credit contributes 100.0% towards this section's score.
Aim	To achieve best practice stormwater quality objectives through reduction of pollutant load (suspended solids, nitrogen and phosphorus)
Criteria	Has best practice stormwater management been demonstrated?

Questions

STORM score achieved

Project wide

101

Flow (ML/year) % Reduction

Project wide

Total Suspended Solids (kg/year) % Reduction

Project wide

Total Phosphorus (kg/year) % Reduction

Project wide

Total Nitrogen (kg/year) % Reduction

Project wide**Calculations**

Min STORM Score

Project wide

100

IEQ

88% - contributing 15% to overall score

Credit	Disabled	Scoped out	Score
IEQ 1.1 Daylight Access - Living Areas			100 %
IEQ 1.2 Daylight Access - Bedrooms			67 %

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

11/02/2020

BESS - 142-144 Coppin St (SMP.V3)

IEQ 1.3 Winter Sunlight	100 %
IEQ 1.4 Daylight Access - Non-Residential	33 %
IEQ 1.5 Daylight Access - Minimal Internal Bedrooms	100 %
IEQ 2.1 Effective Natural Ventilation	100 %

Notes Refer Appendix 4 of SMP for more detail

Are all living areas and bedrooms less than 8m deep (5m if south facing)? Yes

Does all glazing to living areas achieve at least 60% Visible Light Transmittance (VLT)? Yes

Do all living areas have an external facing window (not into a courtyard, light well or other major obstruction)? Yes

What approach do you want to use for IEQ? Provide our own calculations

IEQ 1.1 Daylight Access - Living Areas 100%

Score Contribution This credit contributes 25.7% towards this section's score.

Aim To provide a high level of amenity and energy efficiency through design for natural light.

Criteria What % of living areas achieve a daylight factor greater than 1%

Questions

Percentage Achieved ? Percentage %

Apartment

100 %

Calculations

Calculated percentage Percentage %

Apartment

100 %

IEQ 1.2 Daylight Access - Bedrooms 67%

Score Contribution This credit contributes 25.7% towards this section's score.

Aim To provide a high level of amenity and energy efficiency through design for natural light.

Criteria What % of bedrooms achieve a daylight factor greater than 0.5%

Notes 9 of the 11 bedrooms

Questions

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

11/02/2020

BESS - 142-144 Coppin St (SMP.V3)

Percentage Achieved ? Percentage %

Apartment

82 %

Calculations

Calculated percentage Percentage %

Apartment

100 %

IEQ 1.3 Winter Sunlight

100%

Score Contribution This credit contributes 8.6% towards this section's score.

Aim To provide a high level of amenity and reduce need for artificial heating in winter.

Criteria Do 70% of dwellings receive at least 3 hours of direct sunlight in all Living areas between 9am and 3pm in mid-winter?

Notes Result demonstrated using BESS calculator in Version 1 of BESS assessment

Questions

Criteria Achieved ?

Apartment

Yes

IEQ 1.4 Daylight Access - Non-Residential

33%

Score Contribution This credit contributes 5.8% towards this section's score.

Aim To provide a high level of amenity and energy efficiency through design for natural light.

Criteria What % of the nominated floor area has at least 2% daylight factor?

Notes Using the Green Star daylight hand calculation method, it has been demonstrated that 42% of primary office spaces achieve a daylight factor of 2% or greater. Please refer to Appendix 4 of the SMP for further details.

Questions

% Achieved ?

Office Building

42 %

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

11/02/2020

BESS - 142-144 Coppin St (SMP.V3)

IEQ 1.5 Daylight Access - Minimal Internal Bedrooms

100%

Score Contribution	This credit contributes 8.6% towards this section's score.
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Aim	To provide a high level of amenity and energy efficiency through design for natural light and ventilation.
------------	--

Questions

Do at least 90% of dwellings have an external window in all bedrooms?

Apartment

Yes

IEQ 2.1 Effective Natural Ventilation

100%

Score Contribution	This credit contributes 25.7% towards this section's score.
---------------------------	---

Aim	To provide fresh air and passive cooling opportunities.
------------	---

Criteria	What % of dwellings are effectively naturally ventilated?
-----------------	---

Questions

% Achieved ?

Apartment

100 %

Transport

55% - contributing 5% to overall score

Credit	Disabled	Scoped out	Score
Transport 1.1 Bicycle Parking - Residential			100 %
Transport 1.2 Bicycle Parking - Residential Visitor			100 %
Transport 1.3 Bicycle Parking - Convenience Residential			100 %
Transport 1.4 Bicycle Parking - Non-Residential			100 %
Transport 1.5 Bicycle Parking - Non-Residential Visitor			100 %
Transport 1.6 End of Trip Facilities - Non-Residential			100 %

Transport 1.1 Bicycle Parking - Residential

100%

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

11/02/2020

BESS - 142-144 Coppin St (SMP.V3)

Score Contribution	This credit contributes 18.5% towards this section's score.
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Aim	To encourage and recognise initiatives that facilitate cycling
------------	--

Criteria	Is there at least one secure bicycle space per dwelling?
-----------------	--

Questions

Bicycle Spaces Provided ?

Apartment

8

Calculations

Min Bicycle Spaces Required

Apartment

7

Transport 1.2 Bicycle Parking - Residential Visitor

100%

Score Contribution	This credit contributes 18.5% towards this section's score.
---------------------------	---

Aim	To encourage and recognise initiatives that facilitate cycling
------------	--

Criteria	Is there at least one visitor bicycle space per 4 dwellings?
-----------------	--

Questions

Visitor Bicycle Spaces Provided ?

Apartment

2

Calculations

Min Visitor Bicycle Spaces Required

Apartment

2

Transport 1.3 Bicycle Parking - Convenience Residential

100%

Score Contribution	This credit contributes 9.3% towards this section's score.
---------------------------	--

Aim	To facilitate cycling by providing easily accessible parking infrastructure
------------	---

Questions

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

11/02/2020

BESS - 142-144 Coppin St (SMP.V3)

Are bike parking facilities for residents located at ground level?

Apartment

Yes

Transport 1.4 Bicycle Parking - Non-Residential

100%

Score Contribution This credit contributes 4.2% towards this section's score.

Aim To encourage and recognise initiatives that facilitate cycling

Notes Office employee requirement: 1 to each 300 sq m of net floor area if the net floor area exceeds 1000 sqm. Proposed offices totalling 141sqm have a requirement of zero spaces, therefore provision of two spaces in the external entrance walkway exceeds requirement by 50%

Questions

Have the planning scheme requirements for employee bicycle parking been exceeded by at least 50%?

Office Building

Yes

Transport 1.5 Bicycle Parking - Non-Residential Visitor

100%

Score Contribution This credit contributes 2.1% towards this section's score.

Aim To encourage and recognise initiatives that facilitate cycling

Notes Office visitor requirement: 1 to each 1000 sq m of net floor area if the net floor area exceeds 1000 sq m. Proposed offices totalling 141sqm have a requirement of zero spaces, therefore availability of two spaces on Coppin Street exceeds requirement by 50%

Questions

Have the planning scheme requirements for visitor bicycle parking been exceeded by at least 50%?

Office Building

Yes

Transport 1.6 End of Trip Facilities - Non-Residential

100%

Score Contribution This credit contributes 2.1% towards this section's score.

Aim To encourage and recognise initiatives that facilitate cycling

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

11/02/2020

BESS - 142-144 Coppin St (SMP.V3)

Criteria

Adequate bicycle parking has been provided. Is there also: * 1 shower for the first 5 bicycle spaces plus 1 to each 10 bicycles spaces thereafter, * changing facilities adjacent to showers, and * one secure locker per bicycle space in the vicinity of the changing / shower facilities?

Questions

Number of showers provided ?

Office Building

2

Number of lockers provided ?

Office Building

4

Calculations

Min Showers Required

Office Building

2

Min Lockers Required

Office Building

1

Waste

33% - contributing 2% to overall score

Credit

Disabled Scoped out Score

Waste 2.2 - Operational Waste - Convenience of Recycling

100 %

Waste 2.2 - Operational Waste - Convenience of Recycling

100%

Score Contribution

This credit contributes 33.3% towards this section's score.

Aim

To minimise recyclable material going to landfill

Questions

Are the recycling facilities at least as convenient for occupants as facilities for general waste?

Project wide

Yes

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

11/02/2020

BESS - 142-144 Coppin St (SMP.V3)

Urban Ecology

36% - contributing 2% to overall score

Credit	Disabled	Scoped out	Score
Urban Ecology 1.1 Communal Spaces			N/A
Urban Ecology 2.1 Vegetation			50 %
Urban Ecology 2.4 Private Open Space - Balcony / Courtyard Ecology			100 %

Urban Ecology 1.1 Communal Spaces

N/A

This credit was scoped out: No communal spaces part of the proposed development

Aim	To encourage and recognise initiatives that facilitate interaction between building occupants
Criteria	Is there at least the following amount of common space measured in square meters : * 1m ² for each of the first 50 occupants * Additional 0.5m ² for each occupant between 51 and 250 * Additional 0.25m ² for each occupant above 251

Urban Ecology 2.1 Vegetation

50%

Score Contribution	This credit contributes 51.2% towards this section's score.
Aim	To encourage and recognise the use of vegetation and landscaping within and around developments
Criteria	How much of the site is covered with vegetation, expressed as a percentage of the total site area.
Notes	53m ² - Combination of permeable ground floor landscaped areas and upper storey landscaping on balconies and terraces

Questions

Percentage Achieved ? Percentage %

Project wide

10 %

Urban Ecology 2.4 Private Open Space - Balcony / Courtyard Ecology

100%

Score Contribution	This credit contributes 10.4% towards this section's score.
---------------------------	---

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

11/02/2020

BESS - 142-144 Coppin St (SMP.V3)

Aim Encourage plants to be grown on balconies and courtyards.

Questions

Is there a tap and floor waste on every balcony / in every courtyard?

Apartment

Yes

Innovation

0% - contributing 0% to overall score

Items to be marked on floorplans

0 / 22 floorplans & elevation notes complete.

Management 3.1: Individual utility meters annotated	Incomplete
Management 3.2: Individual utility meters annotated	Incomplete
Management 3.3: Common area submeters annotated	Incomplete
Water 2.1: Location of rainwater tanks as described	Incomplete
Water 3.1: Water efficient garden annotated	Incomplete
Energy 3.4: External lighting sensors annotated	Incomplete
Energy 4.2: Floor plans showing location of photovoltaic panels as described.	Incomplete
Stormwater 1.1: Location of any stormwater management systems used in STORM or MUSIC modelling (e.g. Rainwater tanks, raingarden, buffer strips)	Incomplete
IEQ 1.1: If using BESS daylight calculator, references to floorplans and elevations showing window sizes and sky angles.	Incomplete
IEQ 1.2: If using BESS daylight calculator, references to floorplans and elevations showing window sizes and sky angles.	Incomplete
IEQ 1.3: If using BESS daylight calculator, references to floorplans and elevations showing window sizes and sky angles.	Incomplete
IEQ 1.5: Floor plans with compliant bedrooms marked	Incomplete
IEQ 2.1: Dwellings meeting the requirements for being 'naturally ventilated'	Incomplete
Transport 1.1: All nominated residential bicycle parking spaces	Incomplete
Transport 1.2: All nominated residential visitor bicycle parking spaces	Incomplete

Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

11/02/2020

BESS - 142-144 Coppin St (SMP.V3)

Transport 1.3: Residential bicycle parking spaces at ground level	Incomplete
Transport 1.4: All nominated non-residential bicycle parking spaces	Incomplete
Transport 1.5: All nominated non-residential visitor bicycle parking spaces	Incomplete
Transport 1.6: Showers, change rooms and lockers as nominated	Incomplete
Waste 2.2: Location of recycling facilities	Incomplete
Urban Ecology 2.1: Vegetated areas	Incomplete
Urban Ecology 2.4: Taps and floor waste on balconies / courtyards	Incomplete

Documents and evidence

0 / 12 supporting evidence documentation complete.

Management 2.2: Preliminary NatHERS assessments	Incomplete
Energy 1.1: Energy Report showing calculations of reference case and proposed buildings	Incomplete
Energy 3.6: Provide a written description of the average lighting power density to be installed in the development and specify the lighting type(s) to be used.	Incomplete
Energy 3.7: Provide a written description of the average lighting power density to be installed in the development and specify the lighting type(s) to be used.	Incomplete
Energy 4.2: Specifications of the solar photovoltaic system(s).	Incomplete
Stormwater 1.1: STORM report or MUSIC model	Incomplete
IEQ 1.1: If using an alternative daylight modelling program, a short report detailing assumptions used and results achieved.	Incomplete
IEQ 1.2: If using an alternative daylight modelling program, a short report detailing assumptions used and results achieved.	Incomplete
IEQ 1.3: If using an alternative daylight modelling program, a short report detailing assumptions used and results achieved.	Incomplete
IEQ 1.4: A short report detailing assumptions used and results achieved.	Incomplete
IEQ 1.5: A list of compliant bedrooms	Incomplete
IEQ 2.1: A list of naturally ventilated dwellings	Incomplete

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Attachment 5 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A ESD Report

11/02/2020

BESS - 142-144 Coppin St (SMP.V3)

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



Traffic Engineering Assessment

**Proposed Mixed Use Development
at
142-144 Coppin Street, Richmond**

**Prepared For
Bacolas Group Pty Ltd**

**December, 2019
G26758R-01C**

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Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



Traffic Engineering Assessment

Proposed Mixed Use Development
at
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Document Control

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Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



Traffic Engineering Assessment

142-144 Coppin Street, Richmond: Proposed Mixed Use Development

Table of Contents

1	Introduction	1
2	Proposal	1
3	Existing Conditions	1
3.1	Subject Site	1
3.2	Road Network	6
3.3	Existing Car Parking Conditions.....	8
3.4	Alternative Transport Modes.....	9
3.4.1	Public Transport.....	9
3.4.2	Walkability	11
3.4.3	Bicycle Infrastructure	11
3.4.4	Car Share Vehicles.....	11
4	Traffic Engineering Assessment.....	14
4.1	Statutory Car Parking Assessment	14
4.2	Reducing the Requirement for Car Parking	15
4.3	Car Parking Demand Assessment	16
4.3.1	Empirical Assessment of Parking Demand.....	17
4.4	Appropriateness of providing fewer car spaces than the number likely to be generated.....	19
4.4.1	Availability of Car Parking	20
4.4.2	Existing Car Parking Deficiency	20
4.4.3	Availability of Alternative Transport Modes	21
4.4.4	Impact on Activity Centre	21
4.4.5	Summary	22
4.5	Bicycle Parking Assessment	23
4.6	Review of Car Park Layout and Access Arrangements.....	24
4.7	Waste Collection and Loading Arrangements	25
5	Conclusions.....	26

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



List of Figures

Figure 1: Locality Plan.....	2
Figure 2: Aerial View	3
Figure 3: Subject Site Frontage to Coppin Street – view south-west.....	4
Figure 4: Planning Scheme Zoning Map	5
Figure 5: Principal Public Transport Network Area	6
Figure 6: Coppin Street – view north	7
Figure 7: Coppin Street – view south	7
Figure 8: Wall Street – view east.....	7
Figure 9: Wall Street – view west.....	7
Figure 10: Wall Place – view north.....	7
Figure 11: Wall Place – view south.....	7
Figure 12: Parking Survey Area	8
Figure 13: Profile of On-Street Parking Demand.....	9
Figure 14: Public Transport Map	10
Figure 15: Sustainable Transport Infrastructure	13

List of Tables

Table 1: Summary of Public Transport Services	11
Table 2: Statutory Car Parking Assessment – Column B Rates	15
Table 3: Statutory Bicycle Parking Assessment – Clause 52.34.....	23

List of Appendices

Appendix A: Development Plans
Appendix B: Parking Survey Results
Appendix C: Swept Path Diagrams

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report**Traffic Engineering Assessment**

142-144 Coppin Street, Richmond: Proposed Mixed Use Development

1 Introduction

Traffix Group has been engaged by Bacolas Group Pty Ltd to prepare a traffic engineering report for a proposed mixed use development at 142-144 Coppin Street, Richmond.

