

**Attachment 4: Referral Responses**

Referral	Comments
Housing Officer	<p><b>Application Plans</b></p> <ul style="list-style-type: none"> <li>• The applicant seeks to provide both 6% affordable (8 units based on your calculations), and social housing on a ratio of 1 social housing units for every 8 private units to be provided above the density controls (4 units).</li> <li>• The affordable housing is targeted at moderate income households.. This is appropriate as affordable housing generally target moderate income households, in contrast with social housing which generally targets very low and low income households, and because the proposed affordable housing models of Shared Equity and Rent to Buy are suitable and affordable for moderate income households.</li> <li>• The affordable housing proposed is either (or both?) Shared Equity and Rent to Buy. There are some aspects that I am unclear of that I suggest should be clarified so that I can provide a more definitive response: <ul style="list-style-type: none"> <li>- Whether they propose both Shared Equity and Rent to Buy affordable housing?</li> <li>- Whether the Rent to Buy is related to the discussion of the PRADS model in the application's affordable housing report, eg. is the rental housing to be based on the PRADS model until it converts to ownership? (the PRADS model proposed is rent at 30% of income, not exceeding 80% of market rent / at a 20% discounted rent, for 20 year periods).</li> <li>- Is the Rent to Buy based on additional rental payments that gradually increase renter equity until there is an ability to buy, or an option to buy deferred over the proposed 20 year affordability period, or both?</li> <li>- Is the Shared Equity based on an arrangement where smaller repayments, due to the developer holding a share of equity, are made by the purchaser over the affordability period, with the purchasers able to pay out the developer's equity during or at the end of the affordability period?</li> <li>- For either Shared Equity and Rent to Buy, 20 year affordability periods for affordability are proposed. I recommend that affordability be maintained for 30 year periods to: <ul style="list-style-type: none"> <li>- create longer-term affordability rather than shorter terms that will more rapidly expire and create a new affordability problem</li> <li>- be more consistent with the intent of the PRADS model for long-term affordability that equates with the economic life of buildings - which is considered to be between 30 - 40 years.</li> <li>- be consistent with the minimum general benchmark / consensus used for defining longer-term affordability.</li> </ul> </li> </ul> <p>I note that the Affordable Housing Report indicates that the applicant is open to considering an extended period of affordability.</p> <ul style="list-style-type: none"> <li>- Privately operated Shared Equity and / or Rent to Buy schemes are proposed. Will this include involvement of a Registered Housing Agency to provide evidence that housing affordability will be achieved, support verification of eligibility, and , say, annual reporting to the RAs and applicant of the progress and maintenance of the schemes? I recommend that this occur – it is a feature of the PRADS model, and will assist with ensuring that the ongoing affordable housing arrangements are robust, and will not result in a windfall gain from market / non-affordable purchase within a short period following commencement of the arrangements. I also would like to further understand how the schemes are structured so that the affordability is maintained for a reasonable period, although recognising that both schemes involve full ownership over the affordability period, hence an end to the affordability arrangements.</li> </ul> <p><b>Plans in Response to RFI – 11 May 2020</b></p> </li></ul>

	<ul style="list-style-type: none"> <li>• It is still unclear if the Rent to Buy affordable housing option (alternative to the Shared Equity Housing) involves a mechanism to enable renters to transition to buying, and at what discount, based on a discounted rent arrangement using the PRADS model - in this case the discount being 80% of market rent / not exceeding 30% of income.</li> <li>• It is unclear what happens under the Shared Equity proposal after the 20 years duration of affordability - whether the equity held by the household remains if they have not increased equity to 100%.</li> <li>• I consider the 20 years period of affordability to be inadequate for the reasons given below, and recommend it be 30 years.</li> <li>• The affordable housing report refers to the need for affordable OC fees for the affordable and social housing, but does not elaborate on how that is to be achieved. While I appreciate that any clarification on this needs to be compliant with the Owners Corporation Act, this to be an issue that should be clarified.</li> <li>• The proposal does not indicate the Registered Housing Association or Registered Housing Provider that the developer wishes to partner with. This should be clarified.</li> <li>• I recommend that there be an option for the 7 affordable housing units to be offered at a discounted sale to the partner agency, and where this is not taken up within an agreed period, it revert to the currently proposed affordable housing. This is to determine if there is a capacity for the 7 units to be purchased by the Agency using emerging stimulus package funding or other DHHS funding, based on: <ul style="list-style-type: none"> <li>- Anticipation that new stimulus funding or other DHHS funding is to be fast-tracked.</li> <li>- Where the development meets stimulus funding eligibility criteria, which is yet to be outlined, that may require a permit being provided and the development commencing within a suitable timeframe to be assessed as 'shovel ready'.</li> </ul> </li> </ul>
<p>Melbourne Water – Follow-up from Design Spring discussions on 30/03/2020</p>	<p><b>Application Plans</b></p> <p>The advice provided here is a confidential work in progress and is provided without prejudice of any views of the State Government with the intention of working collaboratively with the applicant to come up with the best possible integrated design solution to managing flooding issues at this location. Melbourne Water will await further development plans from the applicant to provide improved site specific advice as relevant.</p> <p>The Fishermans Bend Urban Renewal Area is located on low lying land, adjacent to the Yarra River. The precinct is affected by flooding associated with overland flows from the local catchment and from storm surge/tidal inundation associated with sea level rise (SLR), and from riverine flooding on the Yarra River. The predicted year 2100 1% Annual Exceedance Probability (AEP) flood level for tidal storm surge is 2.4 metres (m) to Australian Height Datum (AHD). This assumes a sea-level rise of 0.8 m on the existing 1.6 m to AHD level by the year 2100. The subject site will be affected by tidal inundation as a result of predicted sea level rise are assessed under Melbourne Water's Planning for Sea Level Rise Guidelines (2017). These Guidelines are relevant guidelines pursuant to Section 60(1A)(g) of the Planning and Environment Act, 1987 which the responsible authority must consider before deciding on an application.</p> <p>Minimum finished floor levels (FFLs) for residential or office floors and service areas should be constructed to a minimum height of 600mm above the applicable 2100 1% AEP flood level. Minimum floor levels for commercial lobbies and retail occupancies may be marginally reduced (see pages 16-20 of the Guidelines). Any entry points that could allow entry of floodwaters to the basement, including stairwells, windows, openings and vents must be set no lower than 3 metres to AHD. Basement entry ramps must incorporate a flood proof apex set no lower than 3 metres to AHD to prevent floodwaters entering the basement levels during a flood event. Finished floor levels for the residential components of the building must be constructed to a minimum height of 3.0 m to AHD, with the exception of retail spaces which may be constructed with minimum FFLs at 2.4 m to AHD. Entry points that could allow entry of floodwaters to the basement, including stairwells, windows, openings and vents must be set no lower than 3 metres to AHD. Basement entry ramps must incorporate a flood proof apex set no lower than 3 metres to AHD to prevent floodwaters entering the basement levels during a flood event.</p> <p>Roads adjoining to the site (Buckhurst Street and Buckhurst Lane) are also affected by overland flows associated with the local drainage network to a level of 1.9 m AHD. The applicable 2100 1% AEP overland flood level for this site is 1.9 m to AHD. In accordance with the DELWP adopted Guidelines for Development in Flood Affected Areas (and in accordance with Section 60(1A)(g) of the Planning and Environment Act 1987), development on land</p>

affected by overland flooding should be set no lower than 300mm above the 1% AEP flood level at the location of development – producing a minimum required finished flood level of 2.2m to AHD.

