

# Statement of Environmental Effects

## Stages 4 & 5 - Residential Development

Shepherds Bay, Meadowbank

Submitted to Ryde Council  
On Behalf of Shepherds Bay Urban Development Pty Ltd

## Report Revision History

Revision	Date Issued	Prepared by	Reviewed by	Verified by
01 Draft	4/11/14	<b>H Palmer</b> <i>Senior Project Planner</i>	<b>S Francis</b> <i>Executive Director</i>	<i>C.J. Outtersides</i> <b>Chris Outtersides</b> Director
02 Draft	15/01/15	<b>C Outtersides</b> <i>Director</i>	<b>S Francis</b> <i>Executive Director</i>	Director
03 Final	16/01/15	<b>C Outtersides</b> <i>Director</i>	<b>S Francis</b> <i>Executive Director</i>	

*This document is preliminary unless approved by a Director of City Plan Strategy & Development.*

All Rights Reserved. No material may be reproduced without prior permission. While we have tried to ensure the accuracy of the information in this publication, the Publisher accepts no responsibility or liability for any errors, omissions or resultant consequences including any loss or damage arising from reliance in information in this publication.

### CERTIFICATION

This report has been authorised by City Plan Strategy & Development, with input from a number of other expert consultants (appended to this document), on behalf of the Client. City Plan Strategy & Development has relied on the accuracy of the information contained in each of the appended documents and takes no responsibility for any errors or faults in those reports. The comments herein have been based upon information and facts that were correct at the time of writing this report.

Copyright © City Plan Strategy & Development P/L  
ABN 58 133 501 774

# Table of Contents

<b>1. Executive Summary</b> .....	<b>1</b>
<b>2. Background</b> .....	<b>2</b>
2.1 Concept Plan Approval.....	2
2.2 Modification to the Concept Approval.....	2
2.3 Application for Demolition.....	2
2.4 Pre lodgement Meeting .....	2
2.5 Discussions with State Agencies.....	7
<b>3. The Site and Context</b> .....	<b>8</b>
3.1 The Concept Plan Site.....	8
3.2 The Site .....	8
3.3 Adjoining Development.....	11
<b>4. Description of the Development</b> .....	<b>12</b>
4.1 General Description.....	12
4.2 Design Principles.....	12
4.3 Development Statistics.....	12
4.4 Indicative Staging .....	14
4.5 Development Plans & Supporting Documentation .....	14
4.6 Future Subdivision.....	15
4.7 Cost of Construction .....	15
<b>5. Statutory Planning Considerations</b> .....	<b>16</b>
5.1 Overview.....	16
5.2 Environmental Planning & Assessment Act 1979 .....	16
5.3 Compliance with Relevant Strategic & Statutory Plans & Policies.....	18
<b>6. Non-Statutory Considerations</b> .....	<b>25</b>
6.1 Ryde Development Control Plan .....	25
<b>7. Environmental Impact Assessment</b> .....	<b>29</b>
7.1 Overview.....	29
7.2 Context and Setting .....	29
7.3 Built Environment .....	29
7.3.1 Height, Bulk & Scale.....	29
7.3.2 Setbacks.....	29
7.3.3 Design & Aesthetics .....	30
7.3.4 Solar Access & Ventilation .....	31
7.3.5 Internal Amenity.....	32
7.3.6 Privacy .....	32

7.3.7	Public Domain.....	33
7.3.8	Heritage .....	33
7.3.9	Materials & Colour .....	33
7.3.10	Building & Construction .....	33
7.4	Natural Environment.....	34
7.4.1	Flora & Fauna .....	34
7.4.2	Tree Removal .....	34
7.4.3	Landscape .....	34
7.4.4	Water Management .....	34
7.4.5	Soil Management.....	34
7.4.6	Air & Microclimate.....	34
7.4.7	Noise & Vibration .....	34
7.4.8	Energy .....	35
7.5	Movement & Access.....	36
7.5.1	Transport .....	36
7.5.2	Roads & Traffic.....	36
7.5.3	Car Parking.....	37
7.5.4	Pedestrians & Accessibility.....	37
7.6	Site Suitability .....	37
7.6.1	Geotechnical.....	37
7.6.2	Bushfire.....	38
7.6.3	Flooding .....	38
7.6.4	Watertable .....	38
7.6.5	Services & Utilities .....	39
7.6.6	Hazards (Other).....	39
7.6.7	Conclusion.....	39
7.7	Social & Economic Effects.....	39
7.7.1	Social .....	39
7.7.2	Crime & Safety.....	40
7.7.3	Economic & Employment .....	41
<b>8.</b>	<b>Conclusion.....</b>	<b>42</b>

Appendix	Document	Prepared By
1	Assessment against the Concept Plan (as approved) MP09_0216	CPSD
2	Assessment against the Ryde Development Control Plan	CPSD
3	Architectural Design Report	R+M
4	Direct Solar Access Report	Windtech
5	Natural Ventilation Preliminary Assessment	Windtech
6	Solar Light Reflectivity Analysis	Windtech
7	Detailed and Public Domain Landscape Plans	Place Design
8	Public Art Plan	Black Beetle
9	Sydney Water Requirements - Response to Condition 37	Greg Houston Plumbing
10	Internal Traffic Assessment	Thompson Stanbury
11	Travel Plan for a Sustainable Future	Road Delay Solutions
12	Infrastructure Assessment Report	Road Delay Solutions
13	Access Design Assessment Report	Design Confidence
14	Adaptable Housing Report	Design Confidence
15	BCA Report	Vic Lilli
16	Fire Safety Report	GN Consulting
17	BASIX Assessment Report  BASIX Certificates	Integreco
18	ESD Strategy	Integreco
19	Acoustic Report	DK Acoustics
20	Operational Waste Management Report	Elephants Foot
21	Construction Management Plan	Upright Builders

22	Contamination Report and Remediation Action Plan	Environmental Investigations
23	Groundwater Investigation	Environmental Investigations
24	Geotechnical Investigation	Asset Geotechnical
25	Flood Assessment	BG&E
26	Council's Pre-Lodgement Meeting Minutes (Urban Design Review Panel)	City of Ryde Council
27	Letter from City of Ryde Council to Holdmark dated 2 December 2013	City of Ryde Council

## 1. Executive Summary

This Statement of Environmental Effects (SEE) has been prepared for Shepherds Bay Urban Development Pty Ltd by City Plan Strategy and Development Pty Ltd (“CPSD”) to accompany a Development Application (“DA”) to Ryde Council. The DA relates to Stages 4 and 5 of the 'Shepherds Bay' redevelopment, approved as part of Concept Plan MP09\_0216 (as modified). The application relates to 18 Constitution Road and 7-9 Hamilton Crescent, Ryde.

In summary, this DA seeks approval for the following works:

- Excavation and site preparation works;
- The construction and occupation of two (2) residential flat buildings consisting of 511 residential units comprising with 124 x 1 bed, 217 x 1 bed plus studio, 107 x 2 bed, 27 x 2 bed plus studio, 13 x 3 bed, 11 x loft, 2 loft (2 bed) and 10 x studio units;
- The creation of one, amalgamated basement parking area which will service both Stages 4 and 5 with two points of access via Nancarrow Avenue, providing a total of 621 parking spaces;
- Landscaping works associated with the subject site; and
- Street upgrades to public roads and upgrade to stormwater and drainage systems associated with the subject site.

This (SEE) has been prepared pursuant to Section 78A of the *Environmental Planning and Assessment Act, 1979* and Clause 50 of the *Environmental Planning and Assessment Regulation, 2000* and will:

- describe the proposed development and its context;
- assess the proposal against the applicable planning controls and guidelines; and
- assess the potential environmental impacts and mitigation measures.

The site benefits from a Concept Plan Approval (MP09\_0216) (as modified) for a mixed use development comprising up to twelve (12) buildings. This was originally approved by the Planning Assessment Commission (PAC) on 6 March 2013 and subsequently modified on 16 October 2014. The proposed development has been designed to be consistent with the terms of that Concept Approval (as modified) and to provide a built form and outcome that will connect and respect the intended future character of the Shepherds Bay locality as well as enhancing the public domain and delivering the infrastructure required.

## 2. Background

### 2.1 Concept Plan Approval

The Planning Assessment Commission (PAC) approved a Concept Plan for the Shepherds Bay Site on the 6 March 2013 (ref. MP09\_0216). The Approval was for twelve (12) separate buildings to incorporate a mixed use residential, retail, commercial precinct and included:

*“Use of the site for a mixed use development including residential, retail, commercial and community uses incorporating:*

*(a) building envelopes for 12 buildings incorporating basement level parking;*

*(b) infrastructure works to support the development including:*

*(c) upgrades to the local road network;*

*(d) stormwater infrastructure works;*

*(e) publically accessible open space and through site links; and*

*(f) pedestrian and cycle pathways.”*

### 2.2 Modification to the Concept Approval

Pursuant to the Concept Approval, a subsequent Section 75W Modification Application (Mod 1) was approved by the PAC on 16 October 2014. This resulted in amendments to the Concept Approval specifically to allow for a more logical construction process and to improve the overall built form. This approval also included revising the indicative staging of the 10 buildings and the clarification of the delivery of certain infrastructure works at certain stages of the development process.

These modifications are reflected in the updated Draft Statement of Commitments dated March 2014.

This DA relates to two Stages originally referred to in the Concept Approval as Stages 2 and 4 but subsequently modified as part of Mod 1 to be known as Stages 4 and 5.

### 2.3 Application for Demolition

The site benefits from separate Development Consent for the demolition of all existing structures on the site and we understand that demolition of all structures on the site has occurred. To expedite the development of the site, there is also a concurrent DA currently under consideration by Council for the excavation of the site. For completeness, this application also seeks approval for the excavation of the site.

### 2.4 Pre lodgement Meeting

A pre-lodgement meeting was held with Council's senior officers and the Urban Design Review Panel (UDRP) on 19 December 2013. It is noted that this meeting was held prior to the most recent modification of the Concept Approval (approved on 16 October 2014) and therefore some of the issues raised in relation to bulk and scale were addressed as part of the S75W modification.



Notwithstanding this, the principal issues raised by the UDRP are summarised in the table below, along with an explanation from the project architect, Robertson & Marks (R&M) of how each item has been resolved / justified in the revised proposal.

**Table 1: UDRP Comments and Responses**

Item raised by UDRP	R&M Comment
<b>General Comments</b>	
<p>The apartments at the corners of the blocks within the deep courtyards are not acceptable. The apartments wrap into the wings of the building form and have no clear direct outlook for the bedrooms.</p>	<p><i>"Visual and acoustic privacy issues in the internal corners of the buildings addressed by:</i></p> <ul style="list-style-type: none"> <li>▪ <i>introducing vertical privacy fins/blades to bedroom windows</i></li> <li>▪ <i>introducing sliding/folding privacy screens to the balconies of the apartments living areas</i></li> <li>▪ <i>reducing the size and changing the location of the bedroom windows."</i></li> </ul>
<p>A number of the apartments have deep plan kitchens and spaces at the back of the units that will receive no light and are large enough to be used as habitable spaces on the upper basement levels.</p>	<ul style="list-style-type: none"> <li>▪ <i>"Apartments' living areas were designed as the open plan layouts consisting of lounge, dining and kitchen.</i></li> <li>▪ <i>Where functional depths of the open plan living areas are over the RFDC guidelines, the rear kitchen walls are between 8-9m from the glazing line (in most cases between 8-8.5m).</i></li> <li>▪ <i>Apartments with kitchen depths of more than 8m exceed RFDC guidelines in apartment size (area) and ceiling heights by 20%. In addition, extensive glazing is provided to the primary living space (more than 70% of the external facade)."</i></li> </ul>
<p>There are a significant number of single aspect units in these plans which are not likely to achieve satisfactory cross ventilation. Additional cores should be introduced to allow more through units and better cross ventilation as well as more entry points into the buildings.</p>	<ul style="list-style-type: none"> <li>▪ <i>"Natural ventilation shafts (1sqm area) are introduced as per specialist consultants advice to allow for natural ventilation of the single aspect apartments (please refer to Windtech's report).</i></li> <li>▪ <i>In addition to ventilation shafts, highly articulated façade of the buildings in relation to the prevailing winds' direction will allow for natural ventilation of some of the single aspect apartments ( please refer to Windtech's report)."</i></li> </ul>

<p>No units are shown with any ground level access to the public domain. Ground floor units should have direct access to the street/footpath. There are many internalised studies with no windows. These are also not supported.</p>	<ul style="list-style-type: none"> <li>▪ <i>"Access from the street/public domain provided for all apartments with direct access from the street.</i></li> <li>▪ <i>Internalised studies/utility areas are typical for one bedroom apartments and are located in the middle of apartments' layout, less than 8m from the glazing line.</i></li> <li>▪ <i>Please refer to the revised landscape and architectural plans."</i></li> </ul>
<p>The shadow diagrams indicate that the units facing into the internal courtyards on all the buildings will have either no or very poor solar access. These units should be dual aspect units to increase light and sun penetration. Further, units and in particular their balconies should not be located over driveway entrances/exits due to amenity concerns.</p>	<ul style="list-style-type: none"> <li>▪ <i>"Non-compliant solar access was addressed by introducing additional amenity to satisfy Condition 21 of the modified Concept Approval (20% increased height, 20% increased apartment area, natural ventilation and increased glazing to living areas)</i></li> </ul>
<p>Include more dual aspect units and requisite additional cores to service dual aspect units</p>	<ul style="list-style-type: none"> <li>▪ <i>A review of the plans was undertaken to include more dual aspect units</i></li> </ul>
<p>Include more shallow units with wider frontage, which would improve daylight access and have less units at the building frontage</p>	<ul style="list-style-type: none"> <li>▪ <i>A review to improve daylight access to the maximum number of apartments has been undertaken.</i></li> <li>▪ <i>Additionally the requirement to increase 20% of the height requirement as per Condition 21 of the Modification Approval for adding to increased amenity (3.2m) has benefited 56% of total apartments in Stage 4 and 26% of apartments in Stage 5. This assists with increased ambient/diffused light entering the apartment which meets similar objectives to having a shallower unit with wider frontage.</i></li> <li>▪ <i>All units have full height glazing and excessive glazing to primary living areas (70% of the external facade).</i></li> </ul>
<p>Shallower units would also assist with eliminating inboard studies/bedrooms.</p>	<p><i>"Inboard" studies/utility spaces in stages 4&amp;5 are located in the middle of the apartment layouts providing additional space of the main living area allowing for flexibility in the use and number of different furniture layouts.</i></p> <p><i>Spaces within the apartment layouts with depth greater than 8m relative to the glazing line are limited to non-habitable rooms such as bathroom,</i></p>

	<i>laundries, storage areas and entry foyers.</i>
<b>Stage 4 &amp; 5</b>	
The blank walls of the car park to Nancarrow Avenue is not acceptable and results in a single isolated apartment at the corner of Belmore Street on basement level 2. A single unit would be left with no apparent lift access and isolated adjacent to the new Soho's. This unit should also be converted to a Soho.	<ul style="list-style-type: none"> <li>▪ <i>"Addressed on the latest architectural and landscape plans.</i></li> <li>▪ <i>Landscape design on the corner of Belmore St and Nancarrow Ave introduces terraced planter boxes and raised levels of the landscaping to screen blank carpark walls.</i></li> <li>▪ <i>Access to private courtyards along Belmore St and Nancarrow Ave is provided via stairs."</i></li> </ul>
It is not clear from the plans but it would appear on basement 1 and ground level that the driveway exits right next to bedrooms or balconies on the same level. This will result in acoustic and potentially privacy issues.	<ul style="list-style-type: none"> <li>▪ <i>"Apartment 4B07 private open space, located adjacent to the main car park entry on Nancarrow Ave is raised (RL 16.500) and screened (blade wall to the side of the driveway, landscaping) relative to the main entry drive way ( highest point on the driveway RL 15.250).</i></li> <li>▪ <i>Main building lobby (RL 16.500) on Nancarrow Avenue is raised and screened relative to the car park entry."</i></li> </ul>
It would also appear that there are fragmented units with very poor entry sequence and no lift access such as on Basement Level 1 adjacent to Belmore Street.	<ul style="list-style-type: none"> <li>▪ <i>"Refer to the latest set of plans</i></li> <li>▪ <i>Lift access provided to all apartments."</i></li> </ul>
There are issues with privacy and amenity for units in the internal corners of the courtyards and where units protrude towards each other on the courtyard legs where separation appears to be only about 8 m.	<p><i>"Visual and acoustic privacy issues in the internal corners of the buildings addressed by:</i></p> <ul style="list-style-type: none"> <li>▪ <i>introducing vertical privacy fins/blades to bedroom windows</i></li> <li>▪ <i>introducing sliding/folding privacy screens to the balconies of the apartments living areas</i></li> <li>▪ <i>reducing the size and changing the location of the bedroom windows."</i></li> </ul>
In terms of the elevations the upper floors are poorly integrated architecturally.	<ul style="list-style-type: none"> <li>▪ <i>"Upper floors (pop-ups) of stages 4&amp;5 are set back significantly relative to the main building envelope to reduce buildings' bulk and scale when viewed from the street.</i></li> <li>▪ <i>Pop-ups' envelope is consistent with the approved master plan envelope.</i></li> </ul>

	<ul style="list-style-type: none"> <li>▪ <i>Top floors are designed as compact and linear layouts with apartments accessed from the double loaded residential corridor.</i></li> <li>▪ <i>Massing of the pop-ups is simplified (reduced to simple rectangular prism look) to minimize the staggered appearance of the overall buildings' envelope and existing topography.</i></li> <li>▪ <i>Scale and massing of the pop-ups are further reduced visually by the use of the dark and recessive cladding colours."</i></li> </ul>
<p>The elevations on g-14 suggest some units are below ground and this would not provide appropriate amenity.</p>	<ul style="list-style-type: none"> <li>▪ <i>"Revised on the latest set of plans.</i></li> <li>▪ <i>There are no apartments located below ground level.</i></li> <li>▪ <i>Loft (maisonette) style apartments are introduced to the ground floor of stage 4, facing Belmore Street and Nancarrow Avenue. Double height living areas are accessed from the residential corridors/building lobbies on Basement 1 and from the street level via stairs integrated with raised landscaped private courtyards. Landscape treatment on the corner of Belmore and Nancarrow screens blank car park walls of the Basement 1 and 2."</i></li> </ul>
<p>G15 suggests exposed car parking walls but it is not clear how these will be treated.</p>	<ul style="list-style-type: none"> <li>▪ <i>"Addressed by landscape design.</i></li> <li>▪ <i>Exposed car park walls are screened by the raised landscaped areas.</i></li> <li>▪ <i>Landscaping is terraced to suit existing topography and connected to the raised private courtyards, screening blank car park walls (corner of Belmore St and Nancarrow Ave)"</i></li> </ul>
<p>The staggered building forms are disconnected in their architectural expressions and accentuate the upper levels and overall height and bulk see g-16 and g-17</p>	<ul style="list-style-type: none"> <li>▪ <i>"Refer to the current architectural plans.</i></li> <li>▪ <i>Proposed building envelope is consistent with approval.</i></li> <li>▪ <i>Massing and design of the pop-ups has been reviewed, minimizing the bulk and scale by simplifying the overall building shape and form."</i></li> </ul>

The proposal considers and addresses these aspects of the development identified for further improvement and the final design addresses each of these. Refer to the SEPP 65 Statement and RFDC Assessment against the Rules of Thumb prepared by R+M in relation to how the design satisfies the above items (**Appendix 3**).

## 2.5 Discussions with State Agencies

The preparation and assessment process for the Concept Plan has included consultation with several State Agencies, the interests of which have been included in the Concept Approval and this proposal. Following the approval of the Concept Plan and as outlined in the Statement of Commitments, the proponent has undertaken further consultation which has been incorporated into this proposal.

The following agencies have been consulted include:

- Roads and Maritime Services; and
- Sydney Water;

As detailed in the Traffic Report, the traffic and transport consultants, Road Delay Solutions, on behalf of the applicant, has been in continuing contact with RMS in relation to satisfying the Conditions of the Concept Plan and Statement of Commitments.

### 3. The Site and Context

#### 3.1 The Concept Plan Site

The Shepherds Bay Concept Plan site is located approximately 14 kilometres north-west of the Sydney CBD and on the Shepherd's Bay Foreshore between Ryde and Meadowbank.

The principal portion of the Concept Plan site forms an amalgamated precinct bounded, and with direct frontage to, Bowden Street, Constitution Road, Belmore Street and Rothesay Avenue. The site is also dissected by Nancarrow Avenue and Hamilton Crescent.

Of relevance to the Concept Plan Approval, the site also consists of the 'Church Street Site'. This site is separate from the rest of the Concept Approval and is located to the south-east and bound by Church Street, Well Street, Waterview Street and The Loop Road. The total combined site area is approximately 6.7 hectares and is demonstrated in **Figure 1** below.

The Concept Plan site benefits from being in the vicinity of regular rail, ferry and bus services. The main portion of the site is within 350 metres to 1km walking distance from the Meadowbank Railway Station and the Village Plaza and 250 metres to 1km from the Meadowbank Ferry Wharf. The Church Street site is also within 200m of bus services on Church Street, and approximately 1km from the railway station and ferry wharf.

The site currently comprises part of the former Meadowbank Employment Area and is experiencing a period of transition from manufacturing and light industrial uses towards the development of a high density mixed use neighbourhood.



