ROBINSON URBAN PLANNING

Proposed shop-top housing development (DA-482/2017)

59-75 Grafton Street, Bondi Junction

SUPPLEMENTARY STATEMENT OF ENIRONMENTAL EFFECTS (Revision 1)

Submitted to Waverley Council

Prepared on behalf of Clygen Pty Ltd

12 December 2018 | 15082

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1.0 Introduction and summary

1.1 Background

Development Application (**DA**) 482/2017 was submitted to the Waverley Council (**Council**) by Clygen Pty Ltd (the owner and applicant) on 10 November 2017. It proposed the following development at 59-75 Grafton Street, Bondi Junction (**the site**):

1. Demolition of the existing commercial office building and other structures on the site
2. Construction of a shop top housing development comprising:
   (a) 17 storeys of residential accommodation incorporating 77 dwellings on Levels 1 to 17
   (b) Two retail/commercial levels located on the Lower Ground and Upper Ground Levels with a gross floor area (**GFA**) of 528.5m^2
   (c) A seven level mechanical car parking system accommodating 75 cars, accessed from Grafton Street
   (d) A pedestrian through site link connecting Hegarty Lane and Grafton Street
   (e) Communal recreation space at Level 1 and on the roof
   (f) Substation to Grafton Street
   (g) Ancillary facilities comprising storage space, garbage rooms and plant rooms.

The development application (**DA**) has been exhibited, reviewed by the Waverley Design Excellence Panel (**WDEP**) on several occasions and referred internally within Council and to external agencies. The DA has been notified twice.

By letters/emails dated 1 May 2018, 16 July 2018, 20 July 2018 and 8 November 2018; Council has requested a number of design changes.

This Supplementary Statement of Environmental Effects (**SSEE**) identifies the matters raised by Council and the WDEP and details the proposed amendments and additional information provided to resolve these concerns. Submission of this SSEE follows pre-lodgement meetings between the applicant's representatives and Council planners on 4 July 2018, 31 October 2018 and 29 November 2018.

1.2 Summary of amendments

To address the matters raised by Council and the WDEP, the following key amendments are proposed:

- **Height**: Reduction in the building components at the top of the building and an overall reduction in height (from 65.7m in the Original DA to 65.1m in the amended DA)
- **Through-site link**:
  - A strong visual link is now proposed between Grafton Street and Hegarty Lane
  - Activation along the through site link has been increased
  - An addendum wind advice is attached addressing wind conditions in the through site link
- **Building envelope and facade changes** including:
  - Containing the building within the site
  - Lowering and simplifying the podium treatment to Hegarty Lane
  - Simplified tower design, including simplified blade walls in southern elevation
  - Building setback to provide a footpath along the site frontage to Hegarty Lane
  - Simplified tower and podium form achieved by removing steps at the base of the tower
  - The mechanical car stacker is to be designed as a piece of kinetic art

  - Refined internal layout and elevations to provide better privacy protection between the podium apartments and buildings on the southern side of Hegarty Lane
  - Better integration between the proposal and the proposed development to the west at 45-57 Grafton Street including a new inset to better articulate of the western side elevation facing 45-57 Grafton Street
  - 1m soil depth provided to Upper Ground Floor tree at Hegarty Lane (with not raised planter edges)
  - Façade finishes updated to reduce rendered and painted surfaces
- **Communal open space**:
  - An additional communal open space area is provided in north-west corner of Level 5 (replacing one apartment)
  - Amended arrangements to increase landscaping, amenity and utility of the rooftop communal area
- **Amenity:**
  - Refined apartment arrangements to improve amenity for future residents on the site
  - Ventilation provided to the northern façade
  - Updated acoustic and wind reports
- **Servicing, car parking and bicycle parking**:
  - Amendments to address Council's comments on waste and loading including on-site waste collection by a small rigid vehicle (**SRV**)
  - Bicycle storage provided at the Lower Ground Floor with direct access from Grafton Street.

The amended proposal is described as follows (amended attributes are shown in red):

1. Demolition of the existing commercial office building and other structures on the site
2. Construction of a shop top housing development comprising:
   (a) 17 storeys of residential accommodation incorporating 78 dwellings on Levels 1 to 17
   (b) Three retail/two commercial levels located on the Lower Ground and Upper Ground Levels with a gross floor area (**GFA**) of 475.8m^2
   (c) A eight level mechanical car parking system accommodating 84 cars, accessed from Grafton Street
   (d) A pedestrian through site link connecting Hegarty Lane and Grafton Street
   (e) Communal recreation space on the roof and at Level 5
   (f) Substation to Grafton Street
   (g) Ancillary facilities comprising storage space, garbage rooms and plant rooms.

1.3 Additional and amended information

This SSEE provides an updated description of the amended proposal and explains the proposed amendments and additional information. It should be read in conjunction with the original SEE prepared by Robinson Urban Planning Pty Ltd (**RUP**) (November 2017) and the following additional and amended information:

- **Appendix A** Council letters and emails to the applicant (1 May 2018, 16 and 20 July 2018, 15 October 2018 and 8 November 2018)
- **Appendix B** Site analysis, architectural plans, schedules, photomontages, compliance plans and shadow diagrams, by Cottee Parker JPRA (updated)

- **Appendix C** Amended Design Quality Principles (SEPP 65) Report and Design Verification Statement, by Cottee Parker JPRA (Revision C - 10 December 2018) including a summary table of issues and amendments
- **Appendix D** Amended Clause 4.6 Exception to Development Standard - Waverley Local Environmental Plan 2012: Clause 4.3 – Height of buildings, by Robinson Urban Planning
- **Appendix E** Public Art Plan, by Guppy Associates Art Management
- **Appendix F** Amended Traffic Report, by TEF Consulting (1 August 2018)
- **Appendix G** Amended DA Acoustic Assessment, by Acoustic Logic (7 December 2018)
- **Appendix H** Amended Site Waste Management Plan, by Senica (2 July 2018)
- **Appendix I** Amended ESD Report, by RENY (August 2018)
- **Appendix J** BCA Advice on proposed sanitary facilities, by SWP (31 July 2018)
- **Appendix K** Amended Landscape Plans, by Umbaco (14 December 2018)
- **Appendix L** Amended BASIX certificate and Report (9 December 2018) & Section J Report (6 July 2018), by Windtech
- **Appendix M** Pedestrian Wind Environmental Study (31 July 2018) and further wind memo on the through site link (7 December 2018), by Windtech
- **Appendix N** Preliminary Soil Investigation, by CETEC (August 2018).

An amended 3D digital model has also been prepared.

2.0 Amended overview of development

Table 1 provides a comparison numerical overview of the original and amended proposals (showing proposed changes in red).

Table 1 – Key numerical information – Original DA and Amended DA

	Original DA	Amended DA
Site area (m^2)	1,281	1,281
Apartments		
• Studio		9 (12%)
• One bedroom	34 (44%)	26 (33%)
• Two bedrooms	31 (40%)	30 (38%)
• Three bedrooms	12 (16%)	13 (17%)
• Total units	77	78
Gross floor area (GFA) (m^2)		
• Commercial/retail	528.5 (7%)	475.8 (6%)
• Residential (including residential stores and circulation)	7,157.5 (93%)	7,119.2 (94%)
Total GFA	7,686	7,595
Floor space ratio (FSR)	6:1	5.93:1
Height		
• Building height - WLEP 2012 (metres) to the top of plant	65.7m	65.1m
• Storeys (including Upper & Lower Ground)	19	19
Communal open space (m^2)		
• Level 1	125	0
• Level 5		187
• Roof top	80	137
• Total	205	324
• % site area	16%	25%
Parking		
• Resident cars	65	64
• Resident visitor cars	0	12
• Non-residential cars	10	8
• Car parking total	75	84
• Car share	1	1
• Loading	1	2
• Motorcycle parking	6	6
• Bicycle parking spaces	91	91

3.0 Response to request for amendments and additional information

3.1 Height

3.1.1 Issue raised by Council (letter dated 1 May 2018)

1. The components of the roof which exceed the height development standard, including the roof over the common open space at the front of the site is excessive in bulk and scale, appearing as an additional level. This creates additional shadow impacts on the adjoining residential building to the west which would not be impacted by a compliant form and will interrupt views enjoyed across the site by surrounding buildings.

   Council has supported ancillary structures which support a common open space to the building, however not to the extent proposed in this application. Typically such ancillary structures are set in from the sides of the building and are do not contribute to the visual bulk of the building. The design of the top of the building is to be amended to predominantly fit with the 60m height limit. Clarification is also required regarding the use of the pebble roof on the southern side of the lift core (ie. non-trafficable area or common open space) as it is noted to have a hand rail.

3.1.2 Issue raised by Council/WDEP (email dated 8 November 2018)

The site has a 60m height control. This control should not be exceeded by any part of the building including plant, lift overruns or communal space. The extra height over the 60m control being sought by the applicant is not supported by the Panel.

3.1.3 Proposed amendments/additional information

The bulk and scale of the proposed building components at the top of the proposal have been reduced including:

(a) Deleting the roof terrace hood/pergola over the common open space
(b) Relocating the A/C and HWU plant
(c) Deleting the southern roof balustrade (and the pebble roof to the south of the lift core is shown as "NOT TRAFFICABLE" on DA 2112_D, **Appendix B**).

These amendments reduce the overall height from 65.7m to 65.1m. An amended Clause 4.6 Exception to Development Standard - Waverley Local Environmental Plan 2012: Clause 4.3 – Height of buildings accompanies the SSEE (**Appendix D**).

The remaining structures that exceed the 60m height standard are setback from the sides of the building and have been limited to the lift chamber/overrun (which provide equitable access to the communal open space) and stair pressurisation (an essential building component at the top of the building).

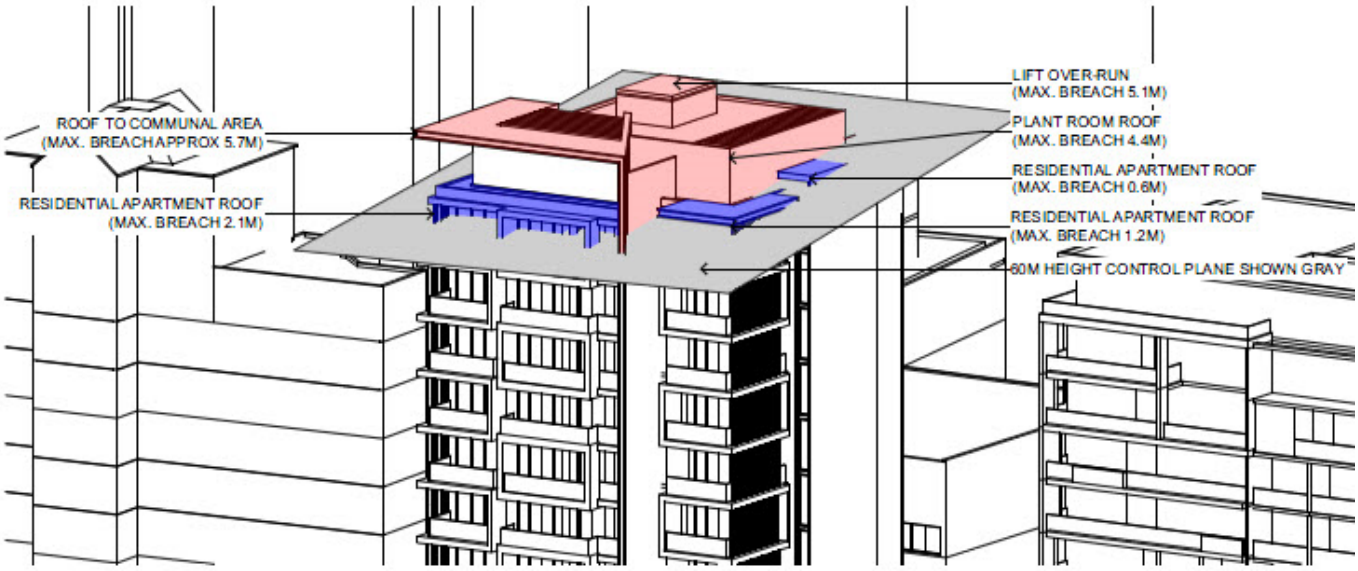
Figures 1 to **3** compare the original and amended DA height non-compliance and built form, illustrating the significant reduction in bulk at the top of the building.

