

Response to Key Issues
Preferred Project Report
Revised Statement of Commitments

**STAGE 1 PROJECT APPLICATION
(MP 09_0219)**

Prepared by ROBERTSON+MARKS ARCHITECTS
AND
PLACE DESIGN GROUP

FOR HOLDMARK PROPERTY GROUP PTY LTD
JULY 2012

SHEPHERDS BAY URBAN RENEWAL, MEADOWBANK

I hereby certify that the information contained in this Preferred Project Report is to our knowledge neither false nor misleading.

A handwritten signature in black ink, appearing to read "Brian Mann". The signature is fluid and cursive, with the first name "Brian" and the last name "Mann" clearly distinguishable.

Signed: Brian Mann
Robertson + Marks

JULY 2012

SHEPHERDS BAY URBAN RENEWAL

CONTENTS:

1. INTRODUCTION

- 1.1 Preliminary
- 1.2 Owners Consents
- 1.3 Background
- 1.4 Development Approval Context
- 1.5 Key Revisions to the Concept Plan from the Original Application
- 1.6 Summary of Original Submitted Stage 1 Project
- 1.7 History of Stage 1 Project Application
- 1.8 Capital Investment Value
- 1.9 Consultation
- 1.10 Revised Capital Investment Value
- 1.11 Key Issues from the Public Exhibition of the EA
- 1.12 Summary Description of the Stage 1 Project (Preferred)
- 1.13 Summary development statistics
- 1.14 Strategic Justification

2. EXHIBITION OF STAGE 1 PROJECT APPLICATION (MP 09_0219)

- 2.1 Submissions from Key Public Agencies & Design Responses
- 2.2 Submissions from Community and Design Responses
- 2.3 Additional Issues Raised by Department of Planning in letter of 5 June 2011 and Design Responses
- 2.4 Additional Issues Raised by the City of Ryde Council

3.THE STAGE 1 PROJECT DRAFT STATEMENT OF COMMITMENTS

4.STAGE 1 PROJECT

- 4.1 Introduction
- 4.2 Drawing Schedule
- 4.3 Stage 1 Project Design Philosophy
- 4.4 Development Statistics
- 4.5 Proposed Land Uses
- 4.5.1 Residential
- 4.5.2 Open Space
- 4.5.3 Interface with Foreshore Area
- 4.6 Building Form
- 4.6.1 Heights (finished levels), Setbacks, Building Depths and Separations
- 4.6.2 Overshadowing and Building Orientation
- 4.6.3 Floor by Floor Description
- 4.6.4 Building Articulation
- 4.6.5 Ceiling Heights
- 4.6.6 Storage
- 4.6.7 Adaptable Dwellings
- 4.6.8 Affordable Housing

- 4.7.1 Landscape Design
- 4.7.2 Public Open Spaces
- 4.7.3 Communal Open Spaces
- 4.7.4 Private Open Spaces
- 4.7.5 Planting Zones
- 4.7.6 Streetscape works
- 4.7.7 Pedestrian Access and Linkages
- 4.7.8 Bicycle Access and Linkages
- 4.7.9 Riparian Environment and Habitat Protection
- 4.8 A Access and Parking
- 4.8.1 Car, Motor Bike and Cycle Parking and Access
- 4.8.2 Loading and Emergency Access
- 4.9 Essential Services and Infrastructure
- 4.10 Geotechnical Stability and Contamination
- 4.11 Residential Amenity
- 4.11.1 Visual Privacy
- 4.11.2 Acoustics
- 4.11.3 Daylight Access
- 4.11.4 Wind
- 4.11.5 Safety and Security
- 4.11.6 Construction Management
- 4.12 Sustainability
- 4.12.1 Building Performance BASIX
- 4.12.2 Waste Management
- 4.12.3 Section 94 Contributions
- 4.12.4 BCA and Fire Safety

5. CONCEPT PLAN COMPLIANCE

6. POLICY AND LEGISLATIVE FRAMEWORK AND CONSISTENCIES

- 6.1 Relevant Planning Provisions and Policies
- 6.2 State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004
- 6.3 State Environmental Planning Policy 55 – Remediation of Land
- 6.4. State Environmental Planning Policy 65 – Design Quality of Residential Flat Development and the Residential Flat Design Code (RFDC)
- 6.5. Ryde Local Environmental Plan 2010
- 6.6 City of Ryde Development Control Plan 2010
- 6.7 Meadowbank Section 94 Contributions Plan 2005

7. ENVIRONMENTAL IMPACT ASSESSMENT: STAGE 1 PROJECT APPLICATION

- 7.1 Public Benefits
- 7.2 Built Form Urban Design/ Public Domain
- 7.2.1 Context, Setting, Streetscape and Character
- 7.2.2 Scale
- 7.2.3 Heights, Setbacks and Massing
- 7.2.4 Views
- 7.2.5 Massing

- 7.2.6 Overshadowing
- 7.2.7 Public Domain – Open Spaces, Plazas, Street
- 7.2.8 Private Open Spaces
- 7.2.9 Materials and Finishes
- 7.2.10 Safety and Security
- 7.3 Land Use
- 7.4 Transport and Accessibility Impacts
- 7.4.1 Parking
- 7.4.2 Sustainable Travel Plan
- 7.5 Environmental and Residential Amenity
- 7.5.1 Solar Access
- 7.5.2 Natural Ventilation
- 7.5.3 Acoustic Privacy
- 7.5.4 Visual Privacy
- 7.5.5 Wind Impacts
- 7.5.6 Adaptable Housing
- 7.5.7 Accessibility
- 7.5.8 SEPP 65 Assessment
- 7.6 Public Domain
- 7.7 Ecologically Sustainable Development (ESD)
- 7.7.1 Energy Efficiency
- 7.7.2 Water Conservation
- 7.8 Utilities
- 7.9 Topography and Excavation
- 7.10 Subdivision
- 7.11 Riparian Land and Threatened Species
- 7.12 Contamination and Geotechnical Issues
- 7.13 Drainage, Stormwater and Flooding
- 7.14 Heritage
- 7.15 Noise & Vibration Assessment
- 7.16 Affordable Housing
- 7.17 Draft Statement Of Commitments
- 7.18 BCA Compliance
- 7.19 Contribution/Voluntary Planning Agreement

CONCLUSION

FIGURES

- Figure 1: Stage 1 Site
- Figure 2: Concept Plan with Stage 1 Site Identified
- Figure 3: Stage 1 Building Footprint Plan
- Figure 4: Stage 1 Materials View from Hamilton Crescent
- Figure 5: Stage 1 Materials View from New Pedestrian Link Park
- Figure 6: Stage 1 Landscape Plan
- Figure 7: Stage 1 Artists Impression Communal Open Space
- Figure 8: Stage 1 Artists Impression Publicly Accessible Link Parkland
- Figure 9: Stage 1 Deep Soil Planting Plan
- Figure 10: Concept Plan
- Figure 11: Concept Plan method of defining height
- Figure 12: Concept Plan Height Map extract - Stage1 site
- Figure 13: Concept Plan - Stage 1 Building Eenvelope Controls
- Figure 14. Concept Plan Indicative Building Setbacks Map extract
- Figure 15: Concept Plan Landscape Plan
- Figure 16. Concept Plan Vehicular Access and Public Transport Plan extract
- Figure 17. Concept Plan Significant View Corridors Map extract
- Figure 18. Concept Plan Pedestrian and Cycle Access Plan extract

TABLES

- Table 1: Architectural Drawing Schedule
- Table 2: Stage 1 Apartment Mix and Size Summary
- Table 3: Proposed Stage 1 Apartment Numbers
- Table 4: Proposed Car Parking Allocation

ANNEXURES

- Annexure 1: Architectural Drawings & Shadow Diagrams
- Annexure 2: Quantity Surveyor Report
- Annexure 3: Landscape Report
- Annexure 4: Stormwater and Flooding
- Annexure 5: SEPP 65 Assessment
- Annexure 6: Solar Access and Natural Ventilation Assessment
- Annexure 7: Traffic and Rail Noise Assessment and Construction Vibration and Noise
- Annexure 8: BASIX Certificate
- Annexure 9: BCA Report
- Annexure 10: DCP Compliance Table
- Annexure 11: Access Review
- Annexure 12: Draft Statement of Commitments
- Annexure 13: Supplementary TMAP letter
- Annexure 14: Waste Management Plan

1. INTRODUCTION

SHEPHERDS BAY URBAN RENEWAL
STAGE 1 PROJECT

SHEPHERDS BAY URBAN RENEWAL

INTRODUCTION

1.1 Preliminary

This Preferred Project Report, prepared by PLACE Design Group on behalf of the Proponent, Robertson Marks Architects, is submitted to the Department of Planning (the Department), in support of Project Application (MP 09_0219). The Application sought approval for the redevelopment of the subject lands fronting Shepherds Bay at Meadowbank for residential and open space purposes. The Environmental Assessment will be made under the transitional arrangements for projects submitted to the Minister for Planning under the now repealed State Environmental Planning Policy (Major Development) 2005 and Part 3A of the Environmental Planning & Assessment Act, 1979 (the Act).

This Preferred Project report describes the site and the Preferred Stage 1 development, provides relevant background information and responds to the Director General's Requirements (DGR's), key authorities, stakeholders and community responses from the public exhibition and additional issues raised by the Department of Planning (the Department) and the City of Ryde Council (the Council) since the lodgement of the Application. In addition this report assesses the proposed development in terms of the relevant matters set out in the Concept Plan (Preferred), legislation, environmental planning instruments and planning policies.

The Proponent, Roberston Marks, and its specialist consultant team have reviewed and considered the submissions, in accordance with clause 75H(6) of the Environmental Planning and Assessment Act 1979 (the EP&A Act).

This Preferred Project Report (PPR) sets out the Proponent's response to the issues raised in relation to the Concept Plan Application No. MP 09_0219, (referred to herein as 'the Stage 1 Project').

This PPR should be read in conjunction with the submitted combined Concept Plan and Stage1 Project Environmental Assessment (the EA) and supporting documents prepared by PLACE Design Group and Robertson + Marks architects.

The Stage 1 Project Site, known as 39-41 Belmore St, Ryde, is legally defined as Lot 1 DP 384185 and Lot 1 DP 1072555. It has an area of 8,499.6 sqm and is bounded by Belmore Street, Rothesay Avenue and Hamilton Crescent. The site is directly opposite the 'Bay One' development and fronts the existing foreshore reserve.

1.2 Owners Consents

The consent of the owners, Bayone Projects Pty Ltd which is part of the Holdmark Property Group was submitted as part of the Preliminary EA.

1.3 Background

The submitted combined Environmental Assessment Report (EA) for the Shepherds Bay Renewal Concept Plan Application (MP 09_0216) (the Concept Plan) and the Stage 1 Project Application (MP 09_0219) for the Shepherds Bay Renewal Project was exhibited for 33 days from 26 January 2011 to 28 February 2011. A total of 162 submissions were received from the general community specifically relating to the Stage 1 Project. The Proponent has reviewed and considered the submissions and in accordance with the now repealed clause 75H (6) of the Environmental Planning and Assessment Act 1979, has responded to the issues raised and also additional issues raised by Council and the Department of Planning following the public exhibition.

This Preferred Project Report sets out the Proponent's responses to submissions, provides details of the Revised Stage 1 Project (the Preferred Project) which addresses issues raised and a includes a revised Statement of Commitments.

The Stage 1 design is supported by significant public benefits that will result from the proposed redevelopment and informed by:

- Shepherds Bay Renewal Concept Plan
- Sydney Metro Strategy and Inner North Regional Strategy;
- Ryde LEP 2010 and DCP2010;
- recent residential projects in the area which have all varied Council's DCP controls;
- detailed urban design and environmental assessment;
- economic studies;
- heritage assessment; and
- traffic assessment and TMAP.

The proposal supports the State Government's Inner North Regional Strategy population targets and is consistent with the objectives of the Ryde LEP 2010. It presents the opportunity to socially, environmentally and economically fulfil the objective of renewal of the Shepherds Bay foreshore area, provide high quality housing in an existing fully serviced middle ring suburb of Sydney and provide significantly improved public domain and infrastructure to the area.

1.4 Development Approval Context

The site sits amid a number of significant new developments, constructed in line with the vision for a revitalized Meadowbank. To the immediate west of the site is the 'Waterpoint' development, a 4 to 9 storey waterfront mixed retail, commercial and residential development, with a supermarket, café's, other shops and commercial uses. To the immediate east is the 'Bay One' residential development, currently under construction which also contains a large restaurant at the foreshore reserve edge of the site.

Deferred Development Consent (No.1244/ 2002) was granted in 2003 to the Sydney Sae Soon Church at 41-45 Belmore Street, the Stage 1 Project, for "Partial demolition and construction of a six storey mixed use residential/commercial and adaptive reuse of existing building for an auditorium". That development consent does have commencement confirmed by the City of Ryde Council.

Another significant residential 4 to 6 storey residential development was recently approved (2009) by Council at 146 Bowden Street.

1.5 Key Revisions to the Concept Plan from the Original Application

Key revisions to the Stage 1 Project now submitted as the subject Preferred Project include:

- Building heights have been amended and the building envelopes broken up to ensure greater vertical and horizontal articulation and improved solar access. The revised heights are consistent with the Maximum RL heights established in the Concept Plan.
- Consistent with the Concept Plan, the proposed development complies with SEPP 65 and the Residential Flat Design Code

Additional details provided on the stormwater management of the development and it has been confirmed that all building floor levels have been designed to be at least 0.5m above the maximum potential flood event (Refer Stormwater and Flooding Reports at Annexure 4);

- A revised Statement of Commitments responding to the issues arising from the submissions made during public exhibition and assessment by the Department of Planning and extensive discussions with Council.

In addition to the above amendments to the Stage 1 Project, the following additional / supporting documentation is submitted to supplement and update documents lodged with the submitted EA:

- Revised Architectural Plans
- Revised development statistics schedules
- Revised Landscape Plan and Report.
- Supplementary letters and reports updating details submitted with the EA in respect of ESD, consultation, flood modelling and QS.

SHEPHERDS BAY URBAN RENEWAL



FIGURE 2. CONCEPT PLAN WITH STAGE 1 SITE IDENTIFIED



FIGURE 1. STAGE 1 SITE

1.6 Summary of Original Submitted Stage 1 Project

Discussion as to how the original Concept Plan and Stage 1 Project designs supported local and state planning policies and objectives is included in the original submitted EA.

That documentation provided the detailed Site Analysis which is not reproduced in this PPR.

The originally submitted Stage 1 Project Application proposed:

- Removal of all existing buildings. The demolition of part of the building on No.41 Belmore Street has already been undertaken under the commenced Development Consent (No. 1244/2002)
- Removal of the existing Energy Australia substation on Lot 1 in 384185, known as No.39 Belmore Street. This has now been carried out under the previous Consent.
- Excision by subdivision of a portion of existing Lot 1 DP 1072555 for dedication to Council to enable the future connection of Nancarrow Rd through to Belmore Street and the new public pedestrian link and pocket park
- Construction of two (attached) residential flat buildings ranging between 3 and 9 storeys in height from a reformed ground level
- 242 apartments (comprised of 19% 1 bed, 70% 2 bed and 11% 3 bed)
- 386 car parking spaces including 26 disabled spaces
- Landscaping of part of the new pedestrian link and pocket park forming part of the pedestrian spine on the western portion of the site and around the street frontages of the site
- Infrastructure, stormwater and utility works
- Communal open space in a central courtyard and public open space around the perimeter of the site (including perimeter planting and public footpaths)
- Private courtyards will be provided at ground level and balconies will be provided to all upper floor apartments
- Excavation and filling to provide direct pedestrian access between the buildings and adjacent public open spaces

1.7 History of Stage 1 Project Application

On 21 December 2009 an initial Project Application was submitted providing a preliminary environmental assessment. The project was declared a ‘major project’ under Part 3A of the Environmental Planning and Assessment Act 1979 on 03 March 2010. The Minister required a Concept Plan to be lodged proving an overview of the project. The Director-General issued Environmental Assessment Requirements (Director General Requirements) 20 May 2010 outlining key issues to be addressed in the environmental assessment of the project. This submitted EA addressed the Director General Requirements and contains Draft Statements of Commitment.

Subsequent to this the Department of Planning issued another letter, dated 5 June 2011 following the public exhibition of the Application which contained a further list of Key Planning Issues to be addressed by the Proponent.

Responses to this most recent correspondence are included in this Draft Preferred Project Report. The most significant response is the substantial reduction in the overall residential density on the Concept Plan site.

Table 2 Illustrates the steps taken in the Part 3A assessment process. This Draft Preferred Project is the result of extensive discussions with both Council and the Department of Planning and also responds to comments received during the public exhibition.