Figure 1: Extract from the Masterplan of the Shepherds Bay redevelopment site prepared by Place Planning dated June 2013 which identifies the boundary of the Concept Plan Site.

#### 3.2 The Site

The site which is the subject of this DA comprises 18 Constitution Road and 7-9 Hamilton Crescent, Ryde. These sites were originally known as Stages 2 and 4, but were re-named

as Stages 4 and 5 pursuant to the most recent s75W application. The location of Stages 4 and 5 with respect to the Concept Plan site is detailed on Figure 2 below:



Figure 2 - Extract from Indicative Staging Plan prepared by R&M Architects detailing the location of the Stage 4 and Stage 5 buildings

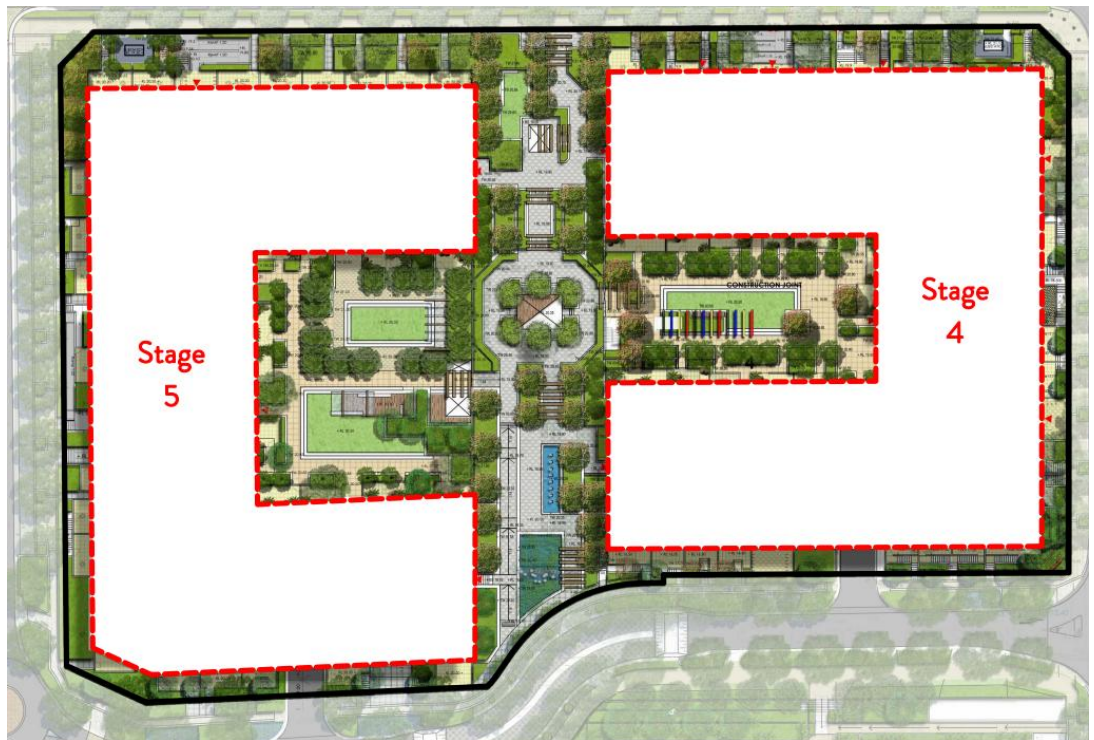


Figure 3: Extract from Site Plan prepared by R&M Architects detailing the building footprint of Stage 4 and Stage 5.

The previous light industrial nature of the site is illustrated in the following Figures. It is noted that these buildings are no longer on the site, and have been demolished in preparation for the proposal.



Figure 4: Existing light industrial building at No. 2 Constitution Road (Source: Google Maps)

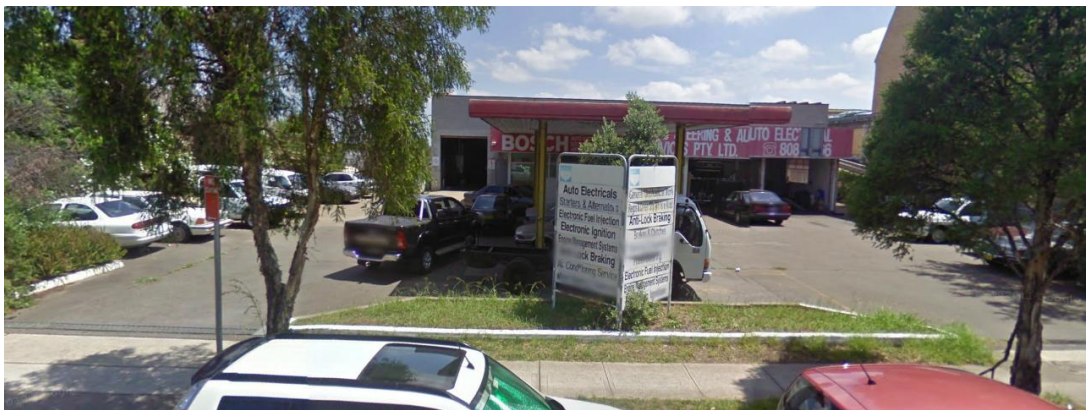


Figure 5: Existing light industrial building at No. 4-6 Constitution Road (Source: Google Maps)

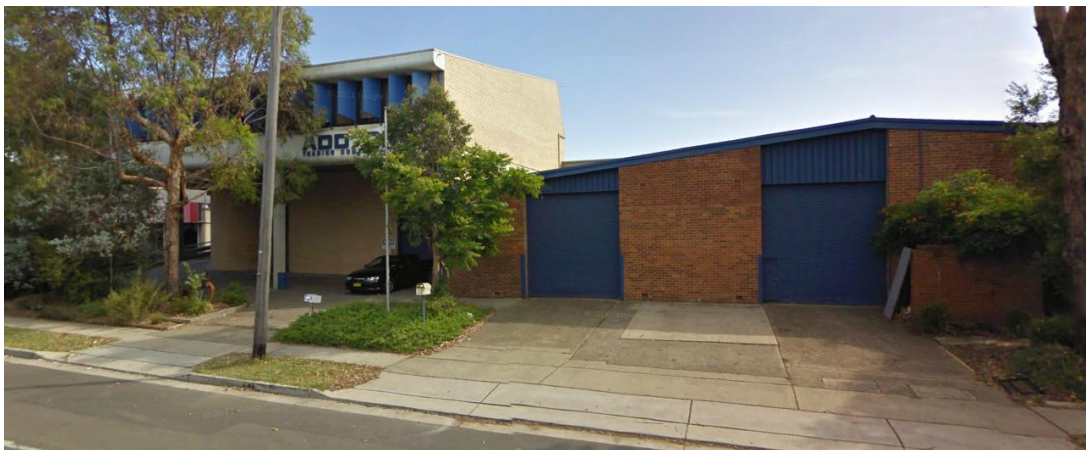


Figure 6: Existing light industrial building at No. 8-14 Constitution Road (Source: Google Maps)





Figure 7: Existing residential dwelling at No. 16 Constitution Road (left) and existing light industrial building at No. 18 Constitution Road (right) (Source: Google Maps)

### 3.3 Adjoining Development

The Shepherds Bay locality has historically been characterised as a light industrial and manufacturing area. More recently, the area has been transitioning to create a varied mix of land uses with an emphasis on residential and mixed use development.

The peninsula benefits from a foreshore location and a high level of connectivity with the surrounding road network and adjoining large scale residential precincts which have replaced the historic industrial land uses, which is representative of these foreshore areas, such as Rhodes and Breakfast Point.

Shepherds Bay benefits from local retail centres including the Meadowbank shops and West Ryde Marketplace, as well as major retail centres in Rhodes and Top Ryde. There are extensive existing parks and recreation facilities including Olympic Park and access to the Parramatta River.

The locality has historically been characterised by predominantly industrial and warehousing uses. As the area is the subject of ongoing and historical urban renewal, the character of the area is currently transitioning to predominantly provide residential development.

## 4. Description of the Development

### 4.1 General Description

This Integrated Development Application seeks consent from Ryde Council for the construction and occupation of 2 residential flat buildings comprising a total of 511 residential units with a shared basement arrangement (refer to the Architectural Drawings).

In summary, the DA consists of the following components:

- The construction and occupation of 2 Residential Flat Buildings consisting of 511 dwellings. Stage 4 comprises 59 x 1 bed, 85 x 1 bed plus studio, 54 x 2 bed, 10 x 2 bed plus studio, 7 x 3 bed, 11 x loft, 2 x loft (2 bed) and 6 x studio apartments with Stage 5 comprising 65 x 1 bed, 132 x 1 bed plus studio, 53 x 2 bed, 17 x 2 bed plus studio, 6 x 3 bed and 4 x studio apartments;
- A shared basement parking arrangement with two separate vehicular entries and exit points off Nancarrow Avenue which provides 621 basement parking spaces including accessible parking spaces, storage areas and waste storage and collection;
- Upgrades to the adjoining streets and public domain works which supports pedestrian and cycle networks within the site.
- Maintenance/augmentation of the services and infrastructure on the site including upgrades to the stormwater and drainage systems.
- The removal of trees on the site and replacement with appropriate landscaping.

We understand demolition of all structures on the site has occurred and the site is now essentially cleared.

### 4.2 Design Principles

The Architect's design principles which are integrated into the proposal provides a residential character which is responsive to the transitioning context of the site and surrounds and the topography of the site in accordance with the Concept Plan. As detailed in the Architect's Design Report provided at **Appendix 3**, the proposal optimises the quality of the public domain and achieves a high level of amenity for the future occupants and neighbouring properties. The proposal creates a sense of connectivity which contributes to creating a strong sense of character and community.

The design principles apply suitable characteristics in relation to the street and waterfront characters to which they relate, which are interspersed with legible pedestrian network, passive recreation areas, private courtyards and balconies, plantings and views to Shepherds Bay. The proposed development is the result of a carefully considered design approach with input from multiple disciplines which provides a high level of amenity and architectural merit.

R+M have provided further details of the design principles in the architectural drawings, SEPP 65 Design Verification Statement and RFDC Assessment, photomontages, shadow diagrams and Schedule of External Finishes which accompany this application at Appendices 3 and 4.

### 4.3 Development Statistics

The key statistics and elements of the project are shown in the **Table 2** below:

**Table 2: Development statistics**

Element	Proposal
Height	<p>Mod 1 of the Concept Plan sets out an approved RL for both the Stage 2 and Stage 3 buildings (plan ref: PPR 001-D). In addition, the modification also approved a building envelope plan for both Stage 4 and Stage 5 (plan ref: Figure 15, Rev 4 and Figure 17, Rev 4).</p> <p>The architectural plans submitted with the DA clearly illustrate the approved built form with a dotted red line with the proposal not exceeding the approved built form.</p>
Setbacks and Separation	<p>As per the requirements of the RFDC and the approved 'Maximum Height with Setbacks' Plan reference PPR 001_D dated 2/11/13 and the Concept Plan. Refer to further discussion in the Architect's Statement.</p>
Dwelling Yield and Mix	<p><b>Stage 4</b> - 234 units comprising:</p> <ul style="list-style-type: none"> <li>6 x studio units (2.5%)</li> <li>59 x 1 bed units (25%)</li> <li>85 x 1 bed plus studio (36%)</li> <li>54 x 2 bed (23%)</li> <li>10 x 2 bed plus studio (4.3%)</li> <li>7 x 3 bed (3%)</li> <li>11 x loft (4.7%)</li> <li>2 x loft (2 bed) (0.9%)</li> </ul> <p><b>Stage 5</b> - 277 apartments</p> <ul style="list-style-type: none"> <li>4 x studio (1.4%)</li> <li>65 x 1 bed (23%)</li> <li>132 x 1 bed plus studio (48%)</li> <li>53 x 2 bed (19%)</li> <li>17 x 2 bed plus studio (6%)</li> <li>6 x 3 bed (2.2%)</li> </ul> <p><b>Total Units for Stage 4 and 5: 511</b></p>
Car Parking	<p>A shared basement parking area</p>

	<p>621 total spaces split between:</p> <ul style="list-style-type: none"> <li>- 517 residential spaces</li> <li>- 104 visitor spaces</li> <li>- 52 accessible spaces</li> <li>- 2 car wash bays</li> <li>- 68 bicycle spaces</li> </ul>
--	---

#### 4.4 Indicative Staging

The indicative construction staging of the development is as follows:

**Table 3:** Indicative staging/phasing of the development

Stage	Phased Works
Stages 4 and 5	As per separate approval – demolition of all existing structures
Stages 4 and 5	Excavation Works - 'early works' as per separate DA
Stages 4 and 5	Further Site Preparation Works Basement Construction Works
Stages 4 and 5 concurrently	Construction of the residential component of the development for Stage 4 and Stage 5.
Stages 4 and 5 concurrently	Completion of works and issue of separate Occupation Certificates for the residential components of Stage 4 and Stage 5.

The overall construction phasing of the development will be undertaken in an efficient and logical manner.


The proposal also seeks to provide the payment of the Section 94 Contributions in accordance with the issue of the staged construction certificates for the residential components of the development.

#### 4.5 Development Plans & Supporting Documentation

The SEE has been prepared and relies on the accuracy and factual integrity of the architectural drawings prepared by R+M which accompany this application.

The SEE has been prepared and relies on the accuracy and factual integrity of the following technical reports which accompany the application:

- Design Verification Statement, SEPP 65 Design Statement and Residential Flat Design Code Assessment prepared by R+M;

- 
- Direct Solar Access Report prepared by Windtech;
  - Natural Ventilation Statement prepared by Windtech;
  - Solar Light Reflectivity Analysis prepared by Windtech;
  - Detailed and Public Domain Landscape Plans prepared by Place Design;
  - Public Art Plan prepared by Black Beetle;
  - Hydrology Report and Hydraulic Engineering Plans prepared by Harris Page;
  - Parking Impact Assessment Report prepared by Thompson Stanbury;
  - Travel Plan for a Sustainable Future prepared by Road Delay Solutions;
  - Access Report and Adaptable Report prepared by Design Confidence;
  - BCA Report prepared by Vic Lilli;
  - Fire Safety Report prepared by GN Consulting;
  - Energy Efficiency Report, BASIC Report and BASIX Certificates prepared by Integreco; and
  - Operational Waste Management Report prepared by Elephants Foot;

CPSD has wholly relied on the technical information, professional opinion and supporting justification in these reports, as prepared by professionals in their field, for the preparation of this SEE and the satisfaction of the technical conditions of consent.

#### 4.6 Future Subdivision

The future Strata Subdivision of the development will be the subject of a separate Development Application(s).

#### 4.7 Cost of Construction

The cost of construction of the project is estimated at \$126,928,086. Refer to the QS Report prepared by Altus Page Kirkland and submitted with the DA.

## 5. Statutory Planning Considerations

### 5.1 Overview

The relevant statutory framework considered in the preparation of this report comprises:

- Environmental Planning and Assessment Act, 1979;
- Environmental Planning and Assessment Regulation 2000;
- State Environmental Planning Policy No. 32;
- State Environmental Planning Policy No. 55;
- State Environmental Planning Policy No. 65;
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004;
- State Environmental Planning Policy (Infrastructure) 2007;
- State Environmental Planning Policy (State and Regional Development) 2011;
- Sydney Regional Environmental Planning Policy (Sydney Harbour Catchment) 2005; and
- Ryde Local Environmental Plan 2014.

Where relevant, these controls are addressed below.

### 5.2 Environmental Planning & Assessment Act 1979

Section 6A of the EP&A Act 1979 provides transitional arrangements for the repeal of Part 3A. In the case of Concept Plans, Clause 3B of Schedule 6A sets out the provisions to be addressed. Clause 3B(2) provides the following provisions which are relevant to developments assessed under Part 4:

- (a) *if Part 4 applies to the carrying out of the development, the development is taken to be development that may be carried out with development consent under Part 4 (despite anything to the contrary in an environmental planning instrument),*
- (b) *if Part 5 applies to the carrying out of the development, the development is taken to be development that may be carried out without development consent under Part 4 (despite anything to the contrary in an environmental planning instrument),*
- (c) *any development standard that is within the terms of the approval of the concept plan has effect,*
- (d) *a consent authority must not grant consent under Part 4 for the development unless it is satisfied that the development is generally consistent with the terms of the approval of the concept plan,*
- (e) *a consent authority may grant consent under Part 4 for the development without complying with any requirement under any environmental planning instrument relating to a master plan,*

- (f) *the provisions of any environmental planning instrument or any development control plan do not have effect to the extent to which they are inconsistent with the terms of the approval of the concept plan,*
- (g) *any order or direction made under section 75P (2) when the concept plan was approved continues to have effect.*

These provisions set out that the Concept Plan continues to have effect. In the event of any inconsistency between the Concept Plan approval and any Environmental Planning Instrument or Development Control plan, the approved Concept Plan prevails.

### **Part 3A Consistency with the Concept Plan**

This section addresses the consistency of the proposal with the modified Concept Plan (MP09\_0216). A detailed assessment of the proposal against the Conditions and Statement of Commitments is provided at **Appendix 1** of this Report.

#### **Part A – Terms of Approval**

This application is generally consistent with the administrative conditions of the Concept Plan (as modified in MP09\_0216 Mod 1) including the approved plans and documentation.

In accordance with Condition A6, all public open spaces, drainage reserves and through site links will be publicly accessible and maintained in private ownership by the future body corporate unless otherwise agreed by the Council.

#### **Part B – Modifications**

On 24 June 2013, The Department of Planning and Infrastructure discharged Condition B1 of the Concept Plan. This proposal maintains consistency with Condition B1 taking into account further amendments approved in MP09\_0216 Mod 1.

The proposal maintains consistency with the requirements of Part B – Modifications Condition B1, including satisfying the maximum RLs, providing a public domain plan, providing a site wide WSUD strategy, and allowing for pedestrian and cycleways. This application is also accompanied by a Sustainable Travel Plan prepared by Road Delay Solutions and provided at **Appendix 11**.

### **Schedule 3 – Future Environmental Assessment Requirements**

This application addresses all of the Conditions of Consent in accordance with the Concept Plan (MP09\_0216) and provides assessment and recommendations from suitably qualified consultants which confirm that the proposal complies and/or is capable of providing a development which satisfies the relevant objectives and development controls applicable to this site. Refer to further discussion below and the supporting reports which accompany this DA.

Detailed consideration of the consistency of the proposal with the Conditions of Consent in Schedule 3 – Future Environmental Assessment Requirements is provided at **Appendix 1**.

### **Section 91 – Integrated Development**

This section of the Act defines ‘integrated development’ as matters which require consent from Council and one or more approvals under related legislation. In these circumstances,

prior to granting consent Council must obtain from each relevant approval body their General Terms of Approval (GTA) in relation to the development.

The site is within 40 metres of the 'bed' of Shepherds Bay, being waterfront land, and is therefore a controlled activity pursuant to the Water Management Act 2000. The works in this area primarily consist of landscaping.

This application is therefore classified as "integrated development."

### 5.3 Compliance with Relevant Strategic & Statutory Plans & Policies

This section addresses the consistency of this proposal with the relevant strategic and statutory plans and policies.

#### Relevant Strategies

The Concept Application (MP09\_0216) and this application have been prepared with due regard for relevant strategies including the Metropolitan Strategy: City of Cities, the NSW State Plan, The Metropolitan Review and Draft Inner North Subregional Strategy. It is noted that the Draft Metropolitan Strategy has also recently been released. This application maintains the approved mixed use neighbourhood area which supports the transitional intent of the area for residential development with ancillary retail and service opportunities. This is achieved through the provision of residential dwellings and improvements to the public domain.

This proposal is in keeping with the strategic intent of the locality in line with the Ryde Local Environmental Plan 2010 and Ryde Development Control Plan 2010 including the Meadowbank Employment Area DCP which encourages the transition for mixed use land uses to transform this previously industrial precinct. The proposal is considered to provide a positive contribution to the transitioning character of Shepherds Bay which satisfies the objectives and directions of the relevant policies and strategies.

#### State Environmental Planning Policies

This application have been prepared with due regard for relevant State Environmental Planning Policies (SEPPs) as discussed below, including SEPP (Major Projects) 2005, SEPP (Infrastructure) 2007, SEPP 55 – Remediation of Land, SEPP (Sydney Harbour Catchment) 2005, SEPP 32 Urban Consolidation (Redevelopment of Urban Land), SEPP 65 Design Quality of Residential Flat Development and SEPP (BASIX) 2004. It is considered that this application continues to satisfy the objectives and requirements of the relevant SEPPs. Further consideration of these SEPPS is provided below.

#### State Environmental Planning Policy (Infrastructure) 2007

This SEPP provides a consistent planning regime for infrastructure and the provision of services across NSW, along with providing for consultation with relevant public authorities during the assessment process. The SEPP supports greater flexibility in the location of infrastructure and service facilities along with improved regulatory certainty and efficiency.

The need for a traffic report is outlined in Clause 104 (Traffic-generating development), which must address such issues as access and any parking or traffic impacts of the proposed development.

Residential Flat Building developments with 75 or more dwellings with access to a classified road, or a road that connects to a classified road, are required to be referred to the RTA for comment. Where no access to a classified road (or a road that connects to a



classified road) is proposed, referral to the RTA is required where 300 or more dwellings are proposed.

The proposal meets all relevant Infrastructure SEPP requirements. The RMS provided comments with regard to the Concept Plan and did not raise any objections and provided conditions of approval. Ongoing discussions between Road Delay Solutions have also been held with RMS.