With the protection offered by proposed Fishermans Bend drainage works, some consideration is being given to retail floors as low as 2.2m AHD. Surface levels for the sites Buckhurst Street frontage on the western boundary is almost 1.9 m AHD. As discussed and demonstrated via the streetscape plans circulated, there is potential for the footpath to be graded up to 2.2m AHD, with transitional areas for retail floors accessible straight off that. The Buckhurst Lane entry surface levels are lower and so Melbourne Water are keen to understand if Council and the applicant are seeking to explore any additional raising of footpaths to achieve a DDA compliant and acceptable gradient to any new building. Details of any proposed engineered solution to explore this option and achieve flood protection with potentially a lower freeboard requirement, such as speed humps/bunds within the road, should be forwarded to Melbourne Water for further discussion. The revised street section circulated demonstrates that there is nearly 14m (13.75 m) to grade down from the 3m wide footpath to the road surface at this location. At existing road surface levels the western 50m of the 11-41 frontage would grade from about 1:20 to 1:14. It is expected that the cost of any engineered solution would be paid for in full by the developer.

ESD

### **Application Plans**

#### **Documents Reviewed (Plans, Documents, Author & Date):**

12020MIN - Application - A3 Plans only.PDF  
12020MIN - Application - Landscape Plans.PDF  
12020MIN - Application - Sustainability Management Plan.PDF

Development proposals in the Fishermans Bend Urban Renewal Area (FBURA) are subject to the following requirements for Environmentally Sustainable Design (click on the links for further details):

[Schedule 1 to the Capital City Zone \(CCZ1\) – Clause 4.3](#)

[Clause 22.12 Water Sensitive Urban Design](#)

[Clause 22.13 Environmentally Sustainable Development](#)

[Clause 22.15 Fishermans Bend Urban Renewal Area Policy](#)

#### **Green Star:**

Mandatory certified Green Star Design & As Built ratings are specified at Clause 4.3 of the Capital City Zone, Schedule 1, which apply as follows:  
Developments of 10 or more dwellings or 5,000m<sup>2</sup> or more of floor space = 5 star

- The Sustainable Management Plan (SMP) should be amended to show how the development will achieve a five star Green Star Design & As Built rating with a 10% buffer above the minimum 60 point requirement. 60 + 6 = 66 points = Five Star “Australian Excellence”. General alignment to the Fishermans Bend Framework should also be followed as outlined in the Arup Report Fisherman’s Bend [Review of Sustainability Standards](#) refer Appendix A for 5 star Pathway for 66 points.

We expect proposals in Fishermans Bend to commit to a certified Green Star Design and As Built rating, as specified in the applicable planning controls. A BESS rating of 60% is not acceptable as an equivalent to a five star certified Green Star rating, particularly as BESS does not have an As Built certification component. Please provide a revised SMP that details how requirements above will be achieved.

#### **Energy:**

The application must demonstrate how the proposal incorporates renewable energy generation, on-site energy storage and opportunities to connect to a future precinct-wide or locally distributed low-carbon energy supply.

#### **Integrated Water Management (IWM):**

The application must address the third pipe and rain tank requirements set out at Clause 4.3 of Schedule 1 to the Capital City Zone, as set out below. The application must demonstrate how these requirements are accommodated into the proposed design:

1. *A third pipe must be installed for recycled and rainwater to supply all non-potable outlets within the development for toilet flushing, irrigation and washing machine unless otherwise agreed by the relevant water authority.*
2. *An agreed building connection point must be provided from the third pipe, designed to the satisfaction of the relevant water supply authority, to ensure readiness to connect to a future precinct-scale recycled water supply.*
3. *A rainwater tank must be provided that:*
  - *Has a minimum effective volume of 0.5 cubic metres for every 10 square metres of catchment area to capture rainwater from 100% of suitable roof rainwater harvesting areas (including podiums);*
  - *Is fitted with a first flush device, meter, tank discharge control and water treatment with associated power and telecommunications equipment approved by the relevant water authority.*
4. *Rainwater captured from roof harvesting areas must be re-used for toilet flushing, washing machine and irrigation or, controlled release.*
5. *Modelling – For sites above 1000m<sup>2</sup>, we do not accept STORM calculations as appropriate stormwater modelling. Provide MUSIC modelling that demonstrate conformance with Melbourne Water’s MUSIC modelling guidelines ([www.melbournewater.com.au/sites/default/files/2018-02/Music-tool-guidelines-2018.pdf](http://www.melbournewater.com.au/sites/default/files/2018-02/Music-tool-guidelines-2018.pdf))*

**Waste:**

The proposal must respond to the waste requirements of Clause 22.15-4.5 including the following:

*Share storage or collections with adjacent developments.*

*Separate collection for recycling, hard waste, and food and green waste.*

**Urban Ecology:**

The application must demonstrate how the proposal is designed to reduce the urban heat island effect, in accordance with the requirements of Clause 22.15-4.5, as follows:

*At least 70 per cent of the total site area should comprise building or landscape elements that reduce the impact of the urban heat island effect including:*

- *Vegetation, green roofs and water bodies.*
- *Roof materials, shade structures, solar panels or hard scaping materials with high solar reflectivity index.*

*Non-glazed facade materials exposed to summer sun should have a low solar absorptance.*

The application must also respond to the landscape requirements in accordance with Clause 22.15-4.7, as follows:

*Landscape areas should;*

- *Incorporate innovative approaches to flood mitigation and stormwater run-off, and best practice Water Sensitive Urban Design.*
- *Plant selection should;*
- *Support the creation of complex and biodiverse habitat that includes native and indigenous flora and fauna.*
- *Balance the provision of native and indigenous plants with exotic climate resilient plants that provide resources for biodiversity.*
- *Support the creation of vegetation links within Fishermans Bend to surrounding areas of biodiversity through planting selection and design.*
- *Incorporate food plants.*

**Transport:**

Commend applicant for going beyond requirements set out in “Table 2: Parking Provision” of Schedule 1 to the Capital City Zone.

**External Shading**

Concerned about the extent of exposed Northeast and Northwest facing glazing (i.e. not shaded by overhanging balconies or shading devices). External shading should be provided to prevent glare and overheating. This could be in the form of external operable awnings, louvers, sliding shutters, venetian or roller blinds.

### **BESS Assessment**

This application should provide a Green Star Design and As Built scorecard assessment. Notwithstanding the Green Star requirement in the schedule to the Capital City Zone, we note the following issues with the submitted BESS assessment that indicate that the project is possibly scoring lower than the 60% score submitted:

#### **Management 2.3 Thermal Performance Modelling - Non-Residential**

The preliminary section J assessment is using the 2016 NCC standards that have since been superseded by the 2019 NCC. This is not a valid assessment as the standards have changed significantly. This credit cannot be claimed unless the preliminary assessment is updated to use the 2019 standards.

#### **Management 3.3 Metering**

To claim this credit, indicate on architectural plans and commit in report that sub-meter be provided to all major common area services will be separately submetered. Current statement in report only indicates single meters to each utility service not sub-metering of common area uses.

#### **Water 1.1 Water Efficient Fixtures**

The developer needs to commit to providing dishwashers and washing machines as part of the building fit-out if they are to be included within the BESS assessment beyond default. This commitment is currently not stated in the report /plans. If this is not the case then amend the entries to default/unrated in BESS.

#### **Energy**

BESS assessment in the energy category has indicated that the consultant will provide their own calculations. However, a review of the report only shows preliminary section J and energy rating reviews with no calculation or simulation of the whole building energy use to reflect what has been entered into BESS. This indicates that the project is possibly failing to meet the 50% minimum for this category with current energy initiatives.

#### **Energy 3.4 Clothes Drying**

This credit has been claimed while there is no commitment in report in relation to reducing energy consumption from clothes drying in the development. Please clarify and amend.