This report provides a detailed traffic engineering assessment of the parking and traffic issues associated with the proposed development.

2 Proposal

The proposal is for a mixed use development on the site. The development consists of the following:

- 7 x apartments comprising:
 - 4 x one-bedroom apartment
 - 2 x two-bedroom apartment
 - 1 x three-bedroom apartment
- 140m² office space (two tenancies)

Four car spaces will be provided via two double garages, accessed from Wall Place along the western boundary of the site. Two spaces (one of the garages) will be allocated to the three-bedroom dwelling, while the two other spaces will be allocated to the two-bedroom apartments (i.e. 1 car space each).

A total of 10 bicycle spaces will be provided on-site, and a further 2 spaces are proposed along the site's frontage to Coppin Street.

A copy of the development plans, prepared by CBG Architects, is attached in Appendix A.

3 Existing Conditions

3.1 Subject Site

The subject site is located on the western side of Coppin Street, approximately 10m south of Wall Street in Richmond. A locality plan, aerial photograph and photograph of the site's frontage to Coppin Street is presented in Figure 1, Figure 2 and Figure 3, respectively.

The site is rectangular in shape and has an area of approximately 509m². The site is comprised of two separate properties as follows:

- No. 142 – a single storey commercial building. No vehicle access is provided to the site.
- No. 144 – a single storey dwelling with vehicle access provided via a single-width crossover towards the site's southern boundary. On-site car parking for one car is provided via a sealed at-grade driveway.

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



There are a total of 2 on-street car spaces along the site's frontage to Coppin Street, subject to 'No Stopping 9am-10am Wed, 2P 10am-11pm' restrictions.

The site is located within a Commercial 1 Zone under the Planning Scheme as presented at Figure 4.

The site is located within the Principal Public Transport Network (PPTN) area, as shown at Figure 5.

Significant non-residential land uses in the nearby area include:

- **Swan Street Activity Centre**, located approximately 350m south of the site,
- **Bridge Road Activity Centre**, located approximately 400m north of the site,
- **St Kevin's Waterford Campus**, located approximately 400m west of the site,
- **Richmond Town Hall**, located approximately 500m north of the site,
- **Citizens Park**, located approximately 600m north of the site,
- **Burnley Station**, located approximately 850m south-east of the site,
- **Epworth Hospital Richmond**, located approximately 1km north-west of the site.

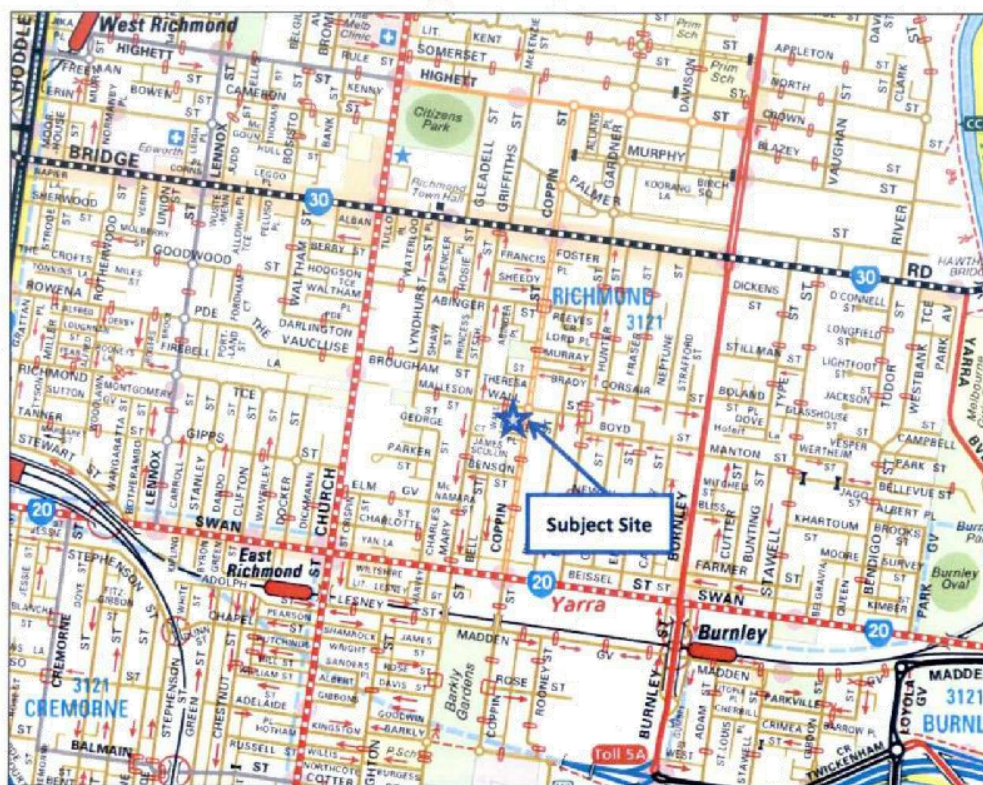


Figure 1: Locality Plan

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Figure 2: Aerial View

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



Figure 3: Subject Site Frontage to Coppin Street – view south-west

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



Traffic Engineering Assessment

142-144 Coppin Street, Richmond: Proposed Mixed Use Development

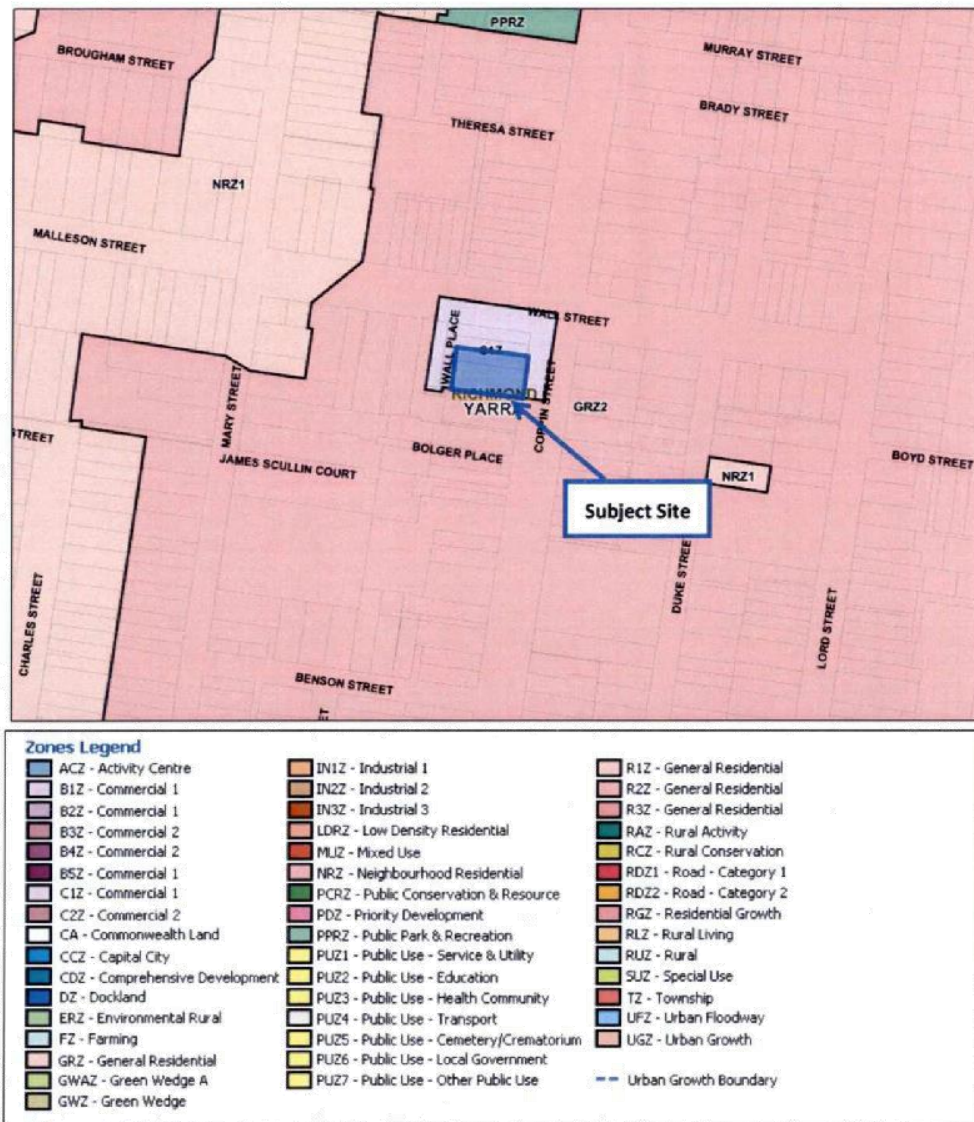


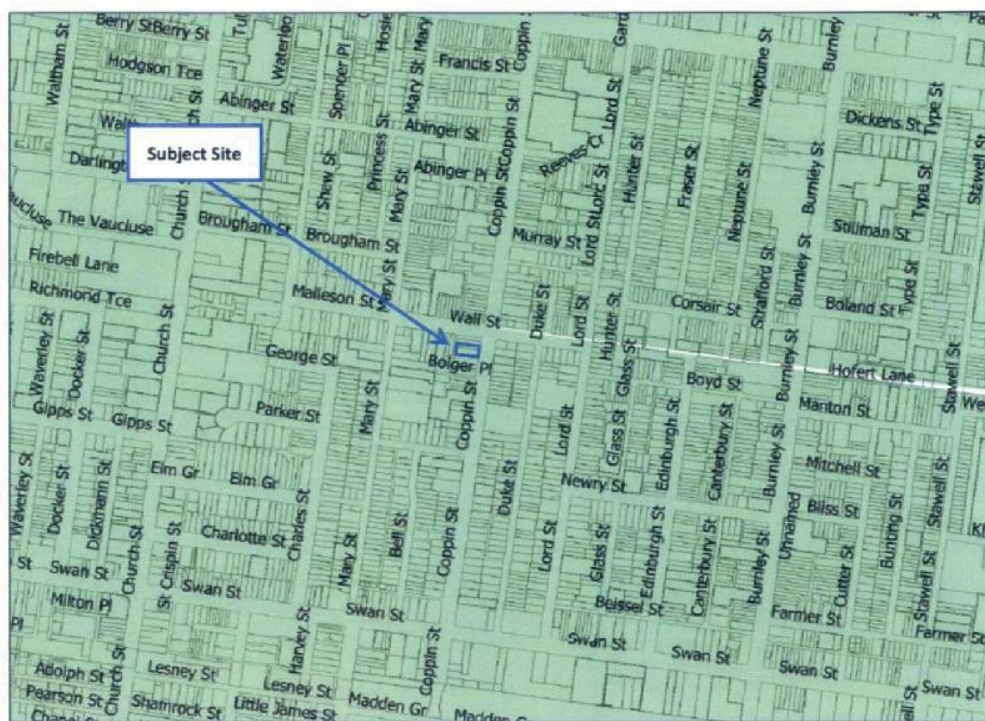
Figure 4: Planning Scheme Zoning Map

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



Traffic Engineering Assessment

142-144 Coppin Street, Richmond: Proposed Mixed Use Development



Source: Planning Schemes Online

Figure 5: Principal Public Transport Network Area

3.2 Road Network

Coppin Street is a local road aligned in a north-south direction. Coppin Street has a linemarked traffic lane, bicycle lane and kerbside parking lane in each direction.

A '40km/h Area' speed limit applies to Coppin Street.

Wall Street is a local road aligned in an east-west direction. Wall Street has a carriageway width of approximately 13.6m, which allows for parking on both sides of the road and simultaneous two-way traffic flow.

Linemarked 90° parking is provided on the south side of Wall Street, and parallel kerbside parking is available on the north side of the road.

A '40km/h Area' speed limit applies to Wall Street.

Wall Place is a dead end Right-Of-Way (ROW), which runs along the western boundary of the site from Wall Street in the north to a dead end in the south. Wall Place has a carriageway width of approximately 3.1m and is constructed of asphalt.

Photographs depicting the surrounding road network are presented in Figure 6 to Figure 11.

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



Traffic Engineering Assessment

142-144 Coppin Street, Richmond: Proposed Mixed Use Development



Figure 6: Coppin Street – view north



Figure 7: Coppin Street – view south



Figure 8: Wall Street – view east



Figure 9: Wall Street – view west



Figure 10: Wall Place – view north



Figure 11: Wall Place – view south

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



Traffic Engineering Assessment

142-144 Coppin Street, Richmond: Proposed Mixed Use Development

3.3 Existing Car Parking Conditions

A series of parking occupancy surveys have been conducted by Traffix Group. The surveys were chosen to cover the peak times for the proposed mixed use development (office and residential) and the nearby area. The surveys were undertaken at the following times:

- 12pm, 1pm, 7pm and 8pm on Thursday 23rd May, 2019
- 12pm, 1pm, 7pm and 8pm Saturday 25th May, 2019

The area surveyed is shown in Figure 12 below and the detailed results of the parking surveys are provided at Appendix B.

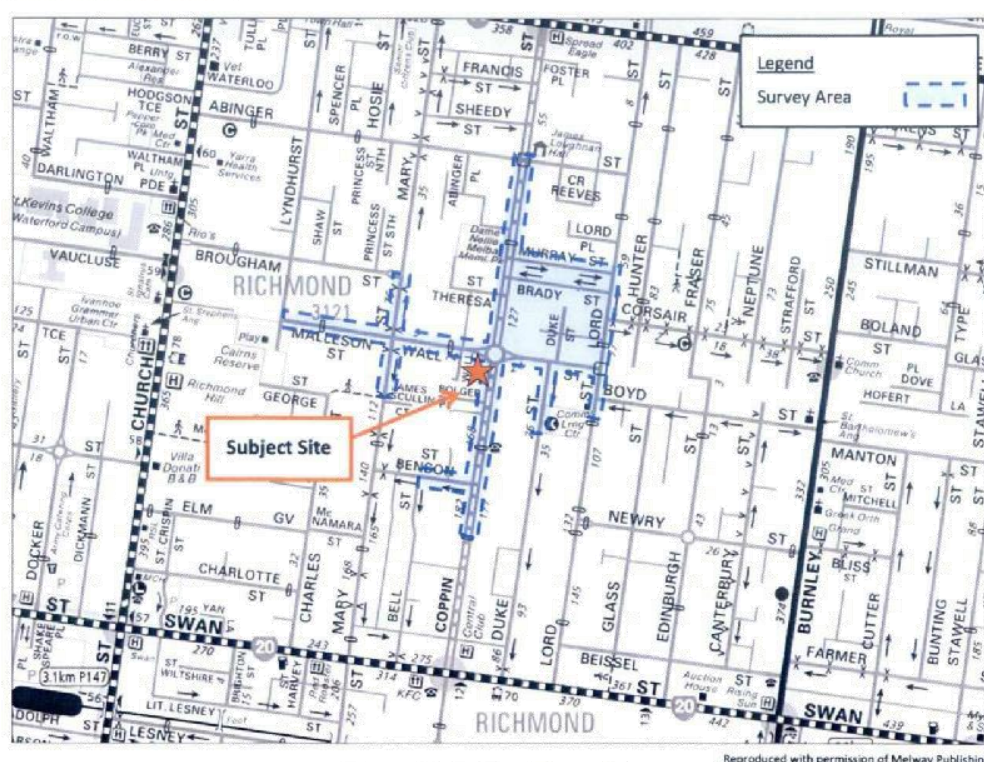


Figure 12: Parking Survey Area

A total of between 171 to 279 publically accessible on-street car spaces are available within the survey area, consisting of a mixture of short-term (2P) and 'Permit Zone' parking spaces. There is no unrestricted parking within the survey area.