Consideration of the current traffic conditions of the site and locality is provided in the Infrastructure Assessment Report prepared by Road Delay Solutions and provided at **Appendix 12**. This report provides an analysis of the relevant existing and approved developments in the locality, as well as the traffic implications of the proposed development and confirms that the proposed parking provision is in accordance with the Concept Plan including the relevant conditions, and the wider road network will be able to cater for the additional, with intersections operating at satisfactory or better levels of service.

### **Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005**

The Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (SREP SHC) aims to establish a balance between promoting a prosperous working harbour, protecting and maintaining a healthy and sustainable waterway environment and promoting recreational access to the foreshore and waterways.

The SREP SHC land use map identifies that land along the foreshore adjacent to the site is zoned W2 - Environmental Protection. This zone provides for the protection, rehabilitation and long-term management of the natural and cultural values of the waterways adjoining the foreshores.

Land along the foreshore adjacent to site is also zoned W8 – Scenic Waters Passive Use Fringe. This zone aims to give effect to inter-tidal public access zones and gives priority to protecting the environment and scenic values of predominately natural shores and waters. The Passive Use Fringe Zone may adjoin residential land or public open space.

Refer to the Zoning Plan provided at **Figure 8** below.

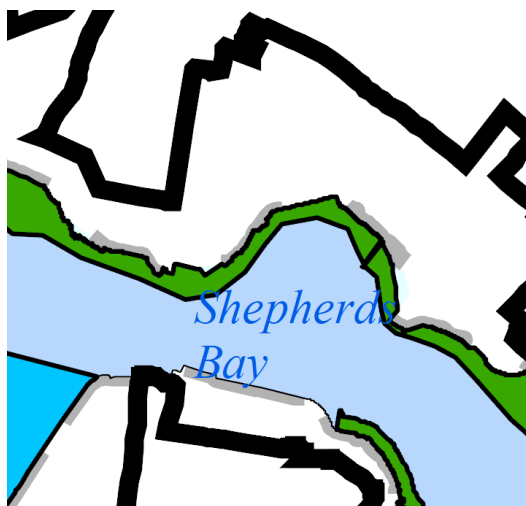


Figure 8: SREP (Sydney Harbour Catchment) 2005 Zoning Plan

Through the retention and absence of impact on the mangrove communities and the retention of public access along the foreshore, it is considered that the proposed Concept is consistent with the land use objectives and provisions of the SREP.

This proposal is consistent with the Concept Plan. The proposal will enhance the natural environment and complement the existing vegetation. Remediation of the site will also significantly improve the environmental situation on the site. Given the substantial positive outcomes being delivered as a result of the proposed development, the proposal is considered to be clearly in the public good.

### **State Environmental Planning Policy No. 32 - Urban Consolidation (Redevelopment of Urban Land)**

Some of the key objectives of the policy, which apply to the site, are to promote urban consolidation; ensure that suitable urban land for multi-unit housing is made available and to provide a greater diversity of housing to meet demand generated by changing demographics and housing needs.

The proposal supports this policy in encouraging higher-density residential development in an existing urban area with good access to transport and services.

### **State Environmental Planning Policy No. 55 - Remediation of Land**

SEPP 55 requires that prior to the granting of consent to any development that consideration be given to whether or not the land is suited to the intended use of the land with respect to potential soil and groundwater contamination.

To address this, the Concept Application was supported by a Preliminary Screening Contamination Assessment and a Preliminary Geotechnical and Groundwater Assessment dated October 2010 prepared by Douglas Partners in order to assess the likelihood and/or extent of potential soil and groundwater contamination, which may have resulted from past and present uses on or adjacent to the site. These reports did not raise significant concern with regard to the proposed works and residential use on this site.

Further detailed assessment of the soil and groundwater conditions of the site was undertaken by Environmental Investigations with the results provided in the Contaminated Land Report (RAP) provided at **Appendix 22**.

In summary, subject to the removal of localised contaminated soils, (which would largely be removed in place of excavated basements), and other recommendations made by Environmental Investigations, the site is considered to be suited to the proposed development and thereby satisfies the provisions of SEPP 55.

As a result of the above, a feasible and robust Remediation Action Plan (RAP) has been prepared at **Appendix 22** and considers that the site the subject of this DA can be made suitable for the approved residential and open space development following the implementation of the RAP, as endorsed by the Site Auditors Advice.

### **State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development**

SEPP 65 sets out 10 design principles for residential flat development, which include context, scale, built form, density, landscape, amenity, resource energy and water efficiency, safety and security, social dimensions and aesthetics.

SEPP 65 and the supporting Residential Flat Code are considered to be the key guiding planning documents informing the assessment of this proposal.

Through the preparation of a detailed SEPP 65 Statement, an Architects Design Report and provision of a design verification statement (provided at **Appendix 3**), R+M has confirmed that the scheme is consistent with the Concept Plan and satisfies all relevant

requirements of SEPP 65, and specifically having regard to Condition 21 of the Concept Modification.

Refer to **Appendix 3** for the SEPP 65 assessment prepared by R&M.

#### **State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004**

The Building Sustainability Index (BASIX) was introduced by the NSW Government to deliver equitable water and greenhouse gas reductions across the state. It sets water and energy reduction targets (as a percentage) for new houses and units, ensuring that dwellings are designed to use less potable water and emit less greenhouse gases.

A BASIX Assessment has been prepared in support of the DA by Integreco Consulting. This confirms that the proposal will meet, if not exceed all relevant BASIX requirements.

In addition, and to complement and augment the BASIX assessment, an ESD Guidelines and Report was prepared and submitted with the original concept application. The Strategy, prepared by Ecospecifier, outlined a roadmap to achieving “industry best practice” and beyond. The “base targets” provided (sourced from EnviroDevelopment) were designed to reflect industry best practice in Australia while the “stretch targets” (sourced from Green Star tools and/or an extension of EnviroDevelopment Targets) are designed to provide additional initiatives which will help the development exceed industry best practice and approach the realms of “world’s best practice”.

Condition 22 of the Concept Modification requires an ESD Report to be prepared that sets out those measures within the original Report that are to be integrated into the current proposal. Prepared by Integreco Consulting and located at **Appendix 18**, this advice states that the proposed project will commit to achieve include:

- "1. Energy scores (measured by BASIX) which, on average, exceed the targets by over 10%.*
- 2. Water scores (measured by BASIX) which exceed the targets by just under 10%.*
- 3. Innovation – achieved by using the first ever Australian incorporation of the CT2000 car charging technology, in a residential context.*
- 4. Waste Category – contractors will be required by Holdmark to meet the base waste targets in the ESD Masterplan Report (“101117 Shepherds Bay Meadowbank - ESD Report”). "*

Refer to the ESD Report at **Appendix 18** for further information.

#### **Ryde Local Environmental Plan 2014**

Major Project Approval MP09\_0216 was approved pursuant to Part 3A of the EP&A Act 1979, and remains the relevant Instrument for Approval for this site. Given these circumstances, the Ryde Local Environmental Plan (LEP) 2014 is relevant, however where there are any inconsistencies with the terms of the Concept Approval, the Concept Approval shall prevail.

Notwithstanding, the proposal continues to satisfy the objectives of the B4 Mixed Use zone and the objectives and development standards and relevant requirements of the LEP, as addressed in the table below:

**Table 4: RLEP 2014 Compliance Table**

RLEP 2014	Comment
<p><b>Zone B4 Mixed Use: Objectives</b></p> <ul style="list-style-type: none"> <li>• To provide a mixture of compatible land uses.</li> <li>• To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.</li> </ul>	<p>Notwithstanding that the uses have been approved as part of the Concept Approval, the proposal provides for residential uses.</p>
<p><b>4.3 Height of buildings</b></p>	<p>The maximum height of the proposal has been established through the Concept Approval. In particular, approved plan ref. PPR 001-D provides maximum RL's for each of the proposed buildings.</p> <p>These maximum RL's are clearly detailed on the submitted architectural plans.</p> <p>The proposed buildings will not exceed these maximum RL's.</p> <p>In addition, it is noted that the Concept Modification approved various 'popups' across both Stage 4 and 5. The extent of these 'popups' are detailed on approved plan references Figure 15 Rev 4 and Figure 17 Rev 4. These 'popups' permit additional storeys on top of the maximum RL's, so long as they do not exceed 60% of the footprint of the typical floor plate below.</p> <p>We are advised that the proposed 'popups' as detailed on the submitted architectural plans meets this requirement and therefore the proposal is consistent with the Concept Approval as modified.</p>
<p><b>4.4 Floor space ratio</b></p>	<p>The Concept Approval did not provide an FSR for the site, instead setting a dwelling cap of 2,005 across the whole Concept Plan site. The proposal seeks approval for 511 dwellings, with the residual to be provided as part of future stages.</p>
<p><b>5.7 Development below mean high water mark</b></p> <p>(1) The objective of this clause is to ensure</p>	<p>Excavation proposed is above MHWM.</p>

<p>appropriate environmental assessment for development carried out on land covered by tidal waters.</p> <p>(2) Development consent is required to carry out development on any land below the mean high water mark of any body of water subject to tidal influence (including the bed of any such water).</p>	
<p><b>5.9 Preservation of trees or vegetation</b></p> <p>(1) The objective of this clause is to preserve the amenity of the area, including biodiversity values, through the preservation of trees and other vegetation.</p>	<p>In accordance with the requirements of the original Arborist's Report prepared by Redgum, Trees Reference 132 and 133 will be retained as part of the proposal.</p> <p>In support of the DA, detailed Public Domain Landscape Plans have been prepared by Place Design. These detail the landscape treatment across the site, including the provision of additional trees.</p>
<p><b>6.1 Acid sulfate soils</b></p> <p>(1) The objective of this clause is to ensure that development does not disturb, expose or drain acid sulfate soils and cause environmental damage.</p> <p>The site is Class 5.</p>	<p>A Remediation Action Plan has been prepared by Environmental Investigations, and is submitted with the DA (refer <b>Appendix 22</b>). This concludes that the:</p> <p><i>"Subject land lies within the map class description of No Known Occurrence. In such cases, acid sulfate soils (ASS) are not known or expected to occur and "land management activities are not likely to be affected by ASS materials"</i></p> <p><i>Some ASS is likely to be present along the foreshores of Shepherds Bay but the development does not extend to this area"</i></p>
<p><b>6.2 Earthworks</b></p> <p>(1) The objective of this clause is to ensure that earthworks for which development consent is required will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land.</p> <p>(3) Before granting development consent for earthworks (or for development involving ancillary earthworks), the consent authority must consider the following matters:</p> <p>(a) the likely disruption of, or any detrimental effect on, drainage patterns and soil stability in the locality of the development,</p>	<p>A Construction Management Plan has been Prepared in support of the DA. This includes detailed erosion and sediment control measures to be adopted during construction.</p>

<p>(b) the effect of the development on the likely future use or redevelopment of the land,</p> <p>(c) the quality of the fill or the soil to be excavated, or both,</p> <p>(d) the effect of the development on the existing and likely amenity of adjoining properties,</p> <p>(e) the source of any fill material and the destination of any excavated material,</p> <p>(f) the likelihood of disturbing relics,</p> <p>(g) the proximity to, and potential for adverse impacts on, any waterway, drinking water catchment or environmentally sensitive area,</p> <p>(h) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.</p>	
<p><b>6.4 Stormwater management</b></p> <p>(1) The objective of this clause is to minimise the impacts of urban stormwater on land to which this clause applies and on adjoining properties, native bushland and receiving waters.</p> <p>(2) This clause applies to all land in residential, business and industrial zones.</p> <p>(3) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that the development:</p> <p>(a) is designed to maximise the use of water permeable surfaces on the land having regard to the soil characteristics affecting on-site infiltration of water, and</p> <p>(b) includes, if practicable, on-site stormwater retention for use as an alternative supply to mains water, groundwater or river water, and</p> <p>(c) avoids any significant adverse impacts of stormwater runoff on adjoining properties, native bushland and receiving waters, or if that impact cannot be reasonably avoided, minimises and mitigates the impact.</p>	<p>Stormwater plans have been prepared by Harris Page, and are submitted with the DA.</p>

## 6. Non-Statutory Considerations

### 6.1 Ryde Development Control Plan

Both the original and modified Concept Approval (MP09\_0216) as well as this application have been prepared with due regard for the relevant sections of the Ryde DCP.

The proposed development will provide a development which is integrated and compatible with the existing and intended built form of Shepherds Bay. The proposed residential development and associated public domain areas will provide a high level of public accessibility, in particular to the foreshore link and plaza area. The proposal will also contribute to the availability of housing choice in an area which is responsive to current and future market demand. The site is well serviced by public transport and will not result in adverse environmental impact.

An assessment of the proposal against the requirements of the relevant sections of the Ryde DCP is provided at **Appendix 2**. As this assessment demonstrates, the proposal largely satisfies the provisions of the DCP.

As detailed earlier in this report, Major Project Approval MP09\_0216 was approved pursuant to Part 3A of the EP&A Act 1979, and remains the relevant Instrument for Approval for this site. As with the application of the Ryde LEP, the application of the Ryde DCP is relevant, but where there are inconsistencies between the Concept Approval and the DCP, the Concept Approval shall prevail.

Furthermore, the amalgamation of the land and ability of the proposal to deliver key public benefits warrants some flexibility in the application of the DCP to the proposal. Flexibility in the application of the DCP provisions is therefore considered appropriate subject to achieving the objectives of the Concept Approval.

This approach is one recently reinforced by the NSW Government's recent *Environmental Planning & Assessment Amendment Bill 2012* and as set out in Section 79C(3A)(b) of the EP&A Act, 1979:

*"79C Evaluation*

*(3A) Development control plans*

*If a development control plan contains provisions that relate to the development that is the subject of a development application, the consent authority:*

*(a) if those provisions set standards with respect to an aspect of the development and the development application complies with those standards—is not to require more onerous standards with respect to that aspect of the development, and*

**(b) if those provisions set standards with respect to an aspect of the development and the development application does not comply with those standards—is to be flexible in applying those provisions and allow reasonable alternative solutions that achieve the objects of those standards for dealing with that aspect of the development, and**

*(c) may consider those provisions only in connection with the assessment of that development application.*

*In this subsection, standards include performance criteria."*

Refer to **Appendix 2** for the full compliance assessment

### **Part 7.1 Energy Smart, Water Wise**

Part 7.1 of the City of Ryde DCP 2014 relates to provision of sustainable development. Objectives include encouraging the design of energy efficient buildings, optimising solar access, decreasing total energy consumption and generally to reduce green house gas emissions and natural resource consumption.

The proposal is accompanied by a BASIX Certificate and an ESD Target Letter prepared by Integreco Consulting (refer **Appendix 17 and 18** - in line with Condition 22 of the Concept Approval). This letter details the measures which will be implemented to minimise energy consumption and demonstrates how the intent of the DCP in relation to energy efficiency has been met.

### **Part 7.2 Waste Minimisation & Management**

Part 7.2 of the City of Ryde DCP 2014 relates to waste minimisation and management during construction and the continued operation of proposed development. Objectives include minimising resource requirements and construction waste, maximising recycling and re-use opportunities and to minimise overall environmental impacts.

A Waste Management Plan prepared by Elephants Foot accompanies this application and addresses the objectives for Waste Minimisation and Management as set out within this Part.

The proposed development provides adequate space for the sorting and storage of waste receptacles within the basement area.

### **Part 8.1 Construction Activities**

Part 8.1 of the City of Ryde DCP 2014 includes objectives which encourage consideration of Ecologically Sustainable Development and site management as well as those related to protection of the environment and local amenity during construction.

An Erosion and Sediment Control Plan has been prepared and has considered the provisions within clause 2.1.2 with regard to the proposed development. Site clearing, demolition activities, water diversion, gutter bunding, signage, amenities, vehicle access, road cleaning and safety can be adequately addressed within a Construction Management Plan and dealt with by way of appropriate conditions of consent.

### **Part 8.2 Stormwater Management**

Part 8.2 of the City of Ryde DCP 2014 includes provisions relating to the management of stormwater associated with development. The subject application is accompanied by a concept stormwater plan prepared by Harris Page & Associates including OSD details to address Council's stormwater management requirements.

### **Part 8.3 Driveways**

Part 8.3 of the City of Ryde DCP 2014 includes specific provisions concerning the design of driveways.

As the plans submitted with the DA demonstrate, vehicular access to the basement level is to be provided via two driveways connecting with Nancarrow Avenue to the south-eastern and south western corners of the site.



To address Council's requirements, an Internal Traffic Assessment has been prepared by Thompson Stanbury Associates (refer **Appendix 10**).

This Report assesses the proposed access arrangements against the relevant Australian Standards, being AS2890.1-2004 concluding that whilst the proposed arrangement therefore constitutes a variance with respect to the Australian Standard, the driveway designs are considered satisfactory.

Refer to Section 3 of the Internal Traffic Assessment for further information.

### **Part 8.6 Floodplain management**

Part 8.6 of the City of Ryde DCP 2014 includes specific provisions to guide development to ensure danger to life and property damage associated with flooding and overland flow are minimised in a manner consistent with the Policies of Council formulated under the NSW Flood Policy and Floodplain Development Manual (FDM).

A Flood Assessment has been prepared in support of the application by BG&E. This Report assesses the siting and levels of the driveways, concluding that:

*" Stages 1 to 5 of the proposed development comply with Councils requirements for floodplain risk management."*

### **Part 9.1 Signage**

Part 9.1 of the City of Ryde DCP 2014 includes specific provisions concerning the erection and display of signage to balance the distinctive urban character of the area and the need to advertise goods and services.

The proposal does not include signage. This will be the subject of subsequent development Applications.

### **Part 9.2 Access for People with Disabilities**

The DCP requires that the residential flat buildings must provide an accessible path of travel to all units as well as the provision of 10% adaptable units. The application is accompanied by an Access Report prepared by Design Confidence. This report advises that 52 adaptable units are required within the development. As the submitted plans demonstrate, the proposal will meet this requirement.

### **Part 9.3 Parking Control**

The Car Parking DCP requires parking to be provided at the following rates for the residential component:

- 0.6 to 1 space per one bedroom dwelling
- 0.9 to 1.2 spaces per two bedroom dwelling
- 1.4 to 1.6 spaces per three bedroom dwelling
- 1 visitor space per 5 dwellings

In support of the application, an Internal Traffic Assessment has been prepared by Thompson Stanbury Associates. Section 4 of this Report provides an assessment of the proposed car parking.

As detailed within this Report, the subject development is required to provide between 360 and 547 resident parking spaces and 103 visitor parking spaces. With reference to the submitted plans, the proposal will provide 621 spaces in total, split between 517 resident and 104 visitor parking spaces. The Report therefore concludes that the proposed parking is suitably compliant with Council's DCP.

### **Part 9.5 Tree Preservation**

Part 9.5 of the City of Ryde DCP 2014 includes specific provisions concerning the effective management of trees as a natural resource and as part of the urban infrastructure to ensure the long term retention of existing trees, appropriate tree maintenance, protection of trees on development sites, and in relation to replacement trees, suitable tree location and considered species selection.

In accordance with the requirements of the original Arborist's Report prepared by Redgum, Trees Reference 132 and 133 will be retained as part of the proposal.

In support of the DA, detailed Public Domain Landscape Plans have been prepared by Place Design. These detail the landscape treatment across the site, including the provision of additional trees.

## 7. Environmental Impact Assessment

### 7.1 Overview

This section identifies and assesses the impacts of the development with specific reference to the heads of consideration under section 79C of the Act.

### 7.2 Context and Setting

The context and setting of the development site is described in Section 2.3 of this Statement. As discussed in detail in the Architects Design Report prepared by R+M and provided at **Appendix 3**, the proposal is considered to be compatible within the context and built form of the character of the existing and future surrounding (former) industrial, warehousing, retail and residential developments. The built form also satisfies the relevant Conditions of Consent in the Concept Plan in relation to design and urban design. The proposal provides a built form and massing which is considered to positively contribute to the quality and transitioning identity of the locality.

### 7.3 Built Environment

#### 7.3.1 Height, Bulk & Scale

Working within the layout of the site in accordance with the Concept Plan, the design of the proposal is considered to properly respond to site attributes and prevailing environmental conditions for the following reasons:

- The terms of the Concept Approval sets out the bulk and scale of the proposed buildings. This is established through an approved envelope as well as maximum RL's and 'popup' allowances for each of the buildings. The proposal does not seek to vary the approval in this regard.
- The SEPP 65 analysis prepared by R&M concludes that the proposal maintains consistency with relevant design principles being, context, scale, built form density, landscaping and aesthetics and has the capability of demonstrating compliance with the "rules of thumb" in the RFDC;
- The landscape scheme for the site is generous and will significantly improve the amenity of the site's interface with the public domain as well as internally within the site. A series of significant replacement trees are proposed within the site and in the public domain which creates a treed environment which supports the new residential character of the locality; and
- The design allows for the delineation of the public and private spaces within the development to create a shared experience which welcomes the public which is balanced with respecting the privacy of future residents.

Overall, the proposal significantly improves the quality of the streetscape, transforms the old industrial sites and creates the neighbourhood of Shepherds Bay in accordance with the approved Concept Plan.

#### 7.3.2 Setbacks

The terms of the Concept Approval sets out the bulk and scale of the proposed buildings. This is established through an approved envelope as well as maximum RL's for each of the buildings.

The proposal does not seek to vary the approval in this regard.