The submitted combined Environmental Assessment Report (EA) for the Concept Plan and Stage 1 Applications for the Shepherds Bay Renewal Project was exhibited for 33 days from 26th January to 28th February 2011 and a total of 162 submissions were received. The Proponent has reviewed and considered the submissions and in accordance with clause 75H (6) of the Environmental Planning and Assessment Act 1979, has responded to the issues raised and also additional issues raised by the Department of Planning since lodgement of the Application.

The Environmental Assessment will be made under the transitional arrangements for projects submitted to the Minister for Planning under the now repealed State Environmental Planning Policy (Major Development) 2005 and Part 3A of the Environmental Planning & Assessment Act, 1979 (the Act).

1.8 Capital Investment Value

The Quantity Surveyor’s Report prepared by Altus Page Kirkland estimate the Capital Investment Value of the Stage 1 Project to be in the order of \$83,820,830, excluding GST, refer **Annexure 2**.

1.9 Consultation

On a number of occasions during the preparation of the final Concept Plan and Stage 1 Project designs the applicant has briefed and sought feedback from the Ryde Council staff and Councillors. Council has provided comments and suggestions, some of which have been incorporated into the final designs. The Department of Planning was also extensively consulted during the design phase.

Straight Talk, community consultation were also engaged by the Proponent and have prepared a Community Consultation Strategy which is consistent with the objectives and principles contained in the Guidelines for Major Project Community Consultation, October 2007, issued by the Department of Planning.

Straight Talk facilitated two community consultation workshops during the design phase and feedback from these sessions informed the Concept Plan and Stage 1 Project designs.

Project team members were on site to have one-on-one discussions and answer questions in an informal environment. Project team members present were able to take notes and record issues of interest identified through discussions with interested stakeholders. Written feedback was made possible via the use of reply paid feedback forms, giving respondents two weeks to return their feedback.

Consultation identified a mixed community response. Some members of the community welcomed urban renewal and the lifestyle and amenity benefits associated with new development while others had significant concerns about amenity impacts associated with traffic, parking, heights and building densities.

A full copy of their Strategy and community consultation feedback is included as part of the EA.

1.10 Revised Capital Invesment Value

The Quantity Surveyor’s Report prepared by Altus Page Kirkland have estimated the Revised Capital Investment Value of the Stage 1 Project to be Stage 1, the value is \$83,820,830 excluding GST in their report which has been previously submitted as part of the Concept Plan PPR.

1.11 Key Issues from the Public Exhibition of the EA

The submitted combined Environmental Assessment Report (EA) for the Concept Plan and Stage 1 Project Applications for the Shepherds Bay Renewal Project was exhibited for 33 **days from 26 January 2011 to 28 February 2011** and a total of 163 submissions were received from the general community.

Annexure 6 of the Preferred Project Report for the Concept Plan Application already lodged with the Department of Planning identified and provided responses to public agencies and the general public submissions to the public exhibition of the Concept Plan.

A number of the issues raised were common to both Applications and will not be revisited in this PPR.

Additional issues raised specifically in relation to the Stage 1 Project Application were from the Department and the NSW Office of Water.

The Department requested:

- the building forms be broken up to improve amenity and solar access and be consistent with SEPP 65 and the RFDC.
- consideration be given to increasing deep soil areas.
- more detailed consideration be given to the access and connections between the development and the adjacent public domain, overall street presentation and prominence of entries.
- The City of Ryde Council recommended the Nancarrow Road extension be included in the Stage 1 Project

The NSW Office of Water requested further information of depth of basement car parks and advised of the need for a License under Part 5 of the Water Act 1912 for any works that would intercept or use groundwater.

1.12 Summary Description of the Stage 1 Project (Preferred)

The Stage 1 Project proposes:

- Demolition and Construction**
- Removal of all existing buildings on No.39 Belmore Street. Demolition of the buildings on No.41 Belmore Street and excavation have already been carried out under the commenced Development Consent (No. 1244/2002)
 - Construction of two (attached) residential buildings ranging between 3 and 12 storeys in height within the maximum RL heights established in the Concept Plan. The proposed height of the buildings varies from 3, 5 and 7 storeys fronting Belmore Street frontage with taller building elements setback from the main building line to maximise solar access to the public domain
 - 246 apartments (comprised of 19.1% 1 bed, 0.4% 1 bed + study; 60.9% 2 bed; 5.28% 2 bed + study and 14.23% 3 bed)
 - 331 car parking spaces including 25 disabled spaces in a three level basement carpark levels accessed from a driveway off Belmore Street
 - Landscaping and publicly accessible open spaces adjacent to the buildings of 1,029.6 sqm of land to Council forming part of the lower pedestrian spine and pocket park required by Council's DCP and the Concept Plan
 - Landscaping including 1,827sqm of deep soil planting (including 552sqm over podium), representing approximately 22.1% of the Stage 1 site.
 - Infrastructure, stormwater and utility works
 - Communal open space in a central courtyard and public open space around the perimeter of the site (including perimeter planting and public footpaths)
 - Private courtyards provided at ground level and balconies to upper floors.

Open Spaces

Communal Open Space
A central communal space, measuring 1154sqm, is proposed to facilitate community interaction. The communal space will comprise landscaping, paving, lighting and water features. The high quality space will be an attractive informal space for residents to interact. The water features will create a visual linkage to Parramatta River. This space will be overlooked by apartment terraces and balconies which will maximise opportunities for passive surveillance.

Publicly Accessible Open Spaces

A significant portion of the new public pedestrian spine along the western boundary of the site linked

to a partially constructed public pocket park will be constructed as part of the Stage 1 Project development. This will be a public space and will provide an important physical and visual corridor for the community through the Concept Plan site. Public domain areas will also be landscaped around the perimeter of the site.

Interface with Foreshore Area

The foreshore is an important part of the Meadowbank neighbourhood. Opposite the Stage 1 site is Anderson Park which contains several mature figs. An attractive landscaped edge is proposed to be provided along the southern boundary of the site. The generous setbacks and stepped 'u-shape' design of the building with a central communal open space will ensure the development appropriately addresses and respects this important public domain area. Building articulation and elements will create an attractive and interesting façade to the foreshore area. No work is proposed within the Council owned foreshore parklands.

1.13. Summary development statistics

A summary of the development statistics is provided below and in detailed schedules in Annexure 1:

- Site Area: 8,269.46sqm
- Total GFA: 22,318sqm
- Total publicly accessible open space: 877sqm
- Communal open space: 1154sqm
- Private balconies or terraces to each apartment well in excess of SEPP 65 and RFDC guidelines
- Storage 6-10 m³ per apartment
- Parking: 331 spaces (including 25 disabled spaces)
- Bike storage for 50 bikes
- Total apartments: 246
- Apartment mix:
 - 47 x 1 bed 19.1%
 - 1 x 1 bed + Study 0.4%
 - 150 X 2 bed 60.9%
 - 13 X 2 bed + Study 5.28%
 - 35 x 3 bed 14.23%
- Adaptable dwellings 10%
- Carparking:

• Basement	162
• Lower basement	122
• Lower ground	47
- TOTAL 331
- Resident spaces 278
- Visitors 50
- Bicycles 50

Refer Development statistics schedule for the Stage 1 Project included with Architectural Plans in **Annexure 1.**

1.14 Strategic Justification

The Strategic justification for the Project is discussed in the submitted Preferred Project Report Concept Plan which states that the Concept Plan departs from Council's DCP controls to a minor degree to achieve a better planning outcome in the renewal of Shepherds Bay foreshore area, providing high quality living area in a sought after, fully serviced middle ring suburb of Sydney.

2. EXHIBITION OF Stage 1 Project Application (MP 09_0219)

SHEPHERDS BAY URBAN RENEWAL

2.1 Submissions from Key Public Agencies & Design Responses

As detailed above, the Stage 1 Project Application was placed on public exhibition concurrently with the Concept Plan Application. The majority of submissions and comments received related to the overall Concept Plan.

No comments from the general community related specifically to the Stage 1 Project. Accordingly, as responses to the submissions on the Concept Plan were included in the submitted Concept Plan Preferred Project Report they will not be reproduced in this Report.

Sydney Water (24 February 2011)

Sydney Water made the following comments:

In terms of the overall Concept Plan Sydney Water advised that amplification works need to be completed by developer to service the site for potable and waste water. They also confirmed that a Section 73 Certificate would be required for any developments within the Concept Plan site.

Proponent response:
The Draft Statement of Commitments for the Stage 1 Project attached as **Annexure 12** and contained in Section 3 commits to the provision of documents describing and illustrating in detail the works required to provide potable and waste water services to the development for approval prior to the issue of the relevant construction certificate.

Commitment is also made to obtain a Section 73 Certificate prior to commencement of construction of the development.

Office of Water (11 March 2011)

The Office of Water strongly recommends the development works do not occur in or near the riparian zone of the river.

They advise that If any works are likely to intercept or use groundwater a Licence under Part 5 of the Water Act 1912 is required. They also list a range of standard conditions in this regard.

The Office supports the proposed groundwater monitoring program to provide information on depth of groundwater and direction of flow.

Proponent response:
As mentioned in the submitted Concept Plan PPR, no work is now proposed in the foreshore reserve or riparian zone.

We note requirement for Part 5 License and will comply.

2.2 Submissions from Community and Design Responses

The following section provides a summary of relevant issues raised by the community during the public exhibition and how the revised design of the Stage 1 Project has responded.

Proponent response:
Annexure 6 to the submitted Concept Plan PPR identifies and provides detailed responses to each of the matters raised by the general public in submissions made in response to the public exhibition of the project and therefore will not be repeated in this document.

• *increases in traffic*
Although the traffic impact modelling carried out and submitted with the Concept Plan PPR, revealed the proposed development will not significantly increase traffic in the area when compared to the current industrial uses additional changes to the Concept Plan have been made to further reduce the perceived additional traffic impacts. Firstly, the overall maximum floor space across the Concept Plan has been significantly reduced from the originally submitted EA. In addition, as requested by the Department the on site car parking rates have been also significantly reduced to be more in line with the RTA Guidelines. Both these initiatives will serve to reduce potential additional cars in the locality. Refer Letter by Varga Traffic Planning at **Annexure 13**.

• *heights*
As detailed in the submitted Concept Plan PPR, in response to concerns about the impacts of building heights on the public domain and solar access, the building envelopes at the Belmore and Rothesay Ave frontages in the Concept Plan for the Stage 1 Project have been lowered and more vertically articulated to improve solar access to private and public areas and add interest in the streetscape.

• *quantity and design of open space*
The communal and public spaces contained in the Stage 1 Project have been designed to seamlessly connect and building entries more clearly defined. Refer Landscape Report at **Annexure 3**.

• *impact on environmentally significant mangrove areas*
No works are now proposed by the Proponent within the foreshore reserve area or areas below high water mark.

• *stormwater runoff*
Detailed stormwater management plans have been prepared and accompany this PPR which ensure no detrimental impacts on the areas water quality will result from the Stage 1 Project. Refer **Annexure 4**.

• *infrastructure capacity*
Detailed discussions have been held with all relevant service providers. The Proponent's services consultants George Floths confirm that all services are available and can be supplied to meet the requirements of the Stage 1 Project. The Draft Statement of Commitments undertakes to provide all relevant details prior to the issue of the relevant construction Certificate.

• *visual impact*
The Concept Plan and Stage 1 designs were informed by a detailed View Analysis and impact Assessment carried out by Richard Lamb and Associates, attached as Annexure 8 to the submitted EA. That ensured that the building envelope placing and height articulations retained all view corridors identified in Council's DCP as well as opening up more views to the water from the surrounding area. The views of the immediate neighbours to Stage 1 were also assessed in detail in that process and found to be not significantly affected.

• *pedestrian safety*
As detailed in the submitted EA, the public and communal open space areas within the Stage 1 Project has been designed to be open, seamlessly connected directly to the waterfront reserve. Their design has been informed by the CPTED principles with open clear views and well lit spaces. Refer Landscape

2.3 Additional Issues Raised by the Department of Planning in letter of 5 June 2011 and Design Responses

Following lodgement and exhibition of the Concept Plan Application a further letter from the Department, dated 5 June 2011 was received by the Proponent seeking further clarification, refinements and assessment of various aspects of the proposal. The bulk of comments related to the Concept Plan Application. Additional comments/issues raised with respect to the Stage 1 are addressed below:

INCLUSION OF NANCARROW EXTENSION IN STAGE 1

The requested that the delivery of the entire length of new road construction between Nancarrow Ave and Hamilton Crescent should be provided as part of Stage 1 of the Concept Plan development.

Proponent response:
With regard to inclusion of extension of Nancarrow in Stage 1, as the details of the design of this road extension are still being discussed with Council as part of the VPA negotiations it is not possible to include in the Stage 1 Project. It has now been included in Stage 2 which will immediate follow the Stage 1 development. In any event the Stage 1 Project is not predicted to generate demand for this new road connection.

PUBLIC OPEN SPACES - DEEP SOIL PLANTING AREAS

Proponent response:
As detailed in the submitted Concept Plan PPR, it is important to note that 1,495sqm of the Stage 1 Project site is provided as deep soil planting with a further deep soil over podium area of 662sqm being provided which together equal more than the 25% SEPP65 guideline. This is considered appropriate in view of the Council DCP and Concept Plan requirement for a through site paved publicly accessible pedestrian link to the foreshore reserve to be provided on site and the site's location adjacent to that large public open space area

CONTRIBUTIONS, WORKS-IN-KIND OFFSETS AND PROVISION OF INFRASTRUCTURE
The Department requested further details of infrastructure works to be delivered as part of the VPA.

Proponent response:
As discussed in the submitted Concept Plan PPR, the VPA is still the subject of negotiation between the Proponent and Council. The Draft VPA has already been submitted to the Department and Council for discussion.

CONCEPT PLAN SEPP 65 COMPLIANCE
The Department requested an assessment of the Concept Plan envelopes against SEPP 65 and the RFDC be submitted demonstrating consistency.

Proponent response:
A SEPP 65 Assessment has been prepared for the Stage 1 Project which demonstrating that the proposed development complies with the objectives and principles contained in SEPP 65 and the RFDC on the basis of building separations being measured from the new ground plane created by the podium as is common application of these guidelines. Refer Annexure 5.

LOCATIONS FOR COMMERCIAL AND COMMUNITY USE
The Department requested that the Concept Plan provide for commercial and community uses.

Proponent response:
As detailed in the submitted Concept Plan PPR, the Concept Plan incorporates provision for approximately 10,000sqm commercial and community uses, the bulk of which is proposed within the podium of the signature tower building. In addition, as required by the Concept Plan, the ground floor ceiling height of the Stage 1 buildings have been designed be higher than the floors above to enable flexibility of ground floor uses as the market conditions require.

SHEPHERDS BAY URBAN RENEWAL

RYDE COUNCIL’S COMMENTS REGARDING FLOOD MODELLING AND STORMWATER DRAINAGE
Council requested additional details of stormwater management and flood modelling across the concept Plan site.

Proponent response:
Additional details are submitted with this PPR, confirming the stormwater management arrangements and proposed infrastructure for the Stage 1 Project. In addition, confirmation is supplied confirming the proposed Stage 1 Project habitable floor levels, vehicular and pedestrian entries to the site have now been set to a level equal to the 100 year ARI and PMF flood levels.

WASTE MANAGEMENT
The Department requested that a Revised Waste Management Plan be submitted.

Proponent response:
The Draft Statement of Commitments for the Stage 1 Project attached as **Annexure 12** commits to the submission to the Principal Certifying Authority and approval of a Revised Waste Management Plan for the Stage 1 Project which addresses Council's comments, prior to commencement of any construction works.

Additional issues raised by Amy Watson from the Department in her email of 22 December 2011 that relate to the submitted Draft Stage 1 Project PPR have been addressed in this PPR. Specifically:

- a map of Deep soil Areas is provided and areas included in the text;
- an amended SEPP 65 Verification statement, prepared by Robertson Marks is attached;
- Drawing A120/2 has been amended to show street levels of Hamilton Crescent on the elevations;
- all references to height and carparking in this PPR reflect the final submitted Project;
- Stage 1 compliance with the Concept Plan maximum RL heights is clearly shown on the Architectural elevations included in **Annexure 1**;
- The Concept Plan boundary plan has been amended to clearly identify all properties included in the Concept Plan Application. this Plan is again reproduced as **Figure 10** of this PPR; and
- All references to Annexures checked.

2.4 Additional Issues Raised by the City of Ryde Council

Council provided an extensive and detailed submission to the Department which has informed the revised design. These all related to the Concept Plan and were addressed in the submitted PPR and will not therefore be reproduced in this Report. Those of relevance have also been addressed above.