There are a total of 2 on-street car spaces along the site's frontages, subject to 'No Stopping 9am-10am Wed, 2P 10am-11pm' restrictions.

The following analysis only includes car parking available to the general public and excludes parking such as 'Permit Zone' and other no stopping areas during the relevant enforcement times.

A profile of on-street parking demand for the survey area is provided at Figure 13.

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



Figure 13: Profile of On-Street Parking Demand

The results of the surveys indicate that there is a moderate to high demand for car parking in the area, with a minimum of 23 vacant spaces recorded at 7pm on Saturday 25th May, 2019 (87% occupancy).

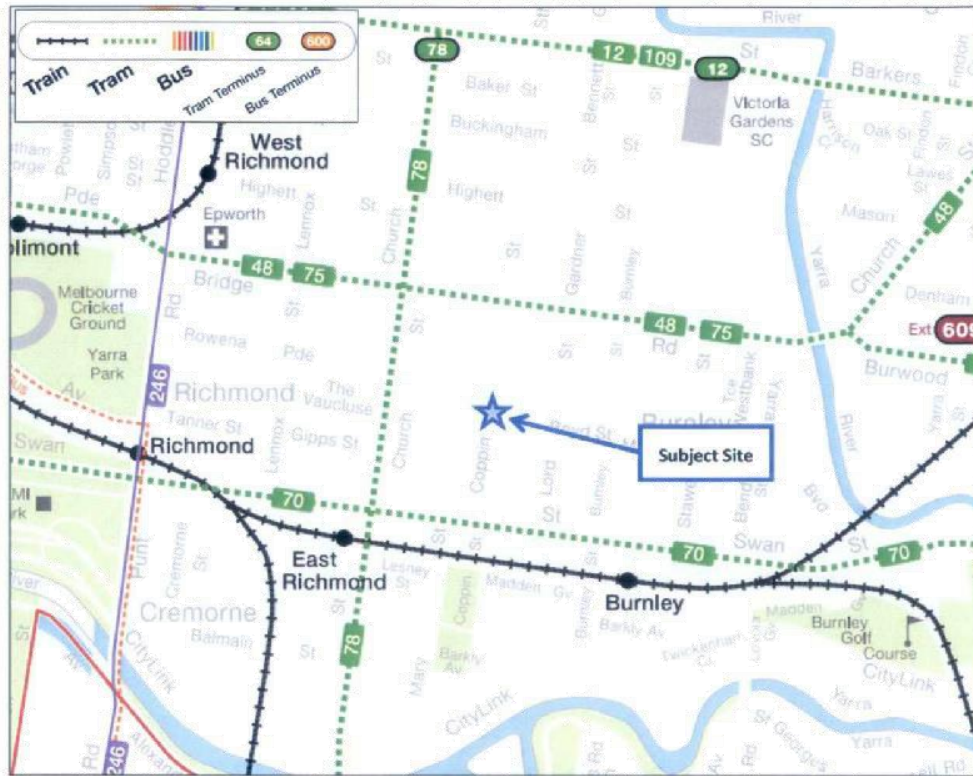
3.4 Alternative Transport Modes

3.4.1 Public Transport

The site is well serviced by public transport services with train and tram services within walking distance of the site. The available public transport services within proximity of the site are shown in Figure 14 and a summary is provided at Table 1.

The site is also within the PPTN area, as previously identified at Section 3.1.

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



Source: Public Transport Victoria, ptv.vic.gov.au

Figure 14: Public Transport Map

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



Traffic Engineering Assessment

142-144 Coppin Street, Richmond: Proposed Mixed Use Development

Table 1: Summary of Public Transport Services

Service	Between	Via
Swan Street – approximately 350m walking distance south of the site		
Tram Route 70	Docklands & Wattle Park	Surrey Hill, Richmond & City
Bridge Road – approximately 400m walking distance north of the site		
Tram Route 48	North Balwyn & Docklands	Kew, Richmond & City
Tram Route 75	Docklands & Vermont South	Burwood, Hawthorn, Richmond & City
Church Street – approximately 450m walking distance west of the site		
Tram Route 78	North Richmond & Balaclava	South Yarra, Prahran & Windsor
Burnley Railway Station – approximately 850m walking distance south-east of the site		
Alamein, Belgrave, Lilydale and Glen Waverley Lines	City & Alamein/Belgrave /Lilydale/Glen Waverley	Richmond, Box Hill, Camberwell & Ringwood

3.4.2 Walkability

Walking is the most sustainable travel mode. The subject site scores 94 out of a possible 100 using the 'Walk Score'¹, a measure of ease of accessibility to everyday services by walking. This score classifies the site as a 'walker's paradise', meaning that that daily errands do not require a car.

The site is located in close proximity to the Swan Street and Bridge Street activity centres and provides access to a range of everyday services with comfortable travel distance of the site such as supermarkets, banks, specialty shops and medical centres.

3.4.3 Bicycle Infrastructure

The site is well served by bicycle infrastructure with on-road bicycle lanes and informal bicycle routes surrounding the site, as shown in the excerpt from the City of Yarra TravelSmart Map shown in Figure 15.

Coppin Street and Burnley Street provide on-road cycle lanes and the Yarra Trail bicycle off-road route is located approximately 1km south of the site. The CBD is a 3km cycle from the subject site.

3.4.4 Car Share Vehicles

Yarra City Council supports 'car sharing' schemes by allocating on-street spaces throughout the municipality for the purposes of accommodating 'car share' cars operated by Flexicar, GoGet and Green Share Car, three Council supported schemes.

There are currently five car share vehicles within 500m of the site. The nearest car share pods are located on Lord Street, approximately 400m to the north of the site, as detailed in Figure 15.

Car sharing schemes provide an alternative to driving to work for staff and actively encourage the use of alternate transport modes. If required, a car can be available by joining the local 'car share' schemes, which allows for work based business trips by car. The use of a non-private car for these

¹ <https://www.walkscore.com/score/142-coppin-st-richmond-vic-australia>

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report**Traffic Engineering Assessment**

142-144 Coppin Street, Richmond: Proposed Mixed Use Development

trips allows staff to avoid drive their own car to work during the commuter peak hours, because they do not need it for business trips during the day.

Car sharing schemes provide an alternative to car ownership for residents and actively encourage the use of alternate transport modes. Residents of this development can be actively discouraged from owning a car as they will have easy access to public transport and are within convenient walking and cycling distance of many activities within the Swan Street and Bridge Road Activity Centre.

If required, a car can be available to these residents by joining the local 'car share' schemes, which will cater for the limited number of times that they may require a car for longer-distance travel and other trips or when they need to transport larger goods.

The existing 'car share' schemes in this area provide a safety net (and fill a mobility gap) for residents by providing convenient access to a car to cater for the limited number of times that they may require a car. This car access is both convenient and cost-effective as they can hire the car on an hourly or daily basis.

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



Traffic Engineering Assessment

142-144 Coppin Street, Richmond: Proposed Mixed Use Development



Source: Yarra City Council

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



4 Traffic Engineering Assessment

4.1 Statutory Car Parking Assessment

The proposed development falls under the land-use categories of 'office' and 'dwelling' under Clause 73.03 of the Planning Scheme

The Planning Scheme sets out the parking requirements for new developments under Clause 52.06.

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 of the Planning Scheme states that:

"The car parking requirement specified in Table 1 does not apply if there is a car parking requirement for the particular use under another provision or if a schedule to the Parking Overlay or the schedule to Clause 52.06 varies the number of car parking spaces required."

Furthermore, Clause 52.06-5 of the Planning Scheme states that:

Column A applies unless Column B applies. Column B applies 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 (State Government of Victoria, 2018); or*
- *A schedule to the Parking Overlay or another provision of the planning scheme specifies that Column B applies.*

The car parking requirements for the proposed use are set out under Clause 52.06 and the car parking table at Clause 52.06-5 of the Planning Scheme.

The site is also located within the PPTN area (refer to Figure 5), and accordingly, the Column B rates set out at Table 1 of Clause 52.06 apply to this site.

The assessment of the car parking requirements associated with the proposed development is set out in the following table.

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



Traffic Engineering Assessment

142-144 Coppin Street, Richmond: Proposed Mixed Use Development

Table 2: Statutory Car Parking Assessment – Column B Rates

Use	Size/No.	Statutory Parking Rate	Car Parking Requirement (Note 1)	Car Parking Provision	Shortfall/ Surplus
One/Two-bedroom apartment	6	1 space per one or two-bedroom dwelling	6	2	-4
Three-bedroom apartment	1	2 spaces per three or more bedroom dwelling	2	2	0
Residential visitors	7	No visitor car parking required	-	-	-
Office	140	3 spaces per 100m ²	4	0	-4
TOTAL			12	4	-8

Notes:

1. Clause 52.06-5 specifies that where a car parking calculation results in a requirement that is not a whole number, the number of spaces should be rounded down to the nearest whole number.

Based on the above, the development has a statutory requirement for 12 car spaces.

The provision of 4 car spaces results in a shortfall of 8 spaces, comprising 4 resident and 4 office spaces. Accordingly, a car parking reduction is required under Clause 52.06-7.

4.2 Reducing the Requirement for Car Parking

Clause 52.06-7 allows for the statutory car parking requirement to be reduced (including to zero). An application to reduce (including reduce to zero) the number of car spaces required under Clause 52.06-5 or in a schedule to the Parking Overlay must be accompanied by a Car Parking Demand Assessment.

Clause 52.06-7 sets out that a Car Parking Demand Assessment must have regard to the following key factors:

- 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 to or proposed occupants (residents or employees) of the land.
- Any empirical assessment or case study.

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



Traffic Engineering Assessment

142-144 Coppin Street, Richmond: Proposed Mixed Use Development

Practice Note 22 (June, 2015) specifies that the provisions for reducing the car parking requirement draw a distinction between the assessment of likely demand for parking spaces (the Car Parking Demand Assessment), and whether it is appropriate to allow the supply of fewer spaces than assessed by the Car Parking Demand Assessment. These are two separate considerations, one technical while the other is more strategic. Different factors are taken into account in each consideration.

Accordingly, the applicant must satisfy the responsible authority that the provision of car parking is appropriate on the basis of a two-step process, which has regard to:

- *The car parking demand likely to be generated by the use.*
- *Whether it is appropriate to allow fewer spaces to be provided than the number likely to be generated by the site.*

An assessment of the appropriateness of reducing the car parking provision below the statutory requirement is set out below.

4.3 Car Parking Demand Assessment

This application requires consideration of the sustainable transport policies and attributes that apply to the site, which is consistent with the purposes of Clause 52.06 set out previously and include “to support sustainable transport alternatives to the motor car”.

The site is suitably located to implement travel demand management strategies to reduce car dependence, increase public transport usage and walking/cycling trips and achieve the Council’s broader sustainable transport policies.

The key attributes of the site’s location are as follows:

- the site is located within walking distance of extensive public transport services and other alternative transport modes,
- the site is located in close proximity to the Swan Street and Bridge Road Activity Centres, with access to many everyday services within close proximity to the site,
- there is no unrestricted on-street parking available in close proximity to the site during the daytime and occupants of this development will not be eligible to access parking permits,
- the proposed development provides a high level of bicycle parking and end of trip facilities, which will assist in encouraging alternative modes of travel, and
- the site has access to local car share vehicles.

Given the availability of nearby public transport services and the ease of cycling trips to the site, we are satisfied that suitable alternatives to car-based travel exist in this locality to support a significant reduction in the on-site parking provisions for staff.

It is important to take a forward looking approach to increasing employment densities in inner areas and that public transport accessibility and access to services will continue to improve in line with government initiatives.

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



Traffic Engineering Assessment

142-144 Coppin Street, Richmond: Proposed Mixed Use Development

4.3.1 Empirical Assessment of Parking Demand

The following Car Parking Demand Assessment has regard to the above factors as appropriate.

Resident Demands

The two and three-bedroom apartments are provided with the required car parking rate, so this assessment focuses on the one-bedroom apartments only.

It is recognised that car ownership is influenced by a number of factors and that in inner areas many households do not own a car for a range of reasons. While the reasons may vary from household to household, they are likely to include one or more of the following:

- affordability issues – some residents may not be able to afford to own, insure, register and maintain a car, or may not travel sufficient distances over the year that makes car ownership worthwhile,
- public transport and service access – residents may live within close proximity to daily services such as shops, banks, activity centre etc., and can conveniently access these by public transport or via non car-based modes (walking, cycling, etc.),
- public transport and employment/study access – residents may have convenient access (via public transport, bicycle, or walking) to their place of work, study, recreation, etc.,
- disability or unlicensed – some residents may be unable to drive due to disability, age or being unlicensed, and therefore are more reliant on alternative transport modes, and
- environmental concerns – some residents may actively minimise their car usage for environmental reasons, preferring to use more sustainable transport modes to meet their daily travel needs.

A review of car ownership statistics for 'flats, units and apartments' within the suburb of Richmond and the City of Yarra recorded for the 2016 Census identified the following average car ownership rates for Richmond:

- Studio/bed-sit apartment – 0.4 cars per dwelling (with 67% not owning a car), and
- One-bedroom apartment – 0.8 cars per dwelling (with 34% not owning a car).

The above statistics relate to the whole of suburb and includes areas with a lower level of access to public transport and services compared with the subject site. These also include owner occupied dwellings in addition to rental properties.

The ABS statistics illustrate a reasonable demand for dwellings without car parking in Richmond. This approach does not recognise that whether a household requires parking or not will factor into the decision-making of that household to reside (as either an owner or a tenant) within a development that does not have on-site parking.

The ABS data indicates that 34% of existing households occupying one-bedroom apartments within Richmond (and 38% in Yarra) do not own a car. This suggests that there is a significant demand within this area for apartments without parking.

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



Traffic Engineering Assessment

142-144 Coppin Street, Richmond: Proposed Mixed Use Development

In the vicinity of the site, there will be hundreds if not thousands of new apartments approved and constructed in this area, that will include developments on larger sites that offer a greater opportunity to provide most (if not all) apartments with a car space.

In contrast, there may also be similar developments on sites where it will be impractical to provide every (or most) apartments with a car space due to the size of the site and/or access constraints.

It needs to be recognised that within any area, there will always be a proportion of households that do not require parking. This decision will also be influenced by the site's convenient proximity to public transport, employment and education and everyday needs (i.e. bank, supermarkets, doctors, etc.).

