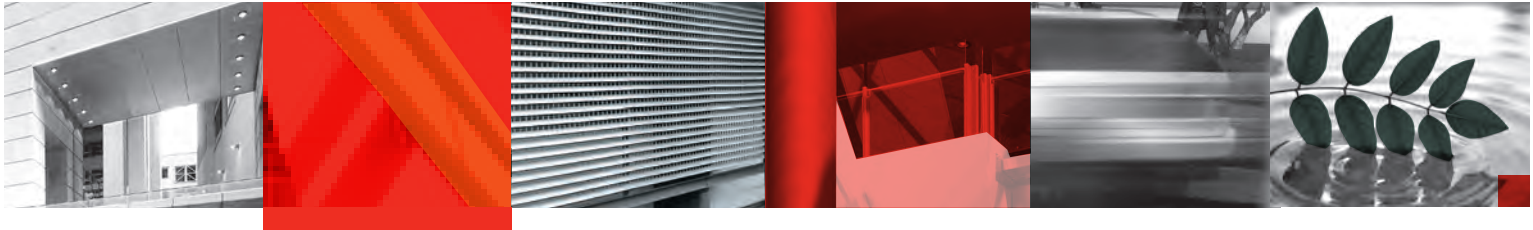


# Environmental Assessment Report Project Application



**Royal Rehabilitation Centre Ryde**  
Frasers Putney  
Stage 1, Phase 1 Residential Development (MP10\_0189)

Submitted to Department of Planning  
On Behalf of Frasers Putney Pty Ltd

April 2011 ■ 09634

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This report has been prepared by: Michael Oliver

Signature



Date 15/04/2011

This report has been reviewed by: Clare Swan

Signature



Date 15/04/2011

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*JBA Planning*

#### Under Separate Cover

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Digital Model  
*Cox Richardson Architects*

Concept Plan Consent 05/00906 and Approved Plans  
*BSA Architects*

# Statement of Validity

Prepared under Part 3A of the Environmental Planning and Assessment Act, 1979  
(as amended).

---

## Environmental Assessment prepared by

Name	Clare Swan
Qualifications	BA MEnvPI CPP
Address	Level 7, 77 Berry Street, North Sydney
In respect of	Project Application

---

## Project Application

Applicant name	Fraser's Putney Pty Ltd
Applicant address	Level 11, 488 Kent Street, Sydney
Land to be developed	<ul style="list-style-type: none"><li>▪ Lots 1,2,3, 4 and 7 DP 1129793 (Lot 3 is proposed to become Lot 8 in a draft plan of subdivision)</li></ul>
Proposed development	Construction of the Stage 1 Phase 1 residential development for 118 dwellings, comprising 60 apartments, 44 semi detached/terraced and 14 detached dwellings, plus subdivision, demolition, landscaping, roadworks and construction of a sales suite (and associated signage).

---

## Environmental Assessment

Certificate	<p>An Environmental Assessment (EA) is attached</p> <p>I certify that I have prepared the content of this Environmental Assessment and to the best of my knowledge:</p> <ul style="list-style-type: none"><li>▪ It is in accordance with the Environmental Planning and Assessment Act and Regulation.</li><li>▪ It is true in all material particulars and does not, by its presentation or omission of information, materially mislead.</li></ul>
-------------	---

Signature



Name

Clare Swan

Date

15 April 2011

## Executive Summary

### Purpose of this report

This submission to the Department of Planning comprises an Environmental Assessment for a Project Application under *Part 3A of the Environmental Planning and Assessment Act 1979*. It relates to development at the Royal Rehabilitation Centre site, Ryde for the first residential stage in accordance with the Concept Plan (MP 05\_0001) approved for the site by the Minister for Planning on 23 March 2006.

The proponent for this development is Frasers Putney Pty Limited.

### Project background

On 23 March 2006, the Minister for Planning approved a Concept Plan for the RRCS site, Sydney. Concept Plan approval as described in the Instrument of Approval included:

- a new, purpose built specialised rehabilitation and disability facility;
- no more than 50 residential dwellings per hectare on land excluding the new, purpose built specialised rehabilitation and disability facility;
- landscaped public and private open space;
- associated services and infrastructure;
- land use distribution, building heights, densities, dwelling mixes and types.

The site was also gazetted as a State Significant Site (SSS) under Schedule 3 of *State Environmental Planning Policy (Major Development) 2005* on 2 August 2006. This Schedule 3 listing included various development standards including zoning and permissible uses, building height, FSR and residential density. The provisions of this SSS listing have now been repealed and incorporated into *Ryde Local Environmental Plan 2010* (LEP 2010). Despite this the Concept Plan approval has physically commenced and remains a relevant matter for consideration.

The Concept Plan provides for a planning regime for the site which amongst other things includes the rezoning of the site and provides for basic development parameters in relation to land use distribution, range of land uses, density, and building heights.

The proponent is seeking to submit a Project Application for Stage 1 Phase 1 residential development, addressing the detailed design and layout of the first stage of residential development. Some adjustments to the Concept Plan layout are proposed to better respond to site conditions and market demand, however the vision and intent of the Concept Plan is retained including height and FSR.