3. THE STAGE 1 PROJECT DRAFT STATEMENT OF COMMITMENTS

3. Stage 1 Project Draft Statement of Commitments

The Draft Statement of Commitments details the various contributions, additional studies, applications and works the proponent commits to undertake in association with the Stage 1 Project. The mechanics of how and when these commitments will be delivered will be subject to ongoing consultation.

SUBJECT	DESCRIPTION OF COMMITMENT
Concept Plan Approval Conditions	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 Major Project No. 09_0216 (the Concept Plan)
Landscaping	Prior to commencement of construction of Project or Development Applications within the Stage 1 Project site detailed documentation and specifications will to be prepared for all landscape works and open space improvements for approval of the Principal Certifying Authority.
Adaptable Housing	The Proponent commits to 10% of apartments within the Stage 1 Project site being designed to be accessible. Pathways from development to communal areas and car parking will also to be designed to be accessible.
Publicly accessible open space	 As detailed on the submitted architectural and landscape plans for the Stage 1 Project, the Proponent commits to providing part of a new, publicly accessible pedestrian link parkland within the Stage 1 Project site that will be owned and maintained by the owners' corporation. This new publicly accessible parkland in the Stage 1 Project includes: The substantial portion of the New Foreshore Link Parkland to be provided in the Stage 1 Project as identified in the submitted Concept Plan and the Stage 1 Project Preferred Project Report Landscape Report at Annexure 3. This new parkland provides a new pedestrian link between the foreshore reserve and the future Nancarrow Ave road link above and will be constructed as part of the Stage 1 Project. This new parkland will include areas of informal seating and passive recreation. <i>Landscape Design Principles</i> • Turf and paved plazas respond directly to the architectural alignments for a seamless transition between landscape and residential building • Structured planting and specimen shade trees frame spaces • Open lawn platforms provide areas for relaxation • Furniture elements will match the bold, simple lines of the design and contrast with the textures of the planting palette • Moving water bodies provide associated relaxation and acoustic benefits • Existing fig trees are retained to Rothesay Avenue with manicured lawn understorey • Streetscape trees reinforce the defined Streetscape character

SHEPHERDS BAY URBAN RENEWAL

Stormwater Management	The Proponent commits to undertake all stormwater works in accordance with the Stormwater Management Plans prepared by Cardno which accompany the Preferred Project Report.
Noise	The Stage 1 Project is to comply with the relevant acoustic standards and controls contained in the BCA and recommendations of the Acoustic Report, prepared by Acoustic Logic which accompany this Preferred Project Report.
Construction Management	Prior to commencement of construction of the Stage 1 Project a Construction Management Plan will be prepared by the proponent and will be submitted to the satisfaction of the Principal Certifying Authority prior to any new building work within the Stage 1 Project site. All construction materials, vehicles, waste and the like will be stored within the site. All demolition and all construction and associated 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. Prior to commencement of construction within the Stage 1 Project site a Traffic Management Plan (TMP), 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.
Utilities	A Section 73 Certificate from Sydney Water will be obtained as required. All existing aerial services (including low voltage Energy Australia electricity and subscriber television services) along the frontage of the Stage 1 Project 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. Documentary evidence will be obtained from Energy Australia to confirm that they have been consulted and that their requirements have been met by the Stage 1 Project.
Environmental Management Plan	Prior to commencement of construction of Project or Development Applications within the Stage 1 Project 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: a. Hours of construction work b. Sediment and Erosion Control; c. Waste Management; d. Noise and Vibration Management; e. Air Quality and dust control; f. Use of cranes, plant and machinery g. Use of ladders, tapes, scaffolding and plant /machinery of conductive material h. Excavation and boring 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 j. TMP; k. Piling, sheet piling, batter and anchors
Waste Management	Prior to commencement of construction of all Project or Development Applications within the Stage 1 Project site, a Waste Management Plan will be prepared for approval by the Principal Certifying Authority which includes demonstration that the subject site is capable of being serviced by the City of Ryde Council’s waste vehicles.
Sustainalbe Travel Plan	Prior to the issue of Occupation Certificates for any habitable areas within the Stage 1 Project site, a Sustainable Travel Plan is to be submitted and approved by the Principal Certifying Authority. This Transport Plan is to be consistent with the Shepherds Bay Renewal Concept Plan sustainable Travel Plan.

Ground water	As required by the NSW Office of Water: Groundwater: 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. General and Administrative Issues 1. Groundwater shall not be pumped or extracted for any purpose other than temporary construction watering. 2. Pumped water (tailwater) shall not be allowed to discharge off-site (eg. adjoining roads, stormwater system, sewerage system etc) without the controlling authorities approval and/or owners consent. 3. The licensee shall allow (subject to Occupational Health and Safety Provisions) the NSW Office of Water or any person authorised by it, full and free access to the works (excavation or bore/bore field), either during or after construction, for the purpose of carrying out inspection or test of the works and its fittings and shall carry out any work or alterations deemed necessary by the NSW Office of Water for the protection and property maintenance of the works, or the control of the water extracted to prevent wastage and for the protection of the quality and prevention from pollution or contamination of the groundwater. 4. If a work is abandoned at any time the licensee shall notify the NSW Office of Water that the work has been abandoned and seal off the aquifer by such methods as agreed to or directed by the NSW Office of Water. 5. Suitable documents are to be supplied to the NSW Office of Water of the following: a) a report of prediction of the impacts of pumping on any licensed groundwater users or groundwater dependent ecosystems in the vicinity of the site. Any adverse impacts will not be allowed and the project will need to be modified. b) A report of assessment of the potential for salt water intrusion to occur as a result of the dewatering. This report is only required for sites within 250m of any marine or estuarine foreshore area. The generation of conditions leading to salt water intrusion will not be allowed, and the proposal will need to be modified. c) Descriptions of the methods used and actual volume of groundwater to be pumped (kilolitres/megalitres) from the dewatering works, the works locations, the discharge rate (litres per second), duration of pumping (number of days/weeks), the amount of lowering of the water table and the anticipated quality of the pumped water. d) Descriptions of the actual volume of pumped water (tailwater) to be reinjected (kilolitres/megalitres), the reinjection locations, the disposal rate (litres per second), duration of operation (number of days/weeks) and anticipated quality of treated water to be reinjected.
	e) Monitoring of groundwater levels (minimum of 3 weekly measurements of depth to water at a minimum of 3 locations broadly distributed across the site) beneath the proposed development site prior to construction. This requirement is only for sites where the proposed structure shall extend greater than one floor level into the existing ground level. Specific Conditions 1. The design and construction of the structure must preclude the need for permanent dewatering. 2. The design and construction of the structure that may be impacted by any watertable must include a water proof retention system (ie a fully tanked structure) with adequate provision for future fluctuations of water table levels. (It is recommended that a minimum allowance for a water table variation of at least +/-1.0 metre beyond any expected fluctuation be provided). The actual water table fluctuation and fluctuation safety margin must be determined by a suitable qualified professional. 3. Construction methods and material used in and for construction are not to cause pollution of the groundwater. 4. Monitoring of groundwater levels is to be continued at least weekly during the construction stage and at least weekly over a period of at least 2 months following cessation of dewatering, with all records being provided to the NSW Office of Water on expiration of the licence. This requirement is only for sites where the proposed structure shall extend greater than one floor level into the existing ground level. 5. Groundwater quality testing must be conducted (and report supplied to the NSW Office of Water). Samples must be taken prior to the commencement of dewatering, (and ongoing to the satisfaction of the NSW Office of Water for any extraction and reinjection activities). Collection and testing and interpretation of results must be done by suitably qualified persons and NATA certified laboratory identifying the presence of any contaminants and comparison of the data against accepted water quality objectives or criteria. 6. Discharge of any contaminated pumped water (tailwater) that is not to be reinjected must comply with the provisions of the Protection of the Environment Operations Act 1997 and any requirements of the relevant controlling authority. The methods of disposal of pumped water (ie street drainage to the stormwater system or discharge to sewer) and written permission from the relevant controlling authority must be presented to the NSW Office of Water in support of the licence application. 7. Discharge of any contaminated pumped water (tailwater) that is to be reinjected, must comply with the provisions of the Protection of the Environment Operations Act 1997. The quality of any pumped water (tailwater) that is to be reinjected must be compatible with, or improve the intrinsic or ambient groundwater in the vicinity of the reinjection site. Contaminated groundwater is not to be reinjected into any aquifer. The following must be demonstrated in writing: a) The treatment to be applied to the pumped water (tailwater) to remove any contamination. b) The measures to be adopted to prevent redistribution of any contamination in the groundwater system. Any reinjection proposal that is likely to further spread contamination within the groundwater system will not be allowed and the project will need to be modified.

	8. Written advice be provided from the Certifying Authority to the NSW Office of Water to certify that the following ground settlement issues have been addressed in reports submitted by the proponent: a) Assessment by a suitably qualified geotechnical professional that the proposed dewatering activity does not pose an unacceptable risk of off-site impacts such as damage to surrounding buildings or infrastructure as a result of differential sediment compaction and surface settlement during and following pumping of groundwater. b) Settlement monitoring activities to be undertaken prior to, during and for the required period of time following the dewatering pumping to confirm the impact predictions. c) Locations of settlement monitoring points, and schedules of measurement. Formal Application Issues 9. An application must be completed on the prescribed form for the specific purpose of temporary construction dewatering and a licence obtained from the NSW Office of Water prior to the installation of the groundwater extraction works. A plan drawn to scale will be required with the application clearly identifying the location of the dewatering installations. 10. Upon receipt of a Consent from the Department of Planning and prior to commencement of work, a fully completed licence application form is to be formally lodged with the Office of Water (accompanied by documentation clearly explaining the means by which the below-ground areas of the development will be designed and constructed to prevent any groundwater seepage inflows; and therefore preclude any need for permanent or semi-permanent pumping). Based on the licence application assessment meeting the Office of Waters statutory requirements, the NSW Office of Water will then be in a position to issue a Water Licence under Part 5 of the Water Act 1912.
Street front landscape works	The street frontages of the Stage 1 Project will be landscaped in accordance with the Landscape Plan and Report included in the Preferred Project Report. These landscaped areas will be maintained on a regular basis to avoid concealment opportunities for criminals to hide.



4. STAGE 1 PROJECT

SHEPHERDS BAY URBAN RENEWAL

SHEPHERDS BAY URBAN RENEWAL

4.1 INTRODUCTION

The Stage 1 Project Application site is known as 39 and 41 Belmore Street, Ryde and is legally defined as Lot 1 DP 384185 and Lot 1 DP 1072555. The site is located in Stage 1 in the south-eastern portion of the Shepherds Bay Renewal Concept Plan (the Concept Plan) site. It has frontage to Belmore Street to the east, Rothesay Avenue to the south and Hamilton Crescent to the north and a total area of 8,269.46sqm.

The Stage 1 Project has been designed to support and comply with the Concept Plan as noted in the previous section. Specifically the Stage 1 Project Application seeks approval for:

Demolition and Construction

- Removal of all existing buildings. Demolition of the building on No.41 Belmore Street has already been undertaken under the commenced Development Consent (No. 1244/2002)
- Construction of two (attached) residential buildings ranging between 3 and 12 storeys in height consistent with the Concept Plan maximum RL's for Stage 1.
- The proposed height of the buildings is ranges from 3 to 7 storeys at the Belmore Street frontage with taller building elements setback from the main building line to maximise solar access to the public domain
- 246 apartments
- 331 car parking spaces including 25 disabled spaces in basement carpark accessed from Belmore Street
- Landscaping and a publicly accessible pedestrian link parkland of 877sqm forming part of the lower pedestrian spine and pocket park required by Council's DCP and the Concept Plan
- Landscaping including deep soil planting in the publicly accessible parkland
- Infrastructure, stormwater and utility works
- Communal open space in a central courtyard and public open space around the perimeter of the site (including perimeter planting and public footpaths)
- Private courtyards provided at ground level and balconies to upper floors
- Bicycle storage facilities in the basement for 50 bikes.



FIGURE 3. STAGE 1 BUILDING FOOTPRINT PLAN EXTRACT FROM CONCEPT PLAN

SHEPHERDS BAY URBAN RENEWAL

4.2 DRAWING SCHEDULE (Robertson + Marks)

SHEET LIST:

ARCHITECTURAL DRAWINGS

Sheet # / Revision	Sheet Name
A 100-3	COVER SHEET
A 101/7	BASEMENT PLAN
A 102/6	UPPER BASEMENT PLAN
A 103/7	LOWER GROUND FLOOR PLAN
A 104/5	GROUND FLOOR PLAN
A 105/5	LEVEL 1 FLOORPLAN
A 106/5	LEVEL 2 FLOORPLAN
A 107/5	LEVEL 3 FLOORPLAN
A 108/4	LEVEL 4 FLOORPLAN
A 109/2	LEVEL 5 FLOORPLAN
A 110/2	LEVEL 6 FLOORPLAN
A 111/2	LEVEL 7 FLOORPLAN
A 112/2	LEVEL 8 PLAN
A 113/2	LEVEL 9 PLAN
A 114/2	LEVEL 10 PLAN
A 115/2	LEVEL 11 PLAN
A 117/2	ROOF PLAN
A 118/4	ROTHESAY AVENUE ELEVATION
A 119/4	BELMORE STREET ELEVATION
A 120/4	HAMILTON CRESCENT ELEVATION
A 121/5	NEW FORESHORE LINK ELEVATION
A 122/4	SECTIONS
A 123/4	SECTIONS
A 124/1	EXISTING BOUNDARIES
A 125/3	NEW BOUNDARIES
A 126-4	SHADOW DIAGRAM SHEET 1
A 127/3	SHADOW DIAGRAM SHEET 2
A 128/3	SHADOW DIAGRAM SHEET 3
A 129/1	SHADOW DIAGRAM SHEET 4
A 130/2	BUILDING ENVELOPE CONTROL DIAGRAMS
A 131/2	BUILDING ENVELOPE CONTROL DIAGRAMES
A 132/2	ADAPTABLE APARTMENTS
A 133/2	ADAPTABLE APARTMENTS
A 134/2	SHADOW DIAGRAM-ADJACENT BUILDING
A 135/1	SHADOW DIAGRAM SHEET 5

COLOURS & MATERIALS

Sheet # / Revision	Sheet Name
_1/2	FACADE MATERIALS & COLOURS - PODIUM
_2/2	FACADE MATERIALS & COLOURS - BLOCK 1
_3/2	FACADE MATERIALS & COLOURS - BLOCK 2
_4/2	FACADE MATERIALS & COLOURS - BLOCK 3
_5/2	FACADE MATERIALS & COLOURS - BLOCK 4

STORMWATER

Sheet # / Revision	Sheet Name
600283-100/1	COVER SHEET
600283-110/2	STORMWATER CONCEPT PLAM - LOWER GROUND FLOOR
600283-111/2	STORMWATER CONCEPT PLAM - UPPER BASEMENT LEVEL
600283-112/2	STORMWATER CONCEPT PLAM - LOWER BASEMENT LEVEL
600283-120/2	EROSION & SEDIMENT CONTROL PLAN
600283-130/1	MISCELLANEOUS DETAILS
600283-135/2	STORMWATER CATCHMENT AND UTILITY SERVICES PLAM
600283-140/1	STORMWATER LONG SECTION PLAN

SHEPHERDS BAY URBAN RENEWAL

4.3 STAGE 1 PROJECT DESIGN PHILOSOPHY

The Stage 1 Project Application supports the vision and development parameters established in the Concept Plan.

As detailed by Roberston + Marks Architects in the SEPP 65 Assessment at **Annexure 5**, the Stage 1 Project design has been informed and responds to the emerging character of Shepherds Bay, the LEP objectives , recently constructed adjacent residential development, solar access, cross ventilation, parklands adjoining the site, extensive water views towards the south, south-west and south-east of the site, and its location fronting the Parramatta River foreshore reserve.

The development will include part of a new publicly accessible pocket park at the western termination of Nancarrow Avenue and part of a new pedestrian walkway will connect the pocket park down to the existing foreshore park. These new public areas will be publicly accessible at all times and will provide enhanced amenity not only for the Stage 1 development but also for the wider community.

The proposed development form is a perimeter block ‘U’ shaped primarily residential building above basement car parking, with the open end facing southern boundary to allow for direct and oblique water views for apartments facing the internal communal courtyard. It is set back from Rothesay Avenue to retain the large existing trees along the southern boundary and within Anderson Park. Building bulk is stepped up away from Belmore Street to retain a similar presentation to the street as the ‘Bay One’ development opposite and ensure a human scale in the street.

The building disposition on the site allows retention of the existing view corridor down Belmore Street and the creation of a new view corridor from upper west end of the development adjoining Nancarrow Avenue down to the water.

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 building.

To minimize the use of energy, most of the apartments offer cross ventilation (dual aspect). Where possible the number of units with solar access is maximized.