Amended shadow diagrams have been prepared illustrating that shadows cast by the portions of the amended building with a height >60m:

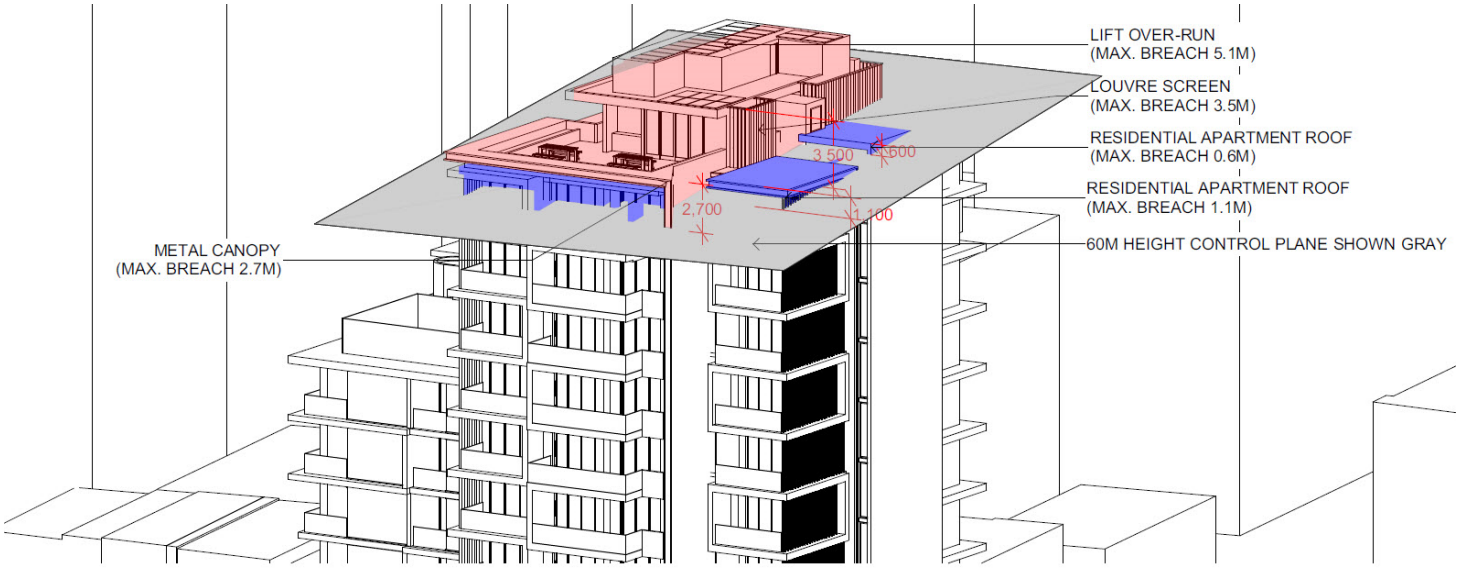
- Fall onto the roof of buildings to the south
- Have an insignificant area
- Will not have any impact on residential amenity for adjoining residents (existing and future).

(see DA 9100_C to 9106C, **Appendix B** and sample shadow study extract at **Figure 4**).

ORIGINAL DA



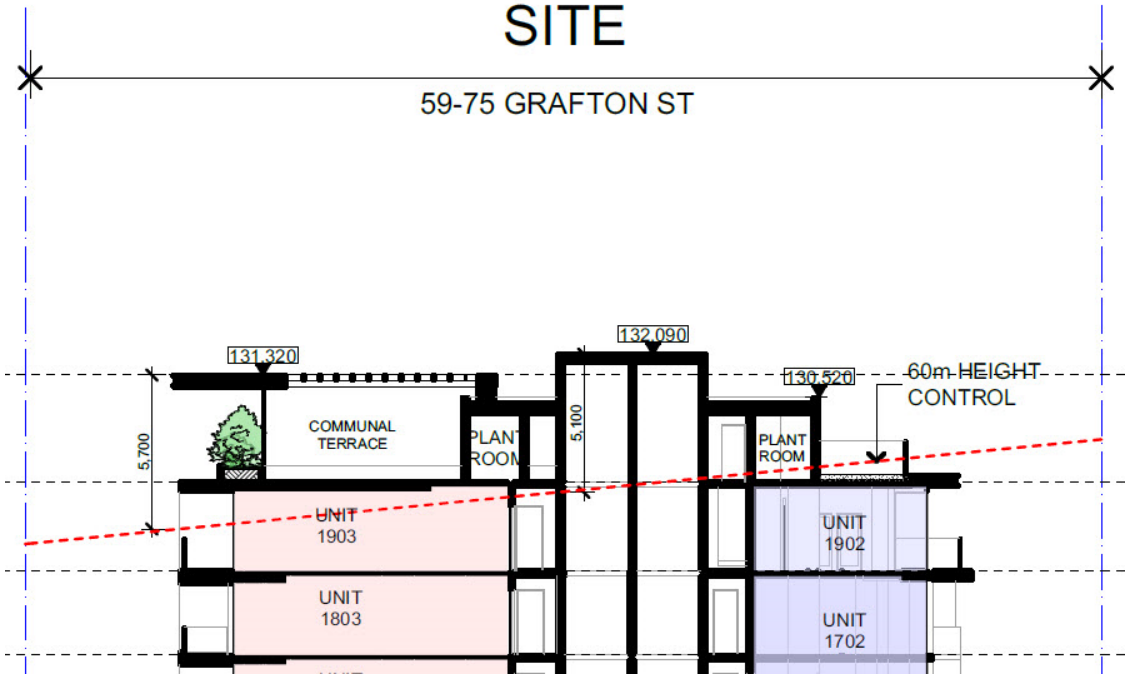
AMENDED DA



HEIGHT PLANE DIAGRAM

Figure 1 – Comparison of original & amended departure from 60m height standard (Source: Cottee Parker JPRA, DA 9005_A and DA 9005_C)

ORIGINAL DA



AMENDED DA

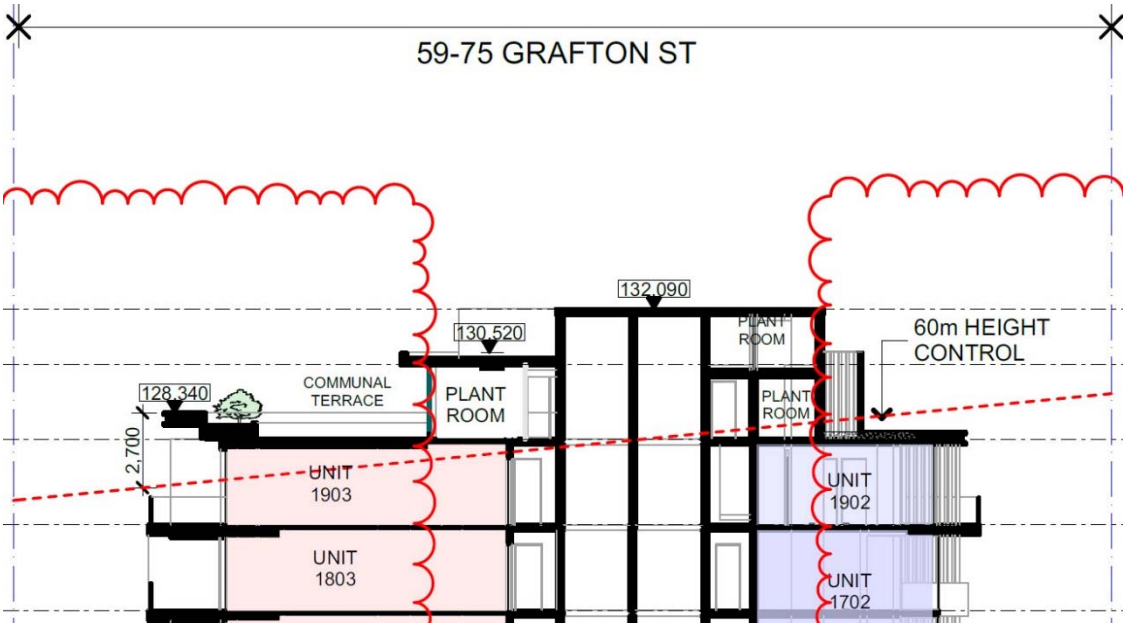


Figure 2 – Comparison of original & amended departure from 60m height standard (Source: Cottee Parker JPRA, DA 2200_A and DA 2200_C)

ORIGINAL DA

AMENDED DA

Figure 3 – Comparison of original & amended Grafton Street Photomontage (Source JPRA: DA 2700_A and DA 2700_C)

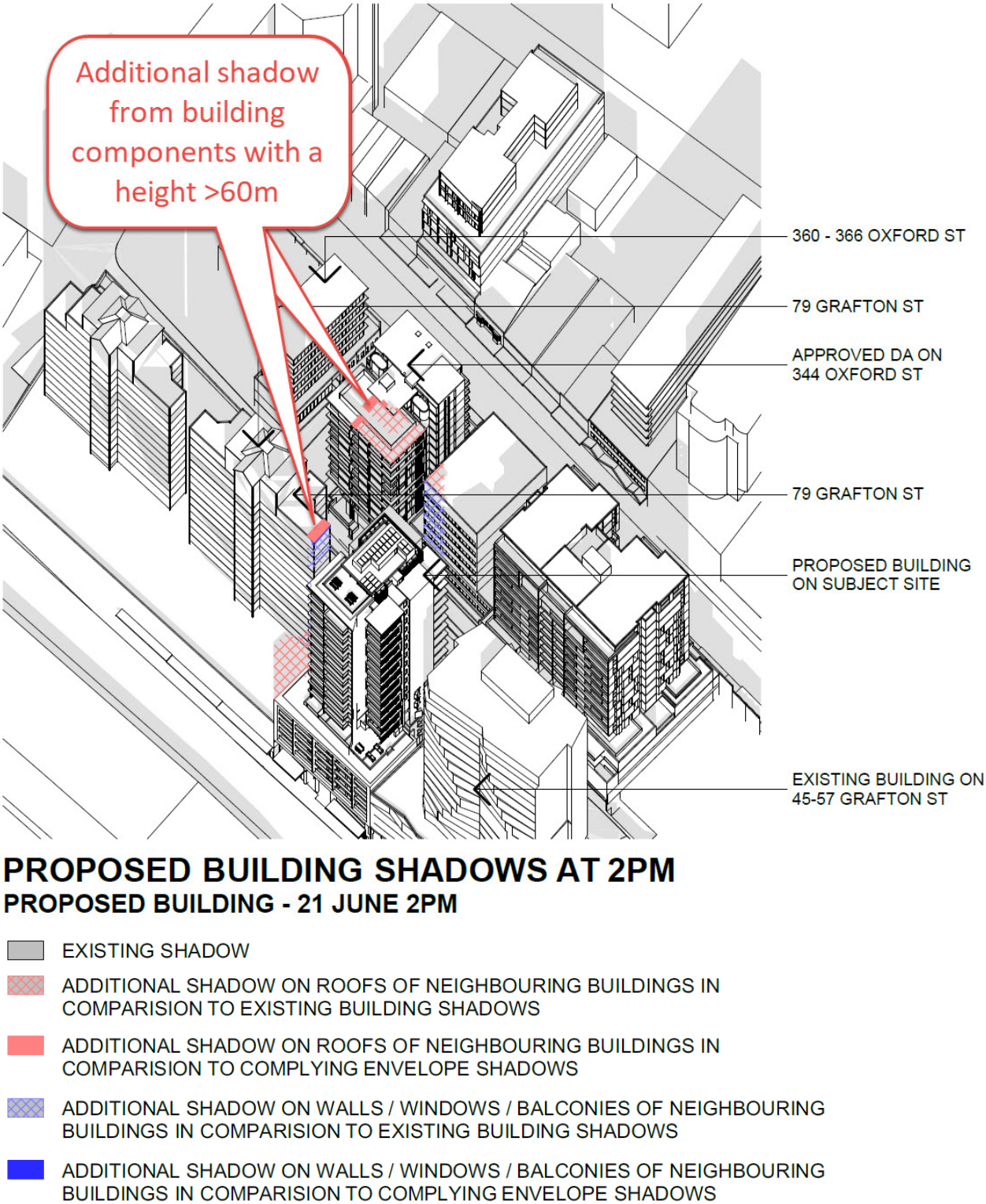


Figure 4 – Amended shadow comparison – Sample 21 June 2PM (Source: Cottee Parker JPRA, DA 9105_C)

3.2 Through site link (including wind)

3.2.1 Issue raised by Council (letter 1 May 2018)

1. The through site link should provide a visual connection from Grafton Street to Hegarty Lane. Given the passage is not in a straight alignment this visual connection is absent. To address this, it is recommended that a double height entry space be provided to the Grafton Street entrance, or the passage be straightened to create that connection. A similar effect should be created at the entrance to Hegarty Lane by adjusting the apartment layout on Level 1 to create a void above the majority of the through site link, maximising the amount of natural light and creating a visual connection between the streets.