Implementation of the Concept Plan approval by this Stage 1 Phase 1 Project Application will supply new dwellings in a variety of densities (apartments, terraces, semi-detached and detached housing), within proximity to an identified Metropolitan Strategy Corridor (Victoria Road) that is in close proximity to public transport and services.



## Overview of Project

The proposal seeks approval for the following elements:

- Demolition of the existing RRCS buildings located on the intended residential components on the site, including:
  - The Weemala building, associated Annex and engineering services building;
  - A portion the existing rehabilitation facility located on the residential zoned part of the site;
  - Riding for the Disabled Association building;
  - Moorong Spinal Unit building; and
  - ILC and remaining slab of Linen Services buildings.
- Subdivision.
- Construction of residential development including 60 apartments, 44 semi detached/terraced and 14 detached dwellings.
- Associated car parking to service the needs of the development.
- Provision of public open space, landscaping (including tree removal) and site works (including roads).
- Extension/augmentation of the physical infrastructure/utilities required.
- Vehicular access to the site from Charles Street and Victoria Road.
- Sales and marketing facilities including a marketing suite, use of dwellings as exhibition homes and temporary signage.

The residential Project Application relates to 35,767m<sup>2</sup> of land in the central part of the site, however approval is sought for the demolition of buildings across the entire site as well as the vehicular connection to Victoria Road.

## The Site and Locality

The residential component of the RRCS site is legally described as Lots 1-9 DP1129793 and is known as 600-640 Victoria Road, 110 Princes Street and 55 Charles Street, Ryde. The Stage 1 Phase 1 residential project application primarily relates to Lot 3 DP 1129793 (Lot 3 is proposed to become Lot 8 in a draft plan of subdivision), though incidental works including demolition are proposed across the site.

The site is located on the southern side of Victoria Road, approximately 800m from the Ryde Town Centre. The site is bounded by Victoria Road to the north east, Charles Street to the south east, and the proposed central detention basin to the south west. The Little Company of Mary (Calvary Retirement Village) and low density residential development abuts the site to the north west.

The overall site is irregular in shape with an area of approximately 17.829 hectares. The area of the site excluding the rehabilitation centre comprises 15.829 hectares. Topographically, the site is undulating with a low central valley in the centre containing the detention basin at RL28, sloping towards the highest points being at the extremities of the site at the intersection of Morrison Road and Princes Street (RL60) and the Victoria Road frontage (RL50).

The site originally formed part of the eastern farms agricultural lands set aside in 1793. An Italianate mansion, “Weemala” was constructed on the site near Morrison Road in 1885 and in 1906 the building and grounds were sold to the NSW Home for the Incurables. In 1954, the Home was renamed the Royal Ryde Homes and new buildings were built over the succeeding years. Various buildings have been subject to alteration and modification over a considerable period of time.

The Putney Shopping Centre is located at the intersection of Charles Street and Morrison Road, adjacent to the site's Morrison Road Access point. Top Ryde Shopping Centre is 0.8 kilometres from the Victoria Road entrance to the site and 2 kilometres from the Morrison Road entrance. The site is roughly equidistant to the Sydney and Parramatta CBDs (approximately 13 kilometres to each) and is well serviced by public transport given its location adjacent to Victoria Road and in close proximity to Ryde bus depot and Meadowbank railway station.

### Planning Context

Section 5 of this EAR considers all applicable legislation in detail. The site is currently zoned R1 General Residential under *Ryde Local Environmental Plan 2010* (Ryde LEP 2010). The proposal is permissible with consent and meets the objectives of the subject zone. As noted previously the approved Concept Plan and SSS listing set up the primary development standards for the site, which have now been translated to Ryde LEP 2010. The proposal complies with these standards.

### Environmental Impacts

The environmental impacts are considered in Section 5 of this EAR. The proposed works do not raise any adverse environmental impacts that cannot be effectively ameliorated through the Statement of Commitments. The proposal will provide a diverse mix of high quality housing to meet the needs of the community.

### Conclusion

The matters for which approval are sought are also generally consistent with the approved Concept Plan and Concept Plan Statement of Commitments. Further commitments are made in this PA to inform the detailed design of the development and manage construction and on-going environmental impacts. The environmental assessment addresses the Director General's Requirements and demonstrates the impacts of the proposal can be satisfactorily managed and therefore we have no hesitation in recommending that the project be approved.

The proposed development contributes to the supply of housing stock in Sydney as part of a major residential redevelopment of the Royal Rehabilitation Centre site which has been envisaged since the Concept Plan approval in 2006. Since the time of the Concept Plan approval the demand to provide additional housing within the metropolitan region has become more critical in light of revised population forecasts and rising housing prices. In light of this, it is essential that new residential development which has been planned for is progressed to market as rapidly as possible.

## 1.0 Introduction

This Project Application and Environmental Assessment Report (EAR) is submitted to the Minister for Planning pursuant to Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The Project Application seeks approval for Stage 1 Phase 1 Residential Development, at the Royal Rehabilitation Centre, Sydney.