In this case, the site is located in close proximity to the Swan Street and Bridge Road activity centres and is also located within close proximity public transport services as detailed in Section 3.4.1.

Accordingly, this application needs to be seen as one where it represents only 4 one-bedroom apartments without parking in an area where there will be numerous new apartments built over time and in an area where there is a demonstrated demand for a proportion of apartments without parking. It is also not necessary that each individual development achieve an exact mix of parking rates as some will be able to readily provide more and some will not.

Residents or tenants will be fully aware of the whether their apartment has access to a car space before deciding to live within the development. As the supply and market for apartments is significant in this locality, we are satisfied that providing apartments without car parking for residents is acceptable.

Accordingly, there is an excellent opportunity to provide apartments without on-site parking in this particular development and we are satisfied with the level of resident parking proposed.

Office

No car parking is to be provided on-site for the proposed office tenancies. Parking demands associated with office land uses are typically long-term in nature associated with staff.

In unconstrained parking circumstances, it is not unusual for offices to experience demands at parking rates in the order of 3 spaces per 100m², consistent with the Planning Scheme requirement. That is, if parking is supplied at the Planning Scheme rate and/or is readily available off-site and free of charge, employees are likely to utilise the parking.

On the other hand, in constrained parking circumstances with convenient public transport access, that is where the availability of long-term parking is restricted and/or where parking fees for such parking apply, parking demands will be suppressed and office workers will be encouraged to take advantage of public transport or consider alternative travel modes (i.e. walking or cycling).

The proposed development has good accessibility to public transport and alternative transport modes. Further, on-street parking in the surrounding area is predominantly subject to short-term parking restrictions especially during business hours. Accordingly, future employees of the proposed office tenancy will most likely seek alternative modes of transport to access the site, rather than utilise a private motor vehicle.

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



Traffic Engineering Assessment

142-144 Coppin Street, Richmond: Proposed Mixed Use Development

On this basis and given the small size of the proposed office tenancy, it is considered appropriate for the proposed office tenancy to not be provided with on-site car parking.

Summary

The car parking demand assessment is summarised as follows:

- There is considerable demand for small apartments in this area without parking and that no parking for 4 one-bedroom apartments is acceptable.
- Office staff will use alternative transport modes. There is no opportunity to use on-street parking for long-term parking during business hours.
- There is ample opportunity for residents and staff to rely on alternative transport modes, instead of private cars.

4.4 Appropriateness of providing fewer car spaces than the number likely to be generated

The second step is to consider whether it is appropriate to allow fewer spaces to be provided than the number likely to be generated by the site as assessed by the Car Parking Demand Assessment.

The Car Parking Demand Assessment indicates that:

- The non-provision of resident parking for the smaller one bedroom apartments is acceptable.
- Short-term parking by residential visitors will need to be accommodated off-site.
- Office staff will use alternative transport modes or pay for off-site car parking. There is no opportunity to use on-street parking for long-term parking during business hours.

Clause 52.06-7 sets out a series of car parking provision factors that should be considered when assessing the appropriateness of providing fewer car spaces on the site than are likely to be generated by the use. The car parking provision factors are as follows, with the most relevant factors highlighted:

- **The Car Parking Demand Assessment.**
- Any relevant local planning policy or incorporated plan.
- **The availability of alternative car parking in the locality of the land, including:**
 - **Efficiencies gained from the consolidation of shared car parking spaces.**
 - **Public car parks intended to serve the land.**
 - **On street parking in non residential zones.**
 - **Streets in residential zones specifically managed for non-residential parking.**
- On street parking in residential zones in the locality of the land that is intended to be for residential use.
- The practicality of providing car parking on the site, particularly for lots of less than 300 square metres.

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



Traffic Engineering Assessment

142-144 Coppin Street, Richmond: Proposed Mixed Use Development

- Any adverse economic impact a shortfall of parking may have on the economic viability of any nearby activity centre.
- The future growth and development of any nearby activity centre.
- Any car parking deficiency associated with the existing use of the land.
- Any credit that should be allowed for car parking spaces provided on common land or by a Special Charge Scheme or cash-in-lieu payment.
- Local traffic management in the locality of the land.
- The impact of fewer car parking spaces on local amenity, including pedestrian amenity and the amenity of nearby residential areas.
- The need to create safe, functional and attractive parking areas.
- Access to or provision of alternative transport modes to and from the land.
- The equity of reducing the car parking requirement having regard to any historic contributions by existing businesses.
- The character of the surrounding area and whether reducing the car parking provision would result in a quality/positive urban design outcome.
- Any other matter specified in a schedule to the Parking Overlay.
- Any other relevant consideration.

These factors are considered below.

4.4.1 Availability of Car Parking

As detailed in Section 3.3, Traffix Group has undertaken parking surveys of the surrounding area. The results of the surveys indicate that there is a moderate to high demand for car parking in the area, with a minimum of 23 vacant spaces recorded at 8pm on Saturday 25th May, 2019 (87% occupancy).

Importantly, there was no unrestricted car parking within close proximity of the site, meaning that there would be no opportunities for staff or residents to park their car nearby to the site during the day. Furthermore, the presence of a significant amount of 'Permit Zone' car parking in the area, protects on-street parking for existing residents of the area during evenings.

Residents and staff will be ineligible for car parking permits to exempt them from on-street parking restrictions, and the lack of long-term on-street parking in the area means that residents will not be able to own a car. Staff will use alternative transport modes available to the site, and will not impact on the availability of on-street car parking.

Any Short-term visitor and customer demands can be readily accommodated on-street, including along the site's frontage to Coppin Street.

4.4.2 Existing Car Parking Deficiency

The site is made up of two separate properties.

No. 142 has historically operated as a shop tenancy and has an overall area of approximately 163m².

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



Traffic Engineering Assessment

142-144 Coppin Street, Richmond: Proposed Mixed Use Development

Applying the statutory car parking of 3.5 spaces per 100m² rate results in a requirement for 5 car spaces. As no car parking is provided for the site, an existing deficiency of 5 car spaces applies to No. 142.

No. 144 is a four-bedroom dwelling that provides a single car space on-site within a sealed driveway.

Dwellings of three or more bedrooms require two spaces under Clause 52.06-5, and as such, there is an existing deficiency of 1 car space.

Overall, considering both properties, there is an existing shortfall of 6 car spaces.

Given the proposal has a shortfall of 8 car spaces, there is a net shortfall of 2 car spaces when considering the existing deficiency.

4.4.3 Availability of Alternative Transport Modes

As detailed in Section 3.4.1, the site is well served by efficient public transport services that are within an appropriate walking distance of the development site. These services include Burnley Railway Station and tram services along Swan Street, Bridge Road and Church Street.

Bicycle parking is provided well above the statutory requirements set out at Clause 52.34 of the Planning Scheme, as detailed in Section 4.5. This encourages the use of bicycles as a mode of transport for residents, visitors and staff. The site is well served by bicycle infrastructure and there are many local destinations that are readily accessible by bicycle.

Alternatively, there are many local destinations that are also readily accessible via a short walk.

There are also a number of car share pods in the vicinity of the site that provide residents with vehicle access and staff with the opportunity to use a car for work based business trips.

Given the above, the development site represents an excellent location to support the reduced rate of car parking.

4.4.4 Impact on Activity Centre

Practice Note 22 (Using the Car Parking Provisions, April, 2013) states that:

In an Activity Centre, car parking issues have a part to play, but should not dominate when assessing an application for a use or development.

Where a change of use or relatively small extension is consistent with the strategic plan for the centre and car parking cannot easily be provided, it will often be more sensible to reduce the car parking requirement, rather than prevent the use or development. Some activity centres will have excellent public transport access, ample car parking or mainly serve local customers who arrive on foot. In such circumstances, an increase in business and activity would increase the overall viability of the centre, and the reduced number of car trips would have a positive impact.

In this instance, the development is relatively small (7 dwellings and 140m² of office) and is unlikely to significantly increase the level of parking activity through additional housing within the nearby Activity Centres.

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



Traffic Engineering Assessment

142-144 Coppin Street, Richmond: Proposed Mixed Use Development

4.4.5 Summary

Based on the decision factors of Clause 52.06-7, we are satisfied that the proposed level of car parking for this development is acceptable and that providing fewer car spaces on the site than required under Clause 52.06-7 is supported for the following reasons:

- the site is in close proximity to the Swan Street and Bridge Road Activity Centres and is well served by public transport and alternative transport modes and provides a high level of bicycle parking,
- residents without car parking will not be able to own a car given the lack of on-street parking and inability to access parking permits,
- staff will not be able to drive to work using on-street parking given the local parking restrictions and inability to access parking permits,
- short-term visitor and customer parking demands can be accommodated in the nearby area, including along the subject site's frontages,
- there is an existing car parking shortfall associated with the current site, and
- the development is unlikely to significantly increase the level of parking activity in the nearby activity centres.

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



Traffic Engineering Assessment

142-144 Coppin Street, Richmond: Proposed Mixed Use Development

4.5 Bicycle Parking Assessment

Clause 52.34 of the Planning Scheme specifies bicycle parking requirements for new developments. The statutory bicycle parking requirement of the development under Clause 52.34 is set out in the table below.

Table 3: Statutory Bicycle Parking Assessment – Clause 52.34

Use	Size/No.	Statutory Bicycle Parking Requirement		No. Bicycle spaces required
		Employees/Residents	Customers/Visitors	
Residential	7 (apts.)	1 space to each 5 dwellings	1 space to each 10 dwellings	1 resident 1 visitor
Office	140m ²	1 space to each 300m ² of NFA, if the NFA >1000m ²	1 space to each 1,000m ² of NFA, if the NFA >1000m ²	0 employee 0 customer
TOTAL				2

Based on the above, the development is required to provide 2 bicycle spaces, which is met on-site by the provision of 10 bicycle spaces.

A further 2 spaces are proposed on-street along the site's frontage to Coppin Street.

Secure bicycle parking spaces will be provided via 8 x 'Ned Kelly' style wall mounted bicycle racks and 2 x wall hugging 'Towel Rails' as per the *Bicycle Victoria Bicycle Parking Handbook* and AS2890.3-2015'.

The two spaces along the site's frontage are provided via a single horizontal 'Flat Top' rail.

While shower/change room facilities are technically not required, given the level of bicycle parking and non-provision of car parking, end of trip facilities have been provided for cyclists. One shower/change room has been provided for each office tenancy.

Based on the above, we are satisfied that a high level of bicycle facilities have been provided in this development.

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



Traffic Engineering Assessment

142-144 Coppin Street, Richmond: Proposed Mixed Use Development

4.6 Review of Car Park Layout and Access Arrangements

The carpark layout and vehicle access arrangements detailed in the development plans (attached at Appendix A) have been assessed under the following guidelines:

- Clause 52.06-9 of the Planning Scheme (Design standards for car parking), and
- AS2890.1-2004 – Part 1: Off-Street car parking, where relevant.

Key elements of the design include:

Clause 52.06-9 Design Standard 1 – Accessways

- A passing area is not required under Clause 52.06-9.
- A headroom clearance of at least 2.2m is provided across all trafficable areas in accordance with the requirements of Clause 52.06-9 and AS2890.1-2004.
- All cars can enter and exit the site in a forwards direction in accordance with Clause 52.06-9.
- Pedestrian sight triangles are not required under Clause 52.06-9, given access is provided via a ROW with low volume of vehicles and pedestrians and provides for a low speed environment.

Clause 52.06-9 Design Standard 2 – Car parking spaces

- The double garages are 6.2m wide by 7.5m long in accordance with Clause 52.06-9.
- Access to and from all critical car spaces has been checked using a turning template based on the B85 design car presented in AS2890.1-2004 and we are satisfied that vehicles will be able to safely manoeuvre to and from each space. Swept path diagrams demonstrating access to and from critical car spaces are attached at Appendix C.

Clause 52.06-9 Design Standard 3 – Gradients

- Grades across the site will be negligible and accord with the requirements of Clause 52.06-9.

Overall, we are satisfied that the parking layout and vehicle access arrangements are acceptable and accord with requirements of Clause 52.06-9 and AS2890.1-2004, where relevant.

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report**Traffic Engineering Assessment**

142-144 Coppin Street, Richmond: Proposed Mixed Use Development

4.7 Waste Collection and Loading Arrangements**Waste Collection**

A Waste Management Plan has been prepared by RB Waste Consulting Service (dated 22nd May, 2019).

Waste bins will be collected from the Coppin Street kerbside along the site's frontage. Prior to collection, the Owner's Corporation will arrange for the transfer of bins from the bin store (accessed via the pedestrian walkway along the site's southern boundary) to the kerbside. After collection, the bins will be transferred back to the bin store.

For both residential and office waste, collection will be undertaken via Council's existing waste services.

We are satisfied that these waste collection arrangements are acceptable from a traffic engineering perspective.

Loading Arrangements

Clause 65.01 of the Planning Scheme specifies that:

Before deciding on an application or approval of a plan, the responsible authority must consider, as appropriate:

- *The adequacy of loading and unloading facilities and any associated amenity, traffic flow and road safety impacts.*

Loading activity associated with the dwellings will be minimal and infrequent. The dwellings may require loading from time-to-time associated with removal trucks or vans. We are satisfied that the frequency of these movements does not warrant the inclusion of a dedicated on-site loading bay.

Loading activities associated with the proposed offices will, in practice, be undertaken by smaller type vehicles, such as vans, which can easily be accommodated on-street, including within the 2 car spaces along the site's frontage to Coppin Street. We are satisfied that given the small size of the office tenancies that the development does not warrant the inclusion of a dedicated on-site loading bay.

Based on the above, we are satisfied that there is no need to provide a loading bay in this case.

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



Traffic Engineering Assessment

142-144 Coppin Street, Richmond: Proposed Mixed Use Development

5 Conclusions

Having undertaken a detailed traffic engineering assessment of the proposed mixed use development at 142-144 Coppin Street, Richmond, we are of the opinion that:

- a) the proposed development has a statutory car parking requirement of 12 car spaces under Clause 52.06-5 and the provision of 4 resident car spaces results in a shortfall of 8 spaces, comprising 4 resident and 4 office spaces,
- b) The Car Parking Demand Assessment indicates that:
 - i) There is a significant market for small dwellings without car parking and the no provision of parking for these apartments is acceptable.
 - ii) Short-term parking by residential visitors will need to be accommodated off-site.
 - iii) Office staff will use alternative transport modes. There is no opportunity to use on-street parking for long-term parking during business hours.
- c) the required reduction in parking under Clause 52.06-7 is supported on the following grounds:
 - i) the site is located nearby to multiple Activity Centres and is well served by public transport and alternative transport modes and provides a high level of bicycle parking,
 - ii) residents will not be able to own a car given the lack of on-street parking and inability to access parking permits,
 - iii) staff will not be able to drive to work using on-street parking given the local parking restrictions and inability to access parking permits,
 - iv) short-term visitor and customer parking demands can be accommodated in the nearby area, including along the subject site's frontages,
 - v) there is an existing car parking shortfall associated with the current site,
 - vi) the development is unlikely to significantly increase the level of parking activity in the nearby activity centres.
- d) bicycle parking is provided well above the minimum requirements set out at Clause 52.34 of the Planning Scheme,
- e) parking layout and vehicle access arrangements are acceptable and accord with requirements of Clause 52.06-9 and AS2890.1-2004, where relevant,
- f) loading and waste collection arrangements are acceptable, and
- g) there are no traffic engineering reasons why a planning permit for the proposed mixed use development at 142-144 Coppin Street, Richmond should be refused, subject to appropriate conditions.