### 7.3.3 Design & Aesthetics

The redevelopment of the subject site is a unique opportunity to enhance and regenerate the former industrial area including its buildings and public domain areas. As discussed in detail in the Design Report prepared by R+M and provided at **Appendix 3**, the proposal provides a contemporary built form which is appropriate in terms of bulk, density and scale in the local context. This is achieved by providing a mixed use development which cohesively integrates with the neighbouring ground floor non-residential spaces with residential apartments above which create the opportunity for future residents to enjoy the local outlook as well as enjoying an appropriate level of privacy. The built form incorporates a mixture of vertical and horizontal elements which are supplemented by ornamental landscaping and operable privacy screens which endorse activity between light and dark from within the building. This creates an interesting and lively relationship at the street boundaries which engages and connects with the public forum.

The proposal directly relates to the street, providing direct pedestrian access to the entry points of the site and to the terraces of the Ground Floor residential units which are demarcated by a raised wall structure and privacy fencing. In conjunction with the modulated building elevations the proposal results in a built form which responds to the human scale while also creating an independent roof line which strengthens the form of the building from the adjacent buildings.

As discussed in the Design Report prepared by R+M provided at **Appendix 3**, the evolution of the design of the building has taken into consideration the concepts of good urban design and the comments provided by Council's Planning Officers. The proposal achieves adequate separation between the buildings, the opportunity to manage and define the level of privacy from each unit, direct relation to the street, and an aesthetically pleasing design and scale of development.

The design is sensitive to maintaining the amenity of current and future neighbouring developments by providing a floor plan layout which enables suitable building separation, placement of habitable rooms and windows and private open space. As discussed in detail in the Design Report prepared by R+M and provided at **Appendix 3**, the proposal is designed to enhance the privacy and amenity of the future occupants within the site and of neighbouring sites.

The adequacy of the design of the development is demonstrated by the following elements:

- The proposal provides a building form which addresses the boundaries of the site to create an active urban edge which activates the interface with the public domain;
- The height and density of the building is consistent with the outcomes contemplated in the Concept Approval;
- The siting of the Public Plaza provides a high level of accessibility and provides a usable and inviting space which connects with the public domain;
- The size and arrangement of the floor plates ensure that the internal amenity of apartments is maximised for natural light and cross ventilation;
- Apartments are provided with appropriately sized and located areas of private open space;
- Access between the private and communal areas within the complex is direct, safe and efficient; and

- The proposal provides a direct and efficient arrangement for vehicular ingress and egress, including a dedicated loading bay and waste storage and collection area which accommodates the needs of the commercial and residential occupants of the site, as well as their visitors and customers.

#### 7.3.4 Solar Access & Ventilation

The proposed development has been carefully designed to achieve a high level of amenity with due consideration to the ability of each apartment to benefit from receiving solar access, adequate privacy and separation, natural ventilation along with providing floor plan layouts which are efficient and have a high level of liveability. Providing water views has been a key design criteria. This focus on achieving a high level of amenity is also balanced with the requirements to satisfy the RFDC Rules of Thumb as amended by Condition 21 of the Concept Approval.

Condition 21 of the Concept Approval MP09\_0216 Mod 1 provides a dispensation in relation to solar access and reads:

*"Future Development Applications shall demonstrate compliance with the provisions of the State Environmental Planning Policy 65 – Design Quality of Residential Flat Development (SEPP 65) and the accompanying Residential Flat Design Code 2002 (RFDC), except where modified below:*

*In particular, future application/s shall demonstrate that:*

*...(c) where less than 70% of apartments achieve 2 hours of solar access in mid winter, these apartments (beyond the first 30%) shall be designed to provide improved amenity by:*

- *including extensive glazing (minimum 70% of the external façade) to living rooms;*
- *permitting cross-ventilation specifically to those apartments; and*
- *exceeding RFDC guidelines by at least 20 10% in at least one both of the following areas:*
  - *increased floor to ceiling height; or and*
  - *increased minimum apartment areas, being greater than 50sqm for 1 bedroom, 70sqm for 2 bedroom and 95sqm for 3 bedroom apartments."*

With reference to Section 3.11 of the RFDC Assessment undertaken by R&M, they advise that, in relation to daylight access that the

*"Proposed development is consistent with Concept Approval MP 09-216 and subsequent Mod1 Approval"*

In terms of cross ventilation, Windtech has prepared a Natural Ventilation Preliminary Assessment (refer Appendix 5). This statement assesses the performance of the proposal against the objective of the RFDC to provide cross ventilation to 60% of the units. This preliminary assessment initially concludes that the residential units will not comply with the natural ventilation requirements of the RFDC.

However, Windtech's preliminary assessment then sets out an alternative assessment for natural ventilation to include the provision of ventilation shafts within the proposal. To this end, Windtech conclude that:

*"It is our expert opinion, based on our extensive experience and field testing of other developments, that the above-mentioned residential apartments are expected to demonstrate natural ventilation performance comparable to those that meet the requirements of SEPP65 if the recommended ventilation shafts and skylights are included. Verification through wind tunnel modelling is recommended at a more detailed design stage of the project (i.e. prior to CC) to accurately determine the precise dimensions and locations of the various ventilation shafts. It is currently considered that shafts in the order of one square metre in cross section connected to 2-3 apartments located on the same aspect would be satisfactory to appropriately address an issue such as this. Shafts of this size have been successfully utilised on other similar developments (eg Top Ryde development by Crown – designed by Robertson & Marks) which have been reviewed and approved by 3rd party consultants.*

With these additional ventilation shafts and operable skylights, Windtech conclude that the proposal will meet the RFDC objective to provide cross ventilation to 60% of all units.

### **7.3.5 Internal Amenity**

The proposed development has been produced with particular attention to the amenity of its future occupants, neighbouring properties and the public domain. As discussed at Section 3.1 of the RFDC Assessment prepared by R+M Architects, the proposal includes the following measures to maximise amenity levels within the units:

- *"All apartments have balconies or terraces.*
- *Living spaces are orientated towards the primary outlook.*
- *Screening will be provided where necessary to maximise privacy.*
- *Natural ventilation and daylight access is provided where solar access is possible.*
- *All apartments are provided with appropriate storage facilities (6 -10m<sup>3</sup> per apartment).*
- *Generally all apartments living, dining, bedrooms and kitchens are within 8m from the glazing line to allow for daylight access and natural ventilation.*
- *In instances where minor variations to 8m layout depth occur:*

*The distance is generally between 8 and 9 m, occurring in dual aspect apartments, apartments with 20% increased area (to satisfy condition 21 of Mod 1 Approval) and in mezzanine type apartments with double storey ceiling height to the living areas.*

*Spaces within the apartment layouts with depth greater than 8m relative to the glazing line are limited to non-habitable rooms such as bathroom, laundries, storage areas and entry foyers."*

R&M consider that the design of the development results in a positive outcome with regard to residential amenity. Careful consideration has been undertaken to mitigate potential aspects of the design which could degrade the quality and liveability of the units both individually and for the development as a whole. R&M consider the amenity of the development to be of high quality and a desirable outcome.

### **7.3.6 Privacy**

Section 2.9 of the RFDC Assessment prepared by R&M looks at privacy within the proposal, detailing that:

*"Apartments have been orientated and appropriately separated to provide visual privacy. Screening is proposed to areas where there is potential for overlooking."*

### 7.3.7 Public Domain

The proposal will make a positive compatible contribution to the public domain given:

- The proposed buildings will achieve a desirable interface with public areas in terms of the relationship between Ground level and the adjoining footpaths;
- The buildings will address and integrate with all of its four street frontages through the inclusion of active facades with design elements that promote a visual relationship with public pedestrian areas adjacent to, and surrounding, those edges of the site;
- Vehicle access points have been consolidated and will provide simple and direct vehicular movements throughout the site;
- Service areas and plant rooms are integrated into the building design and do not visually dominate the streetscape or pedestrian areas adjoining the site. This includes the new electricity kiosk substation;
- The apartments which have an easterly outlook have a substantial setback to the adjoining existing residences, the upper levels are gradually set back and privacy mitigation measures are provided to protect the privacy of neighbouring residents;
- The architectural treatment and landscaping elements will achieve a suitable streetscape presentation; and
- The landscape plans nominate an appropriate treatment for the public domain areas adjoining the site.

### 7.3.8 Heritage

The site is not a heritage item or within a heritage conversation area pursuant to the RLEP 2014.

### 7.3.9 Materials & Colour

Refer to R+Ms Schedule of External Colours and finishes and comment.

### 7.3.10 Building & Construction

This report provides a BCA compliance review (**Appendix 15**) of the proposal prepared by Vic Lilli. This sets out a number of recommendations to ensure that the proposed building is capable of achieving compliance with the requirements of the BCA and relevant adopted standards without undue modification to the design or appearance of the building.

A Construction Management Plan has also been prepared in support of the application. This sets out the construction methodology for the erection of the new buildings.

## 7.4 Natural Environment

### 7.4.1 Flora & Fauna

The existing physical condition of the site is such that it does not have any ecological attributes which, if lost, would impact upon any threatened species, population, ecological community or habitat.

### 7.4.2 Tree Removal

The Concept Approval (as modified) permitted the removal of all trees from the site.

### 7.4.3 Landscape

Concept Approval (as modified) was accompanied by an Overall Concept and Public Domain Plan.

The proposal is accompanied by a detailed landscape scheme and Landscape Design Statement, prepared Place Design and provided at **Appendix 7**.

### 7.4.4 Water Management

#### Water Drainage

Existing drainage conditions, proposed design and relevant impacts associated with development are contained in the Stormwater Concept Plans submitted with the DA.

### 7.4.5 Soil Management

Refer to **Section 4.2** for the SEPP 55 assessment with regard to potential soil contamination.

An Erosion and Sedimentation Control Plan is also provided as part of the Construction Management Plan at **Appendix 21**. This provides measures to ensure the development provides appropriate soil management and sedimentation control during construction.

### 7.4.6 Air & Microclimate

Some dust is anticipated during the construction period, particularly given demolition and excavation is involved. This impact can be managed through measures such as wetting down work areas/stockpiles, stabilising exposed areas, preventing material tracking out onto public roadways, covering loads on all departing trucks and working to weather conditions. The proposal is otherwise not expected to give rise to any long term or adverse impacts on local or regional air quality.

A final CMP will be provided by the builder, once appointed, prior to the issue of the Construction Certificate.

The proposal is otherwise not expected to give rise to any long term or adverse impacts on local or regional air quality.

### 7.4.7 Noise & Vibration

The application is accompanied by a Noise Impact Assessment report by DK Acoustics.



## Construction noise & vibration

The proposed works have been assessed against criteria for resultant noise from construction which are aimed at maintaining comfort levels within the surrounding residential dwellings. The construction site will adhere to the noise control and regulation measures in accordance with AS 2436:2010 "*Guide to noise control on construction, maintenance and demolition sites.*" Furthermore, the works will adhere to the EPA Construction Noise Guidelines which require the proponent to take into consideration and employ all reasonable and feasible measures to ensure that the impact on noise receivers is minimised.

The works will not exceed the relevant vibration criteria to ensure that no architectural or structural damage to surrounding buildings occurs. Refer to the Noise Assessment at **Appendix 19** for further details.

## Internal noise levels to residential areas

The report includes a schedule of requirements for glazing and acoustic seals to ensure that internal areas of the residential apartments achieve the necessary mitigation from road traffic noise.

In order to mitigate potential impacts from traffic noise appropriate acoustic measures are proposed, including glazed windows and doors, roof / ceiling treatment and external walls to be constructed of concrete masonry.

## Operational noise

Potential noise sources from the development include noise generated by mechanical plant and commercial uses.

The external mechanical plant will be selected post DA stage, at which point a fully detailed assessment of treatments will be conducted. This future assessment will determine if acoustic treatments to the mechanical plant are required.

The building layout and orientation of the building has been designed to ensure that the acoustic privacy of surrounding residents and future occupants is protected. This has been achieved through the careful consideration of the layout of the development including the significant setback of the building from the eastern boundary and the further gradual setback of the upper residential levels, the internal arrangement of the loading bay and commercial spaces which are directed away from neighbouring residences.

Moreover, the noise levels within the development will satisfy the requirements of the Ryde Council DCP and the relevant Australia Standards.

## 7.4.8 Energy

An ESD letter has been submitted in support of the DA. This letter is in response to Condition 22 of the Concept Modification (refer **Appendix 18**).

This advice states that the proposed project will commit to achieve include:

- "1. Energy scores (measured by BASIX) which, on average, exceed the targets by over 10%.*
- 2. Water scores (measured by BASIX) which exceed the targets by just under 10%.*
- 3. Innovation – achieved by using the first ever Australian incorporation of the CT2000 car charging technology, in a residential context.*

4. *Waste Category – contractors will be required by Holdmark to meet the base waste targets in the ESD Masterplan Report (“101117 Shepherds Bay Meadowbank - ESD Report”).* "

Refer to the ESD Report at **Appendix 18** for further information.

## 7.5 Movement & Access

### 7.5.1 Transport

The site is accessible by public transport being within close proximity to bus, train and ferry stations.

### 7.5.2 Roads & Traffic

The Infrastructure Assessment Report prepared by Road Delay Solutions and provided at **Appendix 12** has considered the existing and proposed traffic conditions as a result of the proposal.

The Report concludes that:

*"Stages 4 and 5 propose construction of 511 high quality, architecturally designed, residential apartments generating some 148vph during the commuter peak travel periods.*

*The report assess the conditioned infrastructure necessary to sustain the level of development, in accordance with the Department of Planning & Infrastructure Concept Approval, MP09\_0216 and proposes the relevant timing for each.*

*In support of the foregoing assessment, the following is considered relevant to Stages 4 and 5.*

- *The site is ideally located in close proximity to a broad range of public transport alternatives, reducing dependence on use of private passenger vehicles.*
- *The site is located within easy walking/cycling distance of a range of shops and services (such as the local post office, TAFE College and primary schools).*
- *The site is located immediately adjacent to a shared pedestrian and bicycle path with links to Parramatta and the Sydney CBD.*
- *Design and construction of the Nancarrow Road extension will improve mobility and accessibility for pedestrians and cyclists. The extension is to incorporate a defined area of high pedestrian activity. The use of raised thresholds, signposting and a coloured and/or textured pavement treatment, to Council specifications, is to be incorporated.*
- *Design and construction of raised thresholds, signposting and a coloured and/or textured pavement treatment, to Council specifications, in Underdale Lane.*
- *Construction of a splitter central island in Hamilton Crescent at Belmore Street to affect left in/left out priority control.*
- *Design and construction of a pedestrian refuge in Bowden Street between Nancarrow Avenue and Underdale Lane.*

- *Design and construction of a triangular, concrete, island in Yerong Street at Belmore Street to facilitate priority controlled left in/left out with construction to be completed prior to the issue of an Occupancy Certificate for Stage 2 of the development.*
- *No warrant exists for the signalisation of the Constitution Road intersection with Bowden Street.*
- *No warrant exists for the signalisation of the marked foot crossing in Railway Road, at this time."*

### 7.5.3 Car Parking

An Internal Traffic Assessment has been prepared by Thompson Stanbury Associates. This assesses the internal parking, access and delivery arrangements, concluding that the proposal is considered acceptable.

### Construction Waste

A Construction Waste Management Plan has been prepared by Bingo Group and is submitted as part of the Construction Management Plan at **Appendix 21**. This Plan sets out the waste management measures that will be adopted as part of the construction phase and to ensure that resources are conserved and waste is processed responsibly by minimising waste generation and maximising recycling of materials.

### Operational waste

A Waste Management Plan prepared by Elephants Foot has been submitted with the DA. This assesses the operational waste measures that will be adopted post construction. Refer to the Plan at **Appendix 20** for further information.

### 7.5.4 Pedestrians & Accessibility

Accompanying the application is a BCA Report prepared by Vic Lilli, an Adaptable housing Report and an Access Review report prepared by Accessibility Solutions at **Appendices 13, 14 and 15**. All reports set out various detailed design recommendations to ensure the building meets applicable access codes and legislation.

it is considered that these recommendations are of a minor nature, and it would be reasonable for those outcomes to be ensured by means of suitable conditions within any Notice of Determination requiring compliance to be demonstrated with any Construction Certificate.

## 7.6 Site Suitability

### 7.6.1 Geotechnical

A Geotechnical Report has been prepared in support of the DA by Asset Geotechnical and provided at **Appendix 24**. This Report notes that: -

*"The excavation for the proposed development is anticipated to be partially within fill and residual soil, and partially within bedrock. The rock is likely to be continuous across adjoining properties. Excavation requirements will be governed by the presence of the rock, and the sensitivity of nearby residential structures buried services to vibrations caused by the rock excavation.*

*The building constructions on the adjacent properties are sensitive to vibrations above certain threshold levels (regarding potential for cracking). Close controls by the excavation contractor over the rock excavation are necessary, and are recommended, so that excessive vibration effects are not generated.*

*Excavation methods should be adopted which limit ground vibrations at the adjoining developments to not more than 10mm/sec. Vibration monitoring will be required to verify that this is achieved. However, if the contractor adopts methods and / or equipment in accordance with the recommendations in Table 1 for a ground vibration limit of 5mm/sec, vibration monitoring may not be required.*

Refer to Section 4.2 for a SEPP 55 assessment of the proposal.

As required by Conditions 38, 39 and 40 of the Concept Plan, detailed sampling and testing has been undertaken across the site by Environmental Investigations. The findings and recommendations of these investigations are provided in the Remediation Action Plan (RAP) (**Appendix 22**). The outcome of this RAP includes the minimisation of potential exposure to contaminants in soil, air and groundwater. The RAP identifies that there is a low risk of widespread groundwater contamination and that any groundwater impact is unlikely to prevent the redevelopment of the sites for residential and open space development.

This RAP addresses the relevant regulatory framework and establishes a sequential process of remedial works to assist the site in meeting the required residential and open space criteria.

#### **7.6.2 Bushfire**

The site is not within a Bushfire area.

#### **7.6.3 Flooding**

A Flood Assessment has been carried out by BG&E (refer **Appendix 25**). This report considers any potential impacts on the development as a result of flooding.

Section 5 of the Report sets out a number of flood recommendations, concluding that

*"The flood assessment shows that Stages 1 to 5 of the proposed development comply with Councils requirements for floodplain risk management."*

#### **7.6.4 Watertable**

The development includes excavation which is below the watertable. As such, a Groundwater Investigation Report has been prepared by Environmental Investigations (refer **Appendix 23**).

This report concludes that the site would be suitable for the proposed residential development subject to the following recommendations:

- *"Provide evidence of the successful removal and validation of UST's present at the former BP service station located at 4 – 6 Constitution Road, and the former Renown & Pearlite industrial site located at 8 – 14 Constitution Road. If no evidence of validation is available, further detailed investigation may be required to confirm the contamination status of the property, and its suitability for residential land use.*

- *Preparation and implementation of a Remediation Action Plan to outline the removal of the Carcinogenic PAH exceedances identified within the northern and western corners of the site and any unexpected finds identified during construction.*
- *Any material being removed from site (including virgin excavated natural materials or VENM) be classified for off-site disposal in accordance the DECCW (2009) Waste Classification Guidelines.*
- *Any material being imported to the site should be assessed for potential contamination in accordance with NSW EPA guidelines as being suitable for the intended use or be classified as VENM.*
- *Validate that the excavated areas are left free of contamination by comparing analytical results for excavation surfaces and any backfill material, against the respective DECC/EPA thresholds.*
- *Preparation of a final site validation report by a qualified environmental consultant, certifying site suitability for the proposed development."*

#### 7.6.5 Services & Utilities

The site contains adequate facilities which will be retained / reused / upgraded where needed to cater for the proposed residential development. All installations will be capable of meeting the requirements under the Australian Standards and the Building Code of Australia.

#### 7.6.6 Hazards (Other)

##### Natural Hazards

The subject is not affected by any known hazards. The Geotechnical Investigation prepared by Asset Geotechnical (**Appendix 24**) demonstrates that the conditions of the site are appropriate for the excavation and construction works proposed, and provides recommendations to protect the sub-surface conditions and neighbouring properties.

#### 7.6.7 Conclusion

The Concept Approval (MP09\_0216) assessed the suitability of the site for this form of development and concluded that this site is suitable for this form of development.

The subject site is not affected by any policy that restricts development because of the likelihood of land slip, bush fire, tidal inundation, subsidence, acid sulphate soils or any other risk.

An assessment under SEPP 55 has been carried out and is provided at **Section X** above. The SEPP 55 assessment provides sufficient environmental protection measures and do not indicate that there are any impediments to the proposed residential development.

The suitability of the site for this form of development is discussed in detail in the Design Report prepared by R+M and provided at **Appendix 3**.

### 7.7 Social & Economic Effects

#### 7.7.1 Social

The market demand for apartment types for a site of this form and type, the property market is currently characterised by buyer groups with a high level of demand for smaller

apartments. This is attributed to market demand for smaller studio, 1 bed and 2 bed apartments to a property market which values properties which deliver strong rental values and low vacancy rates. The proposed development satisfies this demand, which is specifically valuable due to proximity to transport, local employment, restaurants and retail amenity. The proposal provides a positive planning outcome and responds to demand for high quality residential apartments which deliver a desirable price point and rental demand.

The proposal provides tangible public benefits in the form of a publicly accessible foreshore open space bordered by a community space which suits the social needs of the community. Overall the proposal improves the presentation of the site and positively activates the public domain.