The report has been prepared by JBA Planning for the proponent, Frasers Putney Pty Ltd, and is based on information provided by Cox Richardson Architects and the supporting technical documents provided by the expert consultant team (see Table of Contents).

This EAR describes the site, its environs and the proposed development, and includes an assessment of the proposal in accordance with the Director-General's Requirements (DGRs) under Part 3A of the EP&A Act. It should be read in conjunction with the information contained within and appended to this report.

These studies address the DGRs for the environmental assessment. They provide a technical assessment of the environmental impact of the proposed development, and where relevant recommend proposed mitigation measures to manage potential environmental impacts associated with the proposal.

### 1.1 Overview of Approval Sought

This Project Application seeks approval for the Stage 1 Phase 1 Residential Development of the Ryde Royal Rehabilitation Centre site. In summary, the development involves:

- Demolition of the existing RRCS buildings located on the intended residential components on the site, including:
  - The Weemala building, associated Annex and engineering services building;
  - A portion the existing rehabilitation facility located on the residential zoned part of the site;
  - Riding for the Disabled Association building;
  - Moorong Spinal Unit building; and
  - ILC and remaining slab of Linen Services buildings.
- Subdivision.
- Construction of residential development including 60 apartments, 44 semi detached/terraced and 14 detached dwellings.
- Associated car parking to service the needs of the development.
- Provision of public open space, landscaping (including tree removal) and site works (including roads).
- Extension/augmentation of the physical infrastructure/utilities required.
- Vehicular access to the site from Charles Street and Victoria Road.
- Sales and marketing facilities including a marketing suite, use of dwellings as exhibition homes and temporary signage.

Stage 1 Phase 1 relates to 35,767m<sup>2</sup> of land in the inner portion of the site with a link connecting to Victoria Road, however approval is also sought for the demolition of buildings across the entire site.

## 1.2 Project Background

### Concept Plan and SSS Listing

On 23 March 2006, the Minister for Planning approved a Concept Plan for the RRCS site, Sydney. Concept Plan approval as described in the Instrument of Approval included:

- a new, purpose built specialised rehabilitation and disability facility;
- no more than 50 residential dwellings per hectare on land excluding the new, purpose built specialised rehabilitation and disability facility;
- landscaped public and private open space;
- associated services and infrastructure;
- land use distribution, building heights, densities, dwelling mixes and types.

The site was also gazetted as a State Significant Site (SSS) under Schedule 3 of *State Environmental Planning Policy (Major Development) 2005* on 2 August 2006. This Schedule 3 listing included various development standards including zoning and permissible uses, building height, FSR and residential density. The provisions of this SSS listing have now been repealed and incorporated into *Ryde Local Environmental Plan 2010* (LEP 2010). Despite this the Concept Plan approval has physically commenced and remains a relevant matter for consideration.

The proponent is seeking to submit a Project Application, addressing the detailed design and layout of the Stage 1 Phase 1 residential development component of the site, generally consistent with the Concept Plan approval for the overall site.

### Chronology of Events after approval of Concept Plan

Since the granting of the Minister's Concept Plan Consent (on 23 March 2006), the following key milestones have occurred:

**Table 1 – Chronology of Events after Concept Plan Approval**

Date	Event
2 August 2005	SEPP Major Projects amended to rezone the RRCS site as a State Significant Site (SSS).
5 March 2010	A Section 94 Deed of Agreement signed between the RRCS and Ryde City Council signed.
12 August 2008	Torrens Title Subdivision to create seven superlots, associated rights of carriageway and service easements (MP_07_0100)
16 December 2008	Demolition of existing buildings on part of the RRCS site and construction of a new Health Facility, new Weemala facility, community building, open space and internal roads (MP_08_0054)
30 June 2010	Ryde LEP 2010 gazetted with RRCS zoning, height, FSR and density controls transferred to this instrument. The SSS listing for the RRCS site repealed from Schedule 3 of the Major Development SEPP.
5 July 2010	Modification to subdivision plan to be consistent with SEPP (Major Development) 2005 Amendment No. 5 Zoning Map.
15 July 2010	Frasers Putney Pty Ltd become a party to the Section 94 Deed of Agreement between RRCS and Ryde City Council.
17 November 2010	Modification to the health facility approval to include construction of Road 4 as part of civil infrastructure works.

## 1.3 Approval Process

State Environmental Planning Policy (Major Development) 2005 identifies development to which Part 3A of the EP&A Act applies and which therefore requires approval from the Minister for Planning ('the Minister').

Clause 6 of the SEPP states that development, which in the opinion of the Minister is development of a kind referred to in Schedule 1 of the SEPP, is declared to be a project to which Part 3A of the Act applies. The residential component of the RRCS site falls into the class of development described in Clause 13 of Schedule 1 namely "Residential, Commercial or Retail Projects" in excess of \$100 million.

The residential component of the RRCS site has an estimated Capital Investment Value is \$295 million, as detailed in Quantity Surveyors Statement prepared by WT Partnership (**Appendix A**), and is well in excess of the \$100 million threshold.