### **Plans in Response to RFI – 11 May 2020**

I've reviewed the amended plans and updated SMP, noting the previous Sustainable Design referral advice for this application. Here are my comments:

- The updated SMP has been produced to a high standard. It addresses the FBURA specific requirements for ESD and it responds to the queries raised in the previous Sustainable Design referral response. There are a few outstanding queries, listed below, which should be resolved before a decision is made. There are also a few matters needing additional input that can be addressed prior to endorsement.

	<ul style="list-style-type: none"> <li>- The SMP now confirms that the project is committed to achieving a 5 star Green Star Design &amp; As Built rating, with 66 points targeted as per our previous referral advice. This demonstrates that the proposal is capable of achieving compliance with the mandatory Green Star conditions in Schedule 1 to the Capital City Zone (CCZ1).</li> <li>- The updated SMP confirms that the project can meet the energy efficiency requirements and the urban heat island reduction requirements set out in the FBURA planning policy at Clause 22.15.</li> <li>- The materials commitments in the updated SMP are commended, such as for concrete and steel, to reduce the embodied energy of the development.</li> <li>- A Green Travel Plan (GTP) has been provided, which satisfies the requirement of Clause 22.13. The proposed GTP has been produced to a good standard and should be endorsed.</li>   <li>- <u>Outstanding query:</u></li> <li>- The catchment for the rainwater tank should be enlarged to include trafficable areas and the tank size increased accordingly to respond to the 0.5m<sup>3</sup> per 10m<sup>2</sup> of catchment area requirement (CCZ1). The current proposed catchment falls well short of the site area. The raintank requirements in the CCZ1 primarily serve a flood mitigation function, which has been modelled for the entire FBURA precinct. If undersize tanks are built into any individual sites then the precinct-wide flood mitigation model will be ineffective. Hence the CCZ1 requirements specify that catchment areas should include podiums, with the intention that almost the entire site area would be captured to large-capacity tanks, providing capture and storage during storm events.</li> <li>- The updated plans have not responded to the previous Sustainable Design referral advice in relation to the lack of sun shading to north-west facing glazing. This is particularly a concern for the tower windows in the Buckhurst Street elevation. These apartment windows will be exposed to high solar heat loads throughout summer and external shading should be designed into the façade to mitigate the resulting heat gain. Appropriate solar shading will enhance occupant comfort and reduce energy use for cooling.</li> <li>- Some apartment bedrooms within the podium appear to have poor access to natural daylight due to the apartment configuration. I note that a daylight analysis is provided in Appendix E. It's not clear from the information provided, whether the living rooms and bedrooms marked "Living/bed rooms do not achieve auto-pass criteria and are assessed using BESS built in cal" are acceptable or not. I couldn't see any results from BESS built-in calc in the SMP. This needs to be confirmed clearly.</li>   <li>- <u>To clarify in endorsed version of SMP/Plans</u></li> <li>- Some of the building management credit commitments in the Green Star credits list do not have a nominated responsible person for the operation stage of development, even though the intent of the credit relates to building operation, such as Commissioning and Tuning, Commitment to Performance and Building Information. This should be updated in the final version of the SMP.</li> <li>- Updated SMP states that domestic hot water will be via either electric heat pump or gas centralised system. The heat pump option is strongly preferred over natural gas. If gas is not used the development will not be reliant on off-sets to achieve net-zero greenhouse gas emissions from building operations in future, noting that net-zero operating GHG emissions is an overarching goal for 2050 by the latest, by which time the proposed building will still be in use.</li> <li>- Updated SMP commits to allocating at least 5% of all car parking spaces to electric vehicle charging spaces. This must be demonstrated on the proposed plans.</li> </ul>
Drainage	<p><b>Application Plans</b></p> <ul style="list-style-type: none"> <li>• In Section 5 &amp; 7 of the SMP, a 50,000 L rainwater tank is proposed based on the rooftop area of 1,450m<sup>2</sup>. As per FBURA's conditions (the tank sizing requirement of 0.5m<sup>3</sup> per 10m<sup>2</sup> of roof catchment) the tank should be at least 72,500 litres. In addition, the calculated rooftop area of 1,450m<sup>2</sup> does not provide a breakdown of the areas that are included the calculation e.g. podium included?</li> </ul>

- Currently the Legal point of discharge for each of the existing buildings is to the kerb. The nearest Council stormwater pit is at the intersection of Buckhurst and Kerr St, near the northern boundary of 120-132 Ferrars St. The LPD for the development may need to be constructed to connect to the Council stormwater pit.

Specific comments about matters raised from meeting on 30/03/2020 remain outstanding.

**Plans in Response to RFI – 11 May 2020**

I have reviewed the stormwater section in the updated SMP and the 70kL rainwater storage tank, as proposed, meets FBURA's conditions (the tank sizing requirement of 0.5m<sup>3</sup> per 10m<sup>2</sup> of roof catchment).

Urban Design

**Application Plans**

- We note the level of consultation and negotiation undertaken over sometime between the applicant and DELWP, FB Taskforce, CoPP and other agencies and acknowledge the evolution of the form and presentation of the development that has occurred.
- As recommended in the wind report, wind tunnel testing of the proposal should be undertaken to confirm or update the recommendations of the "desktop" assessment and inclusion of mitigation measures within the final proposal.
- Clarify whether the Ground Floor fire egress door on Buckhurst Lane is intended to provide the main point of access for residents to the bicycle store. This appears to be tight and requires negotiating a flight of stairs with a bike ramp for the intended large number of users.
- Revision of the proposed planting and other treatments on the fourth floor terrace to better correspond with the recommendations of the wind report, eg, *Additional strategic, localised planting/canopy features are recommended to be placed near any seated areas to reduce building downwash. Planting should be densely foliating and of an evergreen species, with a height of at least 3m. In order to further increase pedestrian comfort, multiple trees should be planted close together such that their canopies are capable of interlocking.*
- We draw your attention to recent discussions held between CoPP (Brendan Baxter and others from City Design), Melbourne Water, FB Taskforce regarding possible approaches to dealing with flood levels within the area and specifically relating to this site. A preferred approach for this site was identified that would involve raising the Buckhurst Street footpath and verge level to match the proposed floor level which would have significant implications for the project design and delivery.

**Plans in Response to RFI – 11 May 2020**

In recognition that the Precinct Planning referral includes a number of urban design items, these matters are not duplicated here in detail.

**1. Tower Height and Massing**

This urban design review concurs with the detailed conclusions of the Precinct Planning referral, which is that the proposed height and setbacks of the towers do not achieve the built form outcomes of DD030, as well as the recommendations, which is that the building envelope of the towers be reduced to present either the mid-rise development (i.e. 7-15 storeys) or the 'well-spaced slender tower' outcomes sought in DDO30. In addition, it is critical that a safe and pleasant pedestrian environment is achieved which means that further changes to the towers may be required to adequately manage wind impacts resulting from the development.

**2. Ground Floor Design**

The changes to the ground level plan (TP01.03 RevD) appear fairly minimal and have still not achieved a high quality design response to this site. In particular, the plan does not satisfactorily resolve the competing requirements of managing flood risk, providing an active street frontage and achieving

equitable DDA access. The alternative ground floor scheme provided (TP07.13 RevD) is also not supported because the ramps shown between the two main entries would compromise the viability of the associated tenancy by pushing its frontage a long way in-board and creating an unnecessarily “blank” area at the main entry.