2. The pedestrian link should provide equitable access, facilitating wheel chair and pram access.

3. Public art should be incorporated into the through site link to create a visually engaging and attractive through site link.

3.2.2 Issues raised by Council/WDEP (email dated 8 November 2018)

The through site link needs to be of high quality finishes and design and better activated to improve the neighbourhood connectivity, safety and opportunity for small service businesses along the new through-site link

...

The activation of Grafton Street and the through-site link need to be improved. The retail in Grafton Street should turn the corner and not be obstructed by services, so that its presence can be noticed from the link. The Panel recommends that the hydrant booster, sprinkler booster, fire control room, public lift, 1:10 ramping, position and detail of the security gates, fire egress recess, bridge, service risers, view into toilets and garbage room area, floor wall and glazing finishes, floor level and setback of Retail 3 (the floor level should relate to Hegarty Lane to assist its activation), bike positions, glass canopy and tree planting all be reviewed in detail to achieve a high quality pedestrian and retail experience. Detailed sections through the link showing line-of-sight and looking east and west would be recommended for review. Good CPTED design, natural daylight and solar access is a clear expectation in the ADG for common circulation areas.

...

The Executive Summary of the wind report notes that some areas of impermeable balustrading and the addition of foliage will make some of the wind affected areas trafficable however there is a recommendation that more treatment would be needed for areas intended for short duration stationary activities. There is no specific mention of the through-site link in the wind test and so it is unclear if it has been modelled as fully open.

...

There remains potential to improve the permeability and surveillance of common and public areas associated with the through-site link. The Panel also has associated concerns about the previously noted re-entrant spaces for lower and upper ground level entries that lack good CPTED qualities

...

An amended wind report should be submitted with any amended plans which should specifically address whether the wind conditions in the through site link are acceptable or not. The plans indicate a wind door break in the middle of the public link on the upper ground floor plan, but the wind report does not comment on this aspect of the proposal. Council needs to be confident that the wind conditions are acceptable to ensure the space is successful.

3.2.3 Proposed amendments/additional information

The pedestrian through site link has been amended to provide a direct visual connection between Grafton Street and Hegarty Lane to address Council and WDEP comments as noted below:

1. **Visual connection between Hegarty Lane and Grafton Street**

   A visual connection between Hegarty Lane and Grafton Street has been achieved by:

   (a) Removing the central commercial space at the Grafton Street Upper Ground Floor (previously Commercial 2), connecting bridge and street awning to create a double volume entry space at Grafton Street
   (b) Reconfiguring the Hegarty Lane entry and retail spaces
   (c) Providing a large inset in the south-west corner of the site to increase the building setback from the western boundary and Hegarty Lane, to create an appealing publicly accessible space and increase solar access to the through site link and apartments above facing Hegarty Lane.

   Figures 5 to **8** compare the original and proposed Lower and Upper Ground Floor plans showing how the through site link arrangements have been amended to address Council and WDEP issues (DA 2100_D and 2101_D, **Appendix B**).

   An amended Landscape Plan has also been prepared showing a new feature tree in the public space in the south-west corner of the site. The soil around the tree is to have a depth of 1m recessed into to the slab above the main switch room (see DA 2100_D, **Appendix B**) which obviates the need for raised planter walls.

2. **Activation of through site link**

   The Lower Ground Floor fire hydrant booster cupboards have been moved to the western side of the through site link at Grafton Street, with an additional shopfront created to Retail 1 facing and activating the through site link (see DA2100_D, DA2101_D, DA2200_D, **Appendix B**).

3. **Equitable access**

   A lift is now proposed beside the new double entry space to provide equitable access between Grafton Street and Hegarty Lane (DA 2100_D and DA 2101_D, **Appendix B**).

4. **Public art**

   The mechanical car stacker is to be designed as a piece of kinetic art.

5. **Wind**

   A Wind memo has been prepared by Windtech assessing wind conditions within the through site link (**Appendix M**). It states wind conditions within the through-site link are expected to be acceptable with the security/windbreak doors closed, partially open and fully open; as noted in the following extract:

   > *The wind environment study was undertaken with the assumption the security/ windbreak doors along the Grafton Street frontage on the lower ground level, and along Hegarty Lane frontage on the upper ground level would remain closed for the majority of the day. When the doors are closed, the through-site link is*
   >
   > *effectively enclosed and the wind conditions within these areas are expected to be acceptable for its intended use as a pedestrian thoroughfare. The results of the wind environment study indicates the wind conditions outside the through-site link; represented by Test Point locations 5 and 8, satisfy the short exposure wind comfort*

criterion. The wind conditions within the through-site link when the doors are closed are expected to be equivalent or better than the wind conditions at Test Point locations 5 and 8.

Similarly, the wind conditions within the through-site link are expected to be acceptable for its intended uses for the scenario where one of the security/windbreak doors is open and the other is closed. The pressure differential generated is expected to be negligible due to the large 15m depth between the doors. Furthermore, the intensity of the direct wind effects are expected to dissipate as it travels deeper into the through-site link.

For the scenario where both the security/windbreak doors are open, the wind conditions may be exacerbated along the through-site link due to the potential funnelling wind effect. As mentioned above, the wind conditions outside the through-site link; represented by Test Point locations 5 and 8, satisfy the short exposure wind comfort criterion. This is a much more stringent wind comfort criterion than the pedestrian activity wind comfort criterion that are applicable to pedestrian thoroughfares such as the through-site link. Hence, assuming an increase in wind conditions with both security/windbreak doors open, the wind conditions within the through-site link are expected to be acceptable for its intended uses.

It should be noted security/windbreak doors are likely to remain open for short periods of time when pedestrians are entering/exiting the development. As such these wind conditions are expected to be experienced during these short periods and predominantly in the local trafficable areas around the security/windbreak doors.

ORIGINAL DA

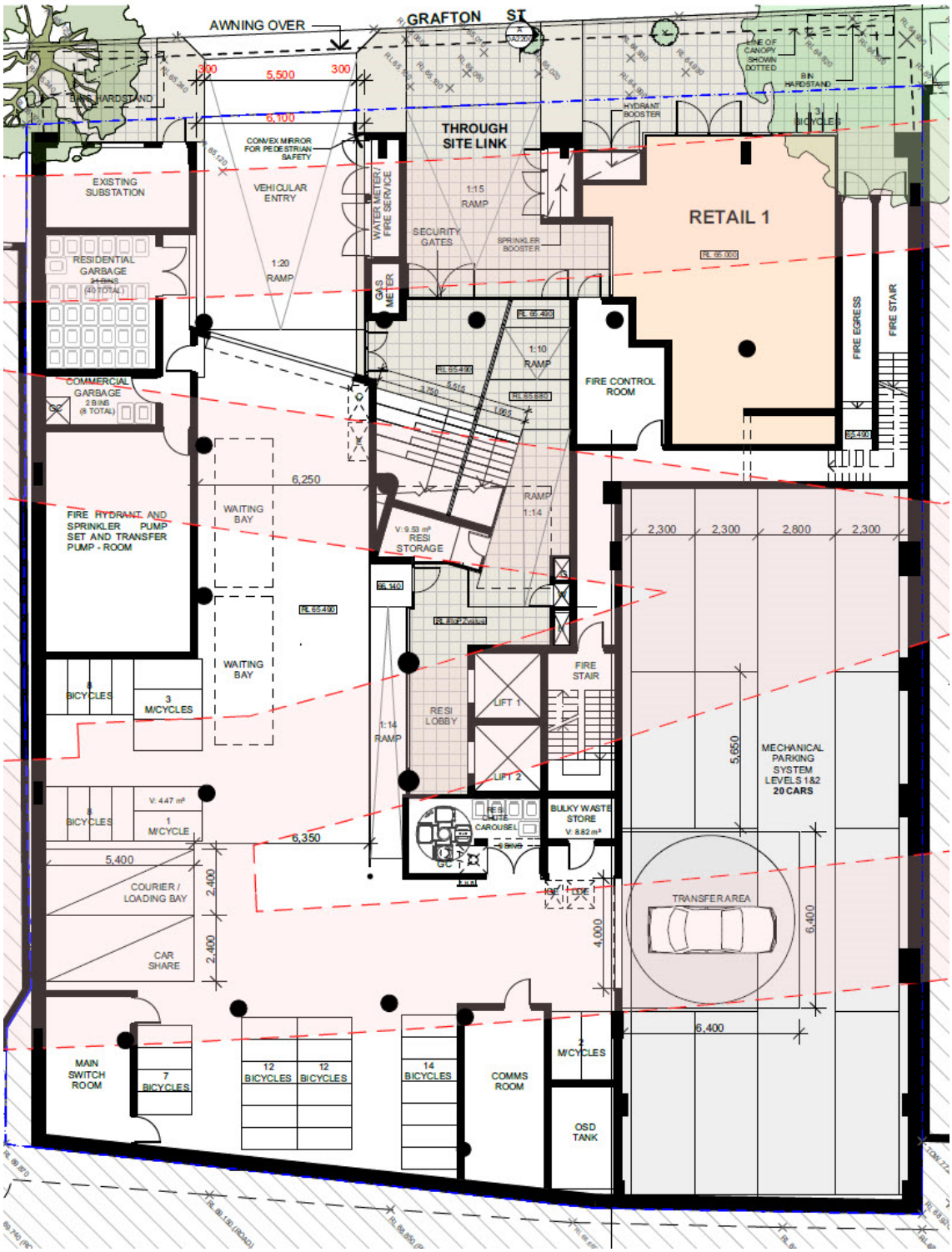


Figure 5 – Original Lower Ground Floor Plan (Source: Cottee Parker JPRA, DA 2100_A)