In accordance with Section 75B of the EP&A Act and Clause 6 of the SEPP, the proponent sought the opinion of the Minister as to whether the overall residential project is of the kind to which Part 3A of the Act applies. As part of this correspondence, the proponent requested that the Stage 1 Phase 1 project as included in this EAR be treated as a part Project Application.

On 1 December 2010 the Director-General of the Department of Planning, as delegate of the Minister for Planning, formed the opinion that the development is of a kind described in Schedule 1 of the SEPP and is thus declared to be a Part 3A project, and authorised the preparation and lodgement of a part Project Application.

Subsequently, the Director-General issued the Environmental Assessment Requirements for the project under Part 3A of the Act. A copy of these requirements is included at **Appendix B**. A table cross-referencing the location in this report where the requirements are covered is located in Section 4.0.

## 1.4 Project Team

An expert project team has been formed to deliver the project and includes:

<b>Proponent</b>	Frasers Putney Pty Ltd
<b>Project Manager</b>	Frasers Property Australia Pty Ltd
<b>Urban Planning</b>	JBA Planning
<b>Architects</b>	Cox Richardson Architects
<b>Landscape Architect</b>	Environmental Partnership NSW
<b>Flora and Fauna</b>	UBM Ecological Consultants
<b>Quantity Surveyors</b>	WT Partnership
<b>Photomontages</b>	Cox Richardson Architects
<b>Electrical and Civil Engineering</b>	Meinhardt Infrastructure and Environment
<b>Waste and Construction Management</b>	Meinhardt Infrastructure and Environment
<b>Hydraulic Services</b>	Harris Page and IDG
<b>BASIX/ ESD</b>	Ecospecifier
<b>Traffic and Transport</b>	Colston Budd Hunt and Kafes
<b>Community Consultation</b>	Elton Consulting
<b>Arborist Statement</b>	Urban Forestry Australia
<b>Accessibility</b>	Morris-Goding Accessibility Consulting



## 2.0 Site Analysis

### 2.1 Site Location and Context

The Royal Rehabilitation Centre Sydney (RRCs) site is located at 600 Victoria Road and 55 Charles Street, within the Ryde Local Government Area (LGA).

The overall site is 17.7 hectares. The residential component of the site is on 11.52 hectares, whilst the Stage 1 Phase 1 Project Application primarily relates to a central portion of the site with a link connecting to Victoria Road of a total area of 35,767m<sup>2</sup>, however approval is also sought for the demolition of buildings across the entire site.

The site's locational context is shown at Figure 1.