The proposal should be revised to demonstrate equitable DDA access to all public areas as well as to and within future tenancies (as indicated by notional tenancy divisions). Compared with ramps and enclosed lifts, accessible platform lifts are a less preferred DDA solution in the main building entries, as they are more time consuming and less dignified to use. As noted below, it is understood that platform lifts may be necessary for DDA access on the constrained Buckhurst Lane frontage but they appear to be entirely avoidable on the main Buckhurst Street frontage because of the opportunity to raise the public footpath level.

The opportunity to raise the Buckhurst Street footpath would also benefit the tenancies on that frontage. Single level tenancies are inherently preferred to split-level ones for their superior public accessibility, adaptability and commercial viability. Where split-level tenancies are proposed, every effort should be made to minimise the vertical transition height within the space. For these reasons, it is suggested that a main retail FFL of AHD 2.4m offers a number of benefits over the proposed FFL of AHD 2.6m.

Detailed suggestions on improving the Ground Floor are as follows:

**a. Street Frontage**

In general, the location of the proposed series of retail tenancies and building entries on Buckhurst Street are supported. As part of the proposed Buckhurst Street public realm upgrade, there is an opportunity to raise the public footpath and verge level in a coordinated way with this private development proposal. Council is coordinating a public realm design response across government agencies and invites the proponent to further engage with this work. Any design option that raises the public realm would improve this proposal’s urban design and flood management response, which is critical because the site is at the lower end of the flood catchment and because the design should integrate with a future linear park.

Preliminary investigations are testing grading the front footpath at 5% (1:20) from the east and west site boundaries to meet, or almost meet, the main entry levels of AHD 2.4m and thus remove the need for internal platform lifts. This option would also substantially reduce the flood risk on this frontage by elevating all building entries above the AHD 1.9m stormwater flood level.

It is envisioned that the public realm works will reconfigure the existing nature strip and street trees as part of creating a new linear park and improved pedestrian environment. It is also desirable to underground existing overhead cables to provide improved conditions for street tree establishment.

**b. Lane Frontage**

The proposed link connection and retail frontages to the laneway are supported. However, design changes are required to improve DDA access to all public areas as well as the design and commercial viability of the tenancies. Having large vertical transitions and circulation spaces within small tenancies is a poor outcome. A platform lift inside the laneway’s Commercial Entry could also provide DDA access to the two adjoining tenancies, which may free-up useable space within those tenancies. There is the option to replicate a similar strategy at the separate Fire Egress door on the laneway, which could also be expanded to a secondary/service entrance that provides better access arrangements to the Resi Bicycle store. In any case, provisions for external entries and DDA access should be demonstrated for all future tenancy subdivisions. Other options include reconfiguring tenancies and bike store facility to create a dual-frontage tenancy that links the street to the lane at the eastern end of the site. A larger tenancy is better able to accommodate an internal ramp or platform lift. If necessary as part of this option, extending the Resi Bicycle Store to a small section of Lane frontage would be appropriate, particularly if it improves access to the Store.

**c. Internal Circulation**



	<p>The provision of a link connection between the two street frontages is supported, however the space needs to achieve a suitably high quality public standard such as an arcade through improvements in areas such as: increasing the legibility of the entries, improving sightlines through the space (by avoiding narrowing at southern end), increasing vertical proportions (preferably double-height for some or all of the space) and increasing surveillance and activation from adjoining tenancies.</p> <p>The internal circulation arrangements for servicing the commercial units and accessing the Resi Bicycle Store are complex and inefficient. One option that could improve some of this circulation would be moving Resi Entrance to the east (e.g. to be centred on Lobby) which would allow the access corridor behind the eastern lifts could connect directly to the lobby (behind DDA WC and FCR).</p> <p><b>3. Architectural Detail</b></p> <p>The composition of the podium into articulated sections provides suitable visual interest at the pedestrian scale and is therefore considered a successful streetscape response for Buckhurst Street.</p> <p>The preliminary drawing package suggest that the building facades are well resolved in terms of their expression, formality, materiality and detailing. The proposed awning design is also supported. Further details of how the ground floor tenancies connect to the public realm are encouraged, such as openable windows and stall-risers (integrated bench seats) etc.</p>
Strategic Planning	<p><b>Plans in Response to RFI – 11 May 2020</b></p> <p><b>Key Issues</b></p> <p>1. Both towers of the proposal exceed the 43m / 12 storey maximum height sought in DDO30 – the eastern tower has a maximum height of 71m / 20 storeys and the west tower has a 45.2m / 12 storey maximum height<sup>[1]</sup>. Both towers comply with the minimum setbacks above the street wall (including side boundary setbacks), except for the encroachments discussed in Item 2 below. There may be strategic planning justification for a ‘high-rise’ building with a building height greater than the 43m / 12 storey maximum height sought in DDO30, due to the heights of existing and approved buildings in the immediate area.</p> <p>It is considered that the proposed <b>height and setbacks of the towers</b> do not achieve the built form outcomes in Clauses 2.5, 2.8 and 2.9 of DDO30:</p> <p>(a) The proposal does not adequately respond to the preferred precinct character of Area M5, which is; <i>“Predominantly mid-rise developments with some high-rise forms on larger sites where well-spaced, slender towers can be demonstrated to provide sunlight access to streets”</i>. The tower forms and proposed building separation will not result in ‘well-spaced slender towers’. Associated with this outcome is that the tower elements of the proposal do not achieve the following built form outcomes:</p> <ul style="list-style-type: none"> <li>▪ Setbacks above street walls that: <ul style="list-style-type: none"> <li>○ <i>Do not overwhelm the public realm; and</i></li> <li>○ <i>Minimise the visual bulk of upper floors when viewed from streets and laneways.</i> (Clause 2.8)</li> </ul> </li> <li>▪ Side and rear setbacks that:</li> </ul>

<sup>[1]</sup> The roof plant and enclosure on both towers is to be included in height calculations (in metres, not storeys), as they are not set back at least 3m behind the building façade (refer Clause 2.5 of DDO30).

- *Create a continuous street wall along streets and laneways;*
- *Ensure tall buildings do not appear as a continuous wall when viewed from street level;*
- *Allow for views to the sky between buildings; and*
- *Minimise visual bulk. (Clause 2.9)*

The proponent's Town Planning Report refers to the Fishermans Bend Urban Design Strategy for a definition of 'slender' towers to help justify the proposed tower floorplates and setbacks (p. 39). The reference, however, relates to the built form assumptions that were used in 3D testing, and is not a discussion on how 'slender' towers sought in DDO30 should be designed (refer to Table 14 of the Urban Design Strategy (p. 98). The footnote of Table 14 states that; "*A slenderness ration of maximum 10:1 has generally been adopted for towers*", which infers that the Urban Design Strategy considered that the slenderness of a building is determined more by the relationship of the width and height of the building, rather than the floorplate dimensions presented by the proponent. For comparison with the 10:1 maximum slenderness ratio used in the Urban Design Strategy, the proposed east and west towers have slenderness ratios of 2.4:1 and 2:1 respectively.<sup>[2]</sup>

Another indicator of the apparent slenderness of a building would be the proportion of building mass along the site's frontage against the proportion of space / separation between buildings. The proposed towers take up 63% of the Buckhurst Street site frontage<sup>[3]</sup> (as illustrated by the diagram below – the towers have light blue shading and the podium has dark blue shading). This outcome is also evident in the architectural renders in the architectural plans (particularly Drawing Nos. TP08.01, 02, 04, 05, 10 and 12).