Proposed public and communal open spaces are to be landscaped to integrate with the overall landscape themes of the Concept Plan site. Balconies are designed to overlook all sides of the development promoting passive surveillance of the spaces below.

The proposal provides a range of apartment types and sizes that provides a range of choice in terms of affordability.

Emphasis has been on maintaining a strong base and ground line. Extensive terracing and landscaping at ground levels provides a smooth transition between the building and the site.

A palate of natural materials and colours are proposed to break up the scale and massing of the building and blend with the waterfront reserve. Elements such as sun shading louvers and pergolas are designed to soften and articulate the façades of the buildings as viewed from the public domain.

Car parking has been provided based on the DCP car parking rates for sites with good access to public transport. Forty eight visitor parking spaces are provided within the basement car park. Visitors will enter the car park via a security controlled access system activated by residents from their units.

On site parking rates have been kept to a sustainable minimum as requested in the DGR’s. For further discussion of proposed Stage 1 car parking provision refer **Annexure 7**.

4.4 DEVELOPMENT STATISTICS

A summary of the development statistics is provided below, for the detailed Development Statistics Schedule please refer to **Annexure 1**:

- Site Area: 8,269.46sqm
- Total GFA: 22,318sqm
- Total publicly accessible open space: 877sqm
- Communal open space: 1,154sqm
- Total apartments: 246
- Private balconies or terraces to each apartment in excess of RFDC guidelines
- Storage 6-10 m³ per apartment
- Parking: 331 spaces (including 25 disabled spaces)
- Bike storage racks for 50 bikes (30 in basement plus 10 at communal open space entry and 10 in publicly accessible link park entry)
- Apartment mix:
 - 48 x 1 bed 19.5%
 - 163 X 2 bed 66.3%
 - 35 x 3 bed 14.2%
- Adaptable dwellings 10%

GFA BREAKDOWN	
Total GFA: : 22,318sqm	
LEVEL	GFA (sqm)
Basement	426
Upper basement	978
Lower ground floor	2115
Ground floor	3046
Level 01	3044
Level 02	2862
Level 03	2443
Level 04	2360
Level 05	1372
Level 06	1097
Level 07	515
Level 08	515
Level 09	515
level 10	515
Level 11	515

4.5 PROPOSED LAND USES

4.5.1 Residential

The Stage 1 development comprises a 3 to 12 storey stepped residential development containing 242 apartments. A mix of apartment sizes has been provided and as detailed below:

Table 7. Stage 1 Apartment Mix and Size Summary			
	Number	Unit Mix	Average Unit Size (sqm)
Bed 1	46	19.1%	56.75
Bed 1 + Study	1	0.4%	75
Bed 2	150	60.9%	89.4
Bed 2 + Study	13	5.28%	87.6
Bed 3	35	14.23%	106.2

4.5.2 Open Space

Communal Open Space

A central communal space is proposed to facilitate community interaction. The communal space will comprise landscaping, paving, lighting and water features. The high quality space will be an attractive informal space for residents to interact. The water features will create a visual linkage to Parramatta River. This space will be overlooked by apartment terraces and balconies which will maximise opportunities for passive surveillance.

Public Open Spaces

A significant portion (1,029sqm) of the new public pedestrian spine along the western boundary of the site required by the Concept Plan, will be constructed as part of the Stage 1 Project development. This will be a public space and will provide an important physical and visual corridor for the community through the Concept Plan site. In addition, public domain areas will be landscaped around the perimeter of the site.

4.5.3 Interface with Foreshore Area

The foreshore is an important part of the Meadowbank neighbourhood. Opposite the Stage 1 site is Anderson Park and the foreshore reserve, which contain several mature figs. An attractive landscaped edge is proposed to be provided along the southern boundary of the site. The generous setbacks and stepped ‘u-shape’ design of the building with a central communal open space will ensure the development appropriately addresses and respects this important public domain area. Building articulation and elements will create an attractive and interesting façade to the foreshore area.

4.6 BUILDING FORM

4.6.1 Heights (finished levels), Setbacks, Building Depths and Separations

The Stage 1 buildings will range in height from 3 to 12 storeys above the new reshaped topography ground plane and comply with the Concept Plan Building Setback and Height Maps.

Lower building heights and articulated facades have been provided at the Belmore Street frontage and on the southern façade facing Shepherds Bay and Anderson Park. The lower building heights along these edges break up the building bulk, integrate the development with the scale of the adjoining development and ensure the building maintains a human scale at the interface with the streetscape and park.

4.6.2 Overshadowing and Building Orientation

As detailed on the Shadow Diagrams at **Annexure 2**, the south-west orientation and topography of the Stage 1 site creates significant constraints on solar access to the development. The building footprints and heights have been designed to create pleasant open spaces, good permeability, linkages and views. Whilst not all apartments receive full solar access a redesign would result in loss of these other benefits. The siting of the proposed building in a ‘U’ shape configuration will result in significant permeability benefits and provide views to many apartments. The design of the buildings include skylights to increase solar access to top floor units.

Consideration of impacts on adjacent private and public domain areas was given during the design and the stepped height of the building between 3 and 12 storeys will minimise overshadowing impacts on these areas. A Solar Access assessment is attached at **Annexure 6**.

SHEPHERDS BAY URBAN RENEWAL

4.6.3 Floor by Floor Description

The Stage 1 development comprises 242 apartments with associated balconies, terraces, a ground floor commercial/community space, car parking and a central communal space.

A floor by floor description is provided below.

61.9 Materials and Finishes

Materials and finishes will be sympathetic with the recent adjoining residential development but vary to provide individuality and identity to the development.

A Facade, materials and colours report was submitted as part of the submitted EA for Stage 1 application, and reprinted in **Annexure 1**.

Table 2. Proposed Stage 1 Apartment Numbers

	1 bed	2 bed	3 bed	TOTAL
Level 1		2	2	4
Level 2	2	6	2	10
Level 3	2	18	2	22
Level 4	5	23	4	32
Level 5	7	23	4	34
Level 6	6	22	4	32
Level 7	4	19	4	27
Level 8	4	18	4	26
Level 9	4	10	2	16
Level 10	4	7	2	13
Level 11	2	3	1	6
Level 12	2	3	1	6
Level 13	2	3	1	6
Level 14	2	3	1	6
Level 15	2	3	1	6
TOTAL	48	163	35	246
APARTMENT MIX	19.5%	66.3%	14.2%	100.0%

4.6.4 Building Articulation

The revised Stage 1 design is highly articulated, both vertically and horizontally with balconies, screening and changes in materials adding further interest in the streetscape.

4.6.5 Ceiling Heights

Higher ceilings have been provided to ground floor spaces to facilitate flexibility of future use for live/work, retail, community or other non-residential use.

4.6.6 Storage

Storage will be provided within the units and car parks in accordance with the SEPP 65 and RFDC 'rule of thumb' (studio: 6m³, 1bed: 6m³, 2bed: 8m³, 3bed: 10m³).

4.6.7 Adaptable Dwellings

Approximately 10% of the development will comprise adaptable apartments. Twenty five (25) disabled parking spaces will be provided and access paths to the communal space will be suitable for disabled access. Refer Annexure 1 for details of Adaptable units provided.

4.6.8 Affordable Housing

A mix of apartment sizes will be provided. The increased housing supply in the area and proposed apartment mix will ease affordable housing issues in the area.



FIGURE 4. STAGE 1 MATERIALS VIEW FROM ROTHESAY AVENUE



FIGURE 5. STAGE 1 MATERIALS VIEW FROM NEW PEDESTRIAN LINK PARK

SHEPHERDS BAY URBAN RENEWAL

4.7 PRIVATE, COMMUNAL AND PUBLIC OPEN SPACES

Landscape Plans and Design Report prepared by PLACE Design Group, December 2011 are attached as **Annexure 3**. A summary of proposed landscape works is provided below.

4.7.1 Landscape Design

The Stage 1 Landscape Plan has two distinct spaces - the internal courtyard and the external spaces which comprises part of the new a public pocket park, pedestrian link and street front areas of the development.

4.7.2 Public Open Spaces

The Stage 1 Project includes construction of approx 1,029sqm of the publicly accessible pedestrian link parkland required by the Concept Plan, within the Stage 1 site on the western side of the building. The northern end of this linear park is the highest end of the park and it provides planted terraced walls and shaded seating areas. Water connects through the park and in turn creates a visual connection to the Parramatta River. At the lower level of the park is a space has been cleared to serve as break out spaces for potential future commercial development in the Stage 3 development site.

4.7.3 Communal Open Spaces

The internal communal courtyard is split level with an upper and lower level, both enjoying views over the Parramatta River. The upper level is designed to be a tranquil space with large shade trees and soft bubbling water jets. The lower level is more energetic with a 3.2m water cascade. Both spaces are easily accessible via a light weight central staircase that expands over the water body.

4.7.4 Private Open Spaces

Terraces and balconies are provided to all upper floor apartments whilst ground floor apartments will have courtyards. The courtyards are provided with fences and movable screening. Landscape buffers are provided between private and public areas.

4.7.6 Streetscape works

The streetscape treatment has given consideration to the existing streetscape, recent improvements to nearby streets and the location of the corner site adjacent to the foreshore. Belmore Street treatment comprises planting to buffer and screen the development and to provide privacy to the ground floor apartments. The existing street trees along Rothesay Avenue will be retained and will be integrated with new trees on the western portion of the Stage 1 street frontage.

Indicative lawn area is indicated on the small portion of Energy Australia land that previously contained a disused substation, adjoining the site on the corner of Belmore St and Hamilton Cres (between the site and the Council owned road reservation).



FIGURE 6. STAGE 1 LANDSCAPE PLAN

4.7.5 Planting Zones

Trees are proposed in the communal courtyard, public pocket park and street planting. These trees balance the vertical scale of the development, provide shade and aesthetic and environmental benefits.

1,827sqm of the Stage 1 site is provided as deep soil planting area (including 552sqm over podium). This represents 22.1% of the Stage 1 site area (8,269.46sqm). This is slightly less than the 25% SEPP 65 guideline. In addition, the Application includes another 318sqm of road verge deep soil planting.

This level of deep soil planting is considered acceptable on the basis of the site's location adjacent to Anderson Park and the foreshore reserve and the requirement of Ryde Council's DCP and the Concept Plan to provide a through- site hard paved publicly accessible pedestrian link to the foreshore within the site.



FIGURE 7 STAGE 1 ARTIST IMPRESSION COMMUNAL OPEN SPACE (part constructed in Stage 1)



FIGURE 8. STAGE 1 ARTIST IMPRESSION PUBLICLY ACCESSIBLE LINK PARKLAND (part constructed in Stage 1)

4.7.7 Pedestrian Access and Linkages

Pedestrian access is provided around the perimeter of the development with multiple at grade access points to the public domain. The publicly accessible pedestrian link park is designed to lead people to the water with pedestrian access running north-south. Hamilton Crescent is 6m above the pedestrian circulation for Stage 1.

4.7.8 Bicycle Access and Linkages

Bicycle racks will be provided in the lower area of the public domain. In addition, bicycle cages for residents will also be provided within the buildings carpark.

4.7.9 Riparian Environment and Habitat Protection

The Stage 1 site, although adjacent to the Parramatta River, is separated from the riparian environment by Anderson Park and Rothesay Avenue. Based on the findings of the Flora and Fauna Assessment by LesryK Environmental Consultants and the City of Ryde’s list of preferred species, native and locally occurring plant species were selected and consideration was given to their aesthetic attributes and functionality. The planting for Stage 1 is consistent with the Planting Palette for the Concept Plan which was informed by Council’s Public Domain Manual. No work is proposed in this Application within the Park or foreshore reserve to ensure the riparian environment is protected.

4.8 ACCESS AND PARKING

4.8.1 Car, Motor Bike and Cycle Parking and Access

Access to the Stage 1 development will be provided from Belmore Street. Three levels of underground parking are proposed and a total of 323 car parking spaces will be provided including 31 disabled spaces. Bicycle cages are proposed in the building’s car park.

4.8.2 Loading and Emergency Access

Emergency vehicle access is from the surrounding streets Rothesay Ave and Belmore Street. The strata management plan, when prepared will address loading protocols.

Table 3. Proposed Car Parking Allocation	
1 bed apts.	48 (1:1)
2 bed apts.	163 (1:1)
3 bed apts.	70 (1:2)
TOTAL RESIDENT	281
Visitors	50 (@ 20%)
TOTAL	331

Proposed Car Parking Locations		
		Disabled
Basement	162	13
Lower basement	122	12
Lower ground	47	
		25
TOTAL	331	

4.9 ESSENTIAL SERVICES AND INFRASTRUCTURE

Proposed stormwater management for the site has been designed to improve the existing stormwater system, reduce run off and associated impacts on Shepherds Bay and incorporate rainwater recycling. Refer to Stormwater Management Plans at **Annexure 4**.

As detailed in their letter which accompanied the submitted EA, investigations and discussions by Floth Sustainable Building Consultants with relevant service providers indicated that the site can be provided with utility services from existing infrastructure with system augmentation.

4.10 GEOTECHNICAL STABILITY AND CONTAMINATION

The Stage 1 Project design requires localised filling of the site to provide accessible entries to buildings, new public accessways and pocket park and future connections to the upper areas of the Concept Plan site. A Geotechnical Assessment was prepared for the existing development approval on the Stage 1 site.

A further Preliminary Geotechnical and Groundwater Assessment was undertaken by Douglas Partners in July 2010 and included in the submitted EA.

Remediation of the site is being carried out under the existing DA approval for the Development Consent (No.1244/ 2002) to the Sydney Sae Soon Church which has commenced.

A Site Validation Report and a Site Audit Statement will be prepared upon completion of works and submitted to Council.

4.11 RESIDENTIAL AMENITY

4.11.1 Visual Privacy

The development has been designed to orientate living areas towards the water where possible with suitable screening included to protect privacy between adjacent dwellings.

4.11.2 Acoustics

An Acoustic Assessment Report is found at **Annexure 7**. That assessed the noise impacts from nearby sources (primarily traffic noise from Church St) in accordance with criteria set out in the Department of Planning *Development near Rail Corridors and Busy Roads Interim Guidelines* and made recommendations for the treatment of windows in the development which have been adopted.

It also assessed potential impact of the construction phases on the surrounding neighbourhood in accordance with the DECCW *Interim Construction Noise Guidelines* and DEC NSW *Assessing Vibration: A Technical Guideline* and provided a range of excavation, demolition and construction management measures that will be adhered to by the Proponent in the Stage 1 Project delivery.

4.11.3 Daylight Access

The Stage 1 site is south facing with topography sloping towards the south. The orientation of the site places constraints on solar access. The layout and siting of the buildings has been designed to increase permeability, through-site linkages and views. Buildings have been orientated to maximise solar access to open spaces (public and private) and living areas of apartments where possible. A Solar Access and Natural Ventilation report has been prepared for the Stage 1 Project by Steve King – Consultant Architect and is included in **Annexure 1**.

In relation to solar access for the Stage 1 Project, the report concludes that the proportion of apartments that are characterised as complying with the performance requirements of the RFDC is of a very reasonable standard, given the nature of the siting constraints, and should not be an impediment to approval.

In relation to natural ventilation, the report concludes that the development is considered fully compliant for natural ventilation under the RFDC.

4.11.4 Wind

The orientation of the site and location adjacent to a waterway will result in exposure to winds. Winds from the south-west and north-west have been considered in the planning of the development.

4.11.5 Safety and Security

The Stage 1 development has incorporated Crime Prevention through Environmental Design (CPTED) principles and strategies to minimise risk. Refer to the Crime Risk Assessment Report prepared by PLACE Design Group at **Annexure 7** of the submitted EA for further details.

4.11.6 Construction Management

The Draft Statement of Commitments commits to the lodgement of a Construction Management Plan to the Principal Certifying Authority for approval prior to the commencement of any relevant works on the site.

4.12 SUSTAINABILITY

4.12.1 Building Performance BASIX

The proposed development has been designed to maximise natural heating and cooling to reduce energy consumption. The apartments will be fitted with water efficient fixtures and rainwater will be captured and reused on site.

A BASIX Certificate for Multi Dwelling Housing (Certificate Number 331309M_03) has been prepared for the Stage 1 Project Application by Ecospecifier Pty Ltd and is included in Annexure 8. The Certificate confirms that the proposed development will meet the NSW Governments requirements for sustainability and achieve a target or above score for water, thermal comfort and energy if built in accordance with the commitments noted in the Certificate including requirements for:

- Use of indigenous or low water species of vegetation
- Water efficient fixtures and appliances
- Energy efficient hot water system
- Ventilation system of bathroom, kitchen and laundry
- Air-conditioning systems
- Central water tank (rainwater or stormwater)
- Car park ventilation and common area lighting

4.12.2 Waste Management

A Waste Management Plan (WMP) was attached as Annexure 27 to the submitted EA. In addition, as required by the Concept Plan Draft Statement of Commitments, a separate Waste Management Plan for the Stage 1 Project will be submitted to the Principal Certifying Authority for approval prior to the issue of a relevant Construction Certificate. Garbage storage rooms are proposed within the basement of the building and collection will be managed to the street for Council collection in the usual manner by the Strata Building Manager. Areas for recycling are included within the garbage rooms. Refer Architectural Plans at Annexure 1.