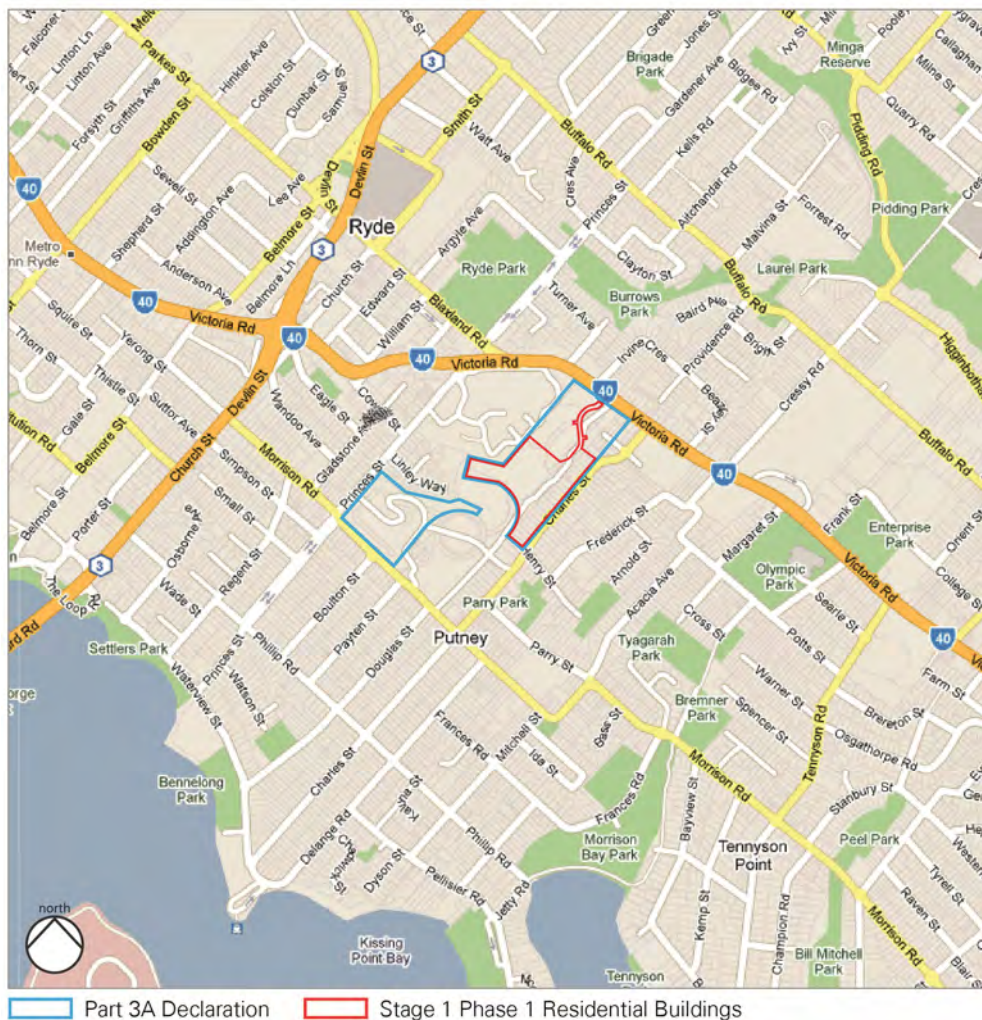


Figure 1 – Locality Plan

## 2.2 Site Description

An aerial photo of the site is shown at **Figure 2**.



**Figure 2 – Site Plan**

### Existing Development

The key characteristics of the site subject to the current PA are summarised below and shown in **Figures 3 to 8**.

### Heritage

There is no listing of the RRCS site or any of its components on the NSW State Heritage Register (SHR) or in Ryde LEP 2010.

### Landform / Vegetation

The subject site slopes steeply to the south/ south-west, with a 14 metre change in levels from north to south and an average gradient of 1(v): 10(h). The topography varies significantly within the site, with several zones of intense grade up to 1 (v): 5 (h), which is particularly evident in the area to the north of the detention basin.

There are a number of existing trees within the PA site, generally located on the north western boundary (the Little Company of Mary (Calvary Retirement Village)). Additional stands of trees are scattered throughout the land to be developed.



## Pedestrian and Vehicular Access

Vehicular access to the Stage 1 Phase 1 site is currently via the existing left in, left out entrance to Victoria Road and entrance/exits to Charles Road and Morrison Road. Pedestrian access to and within the site is not formalised through the provision of footpaths, with pedestrians forced to share internal roads and driveways with vehicles.

## Access to Public Transport

The subject site is highly accessible to existing public transport services within the locality which service employment destinations, retail, education, and community facilities. The Parramatta to City (via Ryde) Strategic Bus Corridor borders the RRCS site to the north-east, providing direct access to Parramatta and the Sydney CBD. As a result Sydney Buses operate a number of routes which travel directly past the site, providing services to North Sydney (287), Macquarie University (518) and the Sydney CBD (287,500,501,518). Another route runs from Macquarie University to the Sydney CBD (507) via Morrison Rd, Putney along the site's southern boundary. In addition, the Kissing Point Ferry wharf is located approximately 1.1km walking distance to the south-west of the Frasers Putney site.

## Utilities and Infrastructure

The site is supplied with electricity, sewer, water, telephony, and gas. Services are generally provided in all surrounding streets. Refer to Section 3.7 for relevant infrastructure upgrades required to service the development.



Figure 3 – View to the west from the existing south eastern internal road



**Figure 4** – North west from the existing south eastern internal road



**Figure 5** – Western corner from below the Moorong lower car park





Figure 6 – View to the east across site from the south-west site corner

## 2.3 Land Ownership and Legal Description

The larger RRCS site is made up of several allotments known as Lots 1,2,3,4,5 and 7 DP1129793. Lot 3 is proposed to become Lot 8 in a draft plan of subdivision (refer to Figure 7). The Stage 1 Phase 1 residential PA primarily relates to Lots 1, 2 and 8 DP 1129793, though other incidental works including demolition are proposed on the other residential zoned allotments (Lots 1, 2, 4 and 7). Frasers Putney Pty Ltd is the contracted purchaser of this site.

A Survey Plan of the Stage 1 Phase 1 site is located at **Appendix C**.