AMENDED DA

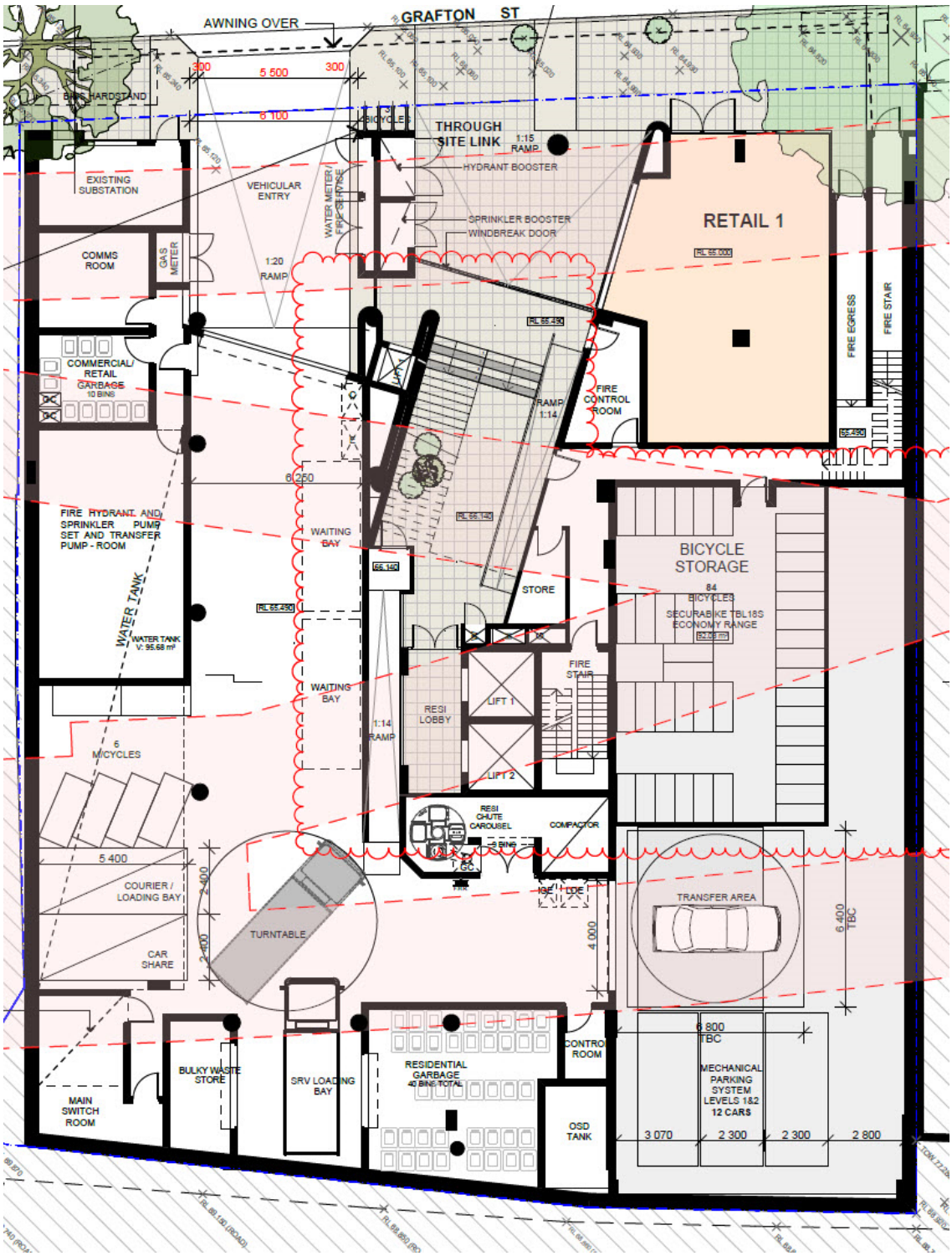


Figure 6 – Amended Lower Ground Floor Plan (Source: Cottee Parker JPRA, DA 2100_D)

ORIGINAL DA

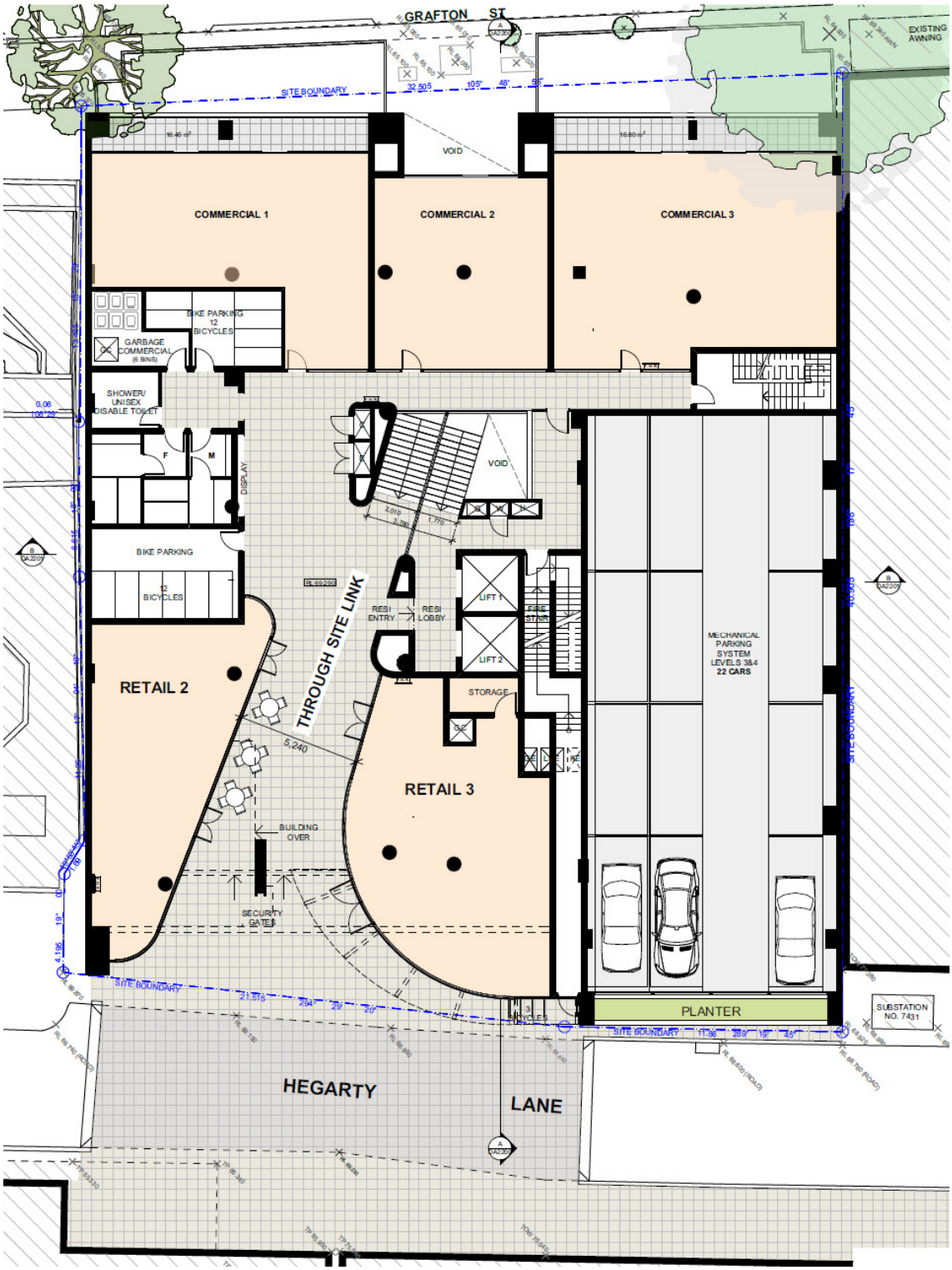


Figure 7 – **Original** Upper Ground Floor Plan (Source: Cottee Parker JPRA, DA 2101_A)

AMENDED DA

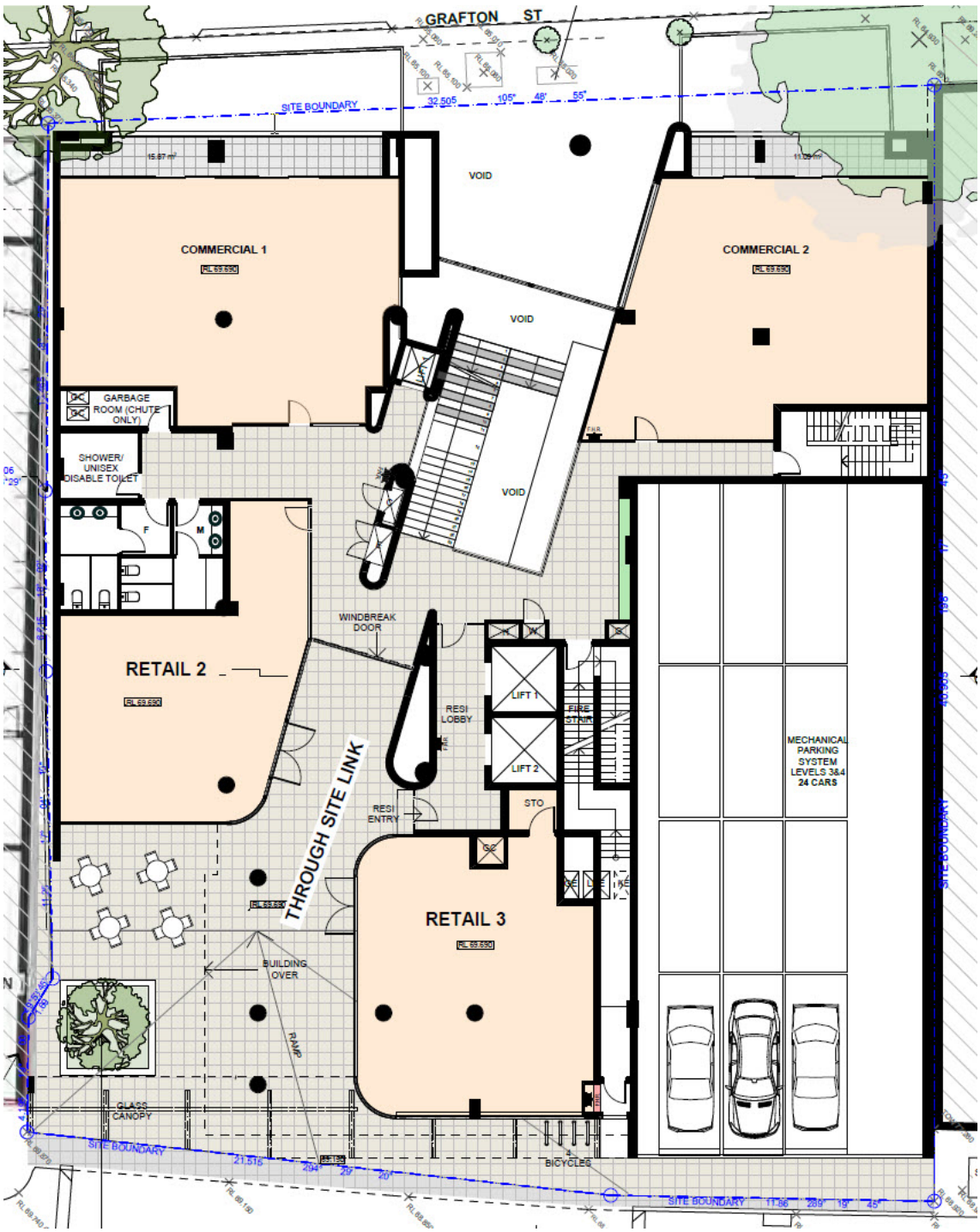


Figure 8 – **Amended** Upper Ground Floor Plan (Source: Cottee Parker JPRA, DA 2101_D)

3.3 Urban design (and public domain)

3.3.1 Issue raised by Council (letter 1 May 2018 and email 20 July 2018)

1. The building is not built to the property boundaries to Grafton Street or Hegarty Lane resulting in awkward indents that are at odds with CPTED principles and create ambiguity regarding the ownership of the space, as it appears to be the public domain (maintained by Council) but are indeed with the ownership of the property. The location of the security gate on the lower ground floor to Hegarty Lane is also of concern in this regard.

   It is recommended that the lower ground floor walls are built as close as possible to the project boundary and the security gates moved towards the property boundary to reduce the occurrence of these vacant, awkward and unsafe spaces. On the contrary, there are encroachments proposed over the front property boundary to Grafton Street at levels 1 to 4 which need to be justified for Council to consider.

   Where the architecture prevents the building being built to the boundary, or seeks to encroach the boundary, justification must be provided to explain how this land will be managed (ie. leased or legally dedicated to council).

   It is expected that modification to the building to align with the site boundaries will not result in an increase to the GFA of the building to exceed the maximum FSR. If so, GFA should be taken from the tower form, to reduce the bulk of the tower and provide better separation to the adjoining buildings to the east and west of the site, which currently doesn't comply with the ADG.

2. On the Hegarty Lane façade, the transition between the upper ground floor to level 1 is awkward with curved elements meeting with block edges above. It is suggested that a more integrated design be explored to ensure that this integral façade to the Lane can be executed to the desired aesthetic without the need for construction compromises later.

3. For Council to support the vertical mechanical car parking system, it is recommended that a vertical planting element or public art be incorporated to create visual interest and activation along Hegarty Lane.

4. Should the application be supported, extra street trees will be required to be planted along Grafton Street to align with the recommendations of Council's 'Complete Streets' strategic document to improve pedestrian amenity and increase landscaping with large street trees to soften the streetscape. This should be considered in the amended scheme.