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report

Traffic Engineering Assessment

142-144 Coppin Street, Richmond: Proposed Mixed Use Development



Appendix A: Development Plans

G26758R-01C



Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report

Traffic Engineering Assessment

142-144 Coppin Street, Richmond: Proposed Mixed Use Development



Appendix B: Parking Survey Results

G26758R-01C

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report

142-144 Coppin Street, Richmond
26758 Parking Surveys

Supervised By: James Young
Surveyed By: Frank Feller

Survey Dates & Times: See below



Location	Restriction	Capacity Min - Max	Thursday 23rd May, 2019				Saturday 25th May, 2019			
			12noon	1pm	7pm	8pm	12noon	1pm	7pm	8pm
ON STREET CARPARKING										
COPPIN STREET										
West Side										
Speed Bump at SB #194 to Benson Street	No Stopping 9am-10am Wed, 2P 10am-6pm, Permit Zone all other times	6	3	4	4	4	5	5	5	3
	No Stopping 8am-10am Wed, P Disabled all other times	1	0	0	0	0	0	0	0	0
	No Stopping 9am-10am Wed, 2P 10am-6pm, Permit Zone all other times	1	0	0	0	0	0	0	0	0
	No Stopping	-	0	0	0	0	0	0	0	0
Benson Street to Bolger Place	No Stopping	-	0	0	0	0	0	0	0	0
	No Stopping 9am-10am Wed, 2P 10am-6pm, Permit Zone all other times	9	2	4	2	2	5	4	2	2
	No Stopping	-	0	0	0	0	0	0	0	0
Bolger Place to SB #144	No Stopping	-	0	0	0	0	0	0	0	0
	No Stopping 9am-10am Wed, 2P 10am-6pm, Permit Zone all other times	3	1	1	1	1	2	2	2	2
SB #144 to Wall Street (Subject Site)	No Stopping 9am-10am Wed, 2P 10am-11pm	2	2	1	0	1	0	0	2	2
	No Stopping	-	0	0	0	0	0	0	0	0
Wall Street to Theresa Street	No Stopping	-	0	0	0	0	0	0	0	0
	No Stopping 9am-10am Wed, 2P 10am-6pm, Permit Zone all other times	8	5	5	5	5	3	3	2	2
	No Stopping	-	0	0	0	0	0	0	0	0
Theresa Street to ROW	No Stopping	-	0	0	0	0	0	0	0	0
	No Stopping 9am-10am Wed, 2P 10am-6pm, Permit Zone all other times	7	2	2	3	4	4	2	5	5
	No Stopping 7am-5pm Mon-Fri, Permit Zone all other times	1	0	0	1	1	0	0	0	0
	No Stopping 9am-10am Wed, 2P 10am-6pm, Permit Zone all other times	2	2	2	1	1	1	1	0	0
ROW to Abinger Street	No Stopping 9am-10am Wed, 2P 10am-6pm, Permit Zone all other times	10	10	4	10	10	8	8	9	9

N/Sb - Northern/Southern Property Boundary
E/Wb - Eastern/Western Property Boundary
MIP - Mid point
ROW - Right of Way

Prepared by Traffix Group Pty Ltd

Page 1 of 6

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report

142-144 Coppin Street, Richmond
26758 Parking Surveys

Supervised By: James Young
Surveyed By: Frank Feller

Survey Dates & Times: See below



Location	Restriction	Capacity Min - Max	Thursday 23rd May, 2019				Saturday 25th May, 2019			
			12noon	1pm	7pm	8pm	12noon	1pm	7pm	8pm
East Side										
Abinger Street to Murray Street	No Stopping	-	0	0	0	0	0	0	0	0
	No Stopping 9am-10am Tues 2P 10am-11pm	13	12	11	13	12	10	10	12	12
	No Stopping 9am-10am, P Disabled Only all other times	1	1	1	1	1	1	1	1	1
	No Stopping 9am-10am Tues 2P 10am-11pm	1	1	0	0	1	0	0	1	1
	No Stopping	-	0	0	0	0	0	0	0	0
Murray Street to Brady Street	No Stopping	-	0	0	0	0	0	0	0	0
	No Stopping 9am-10am Tues 2P 10am-11pm	2	2	2	2	2	2	1	1	2
	No Stopping	-	0	0	0	0	0	0	0	0
Brady Street to Wall Street	No Stopping	-	0	0	0	0	0	0	0	0
	No Stopping 9am-10am Tues 2P 10am-11pm	4	4	3	3	3	4	2	4	4
	No Stopping 9am-10am, P Disabled Only all other times	1	1	1	1	1	1	1	1	1
	No Stopping 9am-10am Tues 2P 10am-11pm	4	3	3	4	4	3	2	2	3
	No Stopping	-	0	0	0	0	0	0	0	0
Wall Street to First Speed Bump	No Stopping	-	0	0	0	0	0	0	0	0
	No Stopping 9am-10am Tues 2P 10am-11pm	11	4	4	10	10	4	3	11	10
First Speed Bump to Second Speed Bump	No Stopping 9am-10am Tues 2P 10am-11pm	2	2	2	2	2	1	2	2	2
	No Stopping 9am-10am Tues 2P 10am-6pm, Permit Zone all other times	9	5	6	9	9	9	8	8	9
COPPIN STREET	Capacity	42 - 97	97	97	42	42	97	97	42	42
	Total Number of Cars Parked		62	56	36	37	63	55	37	38
	Total Number of Vacant Spaces		35	41	6	5	34	42	5	4
	Percentage Occupancy		64%	58%	86%	88%	65%	57%	88%	90%

NDLS - Northern/Southern Property Boundary
EWLW - Eastern/Western Property Boundary
Mid pt - Mid point
RCHV - Right of Way

Prepared by Traffix Group Pty Ltd

Page 2 of 6

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report

142-144 Coppin Street, Richmond
26758 Parking Surveys

Supervised By: James Young
Surveyed By: Frank Feller

Survey Dates & Times: See below



Location	Restriction	Capacity Min - Max	Thursday 23rd May, 2019				Saturday 25th May, 2019			
			12noon	1pm	7pm	8pm	12noon	1pm	7pm	8pm
BENSON STREET										
North Side										
Coppin Street to Bell Street	No Stopping	-	0	0	0	0	0	0	0	0
	2P 7am-7pm	6	3	3	4	4	5	5	5	6
	No Stopping	-	0	0	0	0	0	0	0	0
South Side										
Coppin Street to Bell Street	No Stopping	-	0	0	0	0	0	0	0	0
	2P 7am-7pm	6	2	3	4	4	5	5	5	5
	No Stopping	-	0	0	0	0	0	0	0	0
BENSON STREET	Capacity	12 - 12	12	12	12	12	12	12	12	12
	Total Number of Cars Parked		5	6	8	8	10	10	10	11
	Total Number of Vacant Spaces		7	6	4	4	2	2	2	1
	Percentage Occupancy		42%	50%	67%	67%	83%	83%	83%	92%
DUKE STREET										
West Side										
End to Wall Street	Work Zone 7am-6pm Mon-Fri, 9am-3pm Sat, Permit Zone all other times	1	1	1	0	1	1	1	1	1
	2P 7am-6pm, Permit Zone all other times	5	4	4	4	4	4	4	3	4
	P Disabled Only	1	1	0	1	1	0	0	0	1
	No Stopping	-	0	0	0	0	0	0	0	0
Wall Street to SB #32	No Stopping	-	0	0	0	0	0	0	0	0
	2P 7am-6pm, Permit Zone all other times	7	3	4	0	2	1	1	2	4
East Side										
SB Pre School to Wall Street	2P 7am-7pm Mon-Sat	7	3	3	3	2	3	0	3	3
	P Disabled Only 7am-7pm Mon-Fri	1	0	0	0	0	0	0	0	0
	2P 7am-7pm Mon-Sat	5	5	5	3	3	4	4	3	5
	No Stopping	-	0	0	0	0	0	0	0	0
Wall Street to End	No Stopping	-	0	0	0	0	0	0	0	0
	2P 7am-7pm Mon-Sat	3	3	3	0	2	2	2	2	3
	No Stopping	-	0	0	0	0	0	0	0	0
	2P 7am-7pm Mon-Sat	3	2	2	2	3	1	2	3	3
DUKE STREET	Capacity	20 - 32	32	32	20	20	32	32	20	20
	Total Number of Cars Parked		21	21	9	11	15	13	11	15
	Total Number of Vacant Spaces		11	11	11	9	17	19	9	5
	Percentage Occupancy		66%	66%	45%	55%	47%	41%	55%	75%

N/S/O - Northern/Southern Property Boundary
E/W/O - Eastern/Western Property Boundary
Mid pt - Mid point
RCW - Right of Way

Prepared by: Traffic Group Pty Ltd

Page 3 of 8

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report

142-144 Coppin Street, Richmond
26758 Parking Surveys

Supervised By: James Young
Surveyed By: Frank Feller

Survey Dates & Times: See below



Location	Restriction	Capacity Min - Max	Thursday 23rd May, 2019				Saturday 25th May, 2019			
			12noon	1pm	7pm	8pm	12noon	1pm	7pm	8pm
LORD STREET										
West Side										
Speed Bump to Wall Street	2P 7am-7pm, Permit Zone all other times	9	5	6	8	8	8	8	6	7
	No Stopping	-	0	0	0	0	0	0	0	0
Wall Street to Brady Street	No Stopping	-	0	0	0	0	0	0	0	0
	2P 7am-7pm, Permit Zone all other times	10	9	9	8	9	7	7	8	8
Brady Street to Murray Street	2P 7am-7pm, Permit Zone all other times	1	1	1	1	1	1	1	1	1
	No Stopping	-	0	0	0	0	0	0	0	0
East Side										
Opposite Murray Street to Corsair Street	2P 7am-6pm, Permit Zone all other times	7	3	3	7	7	6	5	5	5
	No Stopping	-	0	0	0	0	0	0	0	0
Corsair Street to Wall Street	No Stopping	-	0	0	0	0	0	0	0	0
	2P 7am-7pm Mon-Sat	2	2	2	2	2	2	2	2	2
	No Stopping	-	0	0	0	0	0	0	0	0
Wall Street to Boyd Street	No Stopping	-	0	0	0	0	0	0	0	0
	2P 7am-7pm	4	4	4	4	4	3	4	4	4
	P Disabled Only	1	1	1	1	1	1	1	1	1
	No Stopping	-	0	0	0	0	0	0	0	0
LORD STREET	Capacity	14 - 34	34	34	14	14	34	34	14	14
	Total Number of Cars Parked		25	26	7	7	29	27	7	7
	Total Number of Vacant Spaces		9	8	7	7	5	7	7	7
	Percentage Occupancy		74%	76%	50%	50%	85%	79%	50%	50%

N/Sb - Northern/Southern Property Boundary
E/Wb - Eastern/Western Property Boundary
Mid pt - Mid point
RCW - Right of Way

Prepared by Traffic Group Pty Ltd

Page 4 of 6

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report

142-144 Coppin Street, Richmond
26758 Parking Surveys

Supervised By: James Young
Surveyed By: Frank Feller

Survey Dates & Times: See below



Location	Restriction	Capacity Min - Max	Thursday 23rd May, 2019				Saturday 25th May, 2019			
			12noon	1pm	7pm	8pm	12noon	1pm	7pm	8pm
MURRAY STREET										
North Side										
Lord Street to Coppin Street	No Stopping	-	0	0	0	0	0	0	0	0
	P Disabled Only	1	0	0	1	1	0	0	0	0
	Permit Zone	13	5	5	7	7	8	6	6	6
	No Stopping	-	0	0	0	0	0	0	0	0
South Side										
Coppin Street to Lord Street	No Stopping	-	0	0	0	0	0	0	0	0
MURRAY STREET	Capacity	1 - 1	1	1	1	1	1	1	1	1
	Total Number of Cars Parked		0	0	1	1	0	0	0	0
	Total Number of Vacant Spaces		1	1	0	0	1	1	1	1
	Percentage Occupancy		0%	0%	100%	100%	0%	0%	0%	0%
BRADY STREET										
North Side										
Lord Street to Coppin Street	No Stopping	-	0	0	0	0	0	0	0	0
South Side										
Coppin Street to Lord Street	No Stopping	-	0	0	0	0	0	0	0	0
	Permit Zone	10	2	2	3	3	3	3	3	3
	No Stopping	-	0	0	0	0	0	0	0	0
BRADY STREET	Capacity	0 - 0	-	-	-	-	-	-	-	-
	Total Number of Cars Parked		-	-	-	-	-	-	-	-
	Total Number of Vacant Spaces		-	-	-	-	-	-	-	-
	Percentage Occupancy		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

N/Sid - Northern/Southern Property Boundary
E/Wid - Eastern/Western Property Boundary
Mid pt - Mid point
ROW - Right of Way

Prepared by Traffic Group Pty Ltd

Page 5 of 8

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report

142-144 Coppin Street, Richmond
26758 Parking Surveys

TrafficGroup
Traffic Engineers and Transport Planners

Supervised By: James Young
Surveyed By: Frank Feller

Survey Dates & Times: See below

Location	Restriction	Capacity Min - Max	Thursday 23rd May, 2019				Saturday 25th May, 2019					
			12noon	1pm	7pm	8pm	12noon	1pm	7pm	8pm		
WALL STREET												
North Side												
Lord Street to Duke Street	No Stopping	-	0	0	0	0	0	0	0	0		
	2P 7am-7pm Mon-Sat	4	0	3	3	3	3	2	4	4		
	No Stopping	-	0	0	0	0	0	0	0	0		
Duke Street to Coppin Street	No Stopping	-	0	0	0	0	0	0	0	0		
	2P 7am-7pm Mon-Sat	6	1	2	5	5	5	4	3	5		
	No Stopping	-	0	0	0	0	0	0	0	0		
Coppin Street to Wall Place	No Stopping	-	0	0	0	0	0	0	0	0		
	2P 7am-7pm Mon-Sat	3	2	2	3	3	1	0	4	4		
Wall Place to Mary Street	2P 7am-7pm Mon-Sat	7	7	6	8	8	6	6	6	6		
	P Disabled Only	1	1	1	1	1	1	1	1	1		
	2P 7am-7pm Mon-Sat	1	1	1	0	0	0	1	1	1		
	No Stopping	-	0	0	0	0	0	0	0	0		
South Side												
Mary Street to Wall Place	No Stopping	-	0	0	0	0	0	0	0	0		
	2P 90 degree angle 7am-7pm Mon-Sat	15	11	13	11	11	12	11	12	12		
	No Stopping	-	0	0	0	0	0	0	0	0		
Wall Place to Coppin Street	No Stopping	-	0	0	0	0	0	0	0	0		
	2P 7am-7pm Mon-Sat	4	3	3	3	3	3	3	4	4		
	No Stopping	-	0	0	0	0	0	0	0	0		
Coppin Street to Duke Street	No Stopping	-	0	0	0	0	0	0	0	0		
	2P 90 degree angle 7am-7pm Mon-Sat, Permit Zone all other times	7	6	6	5	6	4	3	7	7		
	No Stopping	-	0	0	0	0	0	0	0	0		
Duke Street to Lord Street	No Stopping	-	0	0	0	0	0	0	0	0		
	2P 90 degree angle 7am-7pm Mon-Sat, Permit Zone all other times	14	10	8	8	11	8	12	8	11		
	No Stopping	-	0	0	0	0	0	0	0	0		
WALL STREET	Capacity	41 - 62	62	62	41	41	62	62	41	41		
	Total Number of Cars Parked		42	45	34	34	43	43	35	37		
	Total Number of Vacant Spaces		20	17	7	7	19	19	6	4		
	Percentage Occupancy		68%	73%	83%	83%	69%	69%	85%	90%		