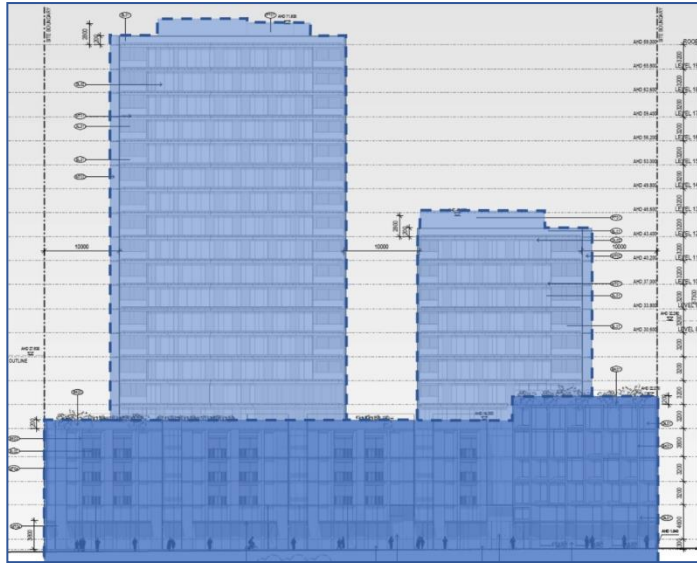
- (b) There is concern that the proposal will not "*limit impacts on the amenity of the public realm as a result of wind*". The amended wind assessment discussed in item 2 is required to respond to this matter.

It is recommended that the building envelope of the towers be reduced to present either the mid-rise development (i.e. 7-15 storeys) or the 'well-spaced slender tower' outcomes sought in DDO30. Further changes to the towers may be required to adequately manage wind impacts resulting from the development, subject to the amended wind assessment recommended in Item 3 below. This matter should be addressed through amended plans prior to a decision being made.

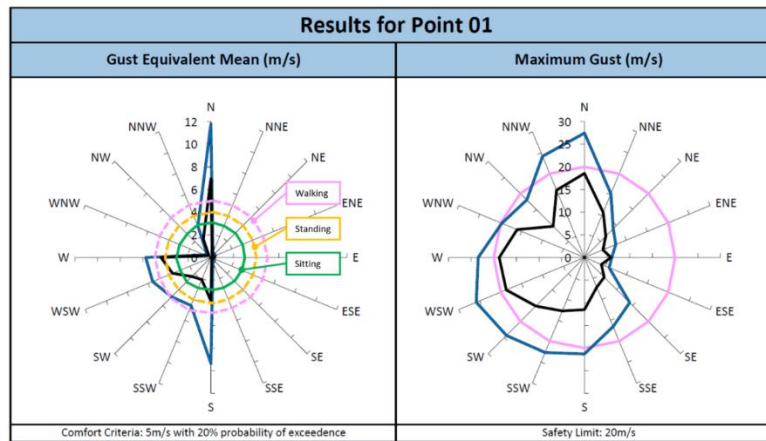
City Design may have other urban design advice in relation to this matter.

<sup>[2]</sup> Based on (1) 71m height and 30m width of east tower, and (2) 45.2m height and 21.7m width of west tower. Widths exclude the 1.2m deep vertical fins on the east and west façades (refer to Item 2 below).

<sup>[3]</sup> 66% if the 1.2m deep vertical fins on the east and west façades are included (refer to Item 2 below).



2. The floor plans for Levels 05-19 and the Roof (Drawing Nos. TP01.06-TP01.10) indicate that the vertical 'fins' on the east and west tower facades (MT02) **encroach** approximately 1.2m into the 10m mandatory side boundary setbacks (Clause 2.9 of DDO30). Similarly, horizontal 'sills' (MT01) encroach approximately 400mm into the 5m mandatory setbacks above the street wall (Clause 2.8 of DDO30). Whilst there is no strategic planning objection to this articulation, there is no provision in DDO30 for exemptions to the mandatory upper level setbacks (unlike the exemptions for building and street wall heights). On this basis, the proposal does not comply with these mandatory DDO30 requirements. Under the Terms of Reference of the Standing Advisory Committee (SAC), the proposal needs to meet the requirements of DDO30. In this regard, it would be expected that the SAC will establish a standard approach to varying mandatory requirements.
3. The **wind assessment** by Windtech (*Pedestrian Wind Environment Study*; dated 11 May 2020), and the resultant built form outcome, does not comply with the policy requirements of DDO30. Clause 2.11 requires development to; "*Maintain a safe and pleasant pedestrian environment on footpaths and other public spaces for walking, sitting or standing*". This requirement is reiterated in Clauses 2.5 and 2.8, relating to building height and upper level setbacks. The following issues need to be addressed in an amended wind assessment:
  - (a) The proximity model needs to take into account developments in the area that are under construction or approved, particularly the approved development at 6-70 Buckhurst Street;
  - (b) The assessment area shown in Figure 5a of the report does not align with the assessment distance required in Clause 2.11 of DDO30. An assessment distance of approximately 42m is required, based on half the longest width of the building. This area would include a greater extent of the pedestrian areas on Buckhurst Street (northern footpath and new linear park on southern side), George Street, Tates Place and the northeast portion of the new park on the corner of George and Thistlethwaite Streets.



- (c) The mandatory wind safety criteria in DDO30 must be achieved. Where the safety criterium is already exceeded, the development must not increase the extent of non-compliance. The current proposal results in exceedance or worsening of safety criteria in 3 test locations (# 1, 2 and 15);
- (d) The assessment criteria for pedestrian comfort need to be revised. The wind speed criteria used applies only to walking (5m/s) and not sitting or standing. As required in Clause 22.15-4.4, developments should contribute to a “*high quality public realm and deliver spaces, including open spaces, for people to meet, gather, socialise, exercise and relax*”. This outcome is particularly relevant for sites located in within the Montague Core Area (such as the subject site) where a “*high quality, high amenity public realm is to be delivered*” (Clause 21.06-8). Further, Buckhurst Street is to be “*a high amenity, linear green spine through the precinct*” (Clause 21.06-8). On this basis, the following areas within the assessment distance should meet the wind comfort criteria outlined in Clause 2.11 of DDO30:
- Sitting – new Buckhurst Street linear park and new park on the corner of George and Thistlethwaite Streets;
  - Standing – northern footpath of Buckhurst Street, George Street, new laneway through site and outside the retail tenancies and building entry fronting Buckhurst Lane; and
  - Walking – remaining publicly accessible areas.

The diagram below illustrates the different wind comfort criteria against the current directional plot for Point 01 (from Appendix C of the report). It indicates the extent of non-compliance with the DDO30 requirements and the level of intervention that may be required by the proposed development.

- (e) Any proposed wind treatments need to be located within the development (not on public land);
- (f) Any proposed changes to the built form and/or wind treatments need to be qualified to demonstrate how an amended proposal will achieve the policy requirements in Clause 2.11 of DDO30; and
- (g) Reference to the wind assessment requirements of DDO30, not those of Amendment GC81 to the Port Phillip Planning Scheme;

It is recommended that an amended wind assessment should be prepared that complies with the relevant planning scheme requirements. The required wind treatments will need to be incorporated into the proposal plans. It is preferred that this change be addressed through amended plans prior to a decision being made.

4. The approach to manage the flood risk to the proposed retail tenancies, whilst seeking to provide active frontages to Buckhurst Street and Buckhurst Lane is supported in principle. The **street level presentation and activation** of the building, however, could be improved to “*maintain good physical and visual connection between the street and internal ground floor*”, as required by Clause 22.15-4.5.

The following changes are recommended:

- (a) Firstly, the level difference within the tenancies should be minimised as much as possible. Melbourne Water should be consulted for the minimum allowable floor level requirements – it is understood that floor levels of 2.4m may be supported for retail tenancies, rather than 2.6m as currently proposed. In addition, an opportunity to raise the height of the footpath along Buckhurst Street should be explored.