### 7.7.2 Crime & Safety

The proposal is for a mixed use development with a high level of amenity, casual surveillance and ultimately public safety within the building and surrounding area. The proposal will assist in revitalising and activating the premises and will provide appropriate lighting and security measures to protect the safety of neighbouring premises, residents and the local community.

Crime Prevention through Environmental Design (CPTED) is a recognised model which provides that if development is appropriately designed it can reduce the likelihood of crimes being committed. By introducing CPTED measures within the design of the development, it is anticipated that this will assist in minimising the incidence of crime and contribute to perceptions of increased public safety. The proposal has been designed to take into consideration these principles as follows:

Surveillance: This principle provides that crime targets can be reduced by effective surveillance, both natural and technical. In this regard, the development has been designed to directly front each of the road frontages with direct surveillance of the public domain from the non-residential units, pedestrian access points, the public domain areas and the upper level apartments.

The layout of the development also provides lines of sight between public and private spaces which will be maintained during the night by a suitable lighting scheme. The proposed development introduces 24 hour activity within the local footpath and road network and casual surveillance to ensure the safety of residents, staff, customers, neighbouring properties and the public.

Access Control: This principle provides that barriers to attract/restrict the movement of people minimises opportunities for crime and increases the effort required to commit crime. The non-residential premises benefits from designated access points which is clearly visible and overseen by staff members. The public foreshore plaza is publically accessible to the general public and benefits from casual surveillance from the public domain, the community space and residential units.

Territorial Reinforcement: This principle provides that well-used places reduce opportunities for crime and increase risk to criminals. There is a clear delineation between the public street and footpath verge, the non-residential units, public plaza and the private residential areas. The future occupants of the development benefit from direct access to encourage the connection of these spaces and neighbouring retail areas. In this regard the development provides for a commercial space, a public plaza and residential units which will create activity within the site and the wider local centre.

Space Management: This principle provides that space which is appropriately utilised and well cared for reduces the risk of crime and antisocial behaviour. Strategies to implement this principle include, site cleanliness, rapid repair of vandalism and graffiti, the quick replacement of broken light fixtures/globes and the removal or refurbishment of decayed

physical elements. The presentation of the non-residential elements of the development will be managed by Coles Management and/or Centre Management who will be responsible for maintaining its high quality standard. The Owners Corporation/Strata will have a management service able to co-ordinate and respond to such matters as necessary for the residential elements of the development.

The proposed works will assist in improving the presentation of the premise, which will improve the amenity, casual surveillance and ultimately public safety and sense of security within the site and surrounding area.

### **7.7.3 Economic & Employment**

The proposed development will have a positive economic impact by providing a higher standard of architectural and urban design than the existing industrial buildings. The development will also offer additional housing choice, , whilst also creating jobs during the construction phase.

## 8. Conclusion

This application seeks approval for Shepherds Bay Stage 4 and 5 and comprises two residential flat buildings containing 511 residential units with basement parking for 621 vehicles.

Having regard to the experts reports provided and attached to this SEE and the conclusions of those reports the proposal is generally consistent with the Concept Approval (as modified), the regional strategies and local planning controls for the site. It has few, if any, adverse impacts on the environment or amenity of the locality and therefore on balance is considered to be in the public interest.

The assessment of this application gives balanced consideration to the social benefits of this proposal in the form of redevelopment of the former light industrial area to provide a residential development with a high degree of accessibility and usability with consideration of any environmental impacts arising from its physical form and the resultant public benefit.

In summary the proposal is considered to:

- provide a built form which strengthens the neighbourhood's sense of identity, and visual appearance of the area. This includes maintaining an appropriate scale to the street frontages without adverse overshadowing or amenity impact on surrounding properties;
- provide an increase in housing choice to meet demand for small units within the area;
- provide high quality residential units which provide a high level of amenity and privacy to the future occupants;
- be an appropriate response to the context, setting, planning instruments and preliminary assessment as required under the heads of consideration under Section 79C(1) of the *Environmental Planning and Assessment Act, 1979*;
- redevelopment of this site will assist in achieving the desired regional objectives and especially contribute to the housing targets set by the Draft Subregional Strategy; and
- have no adverse environmental impacts on adjoining properties and is an innovative and appropriate response to the desired future character of the locality statements.

The benefits provided by the proposed development outweigh any potential impacts and is therefore in the public interest. The proposal will deliver a suitable and appropriate development and is worthy of approval.



## Appendix 1

### DA for Stages 4 and 5

#### Consistency with the Shepherds Bay Concept Approval MP09\_0216 Mod 1

Condition	Comment
SCHEDULE 2 PART A – ADMINISTRATIVE CONDITIONS	
<p>Development Description</p> <p>A1 Concept approval is granted to the development as described below:</p> <p>Use of the site for a mixed use development including residential, retail, commercial and community uses incorporating:</p> <p>building envelopes for 12 buildings incorporating basement level parking;</p> <p>infrastructure works to support the development including:</p> <p>upgrades to the local road network;</p> <p>stormwater infrastructure works;</p> <p>publically accessible open space and through site links; and</p> <p>pedestrian and cycle pathways.</p>	<p>The proposal seeks consent for a residential development in accordance with the Concept Approval (as modified)</p> <p>The proposal also involves stormwater upgrade works and associated pedestrian and cycle pathways.</p> <p>Refer to the attached architectural plans prepared by R+M and supporting documentation for further information which addresses this condition</p>
<p>Mod 1</p> <p>amendment to Building Storeys Plan to allow for additional storeys at ground level in Stages 1 to 3;</p> <p>expand/connect the basement building envelopes between Stage 2 and 3 and Stage 4 and 5;</p> <p>revision to the construction staging;</p> <p>revised timing of the delivery of the open space to be in conjunction with Stage 3 (rather than Stage 1);</p> <p>provision of an additional storey to provide a 6 storey element to the building on the corner of Belmore Street and Constitution Road;</p> <p>flexible application of the solar access requirement of the RFDC;</p>	<p>Noted - The proposal has been designed generally in accordance with the Concept Approval (as modified), including the approved drawings. Refer to the attached architectural plans and supporting documentation as well as this Table for further discussion.</p>

amendment of ESD measures; and

- amendments to terms of approval, future environmental assessment requirements and Statement of Commitments.

**Development in Accordance with the Plans and Documentation**

The development shall be undertaken generally in accordance with MP09\_0216, as modified by MP09\_0216 Mod 1, and:

the Environmental Assessment dated 7 January 2011 prepared by Robertson + Marks Architects and PLACE Design Group, except where amended by the Preferred Project Report dated July 2012, including all associated documents and reports;

the s75W Modification Application dated November 2013 prepared by R+M Architects and City Plan Services including all documents and reports, except where amended by the:

Response to Submissions report dated 28 March 2014 prepared by City Plan Services; and

Proponents Comments in Response to Council submission dated 29 April 2014 prepared by City Plan Services.

Drawings Prepared by Robertson + Marks Architects		
Drawing No	Name of Plan	Date
FIGURE 11 REV 2	PREFERRED CONCEPT PLAN	Jul-12
PPR 001-D	MAXIMUM HEIGHT WITH SETBACKS	2/11/2013
PPR 007-E	INDICATIVE STAGING	09/24/13
S 001/B	SLOPES ON SITE	03/25/2014
FIGURE 14 REV 4	STAGE 1 BUILDING ENVELOPE CONTROLS	28/06/2012
FIGURE 15 REV 4	STAGE 2 BUILDING ENVELOPE CONTROLS	01/18/12
FIGURE 16 REV 4	STAGE 3 BUILDING ENVELOPE CONTROLS	01/18/12
FIGURE 17 REV 4	STAGE 4 BUILDING ENVELOPE CONTROLS	01/18/12
FIGURE 18 REV 4	STAGE 5 BUILDING ENVELOPE CONTROLS	01/18/12
FIGURE 19 REV 4	STAGE 6 BUILDING ENVELOPE CONTROLS	01/18/12
FIGURE 20 REV 4	STAGE 7 BUILDING ENVELOPE CONTROLS	01/18/12
FIGURE 21 REV 4	STAGE 8 BUILDING ENVELOPE CONTROLS	01/18/12
FIGURE 22 REV 4	STAGE 9 BUILDING ENVELOPE CONTROLS	01/18/12
FIGURE 23 REV 4	STAGE 10 BUILDING ENVELOPE CONTROLS	01/18/12
FIGURE 29 REV 2	LANDSCAPE PLAN	July 2012
FIGURE 30 REV 2	VEHICULAR ACCESS & PUBLIC TRANSPORT PLAN	July 2012
SK01 REV E	PEDESTRIAN & CYCLEWAY ROUTES	18 June 2013
FIGURE 32A REV 2	INDICATIVE ACCESSIBLE CIRCULATION PLAN	July 2012
FIGURE 33 REV 2	INDICATIVE COMMUNITY, RETAIL & / OR COMMERCIAL USES LOCATION MAP	July 2012
FIGURE 50 REV 1	CONCEPT PLAN LANDSCAPE PLAN	28/07/2014
PPR 003-5	OPEN SPACE AREA PLAN	11/01/13

except for as modified by the following pursuant to Section 75O(4) of the Act.

The proposal has been designed generally in accordance with the approved EA and PPR and the approval as modified, including the approved drawings. Refer to the attached architectural plans and supporting documentation as well as this Table for further discussion on the consistency of the proposal.

It is considered that the DA submission is consistent with the Concept Approval (as modified).

<p>A3 Inconsistencies Between Documentation</p> <p>In the event of any inconsistency between modifications of the Concept Plan approval identified in this approval and the drawings/documents including Statement of Commitments referred to above, the modifications of the Concept Plan shall prevail.</p>	<p>Noted.</p>
<p>A4 Building Envelopes</p> <p>Building footprints and setbacks are to be generally consistent with the Concept Plan building envelope parameter diagrams for each site, except where amended by the Modifications in Part B of this Approval.</p>	<p>The proposal has been design to fit within the approved building envelopes.</p>
<p>A5 Maximum Gross Floor Area (GFA)</p> <p>1. The maximum GFA for commercial, retail or community uses shall not exceed 10,000m<sup>2</sup>.</p> <p>2. The maximum number of dwellings shall not exceed 2,005.</p>	<p>The proposal is for 511 dwellings. The cumulative dwelling count, including 246 dwellings approved in the Stage 1 Project Approval MP09_0219, and 453 dwellings as proposed as part of Stages 2 and 3 is 1210 dwellings.</p> <p>The maximum number of dwellings will be satisfied.</p>
<p>A6 Publicly Accessible Open Space, Drainage Reserves and Through Site Links</p> <p>All public open spaces, drainage reserves and through site links shall be publicly accessible and maintained in private ownership by the future body corporate unless otherwise agreed by the Council.</p>	<p>Where appropriate, all public open spaces will be privately maintained unless Council expresses a desire otherwise.</p>
<p>A7 Lapsing of Approval</p> <p>Approval of the Concept Plan shall lapse 5 years after the determination date shown on this Instrument of Approval, unless an application is submitted to carry out a project or development for which concept approval has been given.</p>	<p>Noted.</p>
<p>SCHEDULE 2 TERMS OF APPROVAL PART B - MODIFICATIONS</p>	
<p>B1 The Concept Plan shall be amended to:</p> <p>Comply with the modified maximum heights (as per plans in Schedule 5), setbacks etc. under this approval and the project application approval for Stage 1 (MP09_0219). The maximum building height applies to either the number of storeys or RL levels, whichever is the lower.</p>	<p>These items have been satisfies in accordance with the Department of Planning &amp; Infrastructure's correspondence dated 24 June 2013.</p> <p>This condition has been satisfactorily discharged.</p>

<p>provide at least one contiguous open space, of a minimum of 3,000m<sup>2</sup>, to accommodate both active and passive recreational needs. The open space shall include deep soil area and receive a minimum of 2 hours of sunlight to a minimum of 50% of the area on 21 June.</p> <p>Provide a public domain plan which illustrates the proposed public domain treatment including streets and setback areas, landscaping, lighting and public and communal open spaces and which is in accordance with Ryde City Council's Public Domain Technical Manual.</p> <p>increase the width of the proposed through site links/view corridors to a minimum width of 20m.</p> <p>provide an integrated water sensitive urban design (WSUD) strategy for the entire site</p> <p>include a pedestrian and cycleways plan that demonstrates that the proposed routes are both viable and integrated with Council's plans for the surrounding area.</p>	
<p>B1A Amended Foreshore Link</p> <p>The delivery of the foreshore link shall be split between Stage 1 and Stage 2 in accordance with the Response to Submissions prepared by City Plan Services for MP09_0216 MOD1 dated 29 April 2014.</p>	<p>Not relevant to this DA.</p>
<p>B2 Sustainable Travel Plan</p> <p>Prior to issue of an Occupation Certificate for Stage 1 or prior to the submission of a DA for future stages (whichever occurs first), a Sustainable Travel Plan for the Concept Plan site shall be submitted to and approved by the Council. Options for provision of a Car Sharing Scheme for the site are to be explored and incorporated into the Sustainable Travel Plan as is a Parking Management Strategy.</p>	<p>The Sustainable Travel Plan accompanies this proposal at Appendix 11 and addresses each of these items.</p>
<p>B3 Amended Maximum Number of Storeys Above Ground Level (Finished) Plan</p> <p>The plan entitled Indicative Concept Plan Storeys Plan shall be amended to:</p> <p>(a) Change the title to "Maximum Number of Storeys Above Ground Level (Finished) Plan," and</p> <p>The amended plan, demonstrating compliance with these modifications shall be submitted to, and approved by, the Secretary within 1 month of the date of this</p>	<p>Submitted to the Department for approval on 6 November 2014.</p> <p>As per the correspondence from the Department of Planning &amp; Environment, this condition has been satisfactorily discharged.</p>

approval.	
<b>SCHEDULE 3 FUTURE ENVIRONMENTAL ASSESSMENT REQUIREMENTS</b>	
<p><b>1 Design Excellence</b></p> <p>Future DA/s for Stage A (the signature building fronting Church Street) shall demonstrate design excellence in accordance with the Director General’s Design Excellence Guidelines.</p>	<p>This condition will be satisfied in relation to the future DA/s for Stage A.</p>
<p><b>1A Dwelling Cap</b></p> <p>Future Development Applications shall provide for a total number of dwellings up to a maximum of 2,005 across the Concept Plan site (including Stage 1).</p> <p>Future Development Applications shall include a projected dwelling forecast for each remaining stage demonstrating that the total dwelling numbers will adhere to the dwelling cap.</p>	<p>The proposal is for 511 dwellings. The cumulative dwelling count, including 246 dwellings approved in the Stage 1 Project Approval MP09_0219, and 453 dwellings as proposed as part of Stages 2 and 3 is 1210 dwellings.</p> <p>The maximum number of dwellings will be satisfied.</p>
<p><b>2 Design Excellence</b></p> <p>Future DAs shall demonstrate that the development achieves a high standard of architectural design incorporating a high level of modulation / articulation of the building and a range of high quality materials and finishes.</p>	<p>The pre-lodgement notes provided by the UDRP have been integrated into the design of this development where appropriate, and where generally consistent with the Concept Plan. Detailed consideration of these items is provided in the SEE and Design Report (Appendix 3).</p> <p>The attached Architectural Plans demonstrate the proposed buildings are generally in keeping with the Concept Approval, exhibit a high standard of architectural merit, including appropriate detail and modulation / articulation which will enhance the living environment of the future residents and the transitioning character of the locality. A mix of high quality materials and finishes are proposed.</p> <p>The proposal exhibits design excellence.</p>
<b>BUILT FORM</b>	
<p><b>3 Notwithstanding the approved maximum building heights in RL, future DAs shall demonstrate that:</b></p> <p>buildings along Constitution Road are a maximum of 5 storeys, with the exception of the element of Stage 4</p>	<p>Not relevant to this proposal.</p>

<p>located on the corner of Constitution Road and Belmore Street (as shown on PPR 002-B), which is permitted to a maximum of 6 storeys; and</p> <p>the southern building element of Stage 8 is a maximum of 5 storeys.</p>	
<p>3A Maximum Storeys on Steeply Sloping Topography</p> <p>Future Development Applications shall satisfy the 'Maximum Number of Storeys Above Ground Level (Finished) Plan'. An exception to the maximum storey height may be given to buildings within Stages 2 and 3 on steeply sloping topography (being at the locations indicated on drawing S 001/B not including the area shown within Stage 4) where it can be demonstrated that:</p> <p>the overall building height satisfies the maximum permitted RL;</p> <p>no more than 1 additional storey is provided;</p> <p>an acceptable level of amenity can be achieved for any additional apartment(s) provided in accordance with the requirements of Future Environmental Assessment Requirement 21; and</p> <p>the additional storey is required to appropriately activate the ground level.</p>	<p>Not relevant to this application.</p>
<p>4 Future Development Applications shall ensure that basement parking levels do not encroach into street setback areas and do not exceed 1 metre above ground level (finished) and are located below the building footprint (with the exception of basements connecting Stages 2 and 3 and Stages 4 and 5) without encroachment into street setback areas.</p>	<p>As the submitted plans detail, this condition has been satisfied as part of this DA submission.</p>
<p>5 Future DAs shall demonstrate an appropriate interface with surrounding streets and public domain areas at pedestrian level, and an appropriate design treatment to provide an adequate level of privacy to ground level apartments</p>	<p>Access from the street/public domain will be provided for all apartments with direct access from the street which addresses this condition.</p>
<p>6 Future DA/s for Stage 3 shall provide the following minimum setbacks to the south-western boundary (common boundary with 12 Rothesay Avenue):</p> <p>6 metres up to 4 storeys; and</p> <p>9 metres above 4 storeys.</p>	<p>The proposal satisfies this condition, refer to the submitted Architectural Plans.</p>

<p>7 Future DA/s for Stage A shall provide the following minimum setbacks to Parsonage and Wells Streets:</p> <p>Podium – 4 metres</p> <p>Tower – 5 metres</p>	<p>Not relevant to this proposal.</p>
<p>8 Future DA/s for Stage 3 shall provide a minimum one metre setback to the existing Council owned pedestrian access way along the north-western boundary.</p>	<p>The proposal satisfies this condition, refer to the submitted Architectural Plans.</p>
<p>9 Future DA/s for Stage 9 shall provide a minimum 4 metre building setback to the single storey building fronting Bowden Street. Eaves, pergolas, outdoor seating areas or other unenclosed structures are permitted to encroach into the setback providing that the design does not result in unacceptable impacts to the streetscape or view lines.</p>	<p>Not relevant to this proposal.</p>
<p>10 Future DAs shall provide for utility infrastructure, including substations, within the building footprint, wherever possible. If this is not possible, infrastructure shall be located outside of the public domain and appropriately screened.</p>	<p>We are advised that Riz Engineering and DEP Consulting are currently investigating the utility requirements for the subject site.</p> <p>However, and notwithstanding this, any substations proposed will be appropriately screened.</p>
<p>11 Landscaping</p> <p>Future DAs shall include detailed landscape plans for public and private open space areas, street setbacks areas and for the landscape treatment of all adjoining public domain areas and road reserves in accordance with the approved Public Domain Plan.</p>	<p>Detailed Landscape Plans have been prepared by Place (Appendix 7) and reflect the requirements of the approved Public Domain Plan and address this condition.</p>
<p>12 Public Domain</p> <p>Future DAs shall provide the detailed design for the upgrade of all road reserves adjacent to the development to the centre line of the carriageway, including landscaping, street trees, accessible pedestrian pathways, street lighting, cycle ways on Constitution Road and Nancarrow Avenue, and any other necessary infrastructure in accordance with the approved Public Domain Plan. Where the detailed design necessitates an increase in the width of the road reserve, building setbacks are to be increased to retain the approved setback to the road reserve alignment. The road reserve works are to be completed by the proponent prior to occupation of each stage.</p>	<p>The detailed design of the public domain is provided in the landscape plans prepared by Place Design at Appendix 7. Which addresses this condition</p>

<p>13 Cycle Facilities</p> <p>Future DAs shall provide bicycle parking at the minimum rate of 1 space per 10 car parking spaces.</p>	<p>68 bicycle spaces are provided at basement level. As detailed in the Internal Traffic Assessment, this satisfies the rate of 1 per 10 parking space.</p>
<p>14 Cycle Facilities</p> <p>Future DAs shall demonstrate appropriate 'end of trip facilities' for cyclists within all non-residential developments in accordance with Council's requirements.</p>	<p>Refer above.</p>
<p>15 Open Space/Public Access</p> <p>Future DAs shall include detailed landscape plans for the embellishment of publicly accessible open space areas. These areas shall include high quality landscaping and paved areas and a variety of recreation facilities which may include BBQs, seating, water features, grassed areas, paths, shade trees, bicycle racks and exercise equipment/games.</p>	<p>Detailed Landscape Plans have been prepared by Place (Appendix 7) and reflects these requirements.</p>
<p>15A Open Space Provision</p> <p>The contiguous open space required in Modification B1(b) shall be completed, delivered and handed over to Council prior to the issue of the first Occupation Certificate for Stage 3. The land is to be dedicated, at no cost, to Council. Arrangements for the dedication shall be finalised before the issue of the Occupation Certificate for Stage 3. If Council does not accept the dedication, the land shall remain provide access to the public and be in private ownership by the relevant body corporate and appropriately maintained.</p>	<p>Noted.</p>
<p>15B Foreshore Link Easement for Public Access</p> <p>Prior to the issue of an Occupation Certificate for Stage 2 an easement shall be registered over the foreshore link, which is located between Stage 1 and Stage 2 (in favour of Council) providing for public access. The terms of the easement are to be approved by Council.</p>	<p>Noted.</p>
<p>16 Open Space/Public Access</p> <p>Future DAs shall include detailed landscape plans which demonstrate accessible paths of travel for all persons for at least two of the north-south routes between Constitution Road and the Foreshore with one of the routes including the Lower Riparian linear park and a second path either along the Central Spine or the public pathway associated with Stage 1. Landscape plans will</p>	<p>Detailed Landscape Plans have been prepared by Place (Appendix 7) and reflects these requirements.</p>