Council's email of 20 July 2018 (**Appendix A**) provided further comments on the southern/Hegarty Lane façade (requesting a simpler treatment) and the Grafton Street/Hegarty Lane footpath treatments.

3.3.2 Issues raised by Council/WDEP (email dated 8 November 2018)

The neighbourhood context is rapidly changing. On the southern side of Hegarty Lane a range of large residential and commercial towers have retail frontages to Oxford Street and servicing and car park access to the lane. It is understood the future potential for mixed use activities along Hegarty Lane is part of Waverley Council's strategic public domain plan. Recently built apartment buildings looking north over Hegarty Lane are quite overbearing on the tight lane width and it is apparent that any new buildings on the opposite side of Hegarty Lane need to have wider setbacks and allow for light and street trees wherever possible to provide some amenity for the increased number of units and people. This development should set back a minimum of 1-1.2 metres from its Hegarty Lane boundary for a footpath. The setback should be dedicated to Council and not overhung by any part of the building.

The through site link needs to be of high quality finishes and design and better activated to improve the neighbourhood connectivity, safety and opportunity for small service businesses along the new through-site link

....

The Panel previously noted that the transition from the L5 podium to the tower form on both north and south elevations does not appear as well resolved as it might be. The Panel suggested the introduction of a recessive treatment and a more defined break between the two building elements. The current stepped wedding-cake form is not satisfactory. The Panel recommends that Levels 5 and 6 are reduced in area and the Level 5 terraces be reconfigured to create common outdoor space on the north-west corner for ease of access and minimal disruption to remaining units. It is understood that this area would need acoustic and wind treatment.

On the Hegarty Lane frontage the Panel was concerned about the built form relationship, and felt there needed to be a setback as discussed above and a scaling down of the elevation to create a more complementary relationship with the public domain and buildings opposite This would be helped by limiting the podium height to 4 storeys (Ground + 3) instead of 5, and reconsideration of the framing to the car stacker mechanism to reduce its bulk and visual domination in the lane. Consideration should be given to applying the Level 5 plan to Level 4 in terms of the setback from the eastern side boundary and Hegarty Lane, modifying or deleting the Type 1 apartment on Level 4. The massive blade between the Type A and Type B apartments on Levels 3 and 4 should be deleted. A consistent elevation of glass louvered balconies should about the mechanical car stacker. The current frame on the stacker should be deleted and the proposed artwork should be considered in a number of ways, including treating the whole as an art object.

3.3.3 Proposed amendments/additional information

The following amendments are proposed to address these urban design issues:

1. **Boundaries**
   (a) The amended proposal is contained within the site boundaries
   (b) The amended Upper Ground Floor arrangement and recess above (see **Figure 8** above) resolves the irregular western side boundary adjoining 45-57 Grafton Street, ensuring that there are no awkward unbuilt upon recesses (a boundary adjustment to regularise the boundary is being negotiated with the owner of 45-57 Grafton Street).

2. **Hegarty Lane facade**

   The amended Hegarty Lane podium design has been reduced in height by one storey (now ground plus three storeys) and the overall southern façade has been simplified to address the WDEP comments, as illustrated by **Figures 9**, **10** and **12** which compare the original and proposed Hegarty Lane photomontages and elevations.

The frames around the mechanical car parking system and southern façade blade have also been reduced in scale.

3. **Hegarty Lane footpath**

   The building has been setback to provide a footpath along the site frontage to Hegarty Lane. Reducing the depth of the frame around the mechanical parking system and lowering the glazing will ensure that there is a sightline from the public domain into the kinetic artwork adding to the streetscape character of Hegarty Lane (see amended Upper Ground Floor Plan at **Figure 8**).

4. **Simplified podium and tower form**

   Steps in the building envelope between the podium and tower (referred to as a wedding cake form by the WDEP) have been removed to provide a simplified podium and tower form, as illustrated by **Figures 11** and **12** which compare the original and proposed north and south elevations.

5. **Public art**

   The mechanical car stacker is to be designed as a piece of kinetic art.

6. **Street trees and paving**

   The applicant would welcome conditions of consent in relation to:

   (a) Street tree planting to Grafton Street
   (b) Footpath/paving treatments to Grafton Street and Hegarty Lane, including extending the footpath treatment within the through site link.

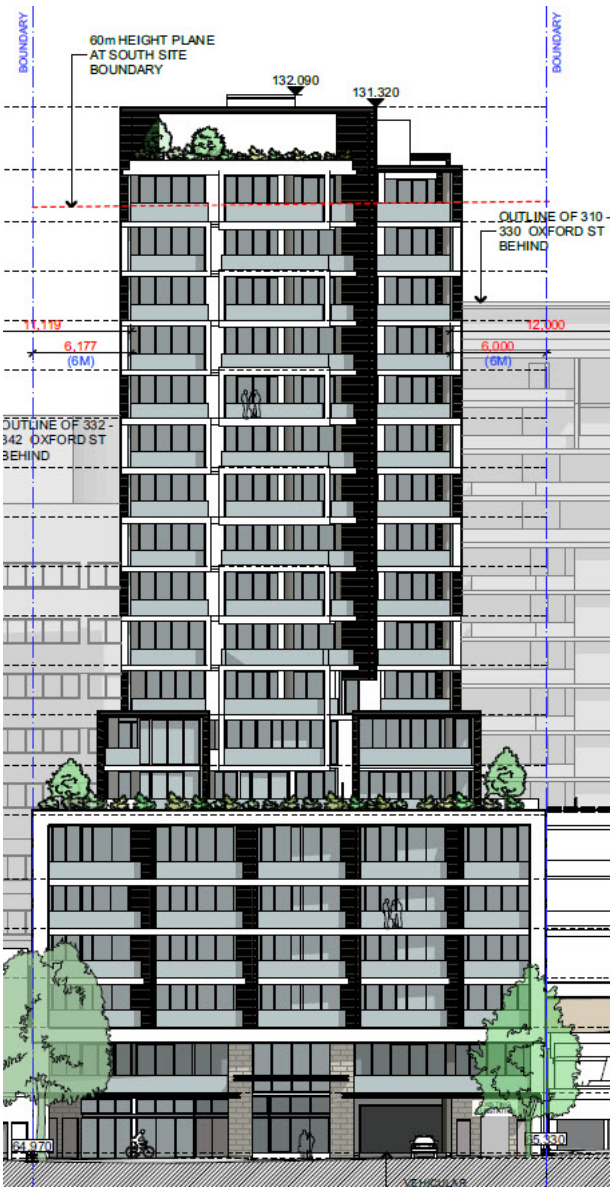
ORIGINAL DA

Figure 9 – **Original** photomontage: Hegarty Lane/Southern podium façade (DA2702_A)

AMENDED DA

Figure 10 – **Amended** photomontage: Hegarty Lane/Southern podium façade (DA2702_C)

ORIGINAL DA



AMENDED DA

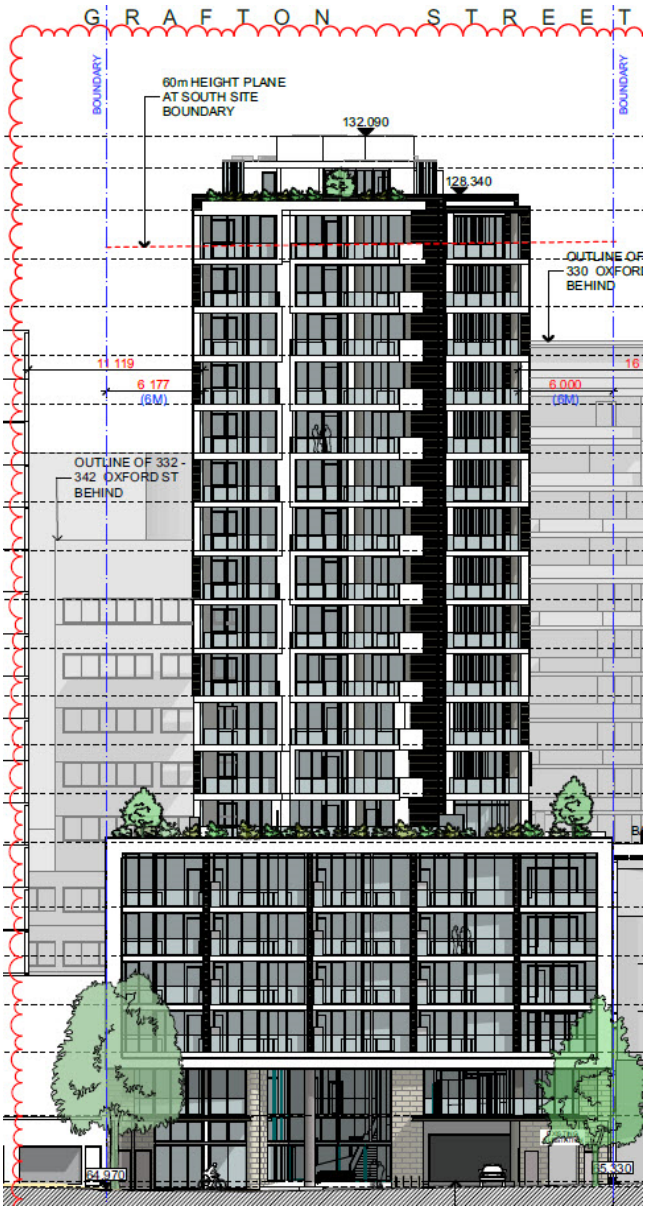
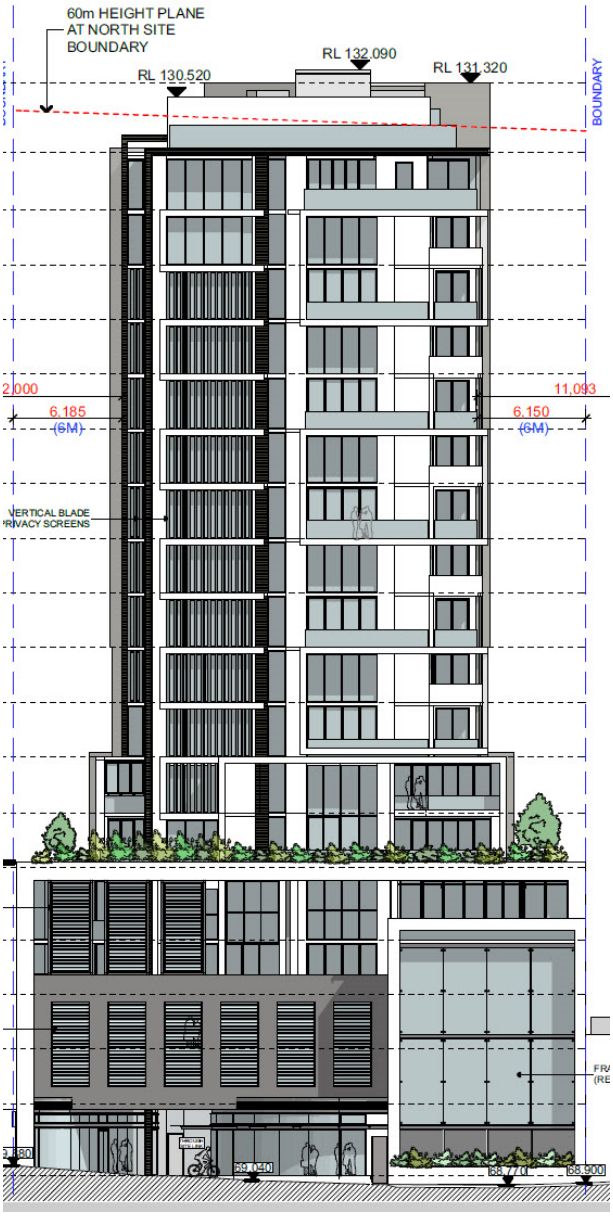


Figure 11 – Northern (Grafton Street) elevation: Comparison of Original DA (DA2300_A) and Amended DA (DA2300_D)