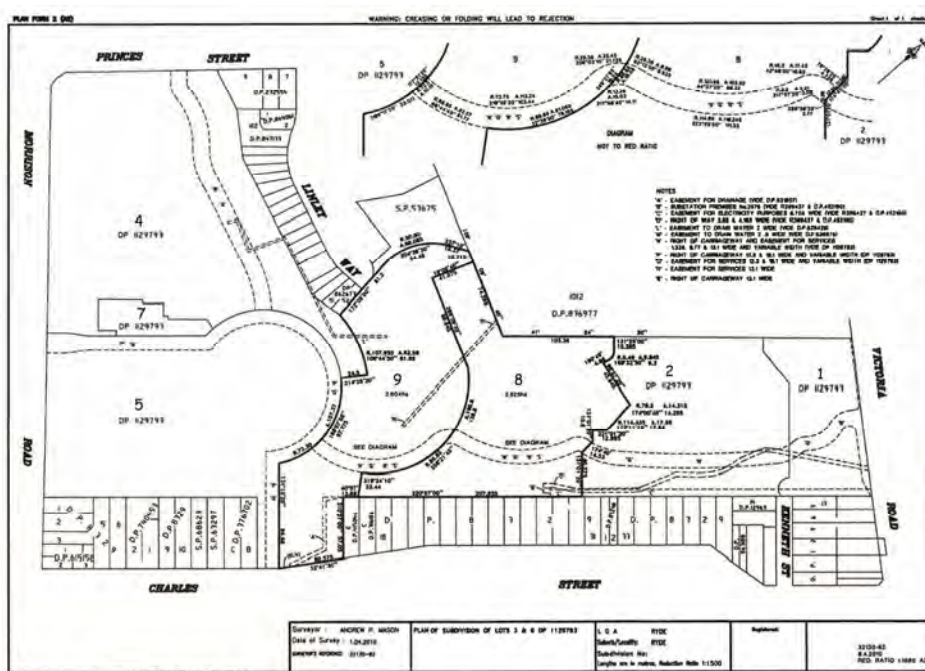


Figure 7 – Draft Subdivision Plan

## 2.4 Existing and Surrounding Development

The Stage 1 Phase 1 residential site is bounded by Victoria Road to the north east, Charles Street to the south east, and the proposed central detention basin to the south west. The Little Company of Mary (Calvary Retirement Village) and low density residential development abuts the site to the north west.

The Putney Shopping Centre is located at the intersection of Charles Street and Morrison Road, adjacent to the site's Morrison Road Access point. Top Ryde Shopping Centre is 0.8 kilometres from the Victoria Road entrance to the site and 2 kilometres from the Morrison Road entrance. The site is roughly equidistant to the Sydney and Parramatta CBDs (approximately 13 kilometres to each) and is well serviced by public transport given its location adjacent to Victoria Road and in close proximity to Ryde bus depot and Meadowbank railway station. **Figures 8-13** show some of the surrounding development context.

### To the north east

To the north east of the PA site is Moorong Spinal Unit, also part of the residential component of the RRCS site.



**Figure 8** – Moorong building viewed from the PA site



### To the south east

To the south west of the PA site are the rears of residential properties which address Charles Street.



**Figure 9** – Detached dwelling houses and villas facing Charles Street



**Figure 10** – Adjoining development along Charles Street (rear yards)

### To the north west

The Little Company of Mary (Calvary Retirement Village) adjoins the subject site along the north western boundary.



**Figure 11** – view of adjoining retirement village



**Figure 12** – View of adjoining retirement village including trees along the boundary



### To the south west

The Central Parkland and Detention basin site, currently under construction, adjoins the site to the south west.



**Figure 13** – View across detention basin site to the subject site

## 3.0 Description of Development Proposal

This section of the report provides a detailed description of the proposed development. Whilst the entire residential component of the development has been declared a Part 3A project, the proposed first phase of development primarily relates to the central part of the site.

### 3.1 Overview

The project involves the Stage 1 Phase 1 Residential Development of the Royal Rehabilitation Centre, Sydney (see **Table 2** and **Figures 14 to 16**).

This Project Application seeks approval:

- Demolition of the existing RRCS buildings located on the intended residential components on the site, including:
  - The Weemala building, associated Annex and engineering services building;
  - A portion the existing rehabilitation facility located on the residential zoned part of the site;
  - Riding for the Disabled Association building;
  - Moorong Spinal Unit building; and
  - ILC and remaining slab of Linen Services buildings.
- Subdivision.
- Construction of residential development including 60 apartments, 44 semi detached/terraced and 14 detached dwellings.
- Associated car parking to service the needs of the development.
- Provision of public open space, landscaping (including tree removal) and site works (including roads).
- Extension/augmentation of the physical infrastructure/utilities required.
- Vehicular access to the site from Charles Street and Victoria Road.
- Sales and marketing facilities including a marketing suite, use of dwellings as exhibition homes and temporary signage.

The residential Project Application relates to 35,767m<sup>2</sup> of land in the inner portion of the site with a link connecting to Victoria Road, however approval is also sought for the demolition of buildings across the entire site.

Architectural drawings of the proposed development prepared by Cox Richardson Architects are located at **Appendix D**; civil engineering drawings prepared by Meinhardt at **Appendix E**; and landscape plans prepared by Environmental Partnership at **Appendix F**.

**Table 2 – Dwellings and Heights**

Dwelling Type	No. of dwellings	Height
Apartments	60	5 storeys (up to 18.5 metres)
Landed Dwellings	58	2/3 storeys (between 9.5 metres and 11.5 metres)
Total	118	-





Figure 14 – Proposed Stage 1 Phase 1 building layout



Figure 15 – Rendered impression of the proposed development



Figure 16 – Rendered impression of the proposed development

## 3.2 Design Principles

The planning and design objectives adopted for the proposed development of the site are as follows:

- to create a series of elegant built forms which vary in height and plan form to both define landscaped spaces and create a rich and varied experience for residents and visitors, moving through the site,
- to achieve a high level of residential amenity for future occupants;
- to reinforce the central pond as the focus for both community and rehabilitation activities;
- to produce a design which embodies the Concept Plan urban design objectives;
- to ensure that any adjustments from the Concept Plan layout are as a result of a better response to the site's constraints and opportunities and/or provide a product that is attractive to the incoming population of the area;
- to provide sufficient private vehicle parking without compromising the viability of public transport usage; and
- to encourage walking through the provision of high quality networks of paths which are interconnected with local networks.