- (b) Reconfiguration of the Buckhurst Street / Buckhurst Lane frontages of some retail tenancies, by (1) consolidating and/or minimising entry transition areas for each tenancy (blue arrows and outlines) and (2) extending retail floorspace to the façade (orange shading). It is considered that the level difference will still allow interaction with the public realm, particularly if openable windows and/or balconies are provided that overlook the street. These suggested changes are illustrated in the diagram below.

City Design may provide further advice on this matter.

5. It is considered that the design outcomes for the **retail tenancies** fronting Buckhurst Street and Buckhurst Lane could be improved to better achieve the following development outcomes:

- Create activated building façades with windows and legible entries (Clause 2.12 of DDO30 – built form outcome);
- Encourage opportunity for social interaction at interfaces between the public and private realms (Clause 21.05-3); and
- Provide openable windows and balconies within the street wall along streets and laneways (Clause 2.12 of DDO30 – built form requirement).

On this basis, the following changes are recommended:

- (a) Greater legibility of individual tenancy entries.
- (b) Provision of openable windows and balconies / outdoor seating areas along street frontages.

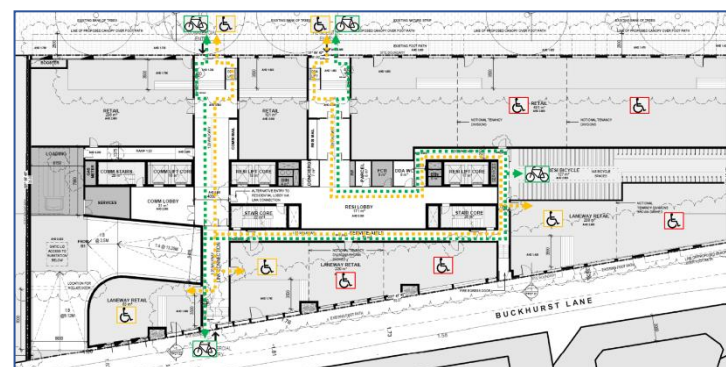
City Design may provide further advice on this matter.

6. The proposed **pedestrian connection** through the site between Buckhurst Street and Buckhurst Lane achieves the requirements of Clause 21.15-4.8 for an additional north-south connection midway in the block bounded by Buckhurst Street, Ferrars Street, Buckhurst Lane and George Street.

The current design of the pedestrian connection, however, does not provide the high connectivity sought in this precinct by policy, though lack of legibility, equitable access and safety.

On this basis, the following changes are recommended:

- (a) Increase the width of the southern portion of the connection to at least 5m to provide a legible path of travel and to enable a clear line of sight through the street block (as illustrated in the diagram at right – increased width indicated in red dashed outlines). The width could be maintained where lift cores and stairs cannot be relocated. A recess above floor level could be provided above the basement ramp (e.g. bench seat or planter box) (refer to insert at right);
- (b) Provide disabled access at the Buckhurst Lane (southern) entry;
- (c) Increase the width of the void areas above the Buckhurst Street (northern) entry (Levels 01-04) to align with the full width of the entry (e.g. 5m);
- (d) Increase the height of the connection to be greater than its width (e.g. greater than 5m) and preferably a double storey height;
- (e) Provide a more legible entry at the Buckhurst Lane (southern) end (as illustrated in the diagram below);
- (f) Increase clear glazing and maintain openings of adjoining retail tenancies onto the connection;
- (g) Maintain full height glazing at both entries;
- (h) Avoid entrapment spaces and areas with limited passive surveillance; and
- (i) Provide details of high quality material and finishes to all surfaces and



7. The green dashed lines in the diagram below illustrate the route that residents will need to take to **access the bicycle parking area** on the Ground Floor. These circuitous routes and potential for conflict in the lobby area and service aisle will likely discourage people from using active transport. The proposal should be amended to provide a more direct and useable route between the streets and bicycle parking area.

#### Issues that could be conditioned

1. Large expanses of blank wall are proposed to the east and west walls of the podium. These walls abut potential future development sites at 120-132 Ferrars Street and 43-49 Buckhurst Street, however the timeframe and building enveloped of any future development is unknown. Architectural treatment should therefore be provided to these walls to reduce the visual bulk of this component of the development. This change could be conditioned.

	<p>2. The areas of the building and retail tenancies that may be impacted by floodwater (e.g. transition areas) will need to be designed and operated to manage flood risk during the life of the development. <u>Conditions should be included</u> to ensure the development complies with the following requirements of Clause 22.15-4.5:</p> <p>(a) <i>Design elements and materials should be resilient including waterproof doors and windows, elevated power outlets and the like.</i></p> <p>(b) <i>Land uses at ground floor level should be able to easily recover from the impacts of temporary flooding.</i></p>
Subdivision officer	<p><b>Application Plans</b>  The titles provided for 11 Buckhurst and 23 Buckhurst are on the other side of Buckhurst Street. According to rates, 23 Buckhurst is Vol 5369 Fol 783 and 11-15 Buckhurst is Vol.10268 Fol.445. The title provided for 17-21 Buckhurst is only for part of the site. The title is for lot 2, but there is a lot 1 and common property, within the land. Rates say that lot 1 is 11-15 Buckhurst. There is an electricity easement which passes through lot 2, but it appears to service a substation on the common property, so will probably not be an issue.</p> <p>Council acknowledges receipt of corrected titles on 04/03/2020.</p>
Open Space	<p><b>Application Plans</b>  Although not a land contribution to the formal open space network, privately owned open spaces can and should still make a positive contribution to the open space network in a meaningful way.</p> <p>Open space planning generally supports the proposed landscape plans however would like clarity over the developers intentions for accessibility to the public spaces at ground level. It would be our preference that the publicly accessible space for this to be guaranteed through an s173 or similar.</p> <p>For consideration at the detailed design phase, we recommend to:</p> <ul style="list-style-type: none"> <li>• Ensure planters around the water feature are designed to encourage sitting and respite.</li> <li>• Water feature elements should create talking points, making the pocket park a desirable destination and encourage longer stays.</li> <li>• The space should be flexible, allowing users the opportunity to utilize the space in different ways. A suggestion would be to make space wide enough to allow for movable furniture.</li> </ul>
Waste Management	<p><b>Application Plans</b></p> <ul style="list-style-type: none"> <li>• Please provide clear drawing of number of recycling and waste bins in the bin rooms and which one is a residential or commercial bin.</li> <li>• Number of bins drawn on the plan and the number of bins mentioned on the WMP are varied</li> <li>• Recommend the use of compactor or increase the number of bins to reduce the collection frequency, and to reduce the impact on noise and traffic amenity</li> <li>• Recommend space for organic/food waste bin for future council services</li> <li>• Recommend space for Electronic Waste</li> <li>• Chute outlets on the bin rooms show four outlets per bin room however the bin chute outlets on each levels show only two outlets</li> </ul> <p><b>Plans in Response to RFI – 11 May 2020</b></p> <ul style="list-style-type: none"> <li>• Bin room for commercial and residential bins must be separate</li> <li>• There are two sets of chute outlets on the plan, this may change as the bin rooms for commercial and residential rooms are separated</li> <li>• Highly recommend to reduce the collection frequency to reduce the traffic amenity impact in the area</li> </ul>
Traffic	<p><b>Application Plans</b></p>

Summary of the site proposal:

- Retail floor space at ground level – 2,365 square metres
- Office floor space (level 1-4) – 4,805 square metres
- 145 Apartments:
  - 1-Bedroom Apartment – 42
  - 2-Bedroom Apartment – 61
  - 3-Bedroom Apartment - 42
- Access for vehicles from Buckhurst Lane
- 125 car parking spaces (including two electric vehicles) and seven motorcycle spaces

Traffic and Parking comments below:

**1. Parking Overlay and Parking Provisions**

- a. Schedule 1 to Clause 45.09 of the planning scheme requires
  - 1 and 2 Bedroom Apartments: 51 parking spaces (45.09, 0.5 parking spaces to each 1 or 2 Bedroom Apartments)
  - 3 Bedroom Apartments: 42 parking spaces (45.09, 1 parking spaces to each 3 or more Bedroom Apartments)
  - Retail Premises: 24 parking spaces (45.09, 1 parking space to each 100sqm of gross floor area)
  - Office: 48 parking spaces (45.09, 1 parking space to each 100sqm of gross floor area)
  - Total 165 parking spaces.
- b. Car Share
  - Clause 37.04 indicate the site will require 5 car share spaces

**2. Number of Parking Space Proposal**

- a. The proposed site has provided a total of 125 car parking spaces (including three car share spaces). Extract from the Traffic Report:

**Table 6 Proposed Car Parking Allocation**

<i>Component</i>	<i>No/Area</i>	<i>Car Parking Allocation</i>
1-Bedroom Apartment	42	82 spaces (48 stacker spaces, 34 standard spaces)
2-Bedroom Apartment	61	
3-Bedroom Apartment	42	
Retail	2,365 m <sup>2</sup>	40 spaces (11 tandem pairs, 17 standard spaces, 1 DDA space)
Office	4,805 m <sup>2</sup>	
Car Share	-	3 spaces for all users

- b. It is recommended they provide a clear breakdown of parking space allocation for each type of apartment, retail and office areas.
- c. The site has only proposed 3 car share spaces (i.e. a shortfall of 2 spaces)
- d. The traffic report indicates the site can rely on existing on-street car share. It's noted, the existing on-street car shares can be removed/relocated at any time. Therefore, the site should not rely on existing on-street car shares.
- e. Note that the assessment for the appropriate rate for car parking provision lies with Statutory Planning team.

**3. Parking Layout and Accessway**



- a. Proposal Summary
  - i. Basement 1 – 1x accessible parking space, 3x Car Share, 31x parking spaces, 4x tandem parking (8 spaces)
  - ii. Basement 2 – 48x parking spaces (stacker), 20x parking spaces, 7x tandem parking (14 spaces)
- b. Mechanical Stacker: The site has proposed 24 (total 48) car parking spaces using Evolution Parking Systems (independent access to each space). Drivers are allocated a specific car space.
  - i. The spec sheet does not provide landing/projected area required when the platform is lowered (such as, is the sufficient aisle width for the platform to be lowered) weight limit and the useable platform dimensions of lower and upper level parking.
  - ii. The spec sheet indicates the stacker dimensions will require a larger area than what has been allocated/shown in the plans. Can this be confirmed?
  - iii. Can the plans clearly show the cross section of the mechanical stacker area? The traffic report indicates a 3.7m floor to ceiling height; however, the plans indicate a lower headroom clearance.
  - iv. The report indicates the upper platforms will have a 1.8m headroom clearance. This would represent 50% of parking spaces via the mechanical can provide a headroom clearance of 1.8m which satisfy CI 52.06.
  - v. The Applicant will need to confirm if there is sufficient space to install the stackers (i.e. Clearance from structural columns/walls/etc)
  - vi. The Applicant must have an action plan in place for when scheduled maintenance occurs or are temporarily unavailable
- c. It is recommended the Applicant clearly show the dimensions of each parking spaces.
- d. Can the Applicant confirm/provide?
  - i. Parking space P34 – over bonnet clearance
  - ii. Parking space P01 – clearance envelope around the parking space
  - iii. Parking space P20 and S09 – clearly indicate the dimensions of the Small Car Bay and provide a swept path assessment for this bay.
  - iv. If they are proposing to provide a boom gate near the entry?
  - v. The RL at the building entrance, ramp and basement levels?
  - vi. Any tandem parking should be allocated to same tenancy.
- e. The pedestrian walkway with the basements to the Lifts are narrow.
- f. All columns must be designed to ensure they are not within the vehicles clearance envelope.
- g. Traffic Report indicate Motorcycle parking dimensions are 1.2m x 2.5m. It is recommended they indicate this on the plan.
- h. Disable Parking
  - i. Can the Applicant confirm height clearance?
  - ii. Update plans to design the disable parking space in accordance with AS2890.6-2009.
- i. No sight splay has been provided. This does not satisfy CI 52.06.
- j. Headroom clearance should satisfy CI 52.06 or other relevant design guidelines specific for Fishermans Bend.
- k. Update Swept Path Assessment to show a B85 and B99 size vehicles manoeuvring at the ramp simultaneously.

#### 4. Traffic Generation and Impact

- a. The traffic report indicates the expected traffic generation as follow:
  - i. Residential Apartments daily rate – 4 movements per day per dwelling allocated with a car space. The distribution of inbound/outbound during AM peak hour are 20%/80% and PM peak hour are 60%/40%.
  - ii. Retail – one movement during each AM and PM peak hour for each allocated retail car space.
  - iii. Office – Anticipated that 50% of allocated parking spaces will be filled and vacated during each AM and PM peak hour.

**Table 12 AM Peak Hour Traffic Generation – Total**

<i>Use</i>	<i>Inbound</i>	<i>Outbound</i>	<i>Two-Way</i>
Residential	7	26	33
Office	15	2	17
Retail	11	0	11
<b>Total</b>	<b>33</b>	<b>28</b>	<b>61</b>

**Table 13 PM Peak Hour Traffic Generation – Total**

<i>Use</i>	<i>Inbound</i>	<i>Outbound</i>	<i>Two-Way</i>
Residential	20	13	33
Office	2	15	11
Retail	0	11	6
<b>Total</b>	<b>22</b>	<b>39</b>	<b>61</b>

Update Table 13 to show the correct figure for *Two-Way*.

The anticipated daily traffic generation of the site is around 408 vehicles movements per day.

- b. Onemilegrid has undertaken a Probability of Conflict for the subject site and current traffic conditions in Buckhurst Lane. The assessment has not included other properties that may have access via Buckhurst Lane in the future. The results are not indicative of the traffic volume in Buckhurst Lane in the future.
- c. Buckhurst Lane can carry up to 300 vehicle movements per day. The site proposal will generate more traffic than the laneway can carry safely. This has not included future developments traffic generation.
- d. There has not been a cumulative traffic generation/impact assessment for other/future developments.
- e. Given the width of Buckhurst Lane I have concerns of vehicle conflict given the width of laneway and lack of passing area. This will be an issue in the long term. Consideration should be provided to widen the laneway to safely accommodate two-way traffic and not compromise other road users safety (such as pedestrian).

#### **5. Waste Collection and Loading**

- a. A loading area is provided on ground level adjacent to the vehicle accessway.
  - i. The swept path assessment indicates a SRV size vehicle can access/egress the loading area.
  - ii. Given the location of the loading area it is recommended the Applicant provide a warning system to minimise conflict. In addition, it is recommended the loading area is not used during peak traffic hours.
  - iii. The loading area should be allowed to be used by all tenants of the building. The pedestrian walkway from the loading area to lifts is considered narrow and is not conveniently accessible to residential lifts.
  - iv. Can the Applicant confirm the headroom clearance?
- b. Update plans to clearly shown the loading area's dimensions.
- c. The traffic report notes the availability of on-street loading bays. It is noted development shall be self-sufficient to accommodate car parking and loading needs without over reliance on existing on-street parking. Future streetscape works may result in removal / reduction of available on-street parking supply
- d. Waste Management plan to be referred to Council's Waste Management department for assessment.
  - i. The swept path assessment indicates a Waste Mini Loader can access/egress the basement/waste area.