ORIGINAL DA



AMENDED DA

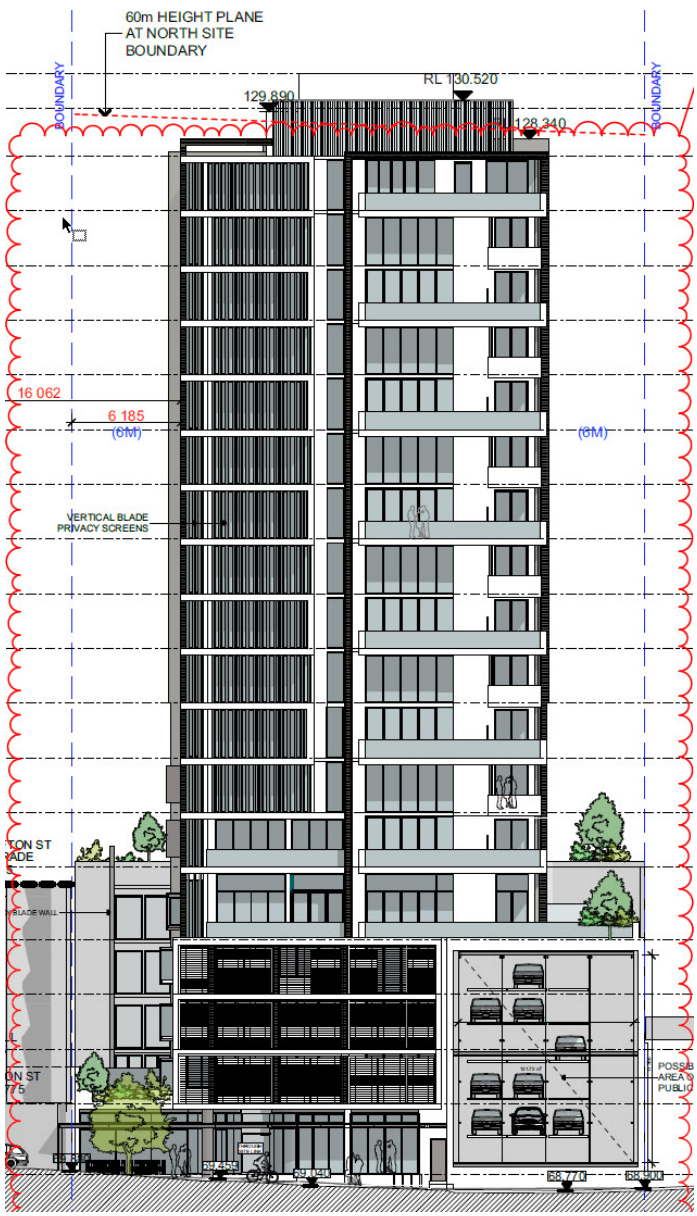


Figure 12 – Southern (Hegarty Lane) elevation: Comparison of Original DA (DA2301_A) and Amended DA (DA2301_D)

3.4 Amenity

3.4.1 Issue raised by Council in letter (20 May 2018)

1. The implications of privacy to the properties across Hegarty Lane is of concern. At the lower podium levels, the apartments do not meet the distance separation requirements in the ADG to the apartments across the Lane. It is noted that the privacy is proposed to be addressed by screening however, this will result in poor amenity for those smaller south facing apartments. It is suggested that commercial floor space at levels 1 -4 on the Hegarty Lane side of the building be provided as an alternative.

2. Privacy treatments between apartments within the development appears not to be fully considered from level 5 upwards.
3. The diagrams for cross ventilation show the central north facing units on levels 1 to 4 as contributing to the 60% target, but it is not clear how these can do so. Further clarification is required of how the ADG target is achieved.

4. Unit layouts for some level 1 to 4 units show bedrooms receiving the benefit of solar access over living areas. The units should be reconfigured to providing living areas to the front façade.

5. Common open space is to be improved to comply with the 30% requirement. The level 1 space is considered to be of low amenity, the majority of which is under cover. No sunlight analysis has been provided for this space.

6. Unit 307 on level 1 has bedroom windows and what appears to be small balcony which opens out onto the common open space which results in poor amenity to that apartment.

7. An accessible unisex toilet is required for the roof terrace for equitable access.

3.4.2 Issues raised by Council/WDEP (email dated 8 November 2018)

A number of amenity issues have been noted above including the through-site link, common outdoor areas, footpath and landscape. The Panel have a series of other concerns in relation to amenity which include:

- The common space off Level 1 Lobby seems unusable and would be better as fully landscaped, or Unit 300 could be changed to bookable space with a terrace which could accommodate resident or visitor activities.
- The Executive Summary of the wind report notes that some areas of impermeable balustrading and the addition of foliage will make some of the wind affected areas trafficable however there is a recommendation that more treatment would be needed for areas intended for short duration stationary activities. There is no specific mention of the through-site link in the wind test and so it is unclear if it has been modelled as fully open.
- The north facing balconies will have noise issues as confirmed by the acoustic report. Living areas and bedrooms will need to be sealed to achieve the recommended 35 and 40 dB(A). This will affect the ability to cross ventilate. The applicant needs to explore solutions to resolve the cross ventilation and the noise issues – see 4. Sustainability.
- The south facing units in the podium are wrapped in a translucent vertical glass louvre screen. The Panel considers that this will create a poor living environment for those units. The screen also increases the visual bulk of the building. Operable privacy louvres of horizontal glass blades directly on the balconies would be a better solution and outlook for the occupants.
- Is it acceptable that all bicycles need to travel in the lift to bike storage on Level 4?
- The connection between the living area and the balcony in Unit Type R (middle south facing units). The kitchen could be placed on the west under the stair and the living area opened to the deeper balcony section.
- The large study areas provided in the podium units do not meet ADG requirements for direct access to windows.
- The position of large structural columns in bedrooms (Type A), living rooms (Type K, O) and balconies (Type J).

3.4.1 Proposed amendments/additional information

The following amendments are proposed to address these amenity issues:

1. **Hegarty Lane Podium**
   (a) The Hegarty Lane façade has been pulled back and the podium building separations across Hegarty Lane now comply with the Apartment Design Guide (**ADG**) minimum habitable rooms/balcony building separation design criteria (with separations of 13.5m to 19.4m proposed, where the ADG requires 12m)
   (b) The proposed introduction of a large recess in the south-eastern corner of the site has reduced the number of podium apartments facing Hegarty Lane
   (c) The recess has also provided a secondary source of light, air and outlook for the south-western podium apartments (as well as increasing amenity for the through site link)
   (d) A privacy screen is proposed to the southern and western facades of the Hegarty Lane podium apartments (see point 3 below).

2. **Privacy**

   Translucent glazing and a privacy is shown on the amended plans to restrict overlooking between the central kitchen/bedroom windows in the eastern elevation (above Level 5)

(noting that the kitchen and bedroom are from the same apartment) (see DA 2106_B to DA 2111_D).

3. **Communal open space**

(a) The communal open space at Level 1 in the Original DA has been deleted to provide for a new publicly accessible open space adjoining the pedestrian through site link at Hegarty Lane on the Upper Ground Floor (see amended Upper Ground Floor Plan at **Figure 8**).

(b) The design of the proposed rooftop communal open space has been amended to increase the terrace area and include a meeting room, kitchen/BBQ, accessible toilet and outdoor seating

(c) A new Level 5 communal open space is proposed in the north-western corner of the building (collocated with that proposed in the development to the east at 55 Grafton Street). The Level 5 communal open space accommodates a communal room, large terrace and a toilet.

(d) The combined communal open spaces have an area of 324m^2 which equates to 25% of the site area. Even though the area of proposed communal open space is below the WDCP 30% requirement it complies with the ADG 25% design criteria. Additionally, the proposed high amenity roof terrace and Level 5 podium terrace satisfy the ADG design guidance at Objective 3D-1 which states:

Where developments are unable to achieve the design criteria, such as on small lots, sites within business zones, or in a dense urban area, they should:

- *provide communal spaces elsewhere such as a landscaped roof top terrace or a common room*
- *provide larger balconies or increased private open space for apartments*
- *demonstrate good proximity to public open space and facilities and/or provide contributions to public open space*

Consistent with these ADG recommendations:

- The site is in a Mixed Use Zone, located within the Bondi Junction Strategic Centre where the ADG acknowledges that it may not be possible to achieve the communal open space design criteria
- All one, two and three bedroom apartments have a balcony that complies with or exceeds the ADG minimum area design criteria (Objective 4E-1) (see Development Summary at DA 9002_C, **Appendix B**)
- The proposed communal roof and Level 5 terrace and will enjoy spectacular views and solar access, a landscaped setting, equitable access and an equitable WC making them a great place for social interaction between residents
- The site has very good access to high quality public open spaces; including Queens Park, Centennial Park and Cooper Park.

It is noted that in the amended DA, nine studios are proposed that do not have a balcony (when the ADG requires 4m^2). The studios have an internal area of 40-51m^2 when the ADG requires an internal area of 35m^2. The additional internal space (5m^2 to 16m^2) offsets the absence of a private open space and is considered more valuable to residents given the apartment aspects. The provision of high quality communal open spaces also offsets the absence of private open space for a small number of units.

4. **Apartment layouts**

The detailed WDEP comments on internal planning have been addressed as follows:

(a) Level 1 communal open space shown as landscaping proposed (see DA2102_D)

(b) An updated wind report has been prepared (**Appendix M**).
(c) A façade ventilated system is proposed (see DA2409_D and Acoustic Report **Appendix G**)
(d) South facing unit façade has been updated and an adjustable horizontal louver system proposed (DA2102_D, DA2103_D, DA2104_D, DA2301_D)
(e) Bicycle storage has been relocated to Lower Ground with direct access from Grafton Street (DA2100_D)
(f) There is insufficient headroom to relocate the kitchens to below stair. Instead the kitchens have been moved to the rear wall and room layout rearranged with living and dining along the balcony (see DA2106_D, DA2108_D, DA2110_D)
(g) Units redesigned, study areas deleted and walk in robes added (see DA2102_D, DA2103_D, DA2104_D, DA2105_D)
(h) Columns reworked through building (see DA2400_D, DA2401_D, DA2403_D, DA2407_D).

5. **Living rooms/bedrooms**

   The internal layout for north facing apartments at Levels 1 to 4 has not been amended to provide living areas at the front façade.

   Such an amendment is not warranted as the relevant living rooms will enjoy direct sunlight from 10am to 3pm on 21 June. With four hours of direct sunlight, the apartments benefit from double the minimum recommended by the ADG (two hours) (see sun eye view drawings (DA 9201_D & DA 9202_D, **Appendix B**). The apartments also enjoy expansive views to the City and harbour.

6. **Cross ventilation**

   The Development Summary (DA 9002_B, **Appendix B**) and SEPP 65 Design Report (**Appendix C**) and have been amended to clarify which apartments are cross ventilated showing that 76% of apartments will be naturally cross ventilated (62.7% up to Level 9), consistent with the ADG design criteria which requires 60%.

7. **Unit 307**

   Unit 307 has been redesigned to resolve Council's comments.

3.5 Traffic and Parking

3.5.1 Issue raised by Council in letter (20 May 2018)

1. The SEE and traffic statement state that 75 resident car and 10 commercial/retail car parking spaces are provided in the development, however the figures shown on the plan for the car stacker indicate that 86 car parking spaces are proposed. Any surplus parking above Council's DCP rate (which is considered the maximum) is not supported.

2. The proposed paving treatment across Hegarty Lane is not supported as a part of this DA, as it is outside the property boundary. Any modification to the road surface will require traffic engineers input and approval from Creating Waverley.

3. Although a specification of the proposed car stacker system was submitted, further clarification is required regarding its operation including details of manoeuvrability, (ie. in and out in a forward direction?) location of any associated plant and noise impacts from the mechanics.

3.5.2 Proposed amendments/additional information

1. **Car parking compliance**

   As detailed in the Development Summary (DA 9002_D, **Appendix B**), the amended proposal provides the following car parking consistent with Waverley Development Control Plan 2012 (**WDCP 2012**):
   (a) 64 resident spaces proposed (maximum 66 spaces allowed)
   (b) 12 residential visitor spaces proposed (maximum 16 spaces allowed)
   (c) 8 retail/commercial spaces proposed (maximum 9 spaces allowed)
   (d) 84 total spaces proposed.
   As shown above, the WDCP 2012 maximum parking controls are not exceeded.