These design principles have guided the preparation of the proposed scheme and are reflected in the final designs.

### 3.3 Dwelling Mix and Typology

An overview of the characteristics of each dwelling type proposed is outlined in **Table 3** and shown in detail in **Appendices D** and **S**.

**Table 3** – Schedule of Dwelling Types

Dwelling Type	Number of dwellings	Lot Area (m <sup>2</sup> )	GFA (m <sup>2</sup> )	Private Open Space (m <sup>2</sup> )	Garaged parking spaces per dwelling
Housing Type 1 Detached	14	285 - 390	182	85-120	2
Housing Type 2A Semi-Detached	10	232 - 270	176	60	1
Housing Type 2B Semi-Detached	11	232 - 290	176	60	1
Housing Type 3A Split Level	6	215 - 300	145	55	1
Housing Type 3B Split Level	5	202 - 263	145	55	1
Housing Type 4A Terrace	6	204 - 350	145	70	1
Housing Type 4B Terrace	6	206 - 263	145	70	1
Apartment (3 bed)	12	N/A	106.5	23.5	1.6
Apartment (2 bed)	4	N/A	97	32	1.2
Apartment (2 bed)	4	N/A	90	22.5	1.2
Apartment (2 bed)	28	N/A	87	11	1.2
Apartment (2 bed)	12	N/A	75	14	1.2

The design rationale for the dwellings typologies is outlined below:

- **Terraces** – Terraces are located in one precinct creating low scaled streets. They address the street with living areas located generally on the north of the dwelling with either a rear private open space to a landscaped path system or with a terrace that addresses the street.
- **Semi Detached Dwellings** – Semi detached dwellings are located along the spine road (Road 5) and Road 8. Dwellings on the spine road have terraces facing north-west onto the street, whilst dwellings on Road 8 are oriented north-south. A level change will ensure both privacy and good surveillance of the street.
- **Detached Dwellings** – Detached dwellings are located with semi detached dwellings around the central public open space. The dwellings are configured as courtyard homes with gardens to the north to gain maximum solar access.

Dwellings located on the central open space address the street on the park and have rear yards with northerly aspect. The through plan allows an open space or terrace at both ends of the dwelling. The through plan also achieves a high level of natural ventilation.

- **Apartments-** Both buildings are to be five storeys in height with basement car parking for residents and visitors. The apartment buildings are arranged around an open space from which both have their address. The buildings are oriented to the north west parallel to the site boundary. Both buildings are planned to allow the individual dwellings to receive solar access and ventilation to achieve RFDC “Rules of Thumb”.

### 3.4 Landscaping and Public Domain

The proposed landscape works are described in the Landscape Report (**Appendix H**) and illustrated in the Landscape Drawings (**Appendix F**) prepared by Environmental Partnership for the proposed Stage 1 development. The breakdown of open space areas within the proposed Stage 1 Phase 1 development is shown in **Table 4** below.

Table 4 – Area of open space

Open space	Area
Public (Council)	4,295 m <sup>2</sup>
Community	4,074 m <sup>2</sup>
Private	7,541 m <sup>2</sup>
Total	15,910 m <sup>2</sup>
Deep Soil	10,794 m <sup>2</sup> (68% of total landscaping)

#### 3.4.1 Public Open Space

The key objectives of the proposed landscaping treatments are to:

- Provide a **variety** of open spaces that enables a range of functions and uses that can be enjoyed by all residents whether residing within the development or the greater community;
- Provide an open space network that **responds to the existing site qualities** and contributes to the character of the surrounding area;
- Provide an open space network that is specifically designed for **accessibility** for disabled or less mobile users;
- Ensure that the design addresses the **integration** of a variety of uses and potential functions that a required by the development.

Streetscape landscaping will respond to the different requirements of the street typologies within the site, including their role in facilitating vehicular and pedestrian movements. The relationship between the public and private domain and the creation of a legible typology will support the street hierarchy of the development.

The public open space link runs north to south within the site connecting the northern residential portion of the site to the Central Parkland, Recreation Circle and wetland open space areas. This corridor will provide a high degree of connectivity and integration between these spaces and afford strong visual links within the site. All dwellings will be serviced by a pedestrian network with strong linkages to surrounding areas (refer to **Figure 17**).

A landscaped buffer will be provided along the western boundary of the site, which will retain and reinforce the existing boundary vegetation.

### 3.4.2 Private Open Space

#### Apartments

Apartments will incorporate private open space in the form of balconies or terraces in order to provide opportunities for private relaxation and entertaining, as well as providing an additional area to enable drying of clothes.

In addition, apartment blocks will also be surrounded by areas of private communal open space for the use of apartment residents. These communal areas will provide a range of opportunities for use by residents, whilst providing a clear separation between the private domain and the public.