4.12.3 Section 94 Contributions

A Voluntary Planning Agreement (VPA) is being prepared for the development in consultation with Council and the Department of Planning outlining the proponent's contributions and community benefits as part of the overall Concept Plan VPA.

4.12.4 BCA and Fire Safety

A report prepared by a BCA consultant attached at **Annexure 9** indicates that the building work proposed in Stage 1 will comply with the Building Code of Australia 2010.

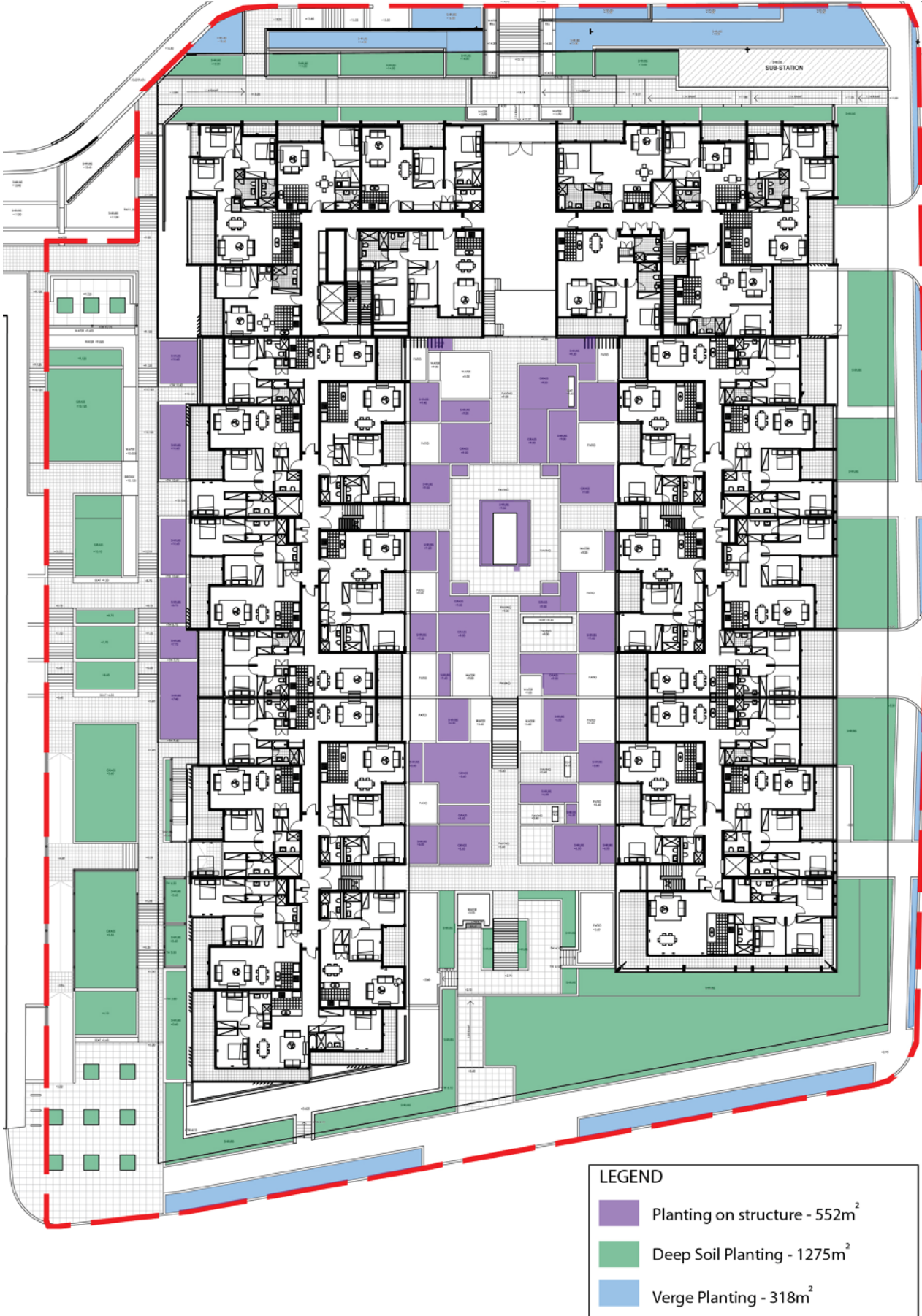


FIGURE 9. STAGE 1 DEEP SOIL PLANTING PLAN



5. CONCEPT PLAN COMPLIANCE

SHEPHERDS BAY URBAN RENEWAL

SHEPHERDS BAY URBAN RENEWAL

 CONCEPT PLAN SITE



FIGURE 10. CONCEPT PLAN

5. Concept Plan Compliance

The Preferred Concept Plan for Shepherds Bay Renewal is described in detail in the Concept Plan Application PPR. In summary it facilitates:

- New residential development to replace existing commercial and industrial uses;
- Establishment of a new foreshore neighbourhood in Meadowbank linking existing residential areas to the waterfront and public transport;
- The construction of new roads, sharedways, cycleways and pedestrian paths to public transport and the waterfront;
- The 'in principle' removal of existing buildings
- Building envelopes for new residential buildings with heights ranging between 3 to 12 storeys from a reformed ground level;
- Approximately 193,491.7sqm GFA of new residential development which equates to approximately 2002 new apartments (dependant upon mix) ranging between 60 to 115sqm (10% 1 bed, 75% 2 bed, 15% 3 bed) plus 10,080sqm of commercial, retail or community uses;
- Approximately 19,660sqm of the site to be publicly accessible open space;
- Car parking for approximately 2,954 residential car parking spaces, including 252 commercial and community spaces, based generally on the RTA Guidelines;
- Strengthening of both north-south and east-west pedestrian and vehicular connections;
- Substantial improvement to area-wide stormwater management infrastructure;
- Remediation of land if required;
- New infrastructure including utility upgrades and under grounding of services;
- Maintaining views to existing development and creating new view corridors;
- Providing better functionality in terms of street layout, building form and location of open spaces;
- Permitting taller building forms at the central core to create a sense of place and 'heart' to the development;
- Providing significantly more publicly accessible open space across the Concept Plan site than a Council DCP compliant scheme;
- Landscaping and significant improvements to the public domain; and
- Localised reshaping of the topography of the site to create the street layout envisaged in Council's DCP, which will open up new view corridors to the water from the surrounding residential area and improve pedestrian and cyclist accessibility.

Adoption of the Concept Plan does not enable any construction works without further Development Approval from either the Minister for Planning (in the case of this submitted Stage One Project Application) or the City of Ryde Council.

The Concept Plan includes maximum building envelopes for new buildings, relative to maximum RL's for each envelope, to accommodate approximately 193,491.7sqm GFA of residential floorspace plus 10,000sqm of commercial or community uses.

The Concept Plan proposes localised reshaping of the topography in various areas of the site to achieve better planning outcomes, particularly in terms of accessibility, views and functioning interfaces between buildings and their adjacent public domain.

Carparking based on a rate that is similar to the RTA rate, which is less than Council's DCP to reflect the site's good access to public transport. as follows:

- 1 & 2 bed units 1 parking space
- 3 bed units 2 parking spaces
- Plus 1 visitor spaces per 5 units

The Concept Plan also requires that bicycle parking be provided within all development stages which is easily accessible from ground levels and from apartments and commercial or community uses. This is to be provided in a combination of secured areas and chained bicycle storage in public domain areas.

As detailed in the development statistics schedules at **Annexure 1**, the Stage 1 Project more than complies with the car parking Concept Plan car parking rates, providing 328 spaces which is 3 more than required plus bicycle storage in the basement and adjacent to the entry of the communal space for 50 bicycles.

Concept Plan Section 4.3.6 - Building Heights

Due to the highly modified existing topography, the Concept Plan defines the height of buildings envelopes illustrated on the Heights Map at **Figure 12** referenced to the RL's of the adjacent streets. As detailed in the Architectural Drawings at **Annexure1**, the Stage 1 Project complies with the maximum building heights and building element locations in the Concept Plan and the detailed RL maxima established in the Concept Plan PPR Figure 13, reproduced as Figure 13 below.

The maximum building heights in the Concept Plan for the Stage 1 site range between 3 and 12 storeys with the 12 storey element in the centre of the site flanking the proposed new Nancarrow Road link above.

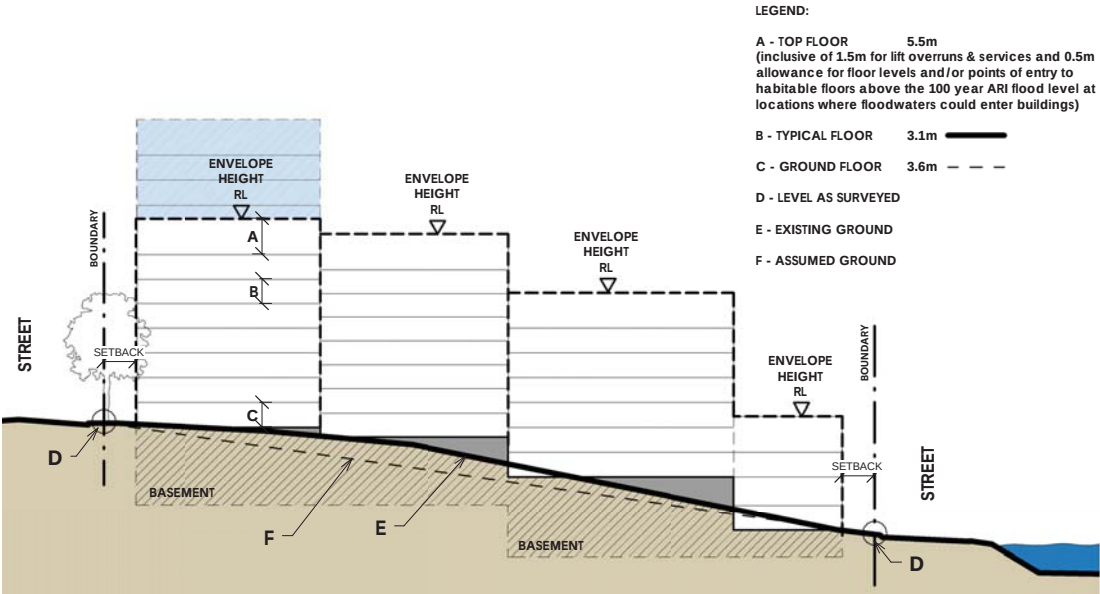


FIGURE 11. CONCEPT PLAN METHOD OF DEFINING HEIGHT

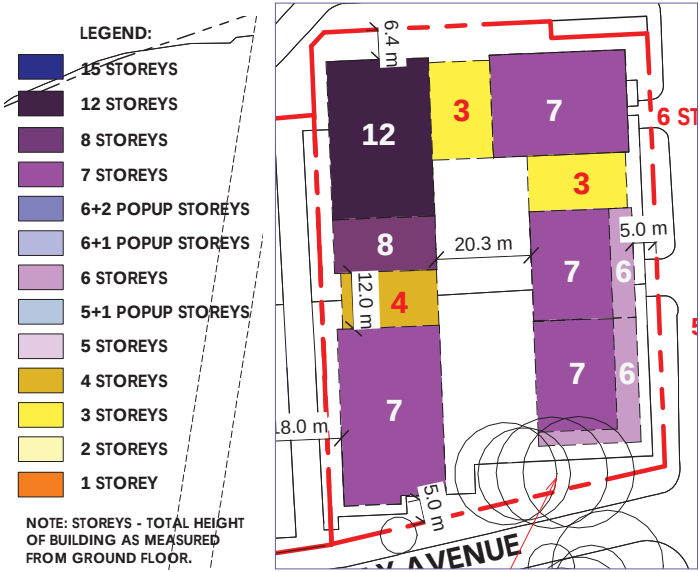


FIGURE 12. CONCEPT PLAN HEIGHT MAP EXTRACT - STAGE 1 SITE

1.



FIGURE 13. CONCEPT PLAN - STAGE 1 BUILDING ENVELOPE CONTROLS

SHEPHERDS BAY URBAN RENEWAL

Concept Plan Section 4.3.7 Building typologies

The Concept Plan envisages three basic building typologies, the Low Rise Residential, Slender Central Tower over Podium and the Perimeter Block form.

The Stage 1 Project adopts the Perimeter Block form, being a residential flat building that wraps around the site boundaries enclosing a central communal landscaped open space with a one 12 storey tower form setback from the main building line and away from the Belmore Street frontage. The width of the buildings are generally between 21 and 25m from glass line to glass line and comply with SEPP 65 and the RFDC.

Concept Plan Section 4.3.8 Building Setbacks

The Concept Plan defines building setbacks from all streets. The Stage 1 Project complies with the 5 metre street setback control illustrated on Figure 7 and demonstrated on the Concept Plan compliance diagrams that accompany the architectural plans at Annexure 1.

LEGEND:

- 5m Setback
- 6.4m Setback



FIGURE 14 CONCEPT PLAN INDICATIVE BUILDING SETBACKS MAP EXTRACT

Concept Plan Section 4.3.9 Open Spaces

The Concept Plan comprises a number of north-south public through-site pedestrian linkages to break up the development and enhance and strengthen foreshore access. The open space concept has been integrated with recent foreshore upgrades, adjoining open space network and riparian vegetation.

Open spaces across the Concept Plan site are to be provided generally in accordance with the Landscape Plan at Figure 28 and Landscape Report at Annexure 10 of the submitted Concept Plan PPR.

The Stage 1 site contains more than half the area of the required new pedestrian link parkland connecting the future Nancarrow Road connection to the foreshore reserve.

The Stage 1 Landscape Plan is fully consistent with the Concept Plan Landscape Plan and Report as detailed in the Stage 1 Landscape Report at Annexure 3. Approximately 25% of the Stage 1 site is provided as deep soil planting area (including 585sqm over podium). # CHECK

Figure 1 of the Concept Plan is reproduced as Figure 15 below.



FIGURE 15. CONCEPT PLAN LANDSCAPE PLAN

The new publicly accessible pedestrian link parkland provides substantial areas for deep soil planting as all basement car parking for the development is located under the building footprints and central communal courtyard.

Concept Plan Section 4.3.9.2 Communal and Private Open Spaces

The central communal courtyard has been designed to be consistent with the Concept Plan, being of high quality design, comprised of landscaping, paving, lighting and water features, seamlessly linked to the public domain and defined by fencing and landscaping.

Concept Plan Section 4.3.10 Vehicular Access and Streets

Consistent with the Concept Plan, the Stage 1 Project proposes street reserve landscaping down Belmore Street and Rothesay Ave to improve the attractiveness and usability of the public domain and strengthen linkages.

Also, as required by the Concept Plan, street lighting will be provided in accordance with Council's Public Technical Domain Manual (Section 5 - Meadowbank).

Provision will also be made for a bus stop along the frontage of the site in consultation with Council and Sydney Buses.



FIGURE 16. CONCEPT PLAN VEHICULAR ACCESS AND PUBLIC TRANSPORT PLAN EXTRACT

- Vehicular Access
- Internal road and destinations
- Foreshore pedestrian access
- Bus stop

SHEPHERDS BAY URBAN RENEWAL

Concept Plan Section 4.3.11 Significant Views

Figure 30 of the Concept Plan identifies ‘Significant View Corridors’ which are to be protected or created in any redevelopment within the Concept Plan site.

View corridors identified in the vicinity of the Stage 1 site are illustrated on the extract of Figure 30 of the Concept Plan PPR, reproduced as **Figure 17** below. All identified view corridors have been protected in the Stage 1 Project design as the development is consistent with the Concept Plan Building envelope controls which were designed to protect existing DCP identified view corridors and open up additional views to the water from the surrounding residential areas where feasible.



- Existing view corridors
- Potential vista
- Neighbours views
- DCP - Panoramic views
- DCP - Vista
- DCP - Partially obscured vista
- DCP - Vista to Olympic Park

FIGURE 17. CONCEPT PLAN SIGNIFICANT VIEW CORRIDORS MAP EXTRACT

Concept Plan Section 4.3.11 Pedestrianways, Cycleways and Shared Zones

The Concept Plan requires the provision of clear, legible pedestrian access through the site. Four (4) north-south pedestrian spines are provided through the new public open spaces and roads. These have been designed to provide attractive and direct linkages through the development and connect to the east-west pathways which run along Constitution Road, Nancarrow Avenue and the foreshore. The extension of the foreshore pedestrian and cycle connections to the foreshore park will assist in completing the link as planned in Council’s Riverwalk Plan, which will provide direct off-road access to a number of existing parks along the foreshore, Meadowbank Ferry wharf and beyond. At night lighting will be provided to pedestrian paths to enhance safety.