N/Sb - Northern/Southern Property Boundary
E/Wb - Eastern/Western Property Boundary
Mid pt - Mid point
R/W - Right of Way

Prepared by: Traffic Group Pty Ltd

Page 6 of 8

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report

142-144 Coppin Street, Richmond
26758 Parking Surveys

Supervised By: James Young
Surveyed By: Frank Peller

Survey Dates & Times: See below



Location	Restriction	Capacity Min - Max	Thursday 23rd May, 2019				Saturday 25th May, 2019			
			12noon	1pm	7pm	8pm	12noon	1pm	7pm	8pm
MARY STREET										
West Side										
Brougham Street to Wall Street	No Stopping	-	0	0	0	0	0	0	0	0
	2P 7am-7pm Mon-Sat	4	5	4	5	5	2	3	5	5
	No Stopping	-	0	0	0	0	0	0	0	0
Wall Street to SB #110	No Stopping	-	0	0	0	0	0	0	0	0
	2P 7am-7pm Mon-Sat	1	0	0	1	1	1	1	1	1
	P Disabled Only	1	1	1	1	1	1	1	1	1
	2P 7am-7pm Mon-Sat	5	4	4	4	4	2	2	4	4
East Side										
SB #107 to Wall Street	Permit Zone	5	3	3	4	4	4	3	4	5
	No Stopping	-	0	0	0	0	0	0	0	0
Wall Street to Brougham Street (NB #73)	No Stopping	-	0	0	0	0	0	0	0	0
	Permit Zone	10	6	6	9	9	5	5	5	5
MARY STREET	Capacity	11 - 11	11	11	11	11	11	11	11	11
	Total Number of Cars Parked		10	9	11	11	6	7	11	11
	Total Number of Vacant Spaces		1	2	0	0	5	4	0	0
	Percentage Occupancy		91%	82%	100%	100%	55%	64%	100%	100%

N/S/B - Northern/Southern Property Boundary
E/W/B - Eastern/Western Property Boundary
Mid pt - Mid point
ROW - Right of Way

Prepared by Traffic Group Pty Ltd

Page 7 of 8

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report

142-144 Coppin Street, Richmond
26758 Parking Surveys

TraffixGroup
Traffic Engineers and Transport Planners

Supervised By: James Young
Surveyed By: Frank Keller

Survey Dates & Times: See below

Location	Restriction	Capacity Min - Max	Thursday 23rd May, 2019				Saturday 25th May, 2019					
			12noon	1pm	7pm	8pm	12noon	1pm	7pm	8pm		
MALLESON STREET												
North Side												
Mary Street to Bend	No Stopping	-	0	0	0	0	0	0	0	0		
	2P 7am-7pm Mon-Sat	14	10	10	12	12	12	11	14	14		
	No Stopping	-	0	0	0	0	0	0	0	0		
South Side												
Bend to Mary Street	No Stopping	-	0	0	0	0	0	0	0	0		
	2P 7am-7pm Mon-Sat	16	11	12	12	12	12	11	15	15		
	No Stopping	-	0	0	0	0	0	0	0	0		
MALLESON STREET	Capacity	30 - 30	30	30	30	30	30	30	30	30		
	Total Number of Cars Parked		21	22	24	24	24	22	29	29		
	Total Number of Vacant Spaces		9	8	6	6	6	8	1	1		
	Percentage Occupancy		70%	73%	80%	80%	80%	73%	97%	97%		
SUMMARY -> ON-STREET CARPARKING												
Car Parking Supply		171 - 279	279	279	171	171	279	279	171	171		
Total Number of Cars Parked			186	185	130	133	190	172	140	148		
Total Number of Vacant Spaces			93	94	41	38	89	102	31	23		
Percentage Occupancy			67%	66%	76%	78%	68%	63%	82%	87%		
<p>Note: Public parking includes spaces that are available to the general public and excludes 'No Stopping', 'Loading Zones' and 'No Parking' areas, etc., during the relevant enforcement periods</p> <p>LEGEND: Public Parking</p> <div> <div></div> Not available to the general public <div></div> Not Available, illegally parked cars included in analysis <div></div> No Stopping/Other No Parking </div>												

N/SB - Northern/Southern Property Boundary
E/WB - Eastern/Western Property Boundary
Mid pt - Mid point
RDW - Right of Way

Prepared by Traffix Group Pty Ltd

Page 8 of 8

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report

Traffic Engineering Assessment

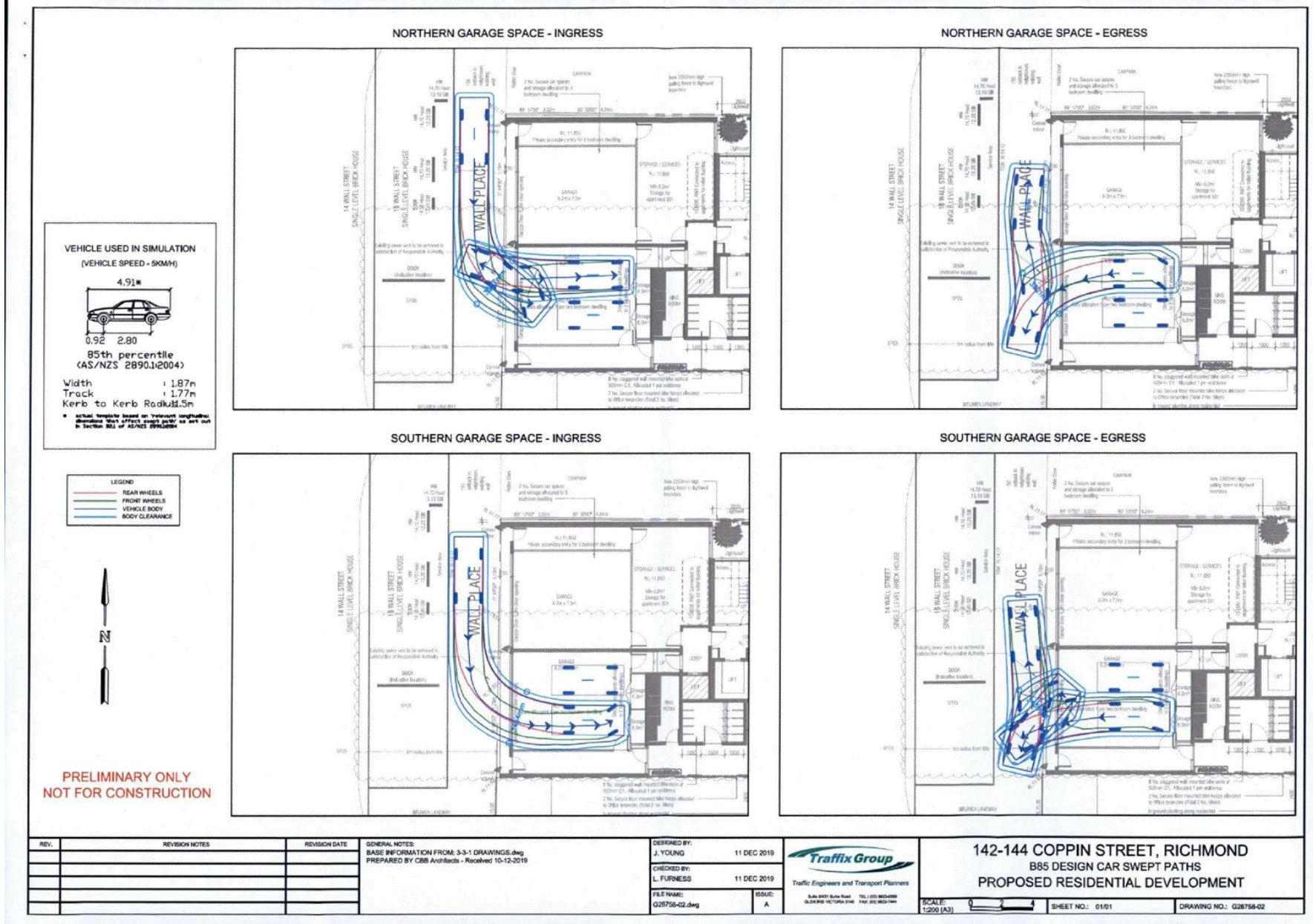
142-144 Coppin Street, Richmond: Proposed Mixed Use Development



Appendix C: Swept Path Diagrams

G26758R-01C

Attachment 6 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A Traffic Assessment Report



Attachment 7 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A - Waste Management Plan

RB WASTE CONSULTING SERVICE

7/21 – 25 Wensley Street, Diamond Creek Vic 3089

Tel: 0400 345 078 / 9438 5183

ABN: 88 363 141 893

Email: robertburr4@bigpond.com

RB/RBWC/103-2019

Bacolas Group

29th January 2020

C/- CBG Architects Pty Ltd

33 Tope Street

South Melbourne Vic 3205

Attention: Bill Katsabis

WASTE MANAGEMENT PLAN

142-144 COPPIN STREET RICHMOND

AMENDMENT

I refer to your request for Waste Services. Based on CBG Architects plans for 7 Apartments and Office areas, the following Waste Management Plan is proposed.

Attachment 7 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A - Waste Management Plan

CONTENTS AS FOLLOWS

1). RESPONSIBILITY

- 1a). Tenements
- 1b). Owner's Corporation/Management
- 1c). Developers
- 1d). Operators

2). WASTE GENERATION & AVAILABLE SPACE

- 2a). Waste Generation - Weekly
- 2b) Available Space

3). SERVICES & ALLOCATION

- 3a). Bin Details
- 3b). Recommended Bin Colouring

4). NOISE & ODOUR MANAGEMENT, SAFETY AND SIGNAGE

- 4a). Noise & Odour Management
- 4b). Safety & Signage

5). WASTE REMOVAL

- 5a). Waste Removal-Private Waste Contractor

6). SUSTAINABILITY & SUMMARY

- 6a). Sustainability
- 6b). Summary

7). CONTACTS

Attachment 7 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A - Waste Management Plan

1). RESPONSIBILITY

The submission of this waste plan is consistent with the City of Yarra Council guidelines for preparing a Waste Management Plan and the guide to best practice for Waste Management in multi-unit developments.

1a). TENEMENTS

The proposed Development consists of 7 only apartments on 3 levels plus ground level, 2 Office areas and a communal bin room also on the ground level.

There are 4 x 1 bedrooms, 2 x 2 bedrooms and 1 x 3 bedrooms apartments and 2 office areas totalling 145m². A communal bin room is provided on the ground level adjacent to the Bike store.

Each apartment will have 2 receptacles, 1 for general waste and 1 for recycling waste located within the kitchen cupboard area of the apartment for storage.

Residential tenants will transfer General waste in suitable bags and tied, to the communal bin room on the ground level and deposit directly into the appropriately marked bins.

Residential tenants will transfer Commingled waste to the communal bin room on the ground level and deposit directly into the appropriately marked bins.

Cardboard will be flattened and folded prior to depositing into the appropriately marked bins.

Access to the communal refuse room on the ground level is via lift or stairwell.

Offices will provide their own in office bin storage whilst cleaners/ staff members will transfer each waste stream to the communal bin room and deposit into the appropriately marked bins for offices.

Access to the communal bin room on the ground level by office staff or cleaners is via the rear door of each office area.

Collection day for each of the waste streams is a Monday from 6.00am onward; bins are placed at kerbside the evening prior.

1b).

EACH RATEABLE TENEMENT IS LIABLE TO BE CHARGED FOR MUNICIPAL SERVICES IRRESPECTIVE OF THE LEVEL OF COLLECTION SERVICES PROVIDED BY COUNCIL.

Attachment 7 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A - Waste Management Plan

1c).

The communal bin room will be ventilated by extraction fan or a similar mechanical device and have available 24 hour sensor lighting for tenant safety, running water and a suitable grate for spillage or bin wash down.

The door on the communal bin room for collection of bins must be a minimum of 900mm wide to allow bins to fit through safely without causing damage to the surrounding structure.

1d).

All aspects of the Waste Management System including the transfer of waste streams to the communal bin room on ground level of the proposed development and to kerbside for collection, will be the responsibility of the occupants/tenants or the Owner's Corporation- not the Council waste collector.

2). WASTE GENERATION & ALLOCATION

2a). WASTE GENERATION-WEEKLY

Waste source	Waste stream	Waste total
Apartments 4(1b/r)	General waste	160 Litres
	Commingle waste	240 Litres
Apartments 2 (2b/r)	General waste	100 Litres
	Commingle waste	160 Litres
Apartments 1 (3b/r)	General waste	60 Litres
	Commingle waste	100 Litres
Offices 145 m2	General waste	75 Litres
	Commingle waste	75 Litres
Waste Total		970 Litres

Attachment 7 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A - Waste Management Plan

2B). AVAILABLE SPACE

Waste source	Waste stream	Bin size	Number of bins	Collections per week	Bin area required
Apartments	General	240L	2	1	0.96 m2
	Commingled	240L	3	1	1.44 m2
Hard Waste					1.00 m2
E-Waste		80L	1	as required	0.26 m2
Organic waste		80L	1	as required	0.26 m2
Total area required for bins					3.92 m2

Recycling and Cardboard will be combined as Commingled waste.

The communal bin room shown on the current plans for this proposed development is 9.24 m2 and suitable in size and complies with guidelines set by Council.

Green waste will be removed from the proposed development by the person/s appointed by the Owner's Corporation to care for the Landscaping of the proposed development.

Disposal of liquid waste/electronics and paint/chemicals etc. will be organised for tenants by the Owner's Corporation Management Team.

Hard waste will be collected twice yearly by contacting Yarra Council on (03) 9205 5555

This service can be altered to reflect increased/decreased waste volumes and/or unforeseen requirements.

3). SERVICES & ALLOCATION

3a). BIN DETAILS

Capacity (Litres)	Height (mm)	Width (mm)	Depth (mm)	Empty (weight kg)	Maximum (weight kg)	Typical (ave. density kg)
120	1000	500	600	9.30	44.00	37.00
240	1100	600	800	15.00	55.00	46.00
660	1200	1400	700	45.00	270.00	220.00
1100	1390	1360	1090	58.00	385.00	310.00

Attachment 7 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A - Waste Management Plan

*Details are a guide only, variations will occur with different branding.

*Weight variations will occur subject to density when disposing of wet or compacted waste.

3b). RECOMMENDED BIN COLOUR CODING-METRO COUNCILS

Bins	Garbage/Food	Commingle/Recycling /Cardboard
Lid	Green	Yellow
Body	Green	Green

*Councils will vary with colours, check council for further information.

4). NOISE & ODOUR MANAGEMENT, SAFETY & SIGNAGE

4a). NOISE & ODOUR MANAGEMENT

All bins are to be kept within the communal refuse room at all times except during servicing.

(MGB) Mobile Garbage Bins have rubber wheels for quieter performance during operation.

Council waste contractors will ensure council and EPA guidelines are met at all times.

The Owner's Corporation will ensure this does occur.

Waste collection services offer little or no disturbance to all tenants including surrounding tenants.