2. **Hegarty Lane paving**

   The plans have been amended to delete any new paving on Hegarty Lane.

3. **Vertical mechanical car parking system**

   (a) The Amended Traffic Report (**Appendix F**), provides the following information on operation of the mechanical parking system:

   The proposed car stacker incorporates a turn table, allowing the vehicles to enter and exit in a forward direction. Additionally, there are two waiting bays provided to allow vehicles to queue safely when the machine is in use. It is anticipated that queuing will not exceed 1 vehicle standing during the peak hour. See section Traffic impacts below for calculations and discussion. The proposed locations of the waiting bays do not impede with the opposing traffic flow.

   The turn-around time for an able bodied person to drop off and collect their vehicle is 45 seconds by the system performance calculators, although there is technically no time limit. Therefore a person in a wheel chair would take approximately 90 seconds, accounting for the time it would take to unload a wheelchair and exit the transfer area.

   *The transfer area is 6100 mm wide, therefore there will be sufficient space for a vehicle to be parked and have enough room to unload a wheelchair (2400 mm room required as per AS/NZS 2890.6:2009: Parking Facilities - Of-street parking for people with disabilities). The entrance to the transfer area is wider than 1 metre, allowing a person in a wheelchair to exit without difficulty. After the person exits the transfer area they initiate the parking process using an RFID fob, see **Appendix** for step by step information regarding the operation of the system.....*

   (b) The Amended DA Acoustic Report by Acoustic Logic (**Appendix G**), provides the following recommended acoustic treatments to ensure that noise impacts from the mechanical car parking system do not adversely affect the amenity of residents adjoining the site and future residents in the proposal (a condition of consent should be imposed requiring compliance with the Amended DA Acoustic Report):

6.3.2 Car Stacker

6.3.2.1 Car Stacker, Turntable Lifts and Traverse

The following items shall be addressed during design and installation to ensure amenity of adjoining residents and future residents of the proposed development.

The indicative acoustic treatments detailed in this below are recommended to provide the practical treatments to ensure the amenity of the surrounding residential development is protected.

The recommended acoustic treatment include the following;

1. Shell around the car stacker structure is to be constructed of minimum of 180mm thick reinforced concrete with a minimum density of 2200 kg/m^3.

2. The alarm to indicate lift malfunction shall be a visual cue, not an audible siren as this may generate offensive noise to the residents in the adjoining properties.

3. The turntable lift and traverse (car hoist) shall be resiliently mounted from the building structure to ensure vibration levels are attenuated from the surrounding buildings and within the building. No mechanical connection between the building and the car stacker/hoist is permitted at any location.

4. Floor Mounts need to be three layers of Super Shear Flex with sheet metal dividers and rubber grommets to mechanical fixings (figure 2). The hold down bolts shall be passed through the RHD mounts and washer and nut applied on top. The bolts shall not be over tightened to ensure that they do not over-compress the mount.

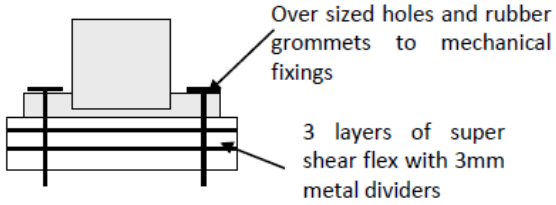


Figure 2 Floor Mounts

5. Speed of the car stacker shall be limited to ensure smooth stopping/starting nature. In addition suitable guide types (Rollers/bushes etc) shall be installed on the stacker to ensure smooth operation.

6. The pallets are to stop slowly with Neoprene buffers at the start/ stop rail to minimise vibration.

7. To further attenuate noise levels generated within the ground level car stacker entry and audible sound generated by the operation of the car lift:

    - The entrance canopy at street level above the lift well shall be acoustically lined with absorbent material equal to 50mm thick CSR Martini Absorb HD50 faced with 30% open area perforated foil or sheet metal.

8. The car lift motor and pump assembly shall be installed within an acoustic enclosure to minimise noise levels to the street and compliance with noise emission requirements.

9. The entry and exit conditions from the car lift shall be smooth and level to ensure minimal vertical displacement and potential for noise generated by steel to steel / steel to concrete impacts.

10. To minimise the noise emission from the car stacker, the entry door shall be an imperforate panel lift door that is open only when cars enter and leave the car park.

11. Motors serving the equipment shall have a variable speed control to ensure slow start/stop operation.

12. The gap below the car stacker entry slab and hoist platform shall be minimised as much as possible.

6.3.2.2 Car Stacker Entry/Exit doors

The following treatment is recommended for car stacker entry door to ensure amenity of adjoining residents and future residents of the proposed development.

1. The automatic doors shall be vibration isolated from the building structure so as to prevent door operation from being audible within occupied spaces.

2. Doors shall be quiet in operation. Embelton NRD mounts shall be used to vibration isolate the motors from the building structure.

3. Teflon Guides shall be installed in all rails to promote smooth operation.

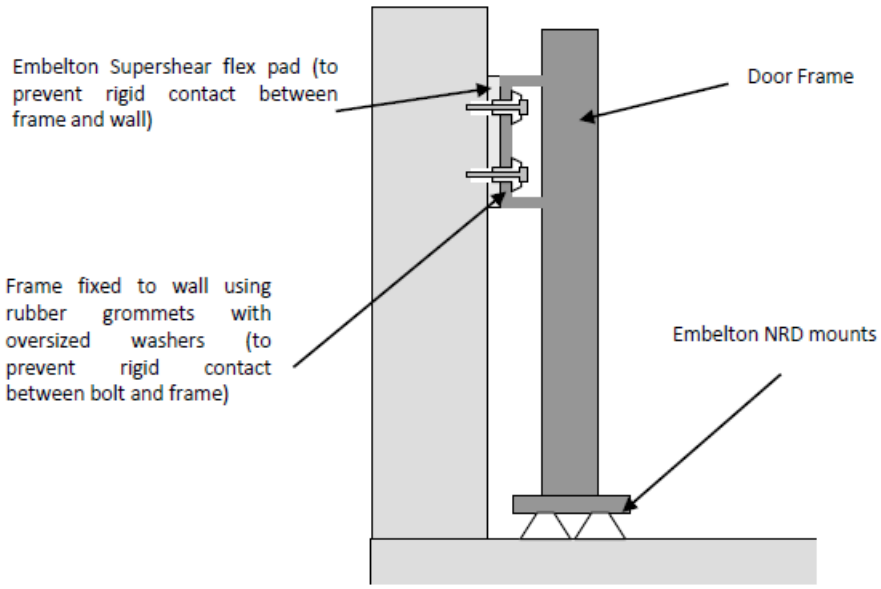
4. Ensure that door panels do not rattle, and the operation of any door guides, rollers, etc. is smooth.

5. Door guides should be fitted with vibration isolated fixings where required to prevent door operation from being audible within occupied spaces.

6. Door motors shall be fitted with a soft start/stop controller to minimise noise.

7. The door shall be stopped approximately 5 mm from the slab/ground to ensure the base of the door does not contact the concrete surface.

Isolation of the door structure is shown in the schematic below –



3.6 Waste

3.6.1 Issue raised by Council in letter (20 May 2018)

1. As noted in Council's Pre-DA minutes, the building must be designed to cater for Council's waste collection trucks to collect waste on site. The justification provided in the SEE has been considered and whilst is understood that the site is constrained with regards to excavation, this does not preclude the building to be designed with enough clearance to allow a Medium Rigid Vehicle (MRV) to enter the site from the Grafton Street frontage. There remains an opportunity to provide a sufficient opening to cater for on-site waste collection by a MRV. This is also required to accommodate removalist and other delivery trucks for the commercial component of the development within the site. On-street bin collection to Grafton Street is not supported.

2. The loading bay within the basement should also be larger to accommodate an MVR vehicle.

3. The Site Waste Recycling Management Plan (SWRMP) has been reviewed and the following items are to be addressed;
   a. Include compaction systems for both waste and comingled recycling streams if possible to minimise bin storage that meet the DCP compaction rate of 2:1.

   b. The building is to cater for the highest use for waste and recycling rates for any commercial/retail area (ie. Use the waste generation rates for a food premises) to ensure the longevity of the development should any of the commercial tenants change in the future.

   c. The bulky waste storage room is to be large enough to accommodate the 77 residential units. The current proposal has allowed for a storage of $8m^3$, which is insufficient.

   d. Insufficient information has been provided regarding the storage and movement of commercial waste within the building. The commercial waste must be kept separate from the residential waste and transported to the basement for collection. The route must be accessible and not rely on the residential lifts. This is a key matter consideration for mixed use development.

3.6.2 Proposed amendments/additional information

1. **Waste collection vehicles**
   (a) The Lower Ground Floor has been redesigned to provide for waste collection by a private contractor using a small rigid vehicle (**SRV**). This arrangement is consistent with the recent approval of a mixed use development at 552-568 Oxford Street, Bondi Junction (DA-245/2017 which was approved by the Sydney Eastern City Planning Panel on 8 March 2018
   (b) The amended Lower Ground Floor includes a turntable so that SRVs can enter and exit the site in a forward direction.

2. **Loading bay/MRV**

   Waste collection by a SRV is reasonable given the constrained basement conditions (noting that the railway tunnel precludes further excavation) and the desirability to maximise the quantum of GFA in the podium (reducing the efficiency of the podium would push more GFA into the tower diminishing the slim tower form and tower separation).

   See also point 1 above.

3. **Site Waste Management Plan**

   An amended SWMP has been prepared (**Appendix H**) which addresses Council's waste comments noting that:

   (a) Waste will be compacted at a ratio of 2:1
   (b) Waste and recycling generation rates have been applied for retail and commercial tenancies
   (c) The bulky waste room has been increased from 8m^3 to 38m^3
   (d) Separate storage areas are proposed for commercial/retail and residential waste bins. The new through site link lift provides for an accessible path between the Upper Ground Floor commercial/retail tenancies and the Lower Ground Floor garbage rooms (without relying on the residential lifts).

3.7 Design excellence

3.7.1 Issue raised by Council in letter (20 May 2018)

1. As noted by the Waverley Design Excellence Panel, better resolution is required for the elements that constitute the podium expression to both Hegarty Lane and Grafton Street, and in particular how these will contribute to the successful future public domain as development continues.

2. The extent of blank side elevational planes, particularly on the west, requires further consideration. On the west elevation some continuation of the rectilinear aesthetic from the east may be appropriate.

3. An external finishes drawing was not provided for the eastern elevation.

4. The proposed stencil wall relief to the podium wall facing 55 Grafton Street will be very visible from the podium and public domain beyond. Further detail of the intended abstraction of this design is necessary to appraise its finer qualities and method of implementation.

3.7.2 Proposed amendments/additional information

As noted above (see Section 3.3):

1. The podium scale has been reduced and expression simplified (see above)

2. The extent of blank elevation on the western façade has been significantly reduced by introducing a podium insert at the south-western corer of the site. A DA has been lodged for 57-75 Grafton Street (DA 155/2018) which is proposes a podium to Grafton Street that will screen the north-western portion of the proposed podium - Western Elevation.
3. External finishes for the Eastern Elevation are shown on DA 9009_B, **Appendix B**.
4. The extend of stencilled pre-cast panels to the western elevation has been reduced (as shown on DA_9010_B. **Appendix B**.

3.8 Sustainability

3.8.1 Issue raised by Council in letter (20 May 2018)

The information submitted with the application does not address the requirements set out in Clause 2.6 *Energy Assessment* of Part B2 of the DCP. The development being a mixed use development, this requirement applies to the whole building and not just to the retail/commercial tenancies. To address this, an amended energy assessment report demonstrating that the proposed development (whole building: residential+ retail/commercial) will have a predicted greenhouse gas emissions reduction of 30% is required.

The energy assessment report is to include a completed Green Building Council of Australia's Green Star Design and As Built Energy Calculator Path 2.3 Class 2-9 Reference Building. This is available online (http://www.gbca.org.au/green-star/green-star-design-as-built/the-rating-tool).