The Stage 1 Project incorporates part of the identified pedestrian link between the foreshore reserve and the new Nancarrow Avenue/Hamilton Crescent connection. This parkland incorporates an open pedestrian pathway that has been designed with lighting to maximise night time and open planting to maximise safety of pedestrians consistent with the Concept Plan controls.

Concept Plan Section 4.3.16 Utilities

The Concept Plan requires that all services be undergrounded within the Concept Plan site. Stage 1 will comply with this requirement.

A letter from George Floth utility consultants confirms that all relevant authorities have been contacted and the required services can be supplied to the proposed development, refer **Annexure 14**.

Provision of detailed services designs for approval to the Principal Certifying Authority at the Construction Certificate stage are committed to in the Draft Statement of Commitments for Stage 1 at **Annexure 12** and Section 3 of this PPR.



- Pedestrian access
- Bicycle paths

FIGURE 18. CONCEPT PLAN PEDESTRIAN AND CYCLE ACCESS PLAN EXTRACT

Concept Plan Section 4.3.14 Flooding

The Concept Plan notes that a number of areas within the Concept Plan site are subject to localised flooding. This issue has been taken into account in the design of the building envelopes, floor levels and reshaped topography and is addressed in the engineering reports included in **the EA**.

Additional details are submitted with this report confirming the Stage 1 design has been informed by flood modelling as recommended by Council and would accept development consent conditions with regard to Council’s suggested safety design measures in basement car parks and provision of identified refuge areas. Refer to the submitted Concept Plan PPR Annexure 15 Flood modelling maps. The supplementary letter from Cardno regarding the proposed stormwater and flooding included in **Annexure 4** to this PPR confirms that all habitable floors are located above the maximum identified flood event.

Concept Plan Section 4.3.15 Stormwater Management

Council’s existing area-wide stormwater infrastructure in the area is inadequate and in need of upgrading between Constitution Road and the waterfront.

A Stormwater Management Plan has been prepared for the Concept Plan site which makes recommendations for infrastructure upgrading required to accommodate the new development envisaged in the Concept Plan.

Stormwater Management Plans for the Stage 1 Project, prepared by Cardno are consistent with the Concept Plan and the originally submitted Concept Plan Integrated Water Management Plan and Stormwater Management Plan were included in the submitted Stage 1 and Concept Plan EA, and accompany this PPR submission, with reduced copies included as **Annexure 4**.

The Stage 1 Stormwater Plans have been designed to ensure no significant detrimental impacts on the hydrology of the area or the waterway result from the proposed development.



6. POLICY AND LEGISLATIVE FRAMEWORK AND CONSISTENCIES

SHEPHERDS BAY URBAN RENEWAL

SHEPHERDS BAY URBAN RENEWAL

6.1 RELEVANT PLANNING PROVISIONS AND POLICIES

The submitted combined EA for the Concept Plan and Stage 1 Applications identified and responded to the policy and legislative requirements and DGR’s for the projects.

Therefore the majority of these documents are not revisited in this PPR. Reference and responses are only provided in this Section of the PPR where specific detailed policies or controls they relate specifically to the Stage 1 Project design

6.2 STATE ENVIRONMENTAL PLANNING POLICY (BUILDING SUSTAINABILITY INDEX: BASIX) 2004

A detailed BASIX assessment has been undertaken of the revised Stage 1 Project Design. In addition to BASIX requirements other sustainable design elements outlined in the submitted EA remain part of the proposal.

A BASIX Certificate for Multi Dwelling Housing (Certificate Number 331309M_03) has been prepared for the Stage 1 Project Application by Ecospecifier Pty Ltd and is included in **Annexure 8**. The Certificate confirms that the proposed development will meet the NSW Governments requirements for sustainability and achieve a target or above score for water, thermal comfort and energy if built in accordance with the commitments noted in the Certificate including requirements for:

- Use of indigenous or low water species of vegetation
- Water efficient fixtures and appliances
- Energy efficient hot water system
- Ventilation system of bathroom, kitchen and laundry
- Air-conditioning systems
- Central water tank (rainwater or stormwater)
- Car park ventilation and common area lighting

6.3 STATE ENVIRONMENTAL PLANNING POLICY 55 – REMEDIATION OF LAND

Remediation of the site has been undertaken under the existing DA Consent for the site. Once site excavation and preparation work is completed a Site Audit will be carried out by a suitably qualified consultant to confirm the remediated site meets the required standards for the proposed residential and open spaces uses.

6.4 STATE ENVIRONMENTAL PLANNING POLICY 65 – DESIGN QUALITY OF RESIDENTIAL FLAT DEVELOPMENT AND THE RESIDENTIAL FLAT DESIGN CODE (RFDC)

The SEPP 65 Assessment of the revised Stage 1 Project prepared by Robertson + Marks Architects at **Annexure 5**, demonstrates the proposal’s consistency with the ten design principles in SEPP 65 and the principles in the RFDC, namely: context; scale; built form; density; resource, energy and water efficiency; landscape; amenity; safety and security; social dimensions and housing affordability; and aesthetics.

6.5 RYDE LOCAL ENVIRONMENTAL PLAN 2010

The submitted EA contains a detail discussion of the Concept Plan consistencies and variances from the Ryde Local Environmental Plan 2010 (RLEP) which will not be reproduced in this PPR.

In summary, the Concept Plan and Stage 1 Project support the objectives and is consistent with the majority of relevant permissible landuses and development standards contained in Ryde LEP 2010 with the exception of maximum heights.

However, it is noted that projects assessed under Part 3A of the Act may vary such development standards if approved by the Minister for Planning.

The Stage 1 Project Application is supported by the Concept Plan Application which both seek approval to depart from the Ryde LEP 2010 height development standards. The Stage 1 Project maximum building heights have been designed to be consistent with the Concept Plan Height Map and Stage 1 Building envelope Controls addressed in Section 5 of this PPR.

6.6. CITY OF RYDE DEVELOPMENT CONTROL PLAN 2010

The revised Stage 1 Project consistency with the relevant DCP development objectives and controls is provided in the compliance tables contained in **Annexure 10**.

6.7 MEADOWBANK SECTION 94 CONTRIBUTIONS PLAN 2005

This Plan adopted in 2005 enables Council to levy contributions for the provision or enhancement of public amenities and services that may be required as a consequence of development in the Meadowbank Employment Area.

The requirements of Section 94 are in the process of being negotiated by the Proponent in the VPA for the whole of the Concept Plan site with the City of Ryde Council and the Department of Planning.



7. ENVIRONMENTAL IMPACT ASSESSMENT: STAGE 1 PROJECT APPLICATION

SHEPHERDS BAY URBAN RENEWAL

SHEPHERDS BAY URBAN RENEWAL

This section of the PPR addresses the relevant matters contained in the issued DGR's and subsequent correspondence from the Department and the requirement of the Environmental Planning & Assessment Act for Environmental Assessment of Project Applications made under Part 3A (now repealed) and Section 79C.

7.1 PUBLIC BENEFITS

There are a number of social, economic and environmental benefits offered by the revised Stage 1 Project Application design including:

1. Better, more useable open spaces, connections and meaningful ‘place making’.
2. Greater emphasis on non-motorised modes of transport and connections to ferry, rail and buses.
3. Increased view corridors to the water and visual and physical linkages to provide for a high quality internal residential amenity.
4. More seamless connections between the new development and existing neighbourhood.
5. Better public access to the foreshore.
6. Open, welcoming addition to the suburb, not ‘gated’ community.
7. More defined, elegant built form when viewed from the water.
8. Significant improvements to the stormwater management of the locality and minimised risk of flood inundation.
9. Provision of parts of the site for publicly accessible parkland/ open space.
10. Commitment to sustainable development practices such as green buildings, green infrastructure, facilitating alternative modes of transportation and integrated stormwater management planning.
11. A diversity of housing types and sizes that exceeds the requirement of the LEP/ DCP.
12. A mix of apartment sizes will be provided in response to providing more affordable housing choices.
13. Development cost charges and increased property tax revenues to be used by Ryde City Council for community-wide improvements and services as well as the creation of financial benefits that will result to the community from direct and indirect development-related jobs and services.
14. Approximately 10% of the apartments will be of accessible design suitable for disabled persons.
15. Flexible spaces will be provided on ground level to enable future changes of use to retail, commercial or community or live/ work units as the market demands.

7.2 BUILT FORM URBAN DESIGN/ PUBLIC DOMAIN

The Stage 1 Project development is founded on and is consistent with the Concept Plan described in the submitted Concept Plan PPR. The site was selected for development first because of it has access to services, infrastructure and open space. Additionally the development of the site will form a reasonable extension to the recent residential development adjacent to the site.

7.2.1 Context, Setting, Streetscape and Character

The Stage 1 Application envisions the integration of the development with the foreshore and riparian vegetation connecting it to nearby parklands. The development will contribute to the quality and identity of the context by responding to the natural and built form of the area. Existing and future residents of Shepherds Bay will benefit from increased view corridors and throughout the Concept Plan site, substantial new parklands and pedestrian connections leading down to an enhanced foreshore environment.

The Stage 1 Projects responds to the character established in the Concept Plan. The Stage 1 site adjoins the Bay One residential development and Anderson Park. The current industrial building on the site is uninviting and has large unbroken walls creating a hard edge to the streetscape. The new development is a well designed building that integrates with the adjoining residential development contributing to an active and vibrant street. The development connects to the parkland and foreshore through new public pathways, through site linkages, attractive streetscape treatment and landscaping.

The publicly accessible pedestrian links parkland proposed to the west of the site and will create a new view corridor and enable pedestrian access to the waterfront.

7.2.2 Scale

The Stage 1 Project Application will result in a total gross floor area of bulk and scale which complies with the Concept Plan and results in a total Floorspace of 31,356 sqm GFA.

7.2.3 Heights, Setbacks and Massing
The heights proposed within the Stage 1 Project Application comply with the Concept Plan Height Map and Stage 1 Building Envelope controls contained in the submitted Concept Plan Application PPR as detailed in Section 5 of this PPR and in the Compliance drawings included with the Architectural Drawings at **Annexure 1**.

The height, bulk and scale of the proposed development has been designed with respect to the site context and recent developments adjacent to the Stage 1 Project Application site and the surrounding existing and proposed public domain areas. The building envelopes in the Preferred Concept Plan and consistent Stage 1 Project have been revised from the submitted EA designs to be more vertically and horizontally articulated to maximise solar access and view and add interest in the streetscape.

Setbacks have been provided consistent within the Concept Plan which are generally in accordance with Council's DCP. The setbacks to the streets will ensure the development is of a human scale and buildings do not dominate the streetscape. Setbacks also allow for site lines, landscaping, pathways and grassed verges, consistent with Councils Public Domain Technical Manual.

The Stage 1 Application retains all existing street reservations and enhances the character of the spaces for pedestrians.

7.2.4 Views

The Stage 1 Project was informed by the Richard Lamb & Associates Visual Impact Analysis that was submitted as part of the Concept Plan PPR and complies with the Concept Plan in protecting the identified views to the water from the adjoining areas. .

The Stage 1 Project involves the creation of a new north-south view corridor and a new public park which will result in improved visual linkages to the foreshore and waterway.

7.2.5 Massing

The Stage 1 Project Application scaling and massing of buildings complies with the Concept Plan and reflects the recommendations of the Visual Impact Assessment and the resultant building locations maintain existing views and create additional views and access through the site to the water and proposed parks. The design has been further vertically and horizontally articulated to maximise solar access to public and private areas and improve the amenity of the streets.

The built form, building heights and setbacks for the Stage 1 Project comply with the controls established in the Concept Plan. The Stage 1 development is 3 to 12 storeys in height.

The existing industrial building on the Stage 1 site has a building height of 7 storeys (residential height equivalent) which also precludes water views from properties uphill of the site.

Development Consent for ‘Sae-Soon Church’ on the Stage 1 site (DA 1244/2002) indicates there is already approval for a 5-6 Storey residential development on the site. Additionally, there are a number of recently constructed residential developments in the locality. The new Bay One development is directly opposite the Stage 1 site on Belmore Street and has a building height of 4-7 storeys. The Stage 1 project is responsive to the topography of the site and comparable building heights.

The stepped design of the revised Stage 1 Project development is responsive to the perimeter edge of the Concept Plan site and the foreshore edge along Rothesay Avenue. The lower and varied building heights on these frontages and layered façade break down the overall height of the building to establish a human scale between public spaces and the building. The building envelope ensures reasonable views are maintained from the adjacent Bay One development. It also accommodates views for future development to the rear of the site. The ‘u-shape’ design of the building results in most apartments enjoying water views. The articulation of the building facades will create an interesting silhouette and attractive appearance.

7.2.6 Overshadowing

The constraints of the southern orientation of the Stage 1 site have been addressed through varying the height and locations of building elements in the Concept Plan. The final design has been amended to be more vertically articulated to maximise solar access to private and public domain areas surrounding the site. Building forms are stepped in design to increase solar access.

The building separations have been increased to improve solar access to the apartments and reduce overshadowing of the adjoining developments. The previously long street façades have been broken up with lower sections of building providing more opportunity of solar access into internal podium courtyards and sun penetration to a greater number of apartments opening onto the new northern façade at the building module.

Most of the apartments will have NE and SW facing living spaces due to orientation of site and water views to the south.

The increased number of high rise residential units within the Stage 1 Project has increased the percentage of units with a northern orientation and unfettered solar access. Refer shadow studies prepared by Roberston Marks at **Annexure 1**.

SHEPHERDS BAY URBAN RENEWAL

The Sun Shadow Studies of the Stage 1 Project demonstrate generally the existing adjoining building will not have their daylight access significantly reduced. The publicly accessible and communal open spaces between buildings on the site have acceptable solar access with appropriate daylight access to public open spaces between March and September, bearing in mind the constraints of the existing north western/ south eastern street axis orientation. Streets are orientated between 40° west of north and 50° east of north provides opportunities for good solar access. The buildings shapes will allow solar access to dwellings and private open space. The typical 18 metre wide spacing between buildings ensures adequate solar access to all buildings on the site and consistency with SEPP 65 and RFDC. In mid winter the area adjacent to the north eastern and north western building facades is in full sun from 10 am to 2 pm.

The central courtyard between the Stage 1 buildings is of adequate size to ensure that direct sun onto the ground occurs in areas that are designed for people. The building envelope limits will allow adequate solar access and privacy to neighbouring dwellings. A maximum building depth of 18m allows articulation and modulation of the front and rear faces of primary buildings. Articulation of the building facades will allow additional opportunities for solar access into dwellings. Trees and landscaping will be selected to provide good winter solar access and summer shade.

As previously discussed, the southern orientation of the site places constraints on solar access. The shadow diagrams at **Annexure 1** illustrate that the layout and design of the buildings for the Stage 1 Project has sought to maximise sunlight access to private and public spaces while also providing the sought after water views to future residents.

7.2.7 Public Domain – Open Spaces, Plazas, Streets

Consistent with the Concept Plan, the Stage 1 Application development involves the provision of approximately half of the new landscaped publicly accessible pedestrian link parkland park to the immediate west of the buildings which will provide improved pedestrian access to the foreshore parkland and beyond, together with the landscaping of the Belmore St and the Rothesay Ave street frontages. .

In support of Council's LEP 2010 objective to “create safe and attractive environments for pedestrians”, the Stage 1 Project Application envisages a new vibrant waterfront living area with parklands and active uses supporting new high quality accessible and sustainable residential development. All areas have been designed to provide users with a safe and enjoyable experience, consistent with the CPTED principles of Safer by Design.

7.2.8 Private Open Spaces

Apartments will be provided with individual private open spaces that comply with SEPP 65 and the RFDC. These spaces are of appropriate size to ensure useability and will have direct access from living areas. Ground floor apartments are provided with terraces/ courtyards while upper floor apartments will be provided with balconies. Private open spaces have been oriented to address streets and other public domain areas to maximise passive surveillance.

7.2.9 Materials and Finishes

Materials, colours and finishes for the Stage 1 Project are of a very high standard and integrate with the emerging character of development in the area. The composition and articulation of the proposed. Refer **Annexure 1** for materials details.

7.2.10 Safety and Security

A Crime Through Environmental Design (CPTED) Assessment has been prepared by PLACE Design Group. The development has incorporated CPTED principles and strategies to minimise risk, a description of these is provided below:

Surveillance (Passive and Active)

Passive Surveillance

The public spaces will be well supervised through natural surveillance created by building layout, orientation and location. The development is bounded by two streets and a well lit pedestrian link parkland. These will increase passive surveillance of the development from the public domain, as well as the surveillance of the public domain from within the development.