<p>also include the detailed design of at least 1 north-south cycle path linking Constitution Road through the site to the existing foreshore cycleway.</p>	
<p><b>17 Open Space/Public Access</b></p> <p>Future DAs shall clearly set an appropriate legal mechanism for creating rights of public access to all publicly accessible areas of open space, drainage reserves and through site links, with the relevant instrument/s to be executed prior to the issue of the occupation certificate.</p>	<p>It is envisaged that the public rights of access will be created through dedicated easements across any publically accessible open space, drainage reserves and through site links.</p> <p>In accordance with the requirements of this condition, details of the easements will be provided and executed prior to the issue of the Occupation Certificate.</p>
<p><b>18 Community Facilities</b></p> <p>Any future DA/s for the 1,000th dwelling shall include, at no cost to Council, the delivery of an appropriate community space within the development, which can be used by Council or members of the community for community purposes and related uses.</p> <p>The community floorspace must be a minimum of 1,000m<sup>2</sup> in area and be primarily located on ground level. The configuration of floorspace should be designed in consultation with Council or Council nominated community organisation(s).</p> <p>The primary use of the designated community floor space must be for community uses. A range of other activities, such as private functions, community markets and garage sales, may be undertaken within the community facility provided that they are subsidiary to the core community function.</p> <p>The designated community floor space must not be used for any other commercial, retail or residential use unless Council decides not to accept the designed floorspace.</p> <p>The provision of community floorspace is in addition to Council's Section 94 Contributions for future development.</p> <p>The facility to be delivered is to be located around the contiguous central public open space in either Stage 2 or 3.</p>	<p>Not relevant to this application.</p>
<p><b>19 Public Art</b></p> <p>Future DAs shall provide the detailed design of public art in locations throughout open space areas generally in accordance with the Public Art Strategy submitted with</p>	<p>A Public Art Plan, prepared by Black Beetle, has been prepared in support of the DA.</p> <p>Refer to Appendix 8 for further</p>

<p>the PPR.</p>	<p>information.</p>
<p>20 Public Art</p> <p>Future DA/s for Stage 2 shall include a Arts and Cultural Plan developed by a professional public artist including consideration of:</p> <p>materials to be used, with particular attention to durability;</p> <p>location and dimension of artwork;</p> <p>public art themes to respond to site history and or social, cultural or natural elements;</p> <p>integration into the site and surrounds;</p> <p>budget and funding; and</p> <p>Council's Public Art Guide for Developers.</p>	<p>A Public Art Plan, prepared by Black Beetle, has been prepared in support of the DA and address this condition</p> <p>Refer to Appendix 8 for further information.</p>
<p>21 SEPP 65 and RFDC</p> <p>Future DAs shall demonstrate compliance with the provisions of the State Environmental Planning Policy 65 – Design Quality of Residential Flat Development (SEPP 65) and the accompanying Residential Flat Design Code 2002 (RFDC), except where modified below:</p> <p>In particular, future application/s shall demonstrate that:</p> <p>a minimum of 60% of apartments within each stage are capable of being cross ventilated; and</p> <p>a minimum of 70% of apartments within each stage receive a minimum of 2 hours solar access to living areas and balconies mid winter; and</p> <p>where less than 70% of apartments achieve 2 hours of solar access in mid winter, these apartments (beyond the first 30%) shall be designed to provide improved amenity by:</p> <p>including extensive glazing (minimum 70% of the external façade) to living rooms;</p> <p>permitting cross-ventilation specifically to those apartments; and</p> <p>exceeding RFDC guidelines by at least 20% in both of the following areas:</p>	<p>An assessment of the proposal against both SEPP 65 and the RFDC has been undertaken by R+M as part of their Design Report.</p> <p>Refer to Appendix 3 for further information.</p> <p>In addition, a Solar Access Report has been prepared by Windtech (refer Appendix 4). This concludes that less than 70% of apartments within Stages 2 and 3 receive a minimum of 70% solar access during midwinter.</p> <p>In accordance with the requirements of Condition 21, and in conjunction with the Natural Ventilation Preliminary Assessment also prepared by Windtech, R+M has provided a set of 'Amenity Plans' as part of their architectural plan set. These plans (ref DA-23-801 - 8/A) detail those units that benefit from the increased amenity levels.</p> <p>With reference to these submitted plans and documentation, we are advised that the requirements of Condition 21 have been satisfied within the submitted DA.</p>

<p>increased floor to ceiling height; and</p> <p>increased minimum apartment areas, being greater than 50sqm for 1 bedroom, 70sqm for 2 bedroom and 95sqm for 3 bedroom apartments.</p> <p>a minimum of 25% of open space area of the site is deep soil zone.</p> <p>the proposed landscape areas provide sufficient deep soil in accordance with the RFDC.</p>	
<p>22 ESD</p> <p>Future Development Applications shall demonstrate the incorporation of ESD principles in the design, construction and ongoing operation phases of the development, in accordance with the base targets within ESD Guidelines Report prepared by Ecospecifier Consulting dated October 2010. Where no base target is provided within this report, the development should strive to achieve the stretch target (where relevant and feasible).</p> <p>In accordance with the EnviroDevelopment philosophy, four of the categories will be targeted to show 'industry best practice'. Where the categories of water and energy are applied, BASIX will be used to test 'industry best practice' for water and energy, which will be treated as 10% better than the BASIX pass mark.</p>	<p>An ESD letter has been submitted in support of the DA. Prepared by Integreco, this letter is in response to Condition 22 (refer Appendix 18)</p> <p>This advice states that the proposed project will commit to achieve include:</p> <p><i>"1. Energy scores (measured by BASIX) which, on average, exceed the targets by over 10%.</i></p> <p><i>2. Water scores (measured by BASIX) which exceed the targets by just under 10%.</i></p> <p><i>3. Innovation – achieved by using the first ever Australian incorporation of the CT2000 car charging technology, in a residential context.</i></p> <p><i>4. Waste Category – contractors will be required by Holdmark to meet the base waste targets in the ESD Masterplan Report ("101117 Shepherds Bay Meadowbank - ESD Report"). "</i></p> <p>Refer to the ESD Report at Appendix 18 for further information.</p>
<p>23 Car Parking</p> <p>Future DAs shall provide on-site car parking in accordance with Council's relevant Development Control Plan, up to a maximum of 2,976 spaces across the Concept Plan site.</p> <p>Future Development Applications shall provide:</p> <p>a car parking rate which relates to the site-wide car parking provision and demonstrates that car parking may</p>	<p>In support of the application, an Internal Traffic Assessment has been prepared by Thompson Stanbury Associates. Section 4 of this Report provides an assessment of the proposed car parking.</p> <p>As detailed within this Report, the subject development is required to provide between 360 and 547 resident parking spaces and 103 visitor parking</p>

<p>be provided for future stages within the total car parking figure of 2,976; and</p> <p>a projected car parking forecast for each remaining stage demonstrating that the total car parking provision can be adhered to.</p> <p>Provision shall also be made for adequate loading and unloading facilities for service vehicles, suitably sized and design for the proposed use.</p>	<p>spaces. With reference to the submitted plans, the proposal will provide 621 spaces in total, split between 517 resident and 104 visitor parking spaces. The Report therefore concludes that the proposed parking is suitably compliant with Council's DCP.</p> <p>Refer to the Internal Traffic Assessment at Appendix 10 for further information.</p>
<p>24 Nancarrow Road Extension and Road Reserve Upgrades</p> <p>Future DA/s for Stage 4 shall include the following infrastructure works:</p> <p>a) Nancarrow Avenue extension;</p> <p>b) Nancarrow Avenue Local Area Traffic Management (LATM) measures and all road reserve upgrades including associated pedestrian footpaths and cycleways;</p> <p>c) implementation of left-in/left-out arrangement at Belmore Street/Hamilton Crescent intersection.</p> <p>The detailed design is to be prepared by a suitably qualified engineer in accordance with Council's requirements and to be approved by Council before the issue of the first Occupation Certificate for Stage 1. All works are to be completed by the proponent prior to the issue of the occupation certificate for Stage 4.</p>	<p>We are advised that a detailed design for the Nancarrow Road extension was submitted to Council in November 2014.</p> <p>In terms of b), the submitted landscape plans, overlaid with architectural plans at ground level, show pedestrian footpaths and cycleways.</p> <p>In terms of c), the left in, left out arrangement is shown on the already submitted plans as well as the submitted landscape plans.</p>
<p>24A Road and Pedestrian Infrastructure Upgrades</p> <p>Future Development Application/s for Stage 2 shall include the following Infrastructure works:</p> <p>installation of a temporary east/west pedestrian link, which connects the stairway at the northern end of the foreshore link between Stages 1 and 2 to Nancarrow Avenue along the northern boundary of Stage 2. The pedestrian link shall provide access to the public on a 24 hour basis and maintained until the provision of the Nancarrow Avenue extension.</p> <p>Underdale Lane Local Area Traffic Management (LATM) measures;</p> <p>installation of a pedestrian crossing facility at Bowden</p>	<p>Not relevant to this DA.</p>

<p>Street / Nancarrow Avenue; and</p> <p>installation of roundabout at Belmore Street / Rothesay Avenue.</p> <p>The detailed design is to be prepared by a suitably qualified engineer in accordance with Council's requirements and to be submitted to Council's for approval before the lodgement of any future development application for Stage 2. All works must be completed by the proponent prior to the issue of the occupation certificate for Stage 2.</p>	
<p>25 Yerong Street / Belmore Street Intersection Upgrade</p> <p>Future DA/s for the stage of development containing the 800th dwelling shall provide the detailed design for the implementation of left-in/left-out arrangement at Belmore Street/Yerong Street intersection. The works are to be completed prior to issue of the first occupation certificate of any building of this stage.</p>	<p>The proposal is for 511 dwellings. The cumulative dwelling count, including 246 dwellings approved in the Stage 1 Project Approval MP09_0219, and 453 dwellings as proposed as part of Stages 2 and 3 is 1210 dwellings.</p> <p>The maximum number of dwellings will be satisfied.</p>
<p>26 Roads and Maritime Services Requirements</p> <p>Future DA/s for each stage of development following the first two stages shall include a traffic study which includes figures on the current number of vehicles and pedestrians at the Railway Road pedestrian crossing at Meadowbank Station and at the Constitution Road / Bowden Street intersection. The traffic study is to be carried out to the RMS's and Council's satisfaction and shall model the impact of the anticipated increase in vehicle and pedestrian traffic for that stage. Where the study reveals that RMS warrants would be met for the provision of signalisation at either of these locations, concept design of the upgrade of the intersection to Council's and RMS's satisfaction is to be included with the DA and the works are to be completed by the proponent prior to the issue of first occupation certificate of any building of that stage.</p>	<p>Refer Infrastructure Assessment Report at Appendix 12</p>
<p>27 Roads and Maritime Services Requirements</p> <p>Future application/s for Stage A shall demonstrate that the RMS requirements have been met in relation to access to RMS infrastructure on the adjoining land, including retention of existing access, parking and turning area for maintenance vehicles.</p>	<p>Not relevant to this proposal.</p>
<p>28 Site Specific Sustainable Travel Plan</p> <p>Future DAs for each stage shall include a site specific</p>	<p>A Travel Plan for a Sustainable Future has been prepared in support of the DA by Road Delay Solutions and addresses</p>

<p>sustainable travel plan incorporating a workplace travel plan and/or travel access guide. The travel plan will be in accordance with the Concept Plan Sustainable Travel Plan required by Modification B2.</p>	<p>this condition</p> <p>Refer to Appendix 11 for further information.</p>
<p>29 Heritage</p> <p>Future DA/s for Stage 6 involving the demolition of the existing heritage item at 37 Nancarrow Avenue shall include:</p> <p>a detailed heritage assessment of the site which includes a professionally written history of the site;</p> <p>a full photographic record; and</p> <p>(c) an interpretation strategy to display the heritage values of the existing building on the newly developed site.</p>	<p>Not relevant to this proposal.</p>
<p>30 Heritage</p> <p>Future DA/s for Stage A shall include a Statement of Heritage Impact providing an assessment of the impact of the development on the adjoining heritage listed Church Street Bridge. Applications are to demonstrate that the design of the building takes into account relevant recommendations of the heritage assessment.</p>	<p>Not relevant to this proposal.</p>
<p>31 Section 94 Contributions</p> <p>Future DAs shall be required to pay developer contributions to the Council towards the provision or improvement of public amenities and services. The amount of the contribution shall be determined by Council in accordance with the requirements of the Contributions Plan current at the time of approval.</p>	<p>Noted.</p>
<p>32 Noise and Vibration</p> <p>Future DA/s for Stage A shall provide an acoustic assessment which demonstrates that the internal residential amenity of the proposed apartments is not unduly affected by the noise and vibration impacts from Church Street, to comply with the requirements of Clause 102 of State Environmental Planning Policy (Infrastructure) 2007 and the Department of Planning's 'Development Near Rail Corridors and Busy Roads – Interim Guidelines'.</p>	<p>Not relevant to this proposal.</p>
<p>33 Adaptable Housing</p> <p>Future DAs shall provide a minimum of 10% of</p>	<p>Australian Standard 4229-1995 requires the provision of 10% adaptable units. The application is accompanied by an</p>

<p>apartments as adaptable housing in accordance with Australian Standard 4229-1995.</p>	<p>Access Report prepared by Design Confidence (refer Appendix 13). This report advises that 52 adaptable units are required within the development. As the submitted plans demonstrate, the proposal will meet this requirement.</p>
<p><b>34 Stormwater Infrastructure Upgrades</b></p> <p>Future DAs for Stage 6, 7, 8 or 9 (whichever occurs first) shall provide the detailed design of the following infrastructure works:</p> <p>the piped drainage system and overland flow path from Ann Thorn Park to Parramatta River; and</p> <p>works to eliminate the risk of embankment failure of Constitution Road.</p> <p>The works will be required to be completed by the proponent prior to construction commencing for any residential buildings within these stages.</p>	<p>Not relevant to this proposal.</p>
<p><b>35 Flooding and Stormwater</b></p> <p>Future DAs for each stage of the development shall include flood assessments to determine the minimum floor levels, any required mitigation measures and evacuation strategy required.</p>	<p>A Flood Assessment has been prepared in support of the application by BG&amp;E (refer Appendix 25). This Report assesses the siting and levels of the driveways, concluding that:</p> <p><i>" Stages 1 to 5 of the proposed development comply with Councils requirements for floodplain risk management."</i></p>
<p><b>36 Flooding and Stormwater</b></p> <p>Future DAs for each stage of the development shall include a Stormwater Management Plan in accordance with Council's requirements.</p>	<p>The subject application is accompanied by a concept stormwater plan prepared by Harris Page &amp; Associates including OSD details to address Council's stormwater management requirements and addresses this condition</p>
<p><b>37 Sydney Water Requirements</b></p> <p>Future DAs shall address Sydney Water's requirements in relation to:</p> <p>required amplification works to existing drinking water mains;</p> <p>required amplification works to the wastewater system;</p> <p>approval for discharge of trade wastewater (where necessary); and</p>	<p>Greg Houston Plumbing has prepared a letter in response to this Condition. This letter can be found at Appendix 9.</p>

application for Section 73 certificates as necessary.	
<p>38 Contamination, Acid Sulphate Soils and Salinity</p> <p>Future DAs shall include a detailed contamination assessment (involving sampling and testing of soil) including an assessment of the presence of acid sulphate soils and salinity.</p>	Addressed in the accompanying RAP (Appendix 22).
<p>39 Contamination, Acid Sulphate Soils and Salinity</p> <p>A groundwater assessment (involving sampling and testing of groundwater) shall be undertaken across the entire Concept Plan prior to the first DA being lodged for Stage 2 or any other stage of the development.</p>	Addressed in the accompanying RAP (Appendix 22).
<p>40 Contamination, Acid Sulphate Soils and Salinity</p> <p>Future DAs where necessary shall include a targeted groundwater assessment for the specific stage (based on the recommendations of the groundwater assessment undertaken for the entire Concept Plan).</p>	Addressed in the accompanying RAP (Appendix 22).

### Consistency with the Shepherds Bay Concept Approval MP09\_0216 Mod 1

#### Statement of Commitments dated March 2014

Commitment	Comment
<p>1 Staging of Development and Occupation</p> <p>The development is to be constructed in ten indicative stages as illustrated in Appendix 1 of MP09_0216 Mod 1.</p> <p>An updated Development Staging Plan will be submitted with each subsequent Project Application.</p>	The staging plan as approved is still relevant.
<p>2 Approval Conditions</p> <p>The proponent will ensure that all relevant parties engaged to carry out work are aware of and will comply with relevant conditions of consent issued under Concept Approval MP09_0216 (as amended).</p>	Noted.
<p>3 Accessibility</p> <p>The proponent commits to providing access to and within buildings within the Concept Plan site in</p>	Accompanying the application is a BCA Report prepared by Vic Lilli, an Adaptable housing Report and an Access Review report prepared by Accessibility Solutions



<p>accordance with the Building Code of Australia. Where topography permits, publicly accessible open spaces within the Concept Plan are to be designed to provide appropriate access to people of all mobility levels.</p>	<p>at Appendices 13, 14 and 15.</p> <p>All reports set out various detailed design recommendations to ensure the building meets applicable access codes and legislation.</p> <p>it is considered that these recommendations are of a minor nature, and it would be reasonable for those outcomes to be ensured by means of suitable conditions within any Notice of Determination requiring compliance to be demonstrated with any Construction Certificate.</p>
<p><b>4 Landscaping</b></p> <p>Prior to commencement of construction of Project or Development Applications within the Concept Plan site detailed documentation and specifications will to be prepared for all landscape works and public space improvements.</p> <p>The landscaping is to be designed so that the view corridors identified on the Concept Plan are maintained.</p>	<p>A detailed Landscape and Public Domain Plan has been prepared by Place Design.</p> <p>Refer to Appendix 7 for further information.</p>
<p><b>5 Community Benefits</b></p> <p>The proponent will enter into discussions with the City of Ryde Council to establish a Voluntary Planning Agreement.</p>	<p>Council has indicated through its letter to the proponent dated 2/12/13 that it did not wish to enter into a VPA (refer Appendix 27).</p>
<p><b>6 Housing Choice</b></p> <p>A mix of apartment sizes will be provided including one bedroom units. The increased housing supply in the area and proposed apartment mix will increase housing choice and ease affordable housing issues in the area. The opportunity for locals to “downsize” together with the additional availability will promote affordability.</p>	<p>Satisfied.</p>
<p><b>7 Adaptable Housing</b></p> <p>The proponent commits to approximately 10% of apartments within the Concept Plan site being designed to be accessible. Pathways from development to communal areas and car parking will also to be designed to be accessible.</p>	<p>The accessibility report accompanying this DA demonstrates compliance.</p>

<p>8 Road verges and footpaths</p> <p>The proponent commits to providing and/or upgrading road verges and footpaths prior to the issue of the relevant occupation certificate for each Stage.</p>	<p>Satisfied.</p>
<p>PUBLICLY ACCESSIBLE OPEN SPACES</p>	
<p>9 The proponent commits to providing a total of 18,304 square metres of publicly accessible public domain with the Concept Plan site that will be owned and maintained by the various Owners' Corporations. These areas will include four new publicly accessible open spaces, landscaped pedestrian connections and landscaped overland flow paths which will be owned and maintained by the relevant Owners Corporations. These will include:</p>	<p>Satisfied.</p>
<ol style="list-style-type: none"> <li>1. New Foreshore Link publicly accessible open space (Development Stage 2)</li> <li>2. New Upper Level Public Square (Development Stage 2, 3 &amp; 5)</li> <li>3. New Central Spine (Development Stage 3)</li> <li>4. New Central Foreshore Plaza (Development Stage 3)</li> <li>5. New upper eastern pedestrian link (Development Stages 4 &amp; 5)</li> <li>6. New Pedestrian Spine 2 publicly accessible open space (Development Stage 6)</li> <li>7. New Upper Riparian Foreshore Link publicly accessible open space (Development Stages 6 &amp; 7)</li> <li>8. New Lower Riparian Foreshore Link publicly accessible open space (Development Stages 8 &amp; 9)</li> <li>9. New Pedestrian Spine 1 South publicly accessible open space (Development Stage 8)</li> <li>10. Gateway Building Central Plaza and pedestrian link (Development Stage A)</li> </ol>	<p>Points 2 and 5 only are relevant to this DA and are detailed on the Landscape &amp; Public Domain Plans prepared by Place Design (Appendix 7).</p>
<p>10 The following are to accompany all project or development applications within the concept plan site:</p> <p>A detailed landscape plan demonstrating the</p>	<p>A detailed landscape package has been prepared by Place Design and has been submitted in support of the DA (refer Appendix 7).</p>