## **6. Bicycle Parking / Facilities**

- a. Clause 37.04 the site requires:
  - i. 145 bike parking spaces for residents
  - ii. 15 bike parking spaces for residents' visitors
  - iii. 160 bike parking spaces total.
- b. It is proposed to provide a total of 198 bike parking spaces
  - i. 145 residential spaces on ground level
  - ii. 32 staff spaces within basement level 1
  - iii. 21 visitor spaces with basement level 1
- c. The proposal has not provided bike storage areas to be conveniently accessed from Buckhurst Street and Lane. The Applicant should consider designing the bike layout/facilities as per:
  - i. The Australian Standards require a minimum of 20% horizontal, ground level bicycle parking spaces (not wall mounted).
  - ii. Secure bicycle parking facility must be provided for staff use.
  - iii. Refer to design guidelines outlined in Clause 52.34.
- d. It is suggested they relocate the visitor bike spaces near the site's frontages and are contained wholly within their site.
- e. Replace the staircase accessing the 'Resi Bicycle' storage area from Buckhurst Lane with ramp. Widen walkway aisle to 1.5m.
- f. Widen the walkway within basement level 1 to 1.5m as per Cl 52.34.
- g. Provide specification of bicycle facilities/racks.
- h. Some consideration to provide electric bike charging stations.
- i. Change /shower rooms are not conveniently accessible for residents/visitors.

## **7. Other**

- a. Plans show canopies projected onto Council land. Can this be confirmed? I have concerns of height clearance.
- b. Update traffic report to mention Department of Transport's Movement and Place Framework. The "SmartRoads Road Use Hierarchy" identified in section 2.4 has been superseded.
- c. All redundant crossovers must be reinstated to Council satisfaction.
- d. All proposed crossovers must be installed to Council satisfaction.

### **Amended Plans 11 May 2020**

I have reviewed the Applicants response, One Mile Grid memo and report dated 30 April 2020 (E73298/20) and new architectural drawings (E73309/20).

- Number of car parking spaces proposed and allocation for each type of bedroom apartments, retail and office spaces should be provided.
- Entrance ramp grades does not satisfy Clause 52.06. One Mile Grid reference AS 2890.1 2004 to provide a 1:8 ramp gradient. It is preferred the site provides a 1:10 ramp grade for the first 5m of the site.
- The carpark layout has been modified.
  - o Small car bays have been removed.
  - o All parking spaces dimensions and clearance to walls/columns needs to satisfy Cl 52.06.
- The proposed roller door near the entrance is setback and is considered acceptable. I suggest the Applicant install a warning system (such as light) to alert drivers of entering/exiting the site.

- Given the location of the roller door can the Applicant confirm if this will impact service/loading vehicle entering/exiting the loading area?
- Can the Applicant confirm the size of the service vehicle swept path assessment? Diagram of the service vehicle indicate it is 8.8m long. Noting an 8.8m long service vehicle will overhang onto the accessway aisle.
- Access to bike storage areas are not convenient or direct from building entrances. I also recommend the accessway aisle leading to the bike storage area widen to 1.5m and replace staircase with an acceptable ramp gradient.
- I suggest visitor bike racks are installed on-site close to the building's entrance and on Ground Level.

One Mile Grid memo and report dated 30 April 2020 (E73298/20)	Comments
<p>"2c. The site has only proposed 3 car share spaces (i.e. a shortfall of 2 spaces) noted."</p> <p>The applicant has had discussions with FlexiCar a car share provider. FlexiCar undertook a review of the development and indicated that 3 car spaces would be commercially viable on this site. Any more pods in the single location would not receive the required take up and could remain dormant. The concern is that as all spaces are located in the one location, there is not flexibility for other users to access the space and a distribution of pods into the area is more appropriate to be an option for other users outside of the development. A copy of the FlexiCar letter is provided attached. In this regard, it is considered that the provision of share car pods on-site is appropriate.</p>	<p>Noted</p> <p>I recommend you refer the Car Share component to Kathleen Kemp in Strategic Transport team for review/comments.</p>
<p>"2d. The traffic report indicates the site can rely on existing on-street car share. It's noted, the existing on-street car shares can be removed/relocated at any time. Therefore, the site should not rely on existing on-street car shares." It is not expected that the site will need to rely on other car share spaces, the report was highlighting the availability of other pods in the immediate vicinity that are currently available.</p>	<p>Noted</p> <p>I recommend you refer the Car Share component to Kathleen Kemp in Strategic Transport team for review/comments.</p>
<p>3b. (i-v) Confirm dimensions and ability for stackers to be accommodated on-site Additional manufacturer specification sheets are provided attached for the system. Car Stackers Australia carry the Evolution and 2 Park system. The system requires only 5.33 metres in parallel and lateral clearance to allow for a vehicle to be turned around. Therefore, as an aisle of 6.4 metres is provided, the system can suitably operate. The amended plans show the turning radius for the end stacker spaces to highlight sufficient width is available. An extract of the updated architectural plans is provided below. In terms of the area required for the stacker, the system can fit within a standard 2.6 metre wide x 4.9metre long space. The system can cater for vehicles up to 4.9m long and 2.0 metres wide. In relation to the height clearance, there is a floor to ceiling height of 3.6 metres which will allow for a vehicle up to 1.5m on the bottom level and 1.8 metres on the upper level. This provides 50% of stacker spaces with a height of 1.8m in excess of the Planning Scheme requirement.</p>	<p>Can the Applicant provide a swept path assessment for critical parking spaces on the lower level of the system (the assessment should show the outline of the system too)?</p> <p>The spec sheet indicates the system is 2.64m wide. Architectural drawings show each system bays are 2.6 wide.</p> <p>It is recommended to install a warning system (such as light) when the stacker system is being used.</p>

<p>In relation to the structure, the applicant has sought structural advice and the selected stacker can be accommodated within the structure as required.</p>	
<p>Various Queries from Council  i. Parking space P34 – over bonnet clearance – No over bonnet storage proposed.  ii. Parking space P01 – clearance envelope around the parking space – Drawings have been updated.  iii. Parking space P20 and S09 – clearly indicate the dimensions of the Small Car Bay and provide a swept path assessment for this bay. – Small car bays no longer proposed.  iv. If they are proposing to provide a boom gate near the entry? – Plans have been updated to indicate a Roller door which will be activated by occupants of the car spaces.  v. The RL at the building entrance, ramp and basement levels? –Noted and have been provided.  vi. Any tandem parking should be allocated to same tenancy – Yes agree and can be dealt with as part of the parking management plan as a condition of permit.</p>	<p>Car park entrance  Plans indicate a roller door will be provided and will be setback 7.0m. This is a good outcome.</p> <p>Other responses noted.</p>
<p>3i. No sight splay has been provided. This does not satisfy CI 52.06.  It is noted that the required sightline is not provided on the northeast side of the ramp. In this regard, due to the low level of observed pedestrians in the laneway and the limited footpath width, it is unlikely that a pedestrian will be walking along the face of the building when a vehicle is departing. Notwithstanding, to provide for additional sight lines, a mirror will be installed which is denoted on the plans.</p>	<p>It is preferred a full sight splay is provided.</p> <p>I note the site proposes to provide retail space along Buckhurst Lane which will generate pedestrian using the laneway.</p>
<p>Traffic Generation responses</p>	<p>My concerns remain regarding the operation and safety of road users along Buckhurst Lane when other sites are developed.</p> <p>Buckhurst Lane's carriageway should be widen to ensure safe two-way movements. Based on the current street configuration and the anticipated traffic volume along Buckhurst Lane can lead to negative outcome for all road users.</p>
<p>Other responses</p>	<p>Noted</p>