The safety and security of each street is enhanced by increased activity and surveillance provided by on-street visitor parking, living rooms and balconies overlooking the street, and multiple building entries that maximise the number of entries along the street frontage.

The perimeter style development has balconies and living areas overlooking the central communal space and also overlooking the streets and adjoining foreshore, which maximises opportunities for passive surveillance by residents of the development. The Stage 1 Project development incorporates clear sight lines between the public and private open spaces. All public and communal areas will be well-lit to maximise security. The proposed landscaping does not have potential ‘dead ends’ or spaces where offenders can hide.

Active Surveillance

The development will have the benefit of a 24-hour manned estate management as part of the strata agreement. Their role would be to manage such things as the security systems and the general security of the development. Use of the communal open space shall be actively encouraged which will provide for increased security of the development. Lobbies/ shared entrances shall have buzzers and intercoms made of strong, vandal-proof materials. Stairwells, lobbies and shared entrances shall be permanently lit from a control device located away from these areas.

Access Control

All building entries in the development will be clearly marked. A security system will be installed in the development which consists of security cameras and swipe card access to buildings. Transition between the public and private domains will be controlled. For example, private car parking areas and private and communal open space areas will be separated from the public domain by back-to-base security controlled gates with intercoms.

The legibility of pathways and cycleways ensures that access is direct and efficient. The foreshore is a natural edge which guides pedestrian and cycle movements. Within the site landscaping, fencing and gardens will be used to define pedestrian routes. All proposed access ways will be clear and well defined. The central communal space and other public domain areas have been designed to be open and inviting, well lit, with direct access to all apartments in order to encourage pedestrian activity.

Territorial Re-enforcement

Boundaries between private and public spaces will be clearly defined. Transitions between the public and private domains shall be controlled.

The communal spaces in the middle of the development is proposed to have a high quality landscaped open space which will ensure its constant use, and in turn, enforces the principle of ‘territorial reinforcement’. The public spaces within the development will have a sense of community ownership. They will relate to the proposed development and locality so that residents connect to it and feel a sense of responsibility towards it. They will be high quality well maintained spaces that will be used, enjoyed and revisited by residents and the community. Well used spaces are less likely to be targets for crime.

The development will have a 24-hour monitored estate management as part of the strata agreement, which would add to the level of security in the development.

Space Management

The development will have 24-hour estate management as part of the strata agreement. Their role would be to manage such things as the security systems, waste removal, cleaning, maintenance and regular upgrading of all common property and spaces. A security system will be installed in the development which will consist of security cameras and swipe card access to buildings. Communal spaces will be built and maintained to a high quality so that they remain attractive spaces for the use of residents.

7.3 LAND USE

The Stage 1 Project Application site is appropriately zoned to permit and encourage its redevelopment for residential and mixed uses.

This brownfield site presents a unique opportunity for redevelopment to allow for new residential development that is more suitable to the location.

The Concept Plan site is appropriately zoned to permit and encourage its redevelopment for residential and mixed uses.

This brownfield site presents a unique opportunity for redevelopment to allow for new residential development that is more suitable to the location of the site and its surrounding residential uses, as envisaged by Council in the objectives for the area contained in their LEP and DCP.

Strategic directions contained in Council and State planning policies indicate that significant commercial or industrial uses are no longer economically feasible and point to transforming the precinct for residential purposes.

7.4 TRANSPORT AND ACCESSIBILITY IMPACTS

In support of Council's LEP objective 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*”, one of the principal design objectives of the Concept Plan was to create a ‘transit-oriented’ development based heavily on improved accessibility to the three public transport nodes in Shepherds Bay. Safe, high quality pedestrian and cycle links are proposed to encourage a shift away from the use of private cars in Shepherds Bay.

The Stage 1 has been designed to comply with the Concept Plan To this end the Stage 1 Application has included the new publicly accessible pedestrian link parkland to contribute to improved pedestrian access to the foreshore and public transport nodes beyond.

A Transport and Accessibility Study (TMAP) prepared by Varga Traffic Planning included in the combined Concept Plan and Stage 1 Project EA and subsequent additional traffic and transport reports submitted to the Department support the Concept Plan and therefore the Stage 1 Project Application .

7.4.1 Parking

The Stage 1 Project complies with the Concept Plan car parking rates as follows:

1 & 2 bed units	1 car parking space
3 bed units	2 carparking spaces
plus 1 visitor space per 5 units	
48 X 1 bed apts	48 (1:1)
166 X 2 bed apts	166 (1:1)
32 X 3 bed apts	64 (2:1)
Visitors	50 (@20%)
Total:	328 spaces

In addition, the Concept Plan requires provision of bicycle storage within developments which are provided in the Stage 1 Project. Cycle racks for 50 bikes are provided - 30 in the basement carpark, 10 in the publicly accessible pedestrian link park and 10 at the entry to the communal open space.

7.4.2 Sustainable Travel Plan

Consistent with the submitted Concept Plan TMAP, the Draft Statement of Commitments for the Stage 1 Project at **Annexure 12** and **Section 3** commits to the following:

“Prior to commencement of construction of all Project or Development Applications within the Stage 1 Project site, Sustainable Travel Plan will be submitted to and approved by the Principal Certifying Authority.”

7.5 ENVIRONMENTAL AND RESIDENTIAL AMENITY

The Stage 1 Project Application achieves a high level of environmental and residential amenity.

An assessment of the proposed development under State Environmental Planning Policy 65 – Design Quality of Residential Flat Development and the Residential Flat Design Code (RFDC) was undertaken by Robertson + Marks Architects and PLACE Design Group, refer to **Annexure 5**. The assessment addressed the principles contained in these policies, namely: context; scale; built form; density; resource, energy and water efficiency; landscape; amenity; safety and security; social dimensions and housing affordability; and aesthetics. The assessment concludes that the development is of a high-quality design.

7.5.1 Solar Access

The whole of the Concept Plan site is south facing with topography sloping towards the south. The orientation of the site places constraints on solar access. Shadow Diagrams prepared by Robertson Marks Architects for the Stage 1 Project are included as **Annexure 1**.

A Solar Access and Natural Ventilation report has been prepared for the Stage 1 Project by Steve King – Consultant Architect and is included at **Annexure 6**. That report considers the topographic and urban planning constraints to which the master planning of the overall site responds including:

- General orientation of the site,
- Marked southerly slope towards the dominant harbour view,
- A strong urban design constraint requiring the preservation and reinforcement of the existing street grid,
- Preserving view and access corridors from the suburb towards the harbour shoreline.

The report notes that taken together, these constraints severely limit the possibility of achieving high levels of compliance for winter solar access. The report concludes that the proposed site layout optimises the balance between solar access for apartments, exposure to prevailing summer cooling breezes, the preservation of winter solar access for parts of the public domain during relevant parts of the day, and competing urban design and amenity issues. In relation to solar access for the Stage 1 Project, the report concludes that the proportion of apartments that may be characterised as complying with the performance requirements of the Residential Flat Design Code is of a very reasonable standard, given the nature of the siting constraints, and should not be an impediment to approval.

7.5.2 Natural Ventilation

The Stage 1 Project assessment of natural ventilation contained in the Solar Access and Natural Ventilation Report at **Annexure 6** concludes in relation to natural ventilation, that the development may be considered fully complaint for natural ventilation under the Residential Flat Design Code.

7.5.3 Acoustic Privacy

The Stage 1 site does not adjoin any major roads. The proposed residential development has been designed to comply with relevant Australian Standards and BCA for acoustic performance. The development has been designed with regard to the location of high use areas such as public open spaces and communal spaces. Internally apartment layouts provide separation of bedroom and living areas and have regard to adjoining uses.

A Traffic and Rail Noise Assessment and Construction Vibration and Noise Impact Assessment report has been prepared for the Stage 1 Project by Acoustic Logic (refer **Annexure 7**) and assesses the potential traffic noise and railway noise impacts. The report identifies appropriate noise impact criteria, presents an acoustic assessment of external noise impacts on the site, provides indicative acoustic treatments to the building shell and identifies appropriate criteria for construction noise generation and presents noise emission goals. The land uses in the vicinity of the site with the potential to generate noise and/or vibration impacts are:

- Church Street, which lies approximately 200 metres to the south-east of the site, potentially affecting the south-eastern façade and to perpendicular façade of any development on site; and
- The Northern Rail Line, which lies 670 metres to the west of the site and will potentially generate a noise and vibration impact.
- Noise sensitive receivers in the vicinity of the site (potentially affected by construction or operational noise from the site) are residences: bounding the site to the north west, on the south eastern side of Belmore Street and on the northern side of Hamilton Crescent.

The report concludes that noise impacts from nearby sources (primarily traffic noise) have been assessed in accordance with criteria set out in the Department of Planning’s ‘Development near Rail Corridors and Busy Roads Interim Guidelines’ and that provided that the reports recommendations are adopted, the impact of traffic and rail noise will be reduced and comply with the Guidelines requirements and therefore noise impacts will be satisfactory.

The report’s recommendations include glazing levels of windows and doors and acoustic seals which will be adopted in the detailed design of Stage 1 Project at the Construction Certificate stage.

The likely impact of construction noise and vibrations against the requirements of DECCW Interim Construction Noise Guidelines and DEC NSW Assessing Vibration was assessed, and provided the reports recommendations are adopted, the impact of noise and vibration during construction will also be satisfactory. The reports recommendations (refer **Annexure 7**) include: construction hours, preparation of a Demolition and Construction Noise Management Plan prior to works commencing. The Plan may be considered at Construction Certificate stage once the construction program and methodology have been determined.

7.5.4 Visual Privacy

Visual privacy between neighbours within the proposed development as well as with adjacent existing and approved residential development has been maintained by commitments to appropriate setbacks, building orientations, locations of doors, windows and balconies, appropriate privacy screening and landscaping.

7.5.5 Wind Impacts

The orientation of the site and location adjacent to the waterway will result in exposure to winds. Winds from the south-west and north-west have been considered in the planning of the development.

7.5.6 Adaptable Housing

Approximately 10% of apartments will be accessible (i.e. 24 apartments). Pathways from the development to the central communal area and car parking and adjacent street and pedestrian link have also been designed to be accessible.

SHEPHERDS BAY URBAN RENEWAL

7.5.7 Accessibility

The Concept Plan has been formulated to maximise accessibility to and between areas of the site, between private and public domain areas.

- Recommendations to be provided within DA stage for each building (where relevant):*
- *Provide 10% adaptable units in accordance with Council DCP,*
 - *Provide 1 adaptable unit car bay for each adaptable unit in accordance with Council DCP,*
 - *Provide accessible toilet with every bank of male and female toilets. The accessible toilet to have internal dimensions in accordance with AS1428.1-2009,*
 - *Retail accessible car bays will be 2% of total retail car bays.”*

An Access Review has been prepared for the Stage 1 Project Application by Morris-Goding Accessibility consulting (refer **Annexure 11**). The stage 1 Project design adopts all the recommendations of the Access Report.

The report provides advice and strategies to maximise reasonable provisions of access for people with disabilities including user groups such as residents and residential visitors and attempts to deliver equality, independence and functionality to people with disabilities inclusive of: people with sensory impairment (hearing and vision; people with mobility impairments (ambulant and wheelchair) and people with dexterity impairments. The report considers Stage 1 Project design in relation to AS1428, Building Code of Australia and the Commonwealth Disability Discrimination Act.

The Stage 1 Project development has been reviewed to ensure that ingress and egress, paths of travel; circulation areas, passenger lifts, car parking, common facilities and adaptable units comply with relevant statutory guidelines. An assessment of compliance with the above codes and legislation is provided in the report and a number of recommendations are made relating to design changes to ensure accessibility as noted below.

The report considers ingress and egress from Rothesay Avenue, Belmore Street, Hamilton Crescent and emergence egress and concludes that there are accessible paths of travel to passenger lifts to access all residential levels and car parking. Additional design development work will be required to comply with AS1428.1 for the Belmore Street Entrance and the doors into lobbies 3 and 4. In relation to Emergency Egress, there are 6 emergency stair wells leading from the upper residential levels down to the street level and others leading out from the lower basement car park levels. All fire doors appear to have a 1000mm clear width in accordance with AS1428.1 and fire stairs and corridors are wheelchair accessible on all levels.

The report considers paths of travel and notes that in general, once inside the building there are 6 passenger lifts at each of the 6 lobbies that provide a continuous accessible path of travel to each apartment in accordance with AS1428.1. The report makes a number of recommendations in relation to sightlines and accessibility of corridors, lift dimensions, access to common amenities (landscaped courtyards).All the report recommendations have been incorporated into the revised Stage 1 Design.

The report notes the Stage 1 Project compliance with the Ryde Council Access DCP in providing a total of 25 adaptable units. Detailed consideration is provided on the design of the adaptable units and made recommendations on the bathroom and kitchen design, entry doors and bedroom sizes and circulation within the laundry area. The report also makes recommendations in relation to the location of the adaptable unit car bays in relation lifts, clearance height of the bays and approach to the car parking bay.

All the report recommendations have been incorporated into the revised Stage 1 Design.

7.5.8 SEPP 65 Assessment

An assessment of the proposed development under State Environmental Planning Policy 65 – Design Quality of Residential Flat Development and the Residential Flat Design Code (RFDC) was undertaken by Robertson + Marks Architects at **Annexure 5**. The assessment addressed the principles contained in these policies, namely: context; scale; built form; density; resource, energy and water efficiency; landscape; amenity; safety and security; social dimensions and housing affordability; and aesthetics. The assessment concludes that the development is of a high-quality design and consistent with the SEPP 65 and RFDC Guidelines.

7.6 PUBLIC DOMAIN

The a substantial portion of a new publicly accessible parkland is included in the Stage 1 Project, which incorporates a landscaped public pedestrian link to the waterfront. The central communal open space and landscaped area in Stage 1 provides passive recreation option for residents, privacy relative to the foreshore area, pleasant outlook from the apartments overlooking the open space and enhanced the building’s appearance when viewed from the Parramatta River. Design intent has been to provide visually interesting and diverse range of planning providing links appropriate to the historical context of the area and materials to enhance the natural character inherent in the parkland context.

Continuous accessible paths will be provided to building entries, the communal open space and adjacent public areas to facilitate disabled access. Adjoining streetscapes will be enhanced and connections strengthened to the foreshore and improve access to public transport nodes. Bicycle parking will be provided in the basement carpark of the Stage 1 building and the adjoining publicly accessible park.

7.7 ECOLOGICALLY SUSTAINABLE DEVELOPMENT (ESD)

The urban form of the Stage 1 Project development is designed to minimise reliance on motorised transport and maximise the efficiency of land supply supporting the concept of compact cities. The area is currently in transition and the proposal will improve land use compatibility. The density of the proposed development reflects its location close to employment areas and public transport hubs (bus, rail and ferry). The development contains a mix of apartment sizes to cater for a range of demographics.

The location of the proposed development close to public transport hubs will promote the use of public transport. Improved pedestrian access to the three different modes of public transport in the vicinity should assist in encouraging a shift to a more sustainable modal split public/ private transport.

The Stage 1 Project complies with the recommendations of the Ecologically Sustainable Development (ESD) guidelines and report by prepared by Ecospecifier (September 2010) which accompanied the combined submitted Concept Plan and Stage 1 EA. That report provides a range of guidelines for the project which have been adopted in the revised Stage 1 design, based on compliance with the EnviroDevelopment Targets.

It provides guidelines for ESD targets for the following categories:

Community - consideration of impacts on broader community, consultation, public transport access, non-motorised transport facilities, minimising private car parking, flexible live-work developments, housing mix, affordability, safety, community communication, community facilities, general public benefit as well as residential amenity for future residents.

Water – water saving initiatives, rainwater harvesting, recycling.

Energy –energy saving initiatives, reduction in greenhouse gas emissions, energy efficient appliances. *Materials* –maximise recycled, low water or energy using or renewable materials.

Waste – maximise recycling, composting of organic matter. *Ecosystems* – protect flora and fauna habitats including aquatic habitats- survey, riparian buffers, water quality, water sensitive urban design, control sediment and erosion, decontaminate, reduce flooding, species selection natives where possible. *Management* - Green Star Accredited Professional on design team, adopt a formal environmental management system, minimise construction waste, install building water and energy smart meter monitoring systems. *Emissions* – minimise ozone depleting ratings for refrigerants and insulation, reduce effluent in sewerage systems, minimise lighting pollution, design to eliminate risk of legionnaires disease. *Innovation* - substantially contribute to the broader market transformation towards sustainable development in Australia or in the world.

In addition, as mentioned earlier in this PPR, the Stage 1 Project meets the requirements of BASIX. Refer stamped plans at **Annexure 8**.