<p>proposed landscape scheme is consistent with the landscape concept report prepared by PLACE Design Group.</p>	<p>It is considered that the landscaping proposed within is consistent with the landscape concept plans as approved by the Concept Plan.</p>
<p>11 ROAD WORKS</p>	
<ol style="list-style-type: none"> <li>1. Pedestrian signals replacing zebra crossing on Railway Road at Meadowbank railway station</li> <li>2. Signalling at Bowden Street and Constitution Road</li> <li>3. Roundabout at Rothesay Avenue/Belmore Street</li> <li>4. Yerong Street and Belmore Street left in/out</li> <li>5. Hamilton "Lane" and Nancarrow "Lane" LATM and two-way construction between Belmore and Bowden</li> <li>6. Underdale Lane LATM scheme</li> <li>7. Hamilton Lane/Belmore Street left in/out</li> <li>8. Introduction of a pedestrian facility on Bowden Street at Underdale Lane</li> <li>9. Lowering of Constitution Road</li> <li>10. Re-grading works associated with the construction of the new Nancarrow Avenue Link Road</li> </ol>	<p>An Infrastructure Requirements Report has been prepared by Road Delay Solutions and is submitted with the DA.</p> <p>Page 9 of this Report sets out the various upgrading work that is required as part of this application.</p> <p>Refer to Appendix 10 for further information.</p>
<p>12 Land to be Dedicated</p> <p>Land comprising the two-way road link to be constructed between Belmore and Bowden Streets, being the connection of Nancarrow Avenue to Hamilton Crescent to be dedicated to Council. This requires the dedication by the proponent an area of land of approximately 325m<sup>2</sup> to the council.</p>	<p>As detailed in the submitted plans, sufficient space has been allowed for this dedication.</p>
<p>13 Tree Management</p> <p>Tree protection measures will be implemented for trees to be retained as recommended in the Arborist Report at Annexure 23 to the submitted EA.</p>	<p>As part of the modified Concept Approval, a Concept Landscape Plan prepared by Place Design was approved.</p> <p>This approved plan proposed the removal of all trees from the site.</p>
<p>14 Crime Prevention Through Environmental Design</p> <p>The design of the public domain, landscaping and building design facilitates the achievement of CPTED principles. Prior to commencement of construction of any subsequent Project Applications CPTED</p>	<p>Refer to discussions in Section 7.7.2 of the SEE.</p>

<p>Assessments will be provided.</p> <p>Planting near footpaths will need to be maintained on a regular basis to avoid concealment opportunities for criminals who may hide in dense shrubbery.</p>	
<p>15 Environmentally Sustainable Development</p> <p>All Residential development within the Concept Plan site will meet the following Sustainability targets:</p> <p>The BASIX water consumption benchmark</p> <p>The BASIX energy consumption benchmark</p> <p>In addition, the proponent commits to further investigate the opportunity for including the following ESD principles:</p> <p>Design internal apartment layouts to maximise natural ventilation and to capture prevailing winds;</p> <p>Utilise roof forms to capture natural light and ventilation;</p> <p>Use of high thermal mass materials within apartments;</p> <p>Ensure natural light and ventilation is provided to common areas to minimise energy consumption;</p> <p>Divide the layout of the apartments into zones to reduce heat and cooling energy consumption;</p> <p>Utilise low water flow fixtures and tap ware;</p> <p>Harvesting of stormwater where feasible; and</p> <p>Recycling of water where feasible.</p>	<p>A BASIX Assessment has been prepared by Integreco Consulting.</p> <p>In addition, an ESD letter has been submitted in support of the DA. This letter is in response to Condition 22 of the Concept Modification (refer Appendix 17 and 18).</p> <p>This advice states that the proposed project will commit to achieve include:</p> <p><i>"1. Energy scores (measured by BASIX) which, on average, exceed the targets by over 10%.</i></p> <p><i>2. Water scores (measured by BASIX) which exceed the targets by just under 10%.</i></p> <p><i>3. Innovation – achieved by using the first ever Australian incorporation of the CT2000 car charging technology, in a residential context.</i></p> <p><i>4. Waste Category – contractors will be required by Holdmark to meet the base waste targets in the ESD Masterplan Report ("101117 Shepherds Bay Meadowbank - ESD Report"). "</i></p> <p>Refer to the ESD Report at Appendix 18 for further information.</p>
<p>16 Stormwater Management</p> <p>The Proponent is committed to providing the necessary stormwater upgrades, the details of which will be included in the final VPA when negotiated with Council.</p> <p>Prior to commencement of construction of all Project or Development Applications within the Concept Plan site the Proponent commits to preparation of an Integrated Stormwater Management Plan for the</p>	<p>Stormwater plans have been prepared by Harris Page, and are submitted with the DA.</p> <p>Note there is no VPA for this development.</p>

relevant development stage.	
<p>17 Noise</p> <p>All Project or Development Applications within the Concept Plan site for all development Stages are to comply with the relevant acoustic standards and controls contained in the BCA.</p>	<p>An Acoustic Report has been prepared by DK Acoustics in support of the DA and addressing this condition.</p> <p>Refer to Appendix 19 for further information.</p>
<p>18 Site Contamination</p> <p>All Project or Development Applications within the Concept Plan site for all development stages will be required to comply with the requirements of SEPP 55 Remediation of Land.</p>	<p>As detailed at Section 4.2 of the SEE, the Concept Application was supported by a Preliminary Screening Contamination Assessment and a Preliminary Geotechnical and Groundwater to assess the likelihood and/or extent of potential soil and groundwater contamination, which may have resulted from past and present uses on or adjacent to the site.</p> <p>These reports did not raise significant concern with regard to the proposed works and residential use on this site.</p> <p>Further detailed assessment of the soil and groundwater conditions of the site was then undertaken by Environmental Investigations with the results provided in the Contaminated Land Report (RAP) provided at <b>Appendix 22</b>.</p> <p>In summary, subject to the removal of localised contaminated soils, (which would largely be removed in place of excavated basements), and other recommendations made by Environmental Investigations, the site is considered to be suited to the proposed development and thereby satisfies the provisions of SEPP 55.</p>
<p>19 Construction Management</p> <p>Prior to commencement of construction of all Project or Development Applications within the Concept Plan site a Construction Management Plan will be prepared by the proponent for each development stage and will be submitted to the satisfaction of the Principal Certifying Authority prior to any new building work within the Concept Plan site.</p> <p>All construction materials, vehicles, waste and the like will be stored within the site.</p> <p>All demolition and all construction and associated</p>	<p>In accordance with this condition a conceptual Construction Management Plan has been prepared in support of the application by Upright Builders (refer Appendix 21).</p> <p>This sets out the broad details of the construction methodology, construction traffic arrangements and construction waste management measures which will form the framework of the detailed CMP to be submitted to the PCA prior to any work commencing on the site, and in accordance</p>

<p>work will be restricted to between the hours of 7.00am and 7.00pm Monday to Friday (other than public holidays) and between 8.00am and 4.00pm on Saturday. No work is to be carried out on Sunday or public holidays.</p> <p>Prior to commencement of construction of all Project or Development Applications within the Concept Plan site a Traffic Management Plan (TMP) for the relevant development stage, which addresses construction access and egress to the site, including vehicle routes and parking for workers, staging and timing of construction of internal road network and other relevant issues, will be prepared and submitted to the satisfaction of Principal Certifying Authority. The TMP will be prepared in accordance with the RTA's guidance on TMP's.</p>	<p>with this Condition.</p> <p>Refer to Appendix 21 for further information.</p>
<p>20 Utilities</p> <p>A Section 73 Certificate from Sydney Water will be obtained as required.</p> <p>All existing aerial services (including low voltage Energy Australia electricity and subscriber television services) along the frontage of the Concept Plan Site are to be relocated underground prior to the occupation of the development stages. The cost of this work is to be borne by the developer.</p>	<p>Greg Houston Plumbing (GHP) has been appointed by Holdmark as Water Services Coordinator.</p> <p>As such, Appendix 9 provides a letter from GHP confirming that they will be lodging applications to Sydney Water for all Section 73 Certificate releases.</p> <p>It is considered that the DA submission satisfies this element of the Concept Approval (as modified).</p> <p>R+M has confirmed that all existing aerial services along the frontage of the Concept Plan site will be relocated underground.</p>
<p>21 Arborist Report</p> <p>All subsequent development stages will be required to comply with the requirements of the Arborist Report (Annexure 23 to the submitted Environmental Assessment).</p>	<p>The Concept Plan Modification approved the removal of all trees from the site (refer to the approved landscape plan prepared by Place Design).</p>
<p>22 Environmental Management Plan</p> <p>Prior to commencement of construction of Project or Development Applications within the Concept Plan site, a development Stage-specific Environmental Management Plan (EMP) will be prepared and submitted to and approved by the Principal Certifying Authority. The EMP will comprise:</p> <p>a. Hours of construction work;</p>	<p>In accordance with this condition, a detailed Environmental Management Plan will be prepared prior to construction.</p> <p>However, and notwithstanding this, a conceptual Construction Management Plan has been prepared in support of the application by Upright Builders (refer Appendix 21).</p> <p>This sets out the broad details of the</p>

<ul style="list-style-type: none"> <li>b. Sediment and Erosion Control;</li> <li>c. Waste Management;</li> <li>d. Noise and Vibration Management;</li> <li>e. Air Quality and dust control;</li> <li>f. Use of cranes, plant and machinery</li> <li>g. Use of ladders, tapes, scaffolding and plant /machinery of conductive material</li> <li>h. Excavation and boring</li> <li>i. Plant and vehicle movements including - ingress and egress of vehicles to the site, loading and unloading, including construction zones, transportation of material, including contaminated material, predicted traffic volumes, types and routes;</li> <li>j. TMP;</li> <li>k. Piling, sheet piling, batter and anchors.</li> </ul>	<p>construction methodology, construction traffic arrangements and construction waste management measures which will form the framework of the EMP.</p> <p>Refer to Appendix 21 for further information.</p>
<p>23 Flooding</p> <p>All Development or Project Applications for individual development stages within the Concept Plan site are to be accompanied by a detailed Flood Impact Assessment Report using the Concept Plan Flood Study Report findings. These studies are to include such safety management measures as safe flood evacuation routes and refuge areas.</p>	<p>A Flood Assessment has been prepared in support of the application by BG&amp;E (refer Appendix 25).</p> <p>This Report assesses the siting and levels of the driveways, concluding that:</p> <p style="text-align: center;"><i>" Stages 1 to 5 of the proposed development comply with Councils requirements for floodplain risk management."</i></p> <p>Refer to Appendix 25 for further information.</p>
<p>24 Waste Management</p> <p>Prior to commencement of construction of all Project or Development Applications within the Concept Plan site, a Waste Management Plan will be prepared for the relevant development stage which includes demonstration of the fact that the road network is capable of being serviced by Council's Waste vehicles.</p>	<p>Waste Management Plans (WMP) relating to construction and operational phases of the development have been prepared in support of the DA and addressing this condition..</p> <p>Refer to Appendix 21 for the WMP in relation to the construction phase prepared by Bingo, and Appendix 20 for the WMP in relation to the construction phase, prepared by Elephants Foot.</p>
<p>25 Sustainable Travel Plan</p>	<p>A Travel Plan for a Sustainable Future has been prepared in support of the DA by</p>

<p>Prior to issue of Occupation Certificates for any habitable areas in any development within the Concept Plan site a Sustainable Travel Plan for the Concept Plan site will be submitted to and approved by the Department of Planning. Individual Project or Development Applications will be accompanied by Development stage - specific Sustainable Travel Plans that are consistent with the Concept Plan Sustainable Travel Plan.</p>	<p>Road Delay Solutions addressing this condition</p> <p>Refer to Appendix 11 for further information.</p>
<p>26 Ground water</p> <p>As required by the NSW Office of Water:</p> <p>Groundwater:</p> <p>Licences under Part V of the Water Act 1912 are required for the works for the purposes of temporary dewatering as part of the proposed construction.</p> <p>General and Administrative Issues</p> <p>Specific Conditions Formal Application Issues</p>	<p>Appropriate licenses from the NSW Office of Water will be obtained prior to the relevant Construction Certificate being issued.</p>



## Appendix 2

### DA for Stages 4&5

#### Consistency with the Ryde Development Control Plan

Ryde DCP Control	Comment
<b>Part 4.2 Shepherds Bay - Waterfront Precinct</b>	
<b>4.1 Development and the Public Domain</b>	
<b>1. Mixed Use Development</b>	
a. & b. Residential development with compatible employment related activity.	The proposal seeks approval for residential uses as approved as part of the original Concept Approval (as modified)
c. Home office accommodation is allowed throughout the area.	The proposal does not seek approval for any home accommodation uses.
d. Retail developments, restaurants and cafés are to be generally located at street level.	The proposal does not include any non residential uses.
e. Commercial uses are encouraged at the level immediately above street level	The proposal does not include any commercial uses.
f. Ground floor apartments are to be of flexible design to facilitate change of use and ensure privacy for occupants.	As detailed on the submitted architectural plans, those units that are located at ground floor, have been designed to ensure privacy for occupants.  Measures adopted to ensure privacy for these units include the provision of landscaping between courtyards and public footpaths, as well as operable privacy screens.
g. Where upper levels of development are used for either commercial or residential activity, the amenity of both uses must not conflict or be compromised by other uses in the development.	The proposal does not seek approval for any commercial uses at the upper levels.
h. Private living spaces and communal or public spaces should be clearly identified and defined.	The architectural plans prepared by R+M and submitted with the DA clearly delineate between private living spaces and communal/public spaces where appropriate.
i. Pedestrian entry to the residential control of mixed-use developments should be i. separated from entry to other land uses in the building(s); and ii. have a	Given that both buildings are almost exclusively residentially based, all entrances will be for the exclusive use of the residential tenants of the

clear address and presentation to the street.	buildings.
j. Active streetscapes will be encouraged by the use of outdoor restaurant seating, whether on private or public land. Refer to Council's Outdoor Dining Policy.	The proposal does not include any non residential uses.
<b>2. Public Domain, Access and Pedestrian/Cyclist Amenity</b>	
a. The achievement of maximum heights and density is contingent on meeting the public domain provisions of this plan and all public domain items being provided by the proponent.	As detailed elsewhere in this report, the Concept Approval established the maximum height of the proposal.  However, and notwithstanding this, the proposal seeks to provide extensive public domain areas across the site. Refer to the Landscape Plans prepared by Place Design at Appendix 7 for further information.
b. New developments must be provided with a minimum of one barrier free access point to the main entry.	An Accessibility Report has been prepared in support of the DA (refer Appendix 13) which addresses this requirement.
c. Publicly accessible pedestrian and cycle ways must be provided through large sites. (even if not envisioned by this plan) (refer to Figure 4.2.03)	As the submitted plans detail, the proposal involves publicly accessible routes through the site.
d. New pedestrian and cycleway access points, gradients and linkages are to be designed to be fully accessible by all.	Refer to the submitted Accessibility Report at Appendix 13.
e. New commercial development should provide facilities, including showers, bike lockers etc, to encourage walking and cycling to work – refer to Part 9.3 - Parking.	The proposal is largely residentially based.
f. New roads, shared ways, pedestrian and cycle paths shall be provided in accordance with Figure 4.2.03.	The proposal seeks to provide extensive public domain areas across the site. Refer to the Landscape Plans prepared by Place Design at Appendix 7 for further information.
h. The design of new roads, shared ways footpaths and cycle paths shall be in accordance with Figure 4.2.03 to 4.2.07.	Refer above.
i. Shared pedestrian links, cycle ways, public roads and lanes are to be of a high standard and treated in a way which indicates their shared status. The selection of paving, street furniture,	Where shared links are to be provided, we understand that these have been provided in accordance with the requirements of the Technical Manual.

<p>lighting, bollards, signage and paving should compliment the existing upgrade works to Shepherds Bay (refer to the Ryde Public Domain Technical Manual).</p>	
<p>j. The design and location of vehicle access to developments should minimise conflicts between pedestrian and vehicles on footpaths, particularly along high volume pedestrian streets.</p>	<p>As part of the recent modification to the Concept Approval, permission was granted to amalgamate the basements for Stages 4 and 5. As such, only one basement is proposed for both buildings.</p> <p>As the plans submitted with the DA demonstrate, vehicular access to the basement level is to be provided via two driveways connecting with Nancarrow Avenue to the south-eastern and south western corners of the site.</p> <p>To address Council's requirements, an Internal Traffic Assessment has been prepared by Thompson Stanbury Associates (refer Appendix 10).</p> <p>This Report assesses the proposed access arrangements against the relevant Australian Standards, being AS2890.1-2004 concluding that whilst the proposed arrangement therefore constitutes a variance with respect to the Australian Standard, the driveway designs are considered satisfactory.</p> <p>Refer to Section 3 of the Internal Traffic Assessment for further information.</p>
<p>k. Service vehicle access is to be combined with parking access and limited to a maximum of one access point per building.</p>	<p>Refer to the waste management plan prepared by Elephant's Foot at Appendix 20.</p>
<p>l. Wherever practicable, vehicle access is to be a single crossing, perpendicular to the kerb alignment.</p>	<p>As the plans submitted with the DA demonstrate, vehicular access to the basement level is to be provided via two driveways connecting with Nancarrow Avenue to the south-eastern and south western corners of the site.</p> <p>To address Council's requirements, an Internal Traffic Assessment has been prepared by Thompson Stanbury Associates (refer Appendix 10).</p> <p>This Report assesses the proposed access arrangements against the relevant Australian Standards, being AS2890.1-2004 concluding that whilst the proposed arrangement therefore constitutes a variance with respect to the Australian Standard, the driveway designs are considered satisfactory.</p> <p>Refer to Section 3 of the Internal Traffic Assessment</p>

	for further information.
<p>n. Vehicle entries are to have high quality finishes to walls and ceiling as well as high standard detailing.</p> <p>No service ducts or pipes are to be visible from the street.</p>	The vehicular entry screened with a high quality recycled timber awning, clad with a sandstone finish and landscaped along the edges.
<p>o. The ground floor of all development is to be flush with the street footpath for the predominant level of the street frontage and at the main entry to the building.</p>	The footprint of the proposed buildings has been established through the Concept Approval. The proposal has been designed in accordance with the Concept Approval.
<p>p. Recesses for roller doors and fire escapes are to be wide and shallow to provide for personal security. Narrow, deep recesses are to be avoided.</p>	The proposal has been designed to ensure that any unnecessary recessed are avoided where practical.
<p>q. Pedestrian links must be a minimum width of 3.5 m, clear of buildings and open 24 hours a day. Pedestrian links identified in Figure 4.2.03 must be dedicated to Council.</p>	Not applicable to this proposal.
<p>r. Developments must be setback from the corner on blocks with poor site lines. The setback distance will be at the discretion of Council.</p>	The footprint of the proposed buildings was established through the Concept Approval. The proposal has been designed in accordance with the Concept Approval.
<p>s. The Rothsay Avenue to Bowden Street pedestrian link must be a minimum width of 6 m.</p>	This is not relevant to the subject DA.
<b>3. Implementation - Infrastructure, Facilities &amp; Public Domain Improvements</b>	
<p>a. The public land such as the road verge adjoining a development site is to be embellished and if required dedicated to Council as part of any new development.</p> <p>The design and construction of the works are to be undertaken in accordance with section Figure 4.2.03, Figure 4.2.04 to 4.2.07.</p>	Any public land adjoining the proposal will be dedicated to Council if required.
<p>c. S94 contributions still apply throughout area, notwithstanding any land dedications, public domain improvements, infrastructure provision etc as required by this DCP.</p>	Noted.

#### 4. Views & Vistas

- a. Panoramic views of Parramatta River are to be maintained from Faraday Park, Settlers Park, Anderson Park, and Helene Park (refer to Figure 4.2.08)
- b. Development is to ensure that vistas towards Parramatta River are maintained (refer to Figure 4.2.08)
- c. Development must reflect the topography of the area taking into consideration views from the Rhodes Peninsula, Railway Bridge and Ryde Bridge.
- d. Maintain views for pedestrians and cyclists along the public open space to the Parramatta River.
- f. Maintain secondary views through the site from pedestrian and cycle links from Nancarrow Avenue to the Parramatta River.
- g. New buildings are to take into account the existing views on the subject site and adjoining sites.

The terms of the Concept Approval sets out the bulk and scale of the proposed buildings.

This was established through an approved envelope as well as maximum RL's for each of the buildings.

The impact of the approved built form in terms of view loss was addressed as part of the Concept Approval with view corridors to the water provided where available.

The proposal does not seek to vary the approval in this regard.

- h. Orientate new development to take advantage of water views and vistas.

As the plans submitted with the DA demonstrate, the principal water views are to the south of the site and for the upper levels only.

On this basis, and whilst the proposed building form was established through the Concept Approval, where possible, the internal layout and arrangement of the proposed units has been designed to ensure that as many of the upper units benefit from a water view.

- i. New developments are not to materially compromise views of the northern ridgeline of Meadowbank.

Refer above.

- j. Development applications will be required to include an assessment of views in accordance with the above controls.

The terms of the Concept Approval sets out the bulk and scale of the proposed buildings.

This is established through an approved envelope as well as maximum RL's for each of the buildings.

The proposal does not seek to vary the approval in this regard.