For further information in this regard, please contact Emmanuel David on 9083 8150. If the application is approved, this can be addressed as a condition of consent as the design development of the scheme is further developed. However this should be considered at this design stage of the process.

3.8.2 Proposed amendments/additional information

An Amended Energy Efficiency Report and Sustainability Initiatives Report has been prepared by RENYI (**Appendix I**). In relation to the request for additional information, the amended report states that the proposal will have a **32% reduction** in predicted greenhouse emissions as shown in the Green Star Design & As built Greenhouse Gas Emission Calculator at Appendix B of the report.

3.9 Retail/commercial amenities

3.9.1 Issue raised by Council in letter (20 May 2018)

It is recommended that the adequate provision for future sanitary facilities for the commercial/retail components of the building be considered and incorporated into the design. This is particularly important for food businesses which will not be able to rely on the common facilities currently proposed on the building. The building should also incorporate mechanical ventilation shafts within some of the commercial tenancies accommodate different uses in the building over time.

3.9.2 Proposed amendments/additional information

Sanitary facilities

Steve Watson & Partners has provided advice confirming that the following sanitary facilities are required, noting that the applicant expects that there would be only one café/restaurant use on the site (**Appendix J**):

- Required sanitary facilities:
  - 1 unisex accessible facility (proposed on the Upper Ground Floor)

  - 1 male ambulant, two urinals and 1 washbasin (proposed on the Upper Ground Floor)
  - 1 female ambulant and 1 washbasin (two female toilets proposed on the Upper Ground Floor).
- Toilet calculations have been based on:
  - 29 staff
  - 50 café patrons

  Broken down as follows:
  - Retail (shop) 1 - 2 staff
  - Retail (shop) 2 – 2 staff
  - Retail (café) 3 - 5 staff and 50 patrons
  - Commercial (office) 1 - 10 staff
  - Commercial (office) 3 - 10 staff

Mechanical ventilation

Retail 3 on the Upper Ground Floor is nominated as a potential café tenancy. The proposed location for Kitchen Exhaust (**KE**) is noted on DA 2102_B, **Appendix B**. Sufficient ceiling space is provided for ducting.

3.10 Wind assessment

3.10.1 Issue raised by Council in letter (20 May 2018)

> The wind report prepared by *Windtech* is not based on wind tunnel testing. Part E1, Clause 1.22, Wind Mitigation, specifically control (c) requires that buildings over 9 storeys require a wind tunnel study report. This is particularly important given the concerns raised earlier in this letter regarding the awning structure on the roof over the common open space area which adds additional bulk to the building, and exceeds the height limit. A wind tunnel study should be undertaken based on the plan amendments recommended in this letter.

3.10.2 Proposed amendments/additional information

An Amended Pedestrian Wind Environment Study has been prepared by Windtech (**Appendix M**). It is based on wind tunnel testing of the amended proposal.

The Executive Summary to the Pedestrian Wind Environment Study (set out below) identifies areas that may experience strong winds and recommends treatments to be included in the final design to ensure that conditions for all outdoor trafficable areas within and around the development will be suitable for their intended uses. The recommended treatments (which are shown in bold below) are incorporated into the amended plans at **Appendix B**.

Wind conditions within the through site link are addressed at Section 3.2 above.

> ***EXECUTIVE SUMMARY***
>
> *This report presents the results of a detailed investigation into the wind environment impact of the development located at 59-75 Grafton Street, Bondi Junction. Testing was performed at Windtech's boundary layer wind tunnel facility. The wind tunnel has a 3.0m wide working section and a fetch length of 14m, and measurements were taken from 16 wind directions at 22.5 degree increments. Testing was carried out using a 1:300 detailed scale model of the development. The effects of nearby buildings and land topography have been accounted for through the use of a proximity model which represents an area with a radius of 375m.*

Peak gust and mean wind speeds were measured at selected critical outdoor trafficable locations within and around the subject development. Wind velocity coefficients representing the local wind speeds are derived from the wind tunnel and are combined with a statistical model of the regional wind climate (which accounts for the directional strength and frequency of occurrence of the prevailing regional winds) to provide the equivalent full-scale wind speeds at the site. The wind speed measurements are compared with criteria for pedestrian comfort and safety, based on Gust-Equivalent Mean (GEM) and annual maximum gust winds, respectively.

The model was tested in the wind tunnel without the effect of any forms of wind ameliorating devices such as screens, balustrades, etc., which are not already shown in the architectural drawings. The effect of vegetation was also excluded from the testing. In-principle treatments have been recommended for any area exposed to strong winds.

The results of the study indicate that wind conditions for the majority of trafficable outdoor locations within and around the development will be suitable for their intended uses. However, some areas will experience strong winds which will exceed the relevant criteria for comfort and/or safety. Suggested treatments are described as follows:

- ***The retention of the proposed impermeable glass panels along the western perimeter edge of the private south-western corner balconies on Levels 9, 13 and 17 as indicated in the latest architectural drawings.***
- ***The retention of the proposed impermeable balustrade along southern perimeter edge of the private south-western corner balconies on Levels 9, 13 and 17 as indicated in the latest architectural drawings.***
- ***The retention of the proposed impermeable balustrade along southern perimeter edge of the private southern balcony on Level 17 as indicated in the latest architectural drawings.***
- ***The inclusion of densely foliating shrubs or hedge planting capable of growing to a height of 1.5m along the western and northern perimeter edge of the rooftop garden. They are to be of an evergreen species to ensure their effectiveness in wind mitigation throughout the year.***

With the inclusion of these treatments to the final design, it is expected that wind conditions for all outdoor trafficable areas within and around the development will be suitable for their intended uses.

Note the inclusion of additional wind mitigation elements such as baffle screens, pergolas and densely foliating vegetation such as trees or shrubs/hedge planting within the various outdoor trafficable areas; in particular around areas intended for short duration stationary activities such as outdoor seating, is expected to be effective in further enhancing the localised wind conditions.

3.11 Acoustic assessment

3.11.1 Issue raised by Council in email (16 July 2018)

An acoustic report prepared by Acoustic Logic dated 26 February 2018 has been submitted to Council however the report does not adequately address issues in relation to demolition and construction noise and/or noise from the mechanical car stacking system as requested in the email below.

3.11.2 Issue raised by Council/WDEP (email dated 8 November 2018)

The current design tries to optimise cross ventilation, orientation and daylighting on a constrained and difficult site. However, it is clear from the acoustic and wind reports that different strategies need to be employed.

Balconies facing Syd Einfeld Drive suffer from road noise requiring windows and doors to be shut. Units in the podium do not have an alternative aspect, nor do the middle units of the tower. Passive systems should be investigated to reduce the total reliance on air-conditioning for these units.

3.11.3 Proposed amendments/additional information

The Amended DA Acoustic Report by Acoustic Logic (**Appendix G**) considers demolition and construction noise and/or noise from the mechanical car stacking system.

Noise from the mechanical car stacking system has been addressed above at Section 3.5.2.

The Acoustic Report notes that rooms within the development will need to have their windows closed in order to meet acoustic requirements. A ventilation system is proposed to achieve natural ventilation (see DA2409_A, **Appendix B**). Windtech (in their Wind Memo, **Appendix M**) note that this passive ventilation system would provide natural fresh air into the residential apartments fronting Syd Enfield Drive.

In relation to construction noise, the Amended DA Acoustic Report concludes that construction noise at the demolition, excavation and construction stages may be above construction noise management levels (**Appendix G**, Table 15, p. 31).

The predicted impacts would be consistent with similar construction sites in Bondi Junction where residences overlook development sites. It is noted that absence of excavation/piling would somewhat reduce the duration of impacts from the proposal, when compared with other development sites.

Acoustic Logic provide a number of recommendations to minimise construction noise impacts, as noted over:

7.3.1.4 Recommended Construction Noise Emission Controls

Given that specific demolition/excavation/construction methodologies have not been established at this stage, the predicted noise level presented above are approximate. Noise impacts can be minimised using the following:

- Careful planning/scheduling of noisy works, particularly when located near the property boundaries.
- Location of static plant (concrete pumps, cranes) as far as practicable away from the boundaries is recommended.
- Use of augured rather than driven or vibratory piling should be considered if feasible.
- Locate cranes as close to the middle of the site as practicable.
- Letter box drops or similar to advise residents on activities with the potential to result in noise levels reaching the "Highly Noise Affected" noise level. Leaflet should advise of the likely duration of the activity.

In light of the above, we recommend:

- On completion of the construction program, an acoustic review of proposed construction activities and plant/methods/selections should be undertaken at CC stage (in the form of a construction noise and vibration management plan) to identify the extent and duration of potential exceedances of EPA construction noise management levels;
- Community consultation to inform adjacent property owners of potential noise sensitive activities;
- Identify feasible acoustic controls or management techniques (for example, selection of plant, use of screens around static plant, scheduling of noisy works, notification of adjoining land users, respite periods) when exceedance of management noise levels may occur;
- For activities where acoustic controls and management techniques still cannot guarantee compliant noise levels, implement a notification process whereby nearby residences are made aware of the time and duration of noise intensive construction processes; and
- Implementation of a noise monitoring program during construction to provide feedback to the Builder to ascertain whether construction noise goals are being exceeded and determine additional management strategies.

Through adoption of the above, noise impacts on nearby residences can be suitably managed to prevent unreasonable impact.

3.12 Environmental site assessment

3.12.1 Issue raised by Council in email (16 July 2018)

A Preliminary Site Investigation report prepared by CETEC Professional Scientific Solutions, dated February 2018 has been submitted concluding that the site is likely to be suitable for the proposed use as a 17 storey shop top housing development at 59-75 Grafton Street Bondi Junction. However, Council needs to be satisfied that the site is or can be made suitable for the proposed use therefore at this stage the proposal is unsatisfactory and further information will be required prior to the granting of consent. This may include but not be limited to:

1. A Detailed Environmental Site assessment clearly concluding that the site is suitable in its current state for the proposed use; or
2. A Site Audit Statement prepared by an accredited NSW EPA auditor clearly stating that the site is/or will be suitable for the intended use.
3. A letter/interim advice from an accredited NSW EPA Site Auditor stating that what is being proposed will result in the site being made suitable for the intended use.

3.12.2 Proposed amendments/additional information

A Preliminary Soil Investigation has been prepared by CETEC (**Appendix N**). It concludes that the site is suitable for the proposed future land use (i.e. high rise residential/commercial development) and that no further soil investigation or remediation is considered necessary at this point.

4.0 Conclusion

Additional information and amendments are proposed to address the issues raised by Council in relation to the proposed shop-top housing development at 59-75 Grafton Street, Bondi Junction (DA 482/2017).

As detailed in this Supplementary Statement of Environmental Effects, the proposed amendments address issues raised by Council to reduce the proposed height, improve the proposed design, improve residential amenity and reduce the impacts of the development for adjoining residences.

As the development and its impacts would be reduced by the proposed amendments, the amended DA need not be renotified.

Considering the merits of the amended proposal and the absence of any significantly adverse environmental effects, the DA is considered worthy of consent.

Appendix A

Council Letters and emails to the applicant (1 May 2018, 16 and 20 July 2018 and 8 November 2018)

Appendix B

Amended site analysis, architectural plans, schedules, photomontages, compliance plans and shadow diagrams, by Cottee Parker JPRA

Appendix C

Amended Design Quality Principles (SEPP 65) report and design verification statement, by Cottee Parker JPRA

Appendix D

Amended Clause 4.6 Exception to Development Standard - Waverley Local Environmental Plan 2012: Clause 4.3 – Height of buildings, by Robinson Urban Planning

Appendix E

Public Art Plan, by Guppy Associates Art Management

Appendix F

Amended Traffic Report, by TEF Consulting

Appendix G

Amended DA Acoustic Assessment, by Acoustic Logic

Appendix H

Amended Site Waste Management Plan, by Senica

Appendix I

Amended ESD Report, by RENY

Appendix J

BCA Advice on proposed sanitary facilities, by SWP

Appendix K

Amended Landscape Plans, by Umbaco

Appendix L

Amended BASIX Report & Section J Report, by Windtech

Appendix M

Pedestrian Wind Environmental Study and Memo, by Windtech

Appendix N

Preliminary Soil Investigation, by CETEC