Keeping lids closed at all times to prevent overflow of bin maintenance within the refuse area will assist in the control of odour and vermin management.

Professional bin cleaning contractors can be engaged on a regular basis, this will assist in the control of odour and vermin management.

4b). SAFETY & SIGNAGE

Bins will be identified by different colours. Stickers or embossing on each bin will clearly indicate the direction of each waste stream.

Signage on walls in the communal bin room will clearly assist tenants in the direction of each waste stream.

Conditions of entry to the communal refuse room will be displayed on the entrance for tenants to see prior to entry.

Advertising and promotional material will be on offer from Council to remind tenants of their recycling obligation.

Attachment 7 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A - Waste Management Plan

5). WASTE REMOVAL

5a). WASTE REMOVAL-COUNCIL

Person/s appointed by the Owner's Corporation to care for the communal bin room will transfer each bin to kerbside the evening prior to collection or prior to 6.00am on the day of collection.

The bins must be placed 300mm apart for easy access by Council vehicles and 1.5 metres from the Development boundary for safe pedestrian access, bins must be placed with wheels not facing the kerb and approximately 100mm back from the kerbside.

Once collection has taken place by Council vehicles, the person/s responsible for the removal of bins will do so within 24 hours and place them back within the communal bin room as before.

This procedure will take place weekly for each waste stream.

Collection times will be between 6.00am-10.00pm on a Monday or as otherwise advised by Council under Local By-Laws and EPA guidelines.

6). SUSTAINABILITY & SUMMARY

6a). Victoria's **Getting Full Value – Waste and Resources Recovery Policy 2013** sets targets for increasing the recovery rate of solid waste for refuse and recycling.

Further information can be sought from Sustainability Victoria website;
www.sustainability.vic.gov.au

Tenants should be made aware of this website on occupancy to this Development and be encouraged to participate in the programs made available by the Owner's Corporation.

6b). SUMMARY:

The use of MGB 240 and 120 Litre bins for Residential and Office tenants is the most effective method of Managing waste at this Development

The use of Council vehicle to collect bins from the front of this Development is the most effective method of servicing this Development.

Attachment 7 - PLN19/0364 - 142 - 144 Coppin Street Richmond - S57A - Waste Management Plan

7). CONTACTS

CITY OF YARRA COUNCIL

333 BRIDGE ROAD

RICHMOND VIC 3121

TEL: (03) 9205 5555

WEBSITE: www.yarracity.vic.gov.au

GI Asset Management (e-waste recycling)

7/225 Lonsdale Street

Dandenong

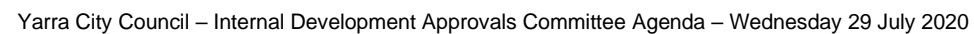
Robert Burr

R B Waste Consulting Service

ABN: 88 363 141 893

Email: robertburr4@bigpond.com

Tel: 0400 345 078 / (03) 9438 5183



**Attachment 8 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Urban Design Comments
Based on Originally Advertised Plans**



MeMO

TO: **Nish Goonetilleke (Statutory Planner)**
FROM: **Lucy Ferguson (Urban Designer)**
DATE: **12 December 2019**
SUBJECT: **142-144 Coppin Street, Richmond**
APPLICATION NO: **PLN19/0364**
DESCRIPTION: **Construction of a four-storey building for dwellings and offices.**

COMMENTS SOUGHT

Urban design comments have been sought on:

- The design response and its reference/relationship to the streetscapes;
- Siting, bulk and height of the proposed development and any impacts; and
- The proposed materials and finishes.

These comments are provided on Revision A – RFI Response Plans (CBG Architects).

COMMENTS SUMMARY

The proposal is not supported in its current form. In summary, the following changes are recommended to make the proposal more acceptable from an urban design perspective (detailed overleaf):

- Reduce the fence height to the common pedestrian entrance on Coppin Street (maximum 1.8m) and specify the materiality of the fence, roofing and structure along the entrance.
 - Introduce vertical articulation to the Coppin Street frontage to respond to the prevailing streetscape grain. The current composition and heavy horizontal banding increases the bulk and
 - Reduce the bulk of the form as it presents to Wall Place, by increasing the Second Floor and Third Floor balcony setback to Wall Place.
 - Rationalise the stepped built form response along the southern interface to simplify the form and reduce visual bulk.
 - Minimise the bulk of the Third Floor and associated pergola structures, through the removal of brick pergola walls utilising a light weight structure in its place and use of darker recessive materials in lieu of brick to distinguish the upper form from the base.
-

SITE AND CONTEXT

- The subject site is an amalgamated allotment on the western side of Coppin Street, Richmond. The site has a frontage of approximately 16.4m, an average depth of approximately 31.2m, with an overall site area of approximately 510sqm.

Attachment 8 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Urban Design Comments Based on Originally Advertised Plans

- The site is subject to Commercial Zone 1 (C1Z) and forms part of a small commercial pocket at the corner of Coppin Street and Wall Street. The surrounding area is generally zoned General Residential Zone (GRZ2).
- No Heritage Overlay applies to the site or the immediate streetscape context on Coppin Street. Heritage Overlay HO319 (Elm Grove Precinct) applies to Wall Street, immediately west of the site.
- The site has the following immediate interfaces:
 - To the north at 140 Coppin Street is a single storey commercial building. Further north at 139 Coppin Street is a double storey commercial building. The second storey addition is setback approximately 5m from the frontage and presents as two storey sheer to Wall Street.
 - To the east is Coppin Street a two way street approximately 19.5m in width.
 - To the south at 146 Coppin Street is a single storey brick dwelling setback approximately 3m from the Coppin Street frontage, with private open space to the rear.
 - To the west is Wall Place a no through laneway (approximately 3.3m wide). Further west at 16 Wall Street is a single storey terrace.

DEVELOPMENT PROPOSAL

- Four (4) storey mixed use development, comprising 2 x office tenancies at Ground Floor (totalling 145sqm) and 8 dwellings (5 x 1bdr, 2 x 2bdr and 1 x 3bdr). Rear car parking (2 x spaces) is proposed, accessed via Wall Place.

URBAN DESIGN FEEDBACK

Built Form and Massing

- The proposal seeks a maximum building height of four storeys (approximately 13.1m from NGL). The compositional proposition is broadly a stepped three storey base with recessive upper fourth storey. The southern boundary marks the transition to 146 Coppin Street within the General Residential Zone and requires a considered and massing response and sensitive transition. It is recommended to rationalise setbacks and balconies along this interface to simplify the overly stepped and bulky form.
- Pursuant to the Design Guidelines at Clause 22.10-3.3 new development which abuts a laneway should be no higher than two storeys. The Second Floor is proposed to be setback between 950mm to 2.25m. Above this, the Third Floor terrace is setback a modest 950mm. It is recommended that the solid component (horizontal concrete) of the street wall at the northwest corner be reconsidered and the Second Floor and Third Floor balcony be set back further (minimum 2.25m) to achieve a recessed upper level.

Design Detail and Materiality

- In conjunction with the above recommended massing amendments, the following design suggestions are offered to resolve the outcome:
 - The proposal adopts a dominant horizontal proportion utilising banding, a stronger vertical division/break (centrally to the frontage between dwellings) is required to the Coppin Street frontage to reference the prevailing rhythm of the immediate streetscape pursuant to Clause 22.10.
 - The treatment and materiality of the Third Floor and associated terrace structures is crucial in ensuring the upper form is recessive. It is recommended that the brick wing walls be removed and light weight structural form be pursued. Additionally the Third Floor should be considered 'in the round' and each elevation finished in recessive dark finish (i.e. monument).
- The proposal's material palette generally consists of acrylic render (monument), brick (white wash), concrete (patterned natural finish), perforated metal (monument), metal (natural bronze) and glazing. Broadly the proposed materials and finish palette is supported, subject to the receipt of additional details including front fence and communal entrance (translucent roofing and structural framing element).

Attachment 8 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Urban Design Comments Based on Originally Advertised Plans

Public Realm

- The Ground Floor Coppin Street interface is broadly acceptable, the presence of two office tenancies strengthens the presence of the small commercial pocket. The 900mm setback and planters assist in defining the tenancies. The entrances could be further enhanced and differentiated through the introduction of a plinth below the window glazing.
- The communal residential entrance is located along the southern boundary. The partially undercover corridor is double gated for security. The proposed height of the wrought iron gate as shown in elevation (TP201-A) is approximately 2.7m, it is recommended this be reduced to 1.8m maximum.
- Generally the provision of habitable spaces to activate the Wall Place frontage is supported. However there are concerns as to the internal amenity of dwelling G01. Should the Wall Place Ground Floor program be amended and be predominantly car parking, adequate consideration should be given to the lighting and garage door treatment.

Streetscapes

- 2 x bicycle hoops (equating to 4 visitor spaces) are proposed on the Coppin Street footpath. Nominated bicycle hoops should be as per Technical Notes: City of Yarra Public Domain Manual.
- The George Street footpath is to be reinstated as asphalt footpath. All proposed streetscape materials should be as per *Technical Notes: City of Yarra Public Domain Manual* and *Yarra Standard Drawings*. Existing kerb and channel should be reinstated as per in-situ materials.
- Any on-street parking re-instated as a result of development works must be approved by Council's Parking Management Unit.

Other Considerations

- The use of wide planters and balustrades to preclude downward views whilst maintaining access to daylight and outlook is supported. Sufficient additional information should be provided to demonstrate how the proposed landscape can be achieved and maintained.

Attachment 9 - PLN190364 - 142 - 144 Coppin Street Richmond - ESD Comments on Originally Advertised Plans

Sustainable Management Plan (SMP)

Referral Response by Yarra City Council



Assessment Summary:

Responsible Planner:	Nish Goonetilleke
ESD Advisor:	Gavin Ashley
Date:	02.12.2019
Subject Site:	PLN19/0364VIC
Site Area:	Approx. 512m ²
Project Description:	Construction of 4 level mixed use building comprising two offices and 8 apartments.
Pre-application meeting(s):	Unknown.
Documents:	PLN190364 - 142-144 Coppin Str-ichmond - S52 Advertised Plans PLN190364 - 142-144 Coppin Str-nd - S52 Advertised ESD Report – Sustainability Management Plan V2, dated July 2019

The standard of the ESD meets Council's Environmental Sustainable Design (ESD) standards.

Should a permit be issued, the following ESD commitments (1) and deficiencies (2) should be conditioned as part of a planning permit to ensure Council's ESD standards are fully met.

The SMP includes:

- a. A BESS assessment showing a score of 60% which is 10% better than "Best Practice" standard.
- b. FirstRate5 results for a sample of 6 apartments
- c. A STORM report with a 102% STORM score has been submitted that demonstrates best practice and relies on ~188m² of roof and 108m² balconies connected to a 10,000 litre rainwater tank connected to toilet flushing in apartments
- d. Daylight modelling results

(1) Applicant ESD Commitments:

- The residential dwellings will achieve an average energy rating of 6.5 Stars with no apartment achieving less than 6 stars
- A 10% improvement on heating and cooling consumption in comparison to a reference case defined by the NCC 2016 BCA Section J will be provided for the offices.
- Solar PV system: minimum 2kWp
- A private outdoor clothesline will be provided for each dwelling
- Rainwater tank(s) with an effective capacity of 10,000L
- Daylight: 100% living areas achieve a daylight factor greater than 1%; 83% bedrooms achieve a daylight factor greater than 0.5%;
- Eight staggered wall mounted bicycle racks will be provided plus two hoops for office users/visitors.
- Building User Guide will be provided to building occupants with the intent to reduce energy and water consumption.

(2) Application ESD Deficiencies:

Attachment 9 - PLN190364 - 142 - 144 Coppin Street Richmond - ESD Comments on Originally Advertised Plans

Sustainable Management Plan (SMP)

Referral Response by Yarra City Council



(3) Outstanding Information:

- Show location of outdoor clothes line

(4) ESD Improvement Opportunities

- Extend application of ceiling fans to all bedrooms.
- Use permeable paving to reduce run-off.
- Increase the size of the PV system.
- Natural ventilation to office spaces.

Further Recommendations:

The applicant is encouraged to consider the inclusion of ESD recommendations, detailed in this referral report. Further guidance on how to meet individual planning conditions has been provided in reference to the individual categories. The applicant is also encouraged to seek further advice or clarification from Council on the individual project recommendations.

Attachment 9 - PLN190364 - 142 - 144 Coppin Street Richmond - ESD Comments on Originally Advertised Plans

Sustainable Management Plan (SMP)
for planning applications being considered by Yarra Council



Applicant Response Guidelines

Project Information:

Applicants should state the property address and the proposed development's use and extent. They should describe neighbouring buildings that impact on or may be impacted by the development. It is required to outline relevant areas, such as site permeability, water capture areas and gross floor area of different building uses. Applicants should describe the development's sustainable design approach and summarise the project's key ESD objectives.

Environmental Categories:

Each criterion is one of the 10 Key Sustainable Building Categories. The applicant is required to address each criterion and demonstrate how the design meets its objectives.

Objectives:

Within this section the general intent, the aims and the purposes of the category are explained.

Issues:

This section comprises a list of topics that might be relevant within the environmental category. As each application responds to different opportunities and constraints, it is not required to address all issues. The list is non-exhaustive and topics can be added to tailor to specific application needs.

Assessment Method Description:

Where applicable, the Applicant needs to explain what standards have been used to assess the applicable issues.

Benchmarks Description:

The applicant is required to briefly explain the benchmark applied as outlined within the chosen standard. A benchmark description is required for each environmental issue that has been identified as relevant.

How does the proposal comply with the benchmarks?

The applicant should show how the proposed design meets the benchmarks of the chosen standard through making references to the design brief, drawings, specifications, consultant reports or other evidence that proves compliance with the chosen benchmark.

ESD Matters on Architectural Drawings:

Architectural drawings should reflect all relevant ESD matters where feasible. As an example, window attributes, sun shading and materials should be noted on elevations and finishes schedules, water tanks and renewable energy devices should be shown on plans. The site's permeability should be clearly noted. It is also recommended to indicate water catchment areas on roof- or site plans to confirm water re-use calculations.

Attachment 10 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Council Arborist Comments

Goonetilleke, Nish

From: Bates, Justin
Sent: Thursday, 16 July 2020 12:39 PM
To: Goonetilleke, Nish; Williams, Glen
Subject: RE: PLN19/0364 - 142 - 144 Coppin Street Richmond - Streetscapes

Hi Nish,

I have sent the Amenity Value to Glen for both trees at 142-144 Coppin St Richmond

T-1 DBH 350 \$9,034
T-2 DBH 390 \$11,217

Both Trees will require TPZ fencing and a Bond.

Please let me know if you need anything else.

Regards
Justin

From: Goonetilleke, Nish
Sent: Tuesday, 14 July 2020 9:07 AM
To: Williams, Glen <Glen.Williams@yarracity.vic.gov.au>; Bates, Justin <Justin.Bates@yarracity.vic.gov.au>
Subject: RE: PLN19/0364 - 142 - 144 Coppin Street Richmond - Streetscapes

Hi Justin,

Hope you're well.

I was wondering if you had a chance to look at the email below?

Thank you.

Kind Regards,
Nish Goonetilleke
Senior Statutory Planner
STATUTORY PLANNING
City of Yarra PO Box 168 Richmond 3121
ABN 98 394 086 520

T (03) 9205 5005
E Nish.Goonetilleke@yarracity.vic.gov.au
W www.yarracity.vic.gov.au



Yarra City Council acknowledges the Wurundjeri as the Traditional Owners of this country, pays tribute to all Aboriginal and Torres Strait Islander people in Yarra, and gives respect to the Elders past and present.