	The impact of the approved built form in terms of view loss was addressed as part of the Concept Approval.
<b>5. Landscaping &amp; Open Space</b>	
a. All development proposals are to be accompanied by a Landscape Plan prepared by a qualified and suitably experienced landscape architect. This is to include an arborist's report on existing trees, and demonstrate how proposed landscaping will contribute to ecological sustainability. Management of construction impacts must also be addressed.	<p>In accordance with the requirements of the original Arborist's Report prepared by Redgum, Trees Reference 132 and 133 will be retained as part of the proposal.</p> <p>In support of the DA, detailed Public Domain Landscape Plans have been prepared by Place Design. These detail the landscape treatment across the site, including the provision of additional trees.</p>
b. Roof gardens are encouraged and must be considered in any landscaping plan.	The proposal does not include any roof gardens.
d. All existing mature trees that enhance the quality of the area are to be retained.	<p>In accordance with the requirements of the original Arborist's Report prepared by Redgum, Trees Reference 132 and 133 will be retained as part of the proposal.</p> <p>In support of the DA, detailed Public Domain Landscape Plans have been prepared by Place Design. These detail the landscape treatment across the site, including the provision of additional trees.</p>
e. Provide adequate deep planting zones above car parking and other concrete or similar structures to allow sustainable planting.	As the Landscape Report prepared by Place Design details, and in accordance with the objectives of the Residential Flat Design Code, the proposal will provide 25% of the open space area as deep soil zones.
f. Provide at ground floor level, where possible, open space for dwelling units and contiguous open garden areas to create common large landscaped space.	As the Landscape Report and plans demonstrate, open space for units has been provided at ground level, with courtyards flowing into common landscaped areas where possible.
g. Construction of roof areas of multi unit developments is to make provision for useable roof gardens.	The proposal does not involve any useable roof gardens.
h. Where appropriate, developments should incorporate landscaping (such as planter boxes) integrated into the upper levels of building to soften building form.	The proposal does not involve any landscaping at the upper levels.
i. Building setbacks are to allow for landscaping/planting as in section 4.2.2	As the Landscape Report prepared by Place Design clearly details, landscaping will be provided within the

Setbacks.	setbacks of both buildings.
j. For corner buildings a reduction of the landscape setback on one side will be considered on its merit. This reduction does not apply to foreshore setbacks.	The terms of the Concept Approval sets out the building form and scale. The proposal does not seek to vary the approved built form as approved.
k. Where a proposal involves redevelopment of a site the developer are to arrange for electricity and telecommunications utilities to be undergrounded along the entire length of all street frontages. Such utility modifications will be carried out to the satisfaction of the responsible authority (e.g. Energy Australia). This is to improve the visual amenity of the area and allow street trees to grow unimpeded.	R+M has advised that this will be undertaken.
l. Permeable landscape surface materials is to be maximised, to allow maximum penetration of stormwater and urban runoff. Recommended permeable landscape materials include gravel, loosely fitting pavers, stepping stones, vegetative groundcover such as grass, creepers, and shrubs.	The Landscape Report details both permeable and non-permeable materials to sure an appropriate balance between the penetration of stormwater and urban runoff.
<b>6. Street Furniture &amp; Public Art</b>	
a. All development proposals are to be accompanied by a landscape plan, prepared by a qualified and suitably experienced landscape architect, indicating how public domain improvements including paving, street furniture and lighting will be incorporated into the development.	A Landscape Report has been prepared by Place Design and is submitted with the DA. This Report details the proposed public domain improvements across the site.
b. Public domain finishes including the style, colour and installation methods of street furniture, paving and street lighting shall be in accordance with Ryde Public Domain Technical Manual.	We understand that the Landscape Report includes public domain finishes in accordance with the Ryde Public Domain Technical Manual.
c. Public art is to be provided in accordance with Council's Public Art Policy.	A Public Art Plan has been prepared by Black Beetle (refer Appendix 8). This Plan explores the opportunities, processes and integration of artworks as part of the entire Concept Plan site and provides aims and objectives of Public artwork in relation to the wider precinct.

<p>d. Embellishment of public places/spaces will be at developers' cost and the type and amount of embellishment will be negotiated with Council.</p>	<p>Noted.</p>
<p><b>7. Safety</b></p>	
<p>a. Public spaces need to be designed to meet Crime Prevention Through Environmental Design (CPTED) principles (DUAP 2001).</p>	<p>As set out in the Landscape Plan prepared by Place Design, the proposed landscape strategy will be designed to achieve CEPTED principles such as</p> <p><b>"Natural surveillance:</b></p> <p><i>The proposed landscape design will play an important role in Crime Prevention through Environmental Design. The landscape is designed to keep surveillance and pedestrian movement in consideration ensure with unimpeded sightlines to all areas and especially key areas of activation to avoid blind spots</i></p> <p><i>to ensure lighting for appropriate surveillance and avoid shadows and glare which might put people at risk.</i></p> <p><b>Natural Access Control:</b></p> <p><i>The landscape design utilizes the use of walkways, fences, lighting and signage to clearly guide people and vehicles to and from the entrances.</i></p> <p><i>The goal with this CPTED principle is not necessarily to keep intruders out, but to direct the flow of people while decreasing the opportunity for crime.</i></p> <p><b>Territoriality:</b></p> <p><i>The Landscape is designed to define desired movement areas, improve surveillance and delineate borders with help of change in materials, texture, planting, change in level, artwork, signage etc.</i></p> <p><b>Maintenance:</b></p> <p><i>A Maintenance and management plan has been produced for stages 4-5 that ensures CPTED principles are met. This includes maintenance of shrubs close to paths and suitable choices if species that allow passive surveillance . particular instructions will be given to the maintenance contractor in this regard."</i></p>



<p>b. Open sightlines and landscaping needs to be provided that allows for high levels of public surveillance by residents and visitors.</p>	<p>Refer above</p>
<p>c. Lighting is to be provided to all pedestrian ways, building entries, corridors, laundries, lifts, stairwells, driveways and car parks to ensure a high level of safety and security for residents and visitors at night. Further, external lighting including street lighting if necessary (in accordance with pedestrian lighting AS1158 is to be provided which makes visible potential hiding spots at night.</p>	<p>Refer to the submitted Landscape Report for details of the proposed lighting strategy.</p>
<p>d. Entrances to public open spaces will need to encourage pedestrian use and establish clear sightlines to improve visual security.</p>	<p>The public domain landscape plans prepared by Place Design include 'natural access control' which involves the utilisation of walkways, fences, lighting and signage to clearly guide people to and from the entrances, with the aim of directing people into the public open spaces.</p>
<p>e. The design of public domains must not result in dead ends or similar design outcomes.</p>	<p>As the plans prepared by Place Design clearly detail, there will be no dead end spaces created.</p> <p>Indeed, Place has undertaken their own CEPTED assessment of the proposal to ensure that the proposed landscape design plays an important role in maximising natural surveillance opportunities.</p>
<p><b>4.2 Architectural Characteristics</b></p> <p><b>1. Height</b></p>	
<p>a. The maximum building height is to comply with the heights shown in Ryde Local Environmental Plan 2014 Height of Buildings Map. Buildings must comply with the maximum number of stories shown in Figure 4.2.10.</p>	<p>The maximum height of the proposal has been established through the Concept Approval. In particular, approved plan ref. PPR 001-D provides maximum RL's for each of the proposed buildings.</p> <p>These maximum RL's are clearly detailed on the submitted architectural plans.</p> <p>The proposed buildings will not exceed these maximum RL's.</p> <p>In addition, it is noted that the Concept Modification approved various 'popups' across both Stage 4 and 5. The extent of these 'popups' are detailed on approved plan references Figure 15 Rev 4 and Figure 17 Rev 4. These 'popups' permit additional storeys on top of the maximum RL's, so long as they do not exceed 60% of</p>

	<p>the footprint of the typical floor plate below.</p> <p>We are advised that the proposed 'popups' as detailed on the submitted architectural plans meets this requirement and therefore the proposal is consistent with the Concept Approval as modified.</p>
c. The ground floor height shall be 4 m floor to floor regardless of use.	The proposed design complies with the MP09_0216 Mod 1 Concept Plan Approval.
d. Any car parking above ground will have a minimum 3 metres (floor to underside ceiling) to allow for potential future conversion.	As the plans submitted with the DA clearly illustrate, all car parking will be provided at basement level.
e. Retail and commercial uses at ground floor are to have floor levels contiguous with finished footpath levels. On sloping sites the levels must be contiguous at entries.	Non non-residential uses are proposed.
<b>2. Setbacks</b>	The building siting and setbacks are in accordance with the Concept Approval.
<b>3. Roof Form</b>	
a. Buildings below RL 15 must have articulated roofs, as they will be viewed from buildings above. Articulated roofs refer to well-designed roof zones with landscaping, useable areas and/or richly detailed roofs made of high quality materials.	<p>The approved RL's for both Stage 4 and 5 are substantially in excess of RL 15. However, and notwithstanding this, the proposal includes articulated roof forms, achieved primarily through the use of high quality materials.</p> <p>Roof terraces to the top floor apartments will be private open spaces for the apartment the lower roofs and other non-trafficable extents of the roof will have high quality gravel patterned on.</p>
b. The use of solar panels on roofs is encouraged where possible.	The proposal does not include the use of solar panels.
<b>4. Building Facades &amp; Articulation</b>	
a. Building facades should be articulated within a 3-metre zone to provide entries, external balconies, porches, glazed balcony enclosures, terraces, verandas, sun shading elements etc.	As the submitted plans demonstrate, the building facades have been sufficiently articulated across all elevations. This has been achieved using a mixture of architectural techniques. Refer to the submitted plans for further information.
b. Penthouses should be set a minimum of 4 metres from any building façade.	The built form was approved through the Concept Modification. The proposal does not involve any modifications to the approved built form.

<p>c. Articulate buildings to respond to orientation, views, breezes, privacy, views, acoustic requirements, street widths and the relationship of the building to external garden spaces.</p>	<p>Envelope configuration, orientation and height, was approved in Concept Approval MP 09-216 and subsequent Mod1 Approval.</p> <p>Where facades receive solar access, living rooms and private open space are orientated to capture the sun. Apartments on the upper floors have skylights incorporated to optimize solar access. Refer to the accompanying Solar Access and Natural Ventilation Assessment.</p> <p>Apartment layouts have been designed to promote separation between living areas and more quiet sleeping zones.</p> <p>Inter tenancy walls between adjoining apartments will be designed in accordance with BCA requirements and acoustic consultant's recommendations.</p>
<p>d. Articulate buildings vertically and horizontally: materials and building setbacks on the upper storeys are to be used to reduce the perceived bulk of buildings.</p>	<p>Articulation of the building façade has been achieved by using both horizontal and vertical elements and differing materials and finishes. Strong horizontal bands (slab edges, balcony balustrades, rhythmic recycled timber posts and changes in cladding) promotes clear delineation between the upper and lower levels.</p> <p>Recessed balconies and screened operable louvres give a sense of enclosure whilst also encouraging passive surveillance to the public links below.</p> <p>Wrap around balconies maximise capturing views around and assists in reducing the perceived building bulk and assists in widening the sense of space between the wings and public link corridors.</p>
<p>e. Provide and denote entries along street frontages and public domain spaces where appropriate.</p>	<p>The primary entry to Stage 3 will be directly from the foreshore plaza area, with the entry to Stage 2 also located directly off a landscaped courtyard.</p> <p>Refer to the architectural and public domain plans for further information.</p>
<p>f. Buildings are to address streets, open spaces and the river foreshore. Street frontages are to be parallel with or aligned to the street alignment.</p>	<p>Notwithstanding the fact that the bulk and scale of the proposal was approved as part of the Concept Modification, both Stage 4 and 5 have been designed to ensure that both buildings will address the proposed foreshore plaza area and foreshore area generally.</p>
<p>g. Provide balconies and terraces, particularly where buildings overlook public spaces.</p>	<p>As the plans submitted with the DA demonstrate, the primary outlook and view for both the Stage 4 and 5 buildings is south and towards the foreshore.</p>

	As such, so as to maximise views and also provide an outlook over the foreshore plaza area, the majority of units have been oriented south with balconies that maximise this outlook.
h. All facades visible from the public domain are to be durable, low maintenance and of high quality.	<p>The following has been provided by R+M:</p> <p>"The colour palate is thematic to the industrial past and water's edge coastal development with a range of blues, recycled timber and metal cladding.</p> <p>At street level, the façade is composed to hint at the urban edge and human scale with sandstone base, rhythmic vertical fins, deep horizontal slabs setting a human scale datum line and operable metal privacy screens that provide a rich kaleidoscope of beauty, luxury and understated style.</p> <p>The mid-section is highly articulated with horizontal and vertical metal cladding, glazed ribbon balconies and punchy windows references the former industrial buildings and their use of glazing.</p> <p>The top head is designed to maximise views to the water and the heartland through strong horizontal lines, continuous patterned screens and folded edges."</p>
i. External glass to be non-reflective and have a maximum of 20% tint.	Any external glass will be non-reflective.
<b>5. Private &amp; Communal Open Space</b>	
a. Private open space with sunlight access, ventilation and privacy shall be provided for apartments in accordance with SEPP65.	Refer to the SEPP 65 Assessment prepared by R+M.
b. No more than 50% of communal open space provided at ground level shall be paved or of other non-permeable materials	Refer to the Landscape Design Report prepared by Place Design.
<b>6. Residential Amenity</b>	
<p>a. In considering compliance with SEPP65, regard will be given to:</p> <p>ii. sunlight access to adjoining balconies of living rooms; and</p> <p>iii. appropriate urban form, site orientation and other constraints.</p>	Refer to the SEPP 65 Assessment prepared by R+M.

<p>b. Apartments below a sloping ground level shall apply the SEPP65 guideline for lightwells.</p>	<p>Refer to the SEPP 65 Assessment prepared by R+M.</p>
<p><b>4.3 Ecological Sustainability</b></p> <p><b>2. Energy Efficient Design</b></p>	
<p>a. Residential development must be designed in accordance with principle outlined in the Building Sustainability Index (BASIX)</p> <p>b. The principles and properties of thermal mass, insulation and glazing are to be considered in the design of buildings to achieve a high level of energy efficiency</p>	<p>A BASIX Assessment has been prepared by Integreco Consulting.</p> <p>In addition, an ESD letter has been submitted in support of the DA. This letter is in response to Condition 22 of the Concept Modification (refer Appendix 18).</p> <p>This advice states that the proposed project will commit to achieve include:</p> <p><i>"1. Energy scores (measured by BASIX) which, on average, exceed the targets by over 10%.</i></p> <p><i>2. Water scores (measured by BASIX) which exceed the targets by just under 10%.</i></p> <p><i>3. Innovation – achieved by using the first ever Australian incorporation of the CT2000 car charging technology, in a residential context.</i></p> <p><i>4. Waste Category – contractors will be required by Holdmark to meet the base waste targets in the ESD Masterplan Report ("101117 Shepherds Bay Meadowbank - ESD Report"). "</i></p> <p>Refer to the ESD Report at Appendix 18 for further information.</p>
<p><b>2. Noise &amp; Vibration Attenuation</b></p>	
<p><b>Residential</b></p> <p>a. New residential developments, including those within a mixed-use building, are required to consider noise attenuation and acoustic treatment in their design. Particularly, the building layout, walls, windows, doors and roofs are to be designed and detailed to reduce intrusive noise levels.</p>	<p>An acoustic report has been prepared by DK Acoustics (refer Appendix 19).</p> <p>The Report concludes that the proposal is acceptable subject to various noise control recommendations as set out in Section 5 of the Report.</p>
<p>b. Development must have regard to "Interim Guidelines for Development Near Busy Road and Rail Corridors" NSW</p>	<p>Sections 3.4 and 3.5 of the acoustic report provide an assessment of the proposal against these Guidelines.</p>

Planning & Infrastructure.	
c. Balconies and other external building elements are to be located, designed and treated to minimise infiltration of noise into the building and reflection of noise from the façade.	Section 3.1 of the acoustic report assesses the proposal against Council's controls.
d. New units are to be constructed in accordance with: i. Australian Standard 3671-1989 and 3671-1987.	R+M has confirmed that the proposal will be designed in accordance with this and all relevant Australian Standards.
<p><b>Commercial</b></p> <p>b. The use of a premises, and any plant, equipment and building services associated with a premises must not: i. create an offensive noise.</p> <p>f. Where development adjoins residential development, the use of mechanical plant equipment and building services will be restricted and must have acoustic insulation.</p> <p>g. Loading and unloading facilities must not be located immediately adjacent to residential development.</p> <p>h. Retail premises must limit any spruiking and the playing of amplified music or messages so as not to disturb the amenity of other public and private places.</p> <p>i. Air conditioning ducts shall not be situated adjacent to residential development.</p> <p>j. Where development is situated adjacent to residential development, working hours shall generally be restricted to 7 am to 6 pm Monday to Friday and 8 am to 1 pm on Saturday, and nil on Sundays or public holidays. Activities in operation outside these hours must demonstrate that there will be no detrimental impact to residential amenity.</p>	No commercial uses are proposed as part of the development.
<b>4. Parking Access &amp; Loading</b>	
a. All new buildings are required to provide on-site loading and unloading	An Internal Traffic Assessment has been prepared in

<p>facilities.</p> <p>b. Loading docks shall be located in such a position that vehicles do not stand on any public road, footway, laneway or service road and vehicles entering and leaving the site move in a forward direction.</p> <p>c. Loading docks that extend more than 7.5 metres into a building, mechanical ventilation might be required.</p>	<p>support of the DA by Thompson Stanbury.</p> <p>In terms of loading, Section 5.2 of this report assesses service vehicle movements into and out of the site, concluding that:</p> <p style="text-align: center;"><i>"The proposed internal servicing arrangements of Stages 4 &amp; 5 are therefore considered to be satisfactory."</i></p> <p>In terms of mechanical ventilation, as stated previously in this report, details of ventilation have not yet been finalised.</p>
<p><b>5. Flooding &amp; Stormwater Drainage</b></p> <p>a. Development must comply with Part 8.6 Floodplain Management of this DCP.</p>	<p>A full stormwater and flooding assessment has been submitted with the DA. We understand that this has been designed to ensure that the proposal satisfies Part 8.6 of the Floodplain Management of the DCP.</p>
<p><b>5.0 PRECINCT SPECIFIC DEVELOPMENT CONTROLS</b></p> <p><b>Precinct 3 - Waterfront</b></p>	
<p>a. The impact of new buildings on views from the Parramatta River to the site and the treed ridgeline to the north are to be considered. Similarly, views from this precinct to the Parramatta River are to be optimised.</p> <p>b. Development near the waterfront is to respond to and consider views from the Parramatta River.</p>	<p>The terms of the modified Concept Approval sets out the bulk and scale of the proposed buildings.</p> <p>This was established through an approved envelope as well as maximum RL's for each of the buildings.</p> <p>The impact of the approved built form in terms of view loss was addressed as part of the Concept Approval with view corridors where available.</p> <p>The proposal does not seek to vary the approval in this regard.</p>
<p>c. Distances between buildings should take into account acoustic and privacy issues to protect the amenity for all residential units. Minimum distances should be in accordance with SEPP 65 principles.</p>	<p>An assessment of the proposal against the objectives of the Residential Flat Design Code (RFDC) has been undertaken by R+M (refer Appendix 3).</p> <p>In terms of separation, R+M have advised that Stage 4 and Stage 5 comply with the Concept Plan building envelopes. Separations range between 18 – 22m (18m is required).</p>
<p>d. Facades should be articulated within a zone of 3 metres and be built to street edge behind the required landscape setback.</p>	<p>An assessment of the proposal against the objectives of the Residential Flat Design Code (RFDC) has been undertaken by R+M (refer Appendix 3).</p> <p>Section 3.14 of this assessment describes the facade articulation stating that:</p> <p style="text-align: center;"><i>"The materials, colours, finishes that are used in</i></p>

	<p><i>the development are of a very high standard and integrate with the emerging character of development in the area. The composition and articulation of the proposed building facades are of high quality and will contribute positively to the streetscapes. The balconies are arranged to provide visual interest. Elements such as sun shading louvers and balustrades add interest to the overall massing of the building. The façade is detailed in layers, breaking down the overall height of the building to establish a relationship of human scale between the public open space and the built environment."</i></p>
<p>e. Maintain all existing mature trees that add to the high landscape quality of the area.</p>	<p>In accordance with the requirements of the original Arborist's Report prepared by Redgum, Trees Reference 132 and 133 will be retained as part of the proposal.</p> <p>In support of the DA, detailed Public Domain Landscape Plans have been prepared by Place Design. These detail the landscape treatment across the site, including the provision of additional trees.</p>
<p>f. Enhance street planting along Bowden Street to facilitate the perception of a boulevard providing direct access to the Parramatta River.</p>	<p>Appropriate street planting has been included within the Place Design Public Domain Landscape Plans.</p>
<p>g. Ensure that new developments are responsive to and add to the landscape quality by providing adequate deep planting zones above car parking to allow sustainable planting which takes into account solar access and views.</p>	<p>R+M confirms that there is sufficient depth to support a wide selection of native and exotic trees and shrubs above car parking that are of low maintenance and contribute to habitats of local fauna and also provide buffering/screen to residential areas.</p>
<p>i. Provide a new pocket park to the southern part of the precinct to ensure tree retention and enable passive activity with views to Parramatta River.</p>	<p>The foreshore park is to be provided as part of the concurrent DA for Stages 2 and 3.</p>
<p>k. Provide a 20-metre foreshore landscape setback with a high quality solution knitting with the Shepherds Bay foreshore upgrade.</p>	<p>The bulk and scale of the proposal was approved as part of the Concept Approval. However, and notwithstanding that, deep landscape setbacks to both buildings have been provided. Refer to the Landscape Plans prepared by Place Design for further information.</p>