7.7.1 Energy Efficiency

An assessment of the Stage 1 Project Application acknowledges the site and other constraints limiting solar access to the development as well as specific design strategies to maximise the proportion of apartments which achieve effective midwinter sun access. The Solar and Natural Ventilation Assessment prepared by Steve King concludes that the Concept Plan and Stage 1 Project application satisfactorily deals with the sites orientation constraints, and therefore satisfy the applicable solar performance requirements of SEPP 65.

Additionally, building materials, appliances and fittings have been selected to improve energy efficiency and utilise natural heating and cooling through sensitive environmental design. Gas instantaneous (solar boosted) hot water systems will be provided to all apartments.

SHEPHERDS BAY URBAN RENEWAL

7.8.2 Water Conservation

The Stage 1 Project development will be provided with rainwater tanks for capture and reuse for irrigation of landscaped areas, laundries, toilets and car wash bays. AAA (or higher) rated water efficient appliances and fixtures will be installed in all apartments. Landscaping will predominantly consist of native species (70%).

7.8 UTILITIES

Consultation has been undertaken with utility companies to identify works required for the provision of utilities for the development. A Services Infrastructure Report has been prepared by Floth Sustainable Building Consultants, September 2010 and was attached as Annexure 20 to the submitted combined Concept Plan and Stage 1 EA.

Preliminary advice from Energy Australia indicates that new high voltage feeders will be required to serve the development. It is proposed that a substation be relocated on the Energy Australia site adjacent if required by Energy Australia.

Telecommunications services can be provided from the nearby Ryde Telephone exchange located within a 1.8 km cable pathway route.

The precinct can be served from existing high pressure gas mains located in the roads bounding the development. Extensions and augmentations will be further investigated by Jemena as specific sites are developed.

Water and sewerage will require amplifications within and external to the development precinct as detailed in Sydney Water’s advice. A Section 73 Certificate is required and this can only be applied for after development consent is granted.

7.9 TOPOGRAPHY AND EXCAVATION

The current landform in many areas across the Concept Plan site, including the Stage 1 site, has been substantially modified through benching to provide for the existing large footprint industrial buildings and at-grade car parking and loading areas. In many cases, natural ground levels cannot be determined.

In support of Council’s LEP 2010 objective to “recognize topography, landscape setting and unique location in design and land-use” the Concept Plan requires the reshaping of the already significantly ‘unnatural’ topography in parts of the site, including the Stage 1 site to maximise accessibility to buildings, streets and parkland consistent with the LEP and DCP layouts to achieve a better planning outcome. Accordingly, the reshaping of the site is proposed as detailed in the Architectural plans at **Annexure 1**.

7.10 SUBDIVISION

The Draft Stage 1 Project Subdivision Plan included as **Annexure 1** facilitates the provision of the pedestrian links, pocket park and Nancarrow Avenue extension planned to take place in Stage 2 development Stage, consistent with the Concept Plan and Draft Statement of Commitments.

The Proponent invites an approval condition to submit a detailed Draft Subdivision linen plan, prepared by a Registered Surveyor, for approval prior to the commencement of work on the site.

7.11 RIPARIAN LAND AND THREATENED SPECIES

As the Stage 1 Project no longer proposes works within the foreshore reserve there is no potential impact on the riparian lands.

In addition, the Department and DECC requested the following additional assessments be carried out in accordance with the Threatened Species Assessment Guidelines 2007 in respect of the whole Concept Plan site:

1. an assessment of the existing Eucalyptus nicholii occurring on the site; and
2. potential to contain roosting habitat for microhiropferan bats.

As reported in the submitted Concept Plan PPR, those assessments were carried out by LesryK Environmental Consultants who concluded as follows:
“Given that the Narrow-leaved Black Peppermint individuals present within the subject site are planted and well outside its distribution range, their removal is not considered to have an adverse impact on the local population or viability of this species. With regards to microchiropteran habitat, no bat species are considered to be roosting within any of the buildings proposed for removal that were focused on during the study. Furthermore, none were recorded foraging within close proximity to the buildings. As such, the proposal can proceed as planned without having an adverse impact on any native flora or fauna of conservation concern.”

Additionally, construction work and stormwater upgrades required for the development including excavation will implement appropriate mitigation measures to ensure the development does not detrimentally impact the riparian land or any threatened or endangered species.

The landscaping foreshore parkland adjoining Stage 1 is complete. The proposed Stage 1 works do not involve any work within the foreshore reserve or riparian zone. Additionally, construction work and stormwater upgrades required for the development including excavation will implement appropriate mitigation measures to ensure the development does not detrimentally impact the riparian land or any threatened or endangered species.

7.12 CONTAMINATION AND GEOTECHNICAL ISSUES

The Concept Plan will involve the construction of a new road, renovation of existing roads, upgrade of stormwater drainage, foreshore landscaping. The works will require:

- Excavation of basement car parking with associated excavation support,
- construction of retaining walls and excavation of building platforms,
- localised excavation for services and stormwater upgrades,
- construction of foundations for buildings, retaining structures, offshore piles for the proposed jetty and raised walkway construction and renovation of roads.

A Preliminary Contamination Assessment was prepared by Douglas Partners (July 2010) at Annexure 21 to the submitted EA for Stage 1. A Contamination Assessment was also prepared for the Stage 1 site by Egis Consulting Australia. The purpose of the investigation was to determine the sites suitability for residential use. The investigations indicate that the site does not appear to be subject to any gross, widespread soil contamination. Some localised areas of relatively minor contamination were identified and require remediation and/ or management to allow for residential use. The Stage 1 site may also contain contaminated groundwater. Care will be taken during the initial site preparation works and if signs of contamination are within individual sites/areas then a more targeted and detailed assessment of groundwater can be conducted within those areas once the existing buildings are demolished.

The Proponent commits that the land will be remediated to the extent necessary for the proposed use. Remediation works will be carried out in accordance with SEPP 55 Remediation of Land. If necessary, a Remedial Action Plan (RAP) will be prepared as a guide to the remediation of land. On completion of the remediation work the developer will obtain a Site validation Report and a Site Audit Statement (issued under the Contaminated Land Management Act 1997) for the land.

SHEPHERDS BAY URBAN RENEWAL

7.13 DRAINAGE, STORMWATER AND FLOODING

An assessment of the stormwater, drainage and flooding impact of the Stage 1 Project has been undertaken by Cardno (NSW) Pty Ltd and a copy of the assessment and stormwater drainage concept drawings is included in **Annexure 4**. The report notes that the architectural layout will have minimal impact on the hydrology or water quality of the area or waterways.

The assessment also responds to comments received from Ryde City Council in relation to stormwater drainage and flooding, in particular the capacity of the receiving stormwater system and impacts on overland flow.

In relation to the capacity of the receiving stormwater system, the assessment notes that the runoff from the site is proposed to be drained via a new pit and pipe system connecting the site directly to the sea wall. The new pit and pipe system has been sized to convey flows in accordance with Councils DCP and the impact of the development on Councils existing stormwater networks will be minor/negligible. In relation to impacts on overland flow, the flood modelling carried out for the site (as detailed in the Flooding Assessment Report included in the EA) noted that Belmore Street at the eastern frontage of the site conveys flood flows from the upstream catchment to the harbour. Based on the levels for the 100yr ARI flood contours adjacent to the proposed development (refer **Annexure 4**) the vehicular and pedestrian entries and habitable floor levels of the Project have been set to a level equal to the 100 year ARI flood level plus 300mm.

7.14 HERITAGE

The Stage 1 site does not contain nor is it located in the vicinity of any listed heritage items or areas.

7.15 NOISE & VIBRATION ASSESSMENT

An Acoustic Assessment Report is found at **Annexure 7**. That assessed the noise impacts from nearby sources (primarily traffic noise from Church St) in accordance with criteria set out in the Department of Planning *Development near Rail Corridors and Busy Roads Interim Guidelines* and made recommendations for the treatment of windows in the development which have been adopted.

It also assessed potential impact of the construction phases on the surrounding neighbourhood in accordance with the DECCW *Interim Construction Noise Guidelines* and DEC NSW *Assessing Vibration: A Technical Guideline* and provided a range of excavation, demolition and construction management measures that will be adhered to by the Proponent in the Stage 1 Project delivery.

7.16 AFFORDABLE HOUSING

A mix of apartment sizes will be provided including one bedroom apartments. The increased housing supply in the area and proposed apartment mix will increase housing choice and ease affordable housing issues in the area.

7.17 DRAFT STATEMENT OF COMMITMENTS

A Draft Statement of Commitments, attached as **Section 3** and at **Annexure 12**, details the Proponents commitment to put in place measures for environmental management, public transport initiatives, risk mitigation measures and monitoring for the project. It is acknowledged that this document is in draft form and will be the subject of further discussion with Department of Planning.

7.18 BCA COMPLIANCE

A BCA Report for Stage 1 Project has been prepared by Michael Wyn Jones and is included as **Annexure 9**. The Report provides an assessment of the proposed development with the relevant provisions of the Building Code of Australia 2009 (BCA). The BCA did not identify any issues pertaining to the Stage 1 development that need to be resolved prior to construction certificate, and concludes that the proposed Stage 1 development meets the relevant requirements and does not require any modifications.

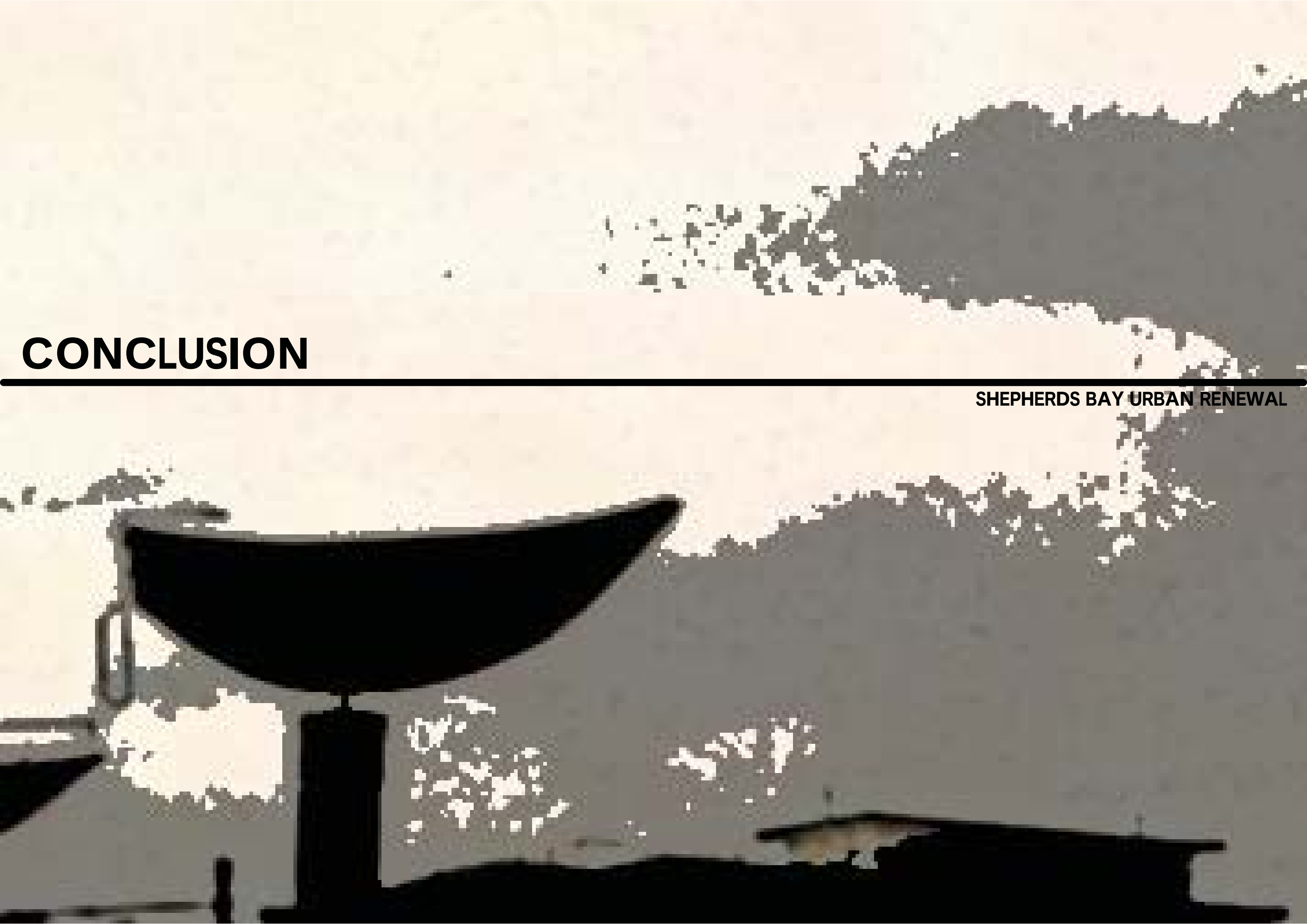
That assessment advises:

The proposed building work has been designed to generally comply with the deemed to satisfy provisions and an alternative solution will be developed to address some areas where strict compliance with the deemed to satisfy provisions is not proposed.

- 3.4 The alternative solution will address at least the following issues:*
- (a) The effective height of the building and the resultant fire safety measures 6 that will need to be installed*
 - (b) The location of the sprinkler valve room and some plant rooms*
 - (c) Travel distances to some exits, and the number of exits*
 - (d) The distance between some alternative exits*
 - (e) Some fire compartmentation and separation issues*
 - (f) The suitability of access to and discharge from exits*
 - (g) The portion of the basement carpark proposed on the adjoining allotment.*

7.19 CONTRIBUTION/VOLUNTARY PLANNING AGREEMENT

The proposed development will comprise significant public benefits, services and infrastructure. A Voluntary Planning Agreement (VPA) between the Proponent and the City of Ryde Council is in the process of being developed which will include public benefits offered by the Stage 1 Project and relevant contributions payable.



CONCLUSION

SHEPHERDS BAY URBAN RENEWAL

SHEPHERDS BAY URBAN RENEWAL

The Stage 1 Project Application seeks approval for a construction of the first of the proposed buildings and associated infrastructure works and public domain elements covered by the Shepherds Bay Renewal Concept Plan Application. The Stage 1 Project is in every way compliant with the concept Plan.

The proposal is in the public interest and serves to contribute to the emerging vibrant residential area of Shepherds Bay.

The Stage 1 Project involves the reuse of an obsolete industrial site for a high quality residential development, a new publicly accessible pedestrian link park, streetscape landscaping improvements and undergrounding of essential services.

The Project represents a positive improvement to the urban fabric of Shepherds Bay. The development envisaged in the Stage 1 Project:

- is fully consistent with the Shepherds Bay Renewal Concept Plan;
- is consistent with the objectives of the Environmental Planning and Assessment Act 1979 of encouraging the orderly and economic development of land;
- is consistent with the principle of more compact cities, which is a major element of the State Government's Metropolitan Strategy and assists in meeting the residential targets contained in the Inner North Regional Strategy and reduced environmental impacts from urban expansion by increasing housing in the inner and middle ring areas;
- is appropriately located, recognised by the land use provisions within Council's LEP 2010 as being a desirable site for the land uses proposed. The subject site is located in an established urban area with a network of urban infrastructure services including utilities, recreation, and community services;
- is well served by three modes of public transport, will improve the viability of these services and has been designed to encourage a modal shift away from private vehicles;
- involves equitable reuse of surplus industrial land, ensuring that more accessible 'inner ring' areas of land are available for residential use. The subject site provides the opportunity for additional housing in an existing and evolving residential area by making use of surplus industrial land and building on established communities and transport links;

- is of high quality, supporting the objectives and controls contained in the relevant environmental planning instruments and policies;
- will improve supply and diversity in housing choice and hence improved affordability within a highly accessible, sought after area of the Sydney region;
- has been designed to be environmentally sustainable through building siting, design, choice of materials, water and energy conservation and environmental protection and interpretation;
- will be dynamic development, creating new high quality elements in the urban form of the locality in this prime location, linking existing residential areas to the waterfront via a high quality system of new pedestrian links, parklands and roads;
- is environmentally sensitive and liveable, being designed with much care to minimise any environmental impacts on adjoining properties, public domain areas or the locality in general, while celebrating the historic uses of the site;
- offers significant benefits for the wider community of Shepherds Bay and Meadowbank;
- offers economic benefits to the local community by increasing employment opportunities both during construction and by subsequent occupation of the proposed Stage 1 Project; and
- is complementary to the recent and planned future urban form of the Shepherds Bay.

The Stage 1 Project is consistent with the Shepherds Bay Renewal Concept Plan and responds appropriately to the unique characteristics of the site and its context within the locality.

Accordingly, it is recommended that the Minister support this proposal by approving the subject application.