Attachment 10 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Council Arborist Comments

From: Williams, Glen
Sent: Friday, 10 July 2020 2:36 PM
To: Bates, Justin <Justin.Bates@yarracity.vic.gov.au>
Cc: Goonetilleke, Nish <Nish.Goonetilleke@yarracity.vic.gov.au>
Subject: FW: PLN19/0364 - 142 - 144 Coppin Street Richmond - Streetscapes

Hi JB,

Can you please give me an amenity value of these trees?

Thanks

Glen

From: Goonetilleke, Nish
Sent: Friday, 10 July 2020 12:01 PM
To: Williams, Glen <Glen.Williams@yarracity.vic.gov.au>
Subject: PLN19/0364 - 142 - 144 Coppin Street Richmond - Streetscapes

Hi Glen,

Hope you're well.

I am currently writing up an IDAC report for the abovementioned application. The application is for the construction of a four-storey building and reduction in the car parking requirements associated with the use of the land for dwellings and offices.

Please find plans attached. There are two trees at the front of the subject site. See circled below:



The Applicant is proposing to retain these trees. Would you recommend conditioning the requirement for a TMP? Or TPZ?

Thank you.

Kind Regards,
Nish Goonetilleke
Senior Statutory Planner

Attachment 10 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Council Arborist Comments

STATUTORY PLANNING

City of Yarra PO Box 168 Richmond 3121

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Attachment 11 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Waste Management Referral Comments Based on S57A Plans

Goonetilleke, Nish

From: Athanasi, Atha
Sent: Tuesday, 30 June 2020 1:24 PM
To: Goonetilleke, Nish
Subject: RE: PLN19/0364 - 142 - 144 Coppin Street Richmond - WMP Referral

Hi Nish,

The waste management plan for 142 - 144 Coppin Street, Richmond authored by RB Waste Consulting Service and dated 20/1/2020 is not satisfactory from a City Works Branch's perspective. Issues to be rectified include, but may not be limited to the following:

1. Council provides 1x80L waste and 1x120L recycle bin for individually rated commercial properties.
2. The commercial and residential streams should be calculated separately and appropriate bins allocated.
3. Commercial bins and residential bins should be separated.
4. Please detail the bin store plan showing path of access to collection point, hard waste area etc
5. Council does not offer hard waste services for commercial properties.
6. Council does not alter collection services on request.
7. Space must be available to accommodate extra bins that will be required once Councils new kerbside service is introduced later this year.(glass bin and food and green waste bin)
8. Please provide an explanation of how any risk relating to waste service will be managed.
9. A clause must be included in the plan regarding potential review into the service if operational requirements change.

Regards,

Atha Athanasi
Contract Management Officer

City of Yarra – City Works Depot
168 Roseneath St CLIFTON HILL VIC 3068
T (03) 9205 5547 F (03) 8417 6666
Atha.Athanasi@yarracity.vic.gov.au
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Yarra City Council acknowledges the Wurundjeri Woi Wurrung as the Traditional Owners of this country, pays tribute to all Aboriginal and Torres Strait Islander people in Yarra, and gives respect to the Elders past and present.

From: Goonetilleke, Nish
Sent: Monday, 29 June 2020 10:35 AM

Attachment 11 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Waste Management Referral Comments Based on S57A Plans

To: Athanasi, Atha <Atha.Athanasi@yarracity.vic.gov.au>

Subject: PLN19/0364 - 142 - 144 Coppin Street Richmond - WMP Referral

Hi Atha,

Thank you for taking my call today.

I was hoping you could provide comments on the WMP for the following planning application:

Application No.: PLN19/0364
Address: 142 – 144 Coppin Street Richmond
Description: Construction of a four-storey building and reduction in the car parking requirements associated with the use of the land for dwellings and offices (no permit required for office use).

Please find documents attached. Two offices at ground floor and 7 apartments between first to third floors.

If you have any queries or need any further information, please let me know.

THANK YOU!

Kind Regards,
Nish Goonetilleke
Senior Statutory Planner
STATUTORY PLANNING
City of Yarra PO Box 168 Richmond 3121
ABN 98 394 086 520

T (03) 9205 5005

E Nish.Goonetilleke@yarracity.vic.gov.au

W www.yarracity.vic.gov.au



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Attachment 12 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Engineering Comments Based on S57A Plans



MEMO

To: Nish Goonetilleke
From: Artemis Bacani
Date: 21 May 2020
Subject: Application No: PLN19/0364
 Description: Mixed-Use Development
 Site Address: 142-144 Coppin Street, Richmond

I refer to the above Planning Application received on 17 April 2020 in relation to the proposed development at 142-144 Coppin Street, Richmond. Council's Civil Engineering unit provides the following information:

Drawings and Documents Reviewed

	Drawing No. or Document	Revision	Dated
CBG Architects & Interior Designers	TP100 - B Ground Floor Plan	B	10 December 2019
	TP220 - B Sections	B	10 December 2019
Traffic Group	Traffic Engineering Assessment	Issue 01C	11 December 2019

CAR PARKING PROVISION

Proposed Development

Under the provisions of Clause 52.06-5 of the Yarra Planning Scheme, the development's parking requirements are as follows:

Proposed Use	Quantity/ Size	Statutory Parking Rate*	No. of Spaces Required	No. of Spaces Allocated
One-bedroom dwelling	4	1 space per dwelling	4	0
Two-bedroom dwelling	2	1 space per dwelling	2	2
Three-bedroom dwelling	1	2 spaces per dwelling	2	2
Office (2 Tenancies)	140 m ²	3 spaces per 100 m ² of net floor area	4	0
Total			12 Spaces	4 Spaces

* Since the site is located within the Principal Public Transport Network Area, the parking rates in Column B of Clause 52.06-5 now apply.

A reduction of eight car spaces (consisting of four residential spaces and four spaces for the office use) is sought by the applicant.

The four on-site car spaces will be allocated for the two-bedroom and three-bedroom dwellings to satisfy the car parking requirement of *Clause 52.06-9*.

Attachment 12 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Engineering Comments Based on S57A Plans

To reduce the number of car parking spaces required under Clause 52.06-5 (including to reduce to zero spaces), the application for the car parking reduction must be accompanied by a Car Parking Demand Assessment.

Car Parking Demand Assessment

In reducing the number of parking spaces required for the proposed development, the Car Parking Demand Assessment would assess the following:

- *Parking Demand for the One-Bedroom Dwelling.*
The one-bedroom dwellings will have no on-site car spaces. Traffic Group have sourced car ownership data for the Richmond area from the 2016 ABS Census. The data indicates that the one-bedroom dwelling have an average car of 0.80 cars per dwelling. The Census also suggests that there is a strong market for dwellings that have no on-site car parking. It is recognised that car ownership is influenced by a number of factors (public transport access, proximity to employment and education centres, affordability issues, environmental concerns, and access to services) and that in inner areas many households do not own a car for a range of reasons. The area's coverage of 2P restrictions should provide regular turnover of parking throughout the day and provide opportunities for visitors to find a parking space near the site.
- *Parking Demand for Office Use.*
The proposed office use would also not be allocated with on-site car parking. Staff, clients and visitors to the site would be inclined to parking on-street or commute by sustainable transportation modes. The actual parking demand generated by the office is expected to be lower than the statutory parking rate of 3.0 spaces per 100 square metres of floor space, since the area has very good access to public transport services.

Throughout the municipality, a number of developments have been approved with no car spaces or a reduced office rate, as shown in the following table:

Development Site	Approved Office Parking Rate
Cremorne	
60-88 Cremorne Street PLN17/0626 issued 21 June 2018	0.85 spaces per 100 m ² (233 on-site spaces; 27,306 m ²)
9-11 Cremorne Street PLN16/0171 (Amended) issued 13 June 2017	0.85 spaces per 100 m ² (20 on-site spaces; 2,329 m ²)
Collingwood	
2-16 Northumberland Street PLN16/1150 issued 14 June 2017	0.89 spaces per 100 m ² (135 on-site spaces; 15,300 m ²)

The provision of no on-site parking for the office use is considered appropriate, having regard to the site's accessibility to public transport services and its proximity to Melbourne.

- *Multi-Purpose Trips within the Area.*
Visitors and clients could combine their visit to the site by engaging in other business or activities whilst in the Richmond area.
- *Convenience of Pedestrian and Cyclist Access.*
The site has very good pedestrian access to shops, businesses, essential facilities and public transport nodes. The site also has good connectivity to the Principal Bicycle Network.

Attachment 12 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Engineering Comments Based on S57A Plans

Appropriateness of Providing Fewer Spaces than the Likely Parking Demand

Clause 52.06 lists a number of considerations for deciding whether the required number of spaces should be reduced. For the subject site, the following considerations are as follows:

- *Availability of Car Parking.*
Traffic Group had undertaken on-street parking occupancy surveys of the surrounding area on Thursday 23 May 2019 and Saturday 25 May 2019 at 12:00pm, 1.00pm, 7.00pm, and 8.00pm. The survey area included Coppin Street, Mary Street, Duke Street, Lord Street, Malleson Street, Wall Street, Brady Street, and Murray Street. The times and extent of the survey are considered appropriate. An inventory of between 171 to 279 publicly available parking spaces were identified. The results of the survey indicate that the peak parking occupancy in the study area had occurred at 8.00pm on Saturday with 87 % of spaces occupied or 23 vacant spaces. The survey data suggests that any shortfall of parking for the site can be accommodated in the surrounding streets.
- *Relevant Local Policy or Incorporated Document.*
The proposed development is considered to be in line with the objectives contained in Council's *Strategic Transport Statement*. The site is ideally located with regard to sustainable transport alternatives and the lack of on-site car parking would discourage private motor vehicle ownership and use.
- *Access to or Provision of Alternative Transport Modes.*
The site has very good accessibility to public transport and connectivity to the on-road bicycle network. The site is also in proximity to on-street car share pods. A Flexicar car share pod is located in Lyndhurst Street, approximately 450 metres north-west of the site.

Adequacy of Car Parking

From a traffic engineering perspective, the waiver of eight spaces associated with the site is considered appropriate in the context of the development and the surrounding area.

The Civil Engineering unit has no objection to the reduction in the car parking requirement for this site.

DEVELOPMENT LAYOUT DESIGN

Layout Design Assessment

Item	Assessment
Access Arrangements	
Carriageway Width of Wall Place	According to the applicant, Wall Place has a carriageway width of 3.3 metres.
Two Double Garage – Entrance via Wall Place	The width of each garage entrance is 5.9 metres wide which satisfies AS/NZS 2890.1:2004.
Garage - Headroom Clearance	A minimum headroom clearance of 2.2 metres has been provided to satisfy <i>Design standard 1 – Accessways</i> .
Visibility	Convex mirrors are proposed on the north and south walls at the rear of the garage/pedestrian entrance.
Vehicle Turning Movements	The swept path diagrams adequately demonstrate entry and exit movements into and out of the garage using the B85 design template.

Attachment 12 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Engineering Comments Based on S57A Plans

Layout Design Assessment

Item	Assessment
Car Parking Modules	
Garage	The double garage is 6.2 metres wide by 7.5 metres depth to satisfy <i>Design standard 2 – Car parking spaces</i> .

Design Items to be Addressed

Item	Details
Visibility Sight Triangles	The convex mirrors are to be relocated inside the property line, at the corner of the garage.
Internal Concrete Slab	<p>For any new internal concrete works, the finished floor levels along the edge of the slab must be set 40 mm above the edge of Wall Place – Council Infrastructure requirement.</p> <p>Since the property has vehicle access off the laneway, the applicant is to demonstrate by a ground clearance check, that a B85 design vehicle can enter and exit the property without scraping or bottoming-out.</p> <p>The applicant should demonstrate there is adequate ground clearance by providing an accurate cross section of the internal slab and laneway showing:</p> <ul style="list-style-type: none"> ▪ The finished floor level of the garages; ▪ The finished floor level at the front edge of the internal slab (i.e. - the 40 mm above the laneway); ▪ The level at the edge of the laneway; and <p>The cross section should run along the centre of each garage and be fully dimensioned.</p>
Bicycle Considerations	The bicycle requirements for this development are to be referred to Council's Strategic Transport unit for comments.

ENGINEERING CONDITIONS

Civil Works

Upon the completion of all building works and connections for underground utility services,

- The footpath along the property's Coppin Street frontage must be stripped and re-sheeted to Council's satisfaction and at the Permit Holder's cost. The footpath must have a cross-fall of 1 in 40 or unless otherwise specified by Council.

Road Asset Protection

- Any damaged roads, footpaths and other road related infrastructure adjacent to the development site as a result of the construction works, including trenching and excavation for utility service connections, must be reconstructed to Council's satisfaction and at the developer's expense.

Attachment 12 - PLN19/0364 - 142 - 144 Coppin Street Richmond - Engineering Comments Based on S57A Plans

Construction Management Plan

- A Construction Management Plan must be prepared and submitted to Council. The Plan must be approved by Council prior to the commencement of works. A detailed dilapidation report should detail and document the existing and post construction conditions of surrounding road infrastructure and adjoining private properties.

Impact of Assets on Proposed Development

- Any services poles, structures or pits that interfere with the proposal must be adjusted, removed or relocated at the owner's expense after seeking approval from the relevant authority.
- Areas must be provided inside the property line and adjacent to the footpath to accommodate pits and meters. No private pits, valves or meters on Council property will be accepted.

ADDITIONAL ENGINEERING ADVICE FOR THE APPLICANT

Item	Details
Legal Point of Discharge	The applicant must apply for a Legal Point of Discharge under Regulation 133 – Stormwater Drainage of the <i>Building Regulations</i> 2018 from Yarra Building Services unit. Any storm water drainage within the property must be provided and be connected to the nearest Council pit of adequate depth and capacity (legal point of discharge), or to Council's satisfaction under Section 200 of the <i>Local Government Act</i> 1989 and Regulation 133.
Tree Protection	The applicant is to liaise with Council's Open Space unit regarding the protection of the street tree along the property's Coppin Street road frontage.

Attachment 13 - PLN190364 - 142 - 144 Coppin Street Richmond - Engineering Comments Based on Sketch Plans (dated 03.06.2020)



MEMO

To: Nish Goonetilleke
From: Artemis Bacani
Date: 15 June 2020
Subject: Application No: PLN19/0364
 Description: Mixed-Use Development
 Site Address: 142-144 Coppin Street, Richmond

I refer to the above Planning Application received on 17 April 2020 in relation to the proposed development at 142-144 Coppin Street, Richmond. Council's Civil Engineering unit provides the following information:

Drawings and Documents Reviewed

	Drawing No. or Document	Revision	Dated
CBG Architects & Interior Designers	TP100 - C Ground Floor Plan	C	3 June 2020

DEVELOPMENT LAYOUT DESIGN Layout Design Assessment

Item	Assessment
Access Arrangements	
Visibility	Convex mirrors are proposed on the north and south walls at the rear of the garage/pedestrian entrance. The Civil Engineering unit has no objection to the use and locations of the convex mirrors as shown on the drawings.
Internal Concrete Slab	The edge of the internal concrete slab is set 40 millimetres above the eastern edge of the laneway to satisfy Council's Infrastructure requirement.