#### Semi-Detached & Terraces

Semi-detached dwellings within the Stage 1 Phase 1 site will generally incorporate north and south facing courtyard and terrace open space. Courtyards will be provided off the main living areas to promote and enhance the use of these spaces. Terraces will have less private open space and will not incorporate a linking path between the front and rear courtyards.

Due to the varied topography across the development site, walling/ division treatments may be necessary to enable level outdoor spaces, and will complement both the architecture of the buildings and the landscape.

#### Detached dwellings

Detached dwellings will have landscaped frontages to the street, with private open space provided through open courtyards to the front and rear of dwellings. The interface with the private domain has been carefully considered as part of the landscape strategy for the Stage 1 Phase 1 residential development. Private open space for detached dwellings will seek to promote soft landscaping treatments with native planting where practical. Due to the varied topography of the PA site, walling/ division treatments may be required to enable level outdoor spaces between lots.

## 3.5 Access and Parking

#### Vehicle access

Primary vehicular access to the site will be provided via Charles Street at the existing site access point (approved and upgraded under the Health Facility PA). The Stage 1 Phase 1 also seeks approval for the construction of a new left in left out intersection to Victoria Road, with a deceleration lane to be provided for westbound traffic. This connection will be used for construction access with the option of providing general traffic access once construction activity reduces to allow its safe use by general traffic. A separate submission has been made to the RTA, seeking in principle approval for traffic lights at this intersection with a response pending.

The internal road layout has been adjusted to respond the revised dwelling layout and as more information regarding grades and contours is available after Concept approval. The development retains a central spine road that will connect through to Victoria Road and is designed in accordance with AMCORD as per the signed Deed of Agreement between RRCS, the proponent and Ryde City Council.



## Parking

Basement car parking will be provided for both apartment buildings at rates consistent with those specified under the Ryde DCP 2010, being 1.2 spaces per two bedroom apartment and 1.6 spaces per three bedroom apartment, with additional visitor and disabled parking also provided at the appropriate rates, resulting in a total parking provision for these buildings of 78 spaces.

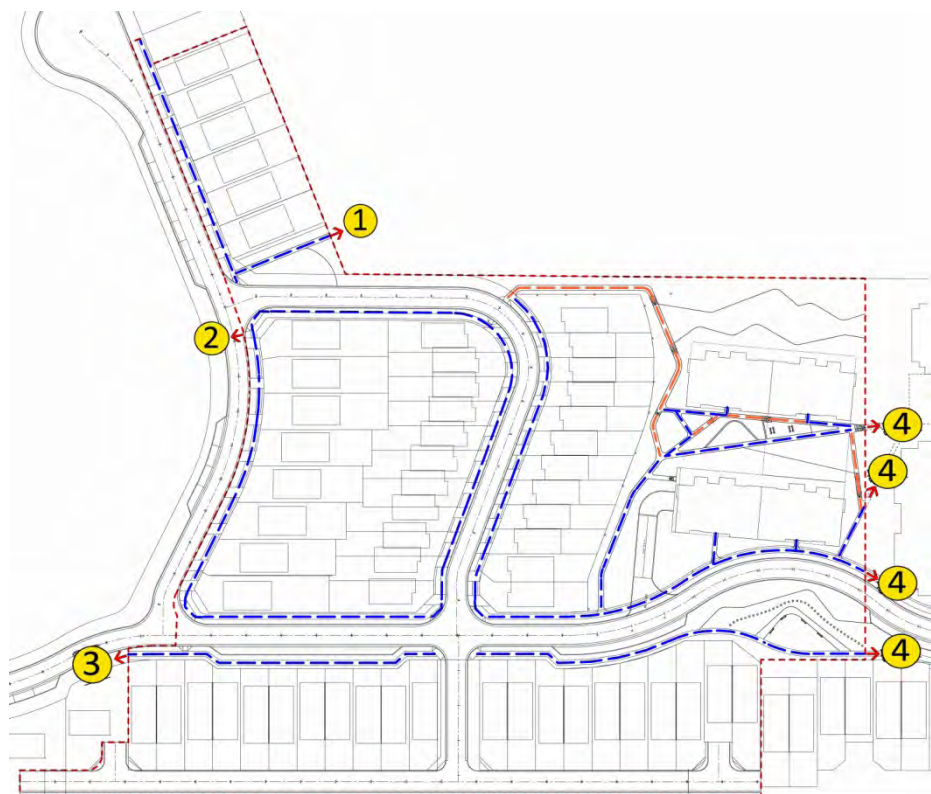
In addition, 25 bicycle parking spaces will be provided for apartment buildings in line with the rate of one space per three dwellings, with an additional one visitor space per twelve units.

Semi-detached dwellings (House Types 2-5) are provided with one garaged parking space, with dwellings types including the option to park another car on the driveway. The proposed detached dwellings (House Type 1) have been designed with a double garage. The potential for visitor parking for semi-detached/ terraced and detached dwellings is provided on private driveway areas of each dwelling, and supplemented by on-street parking. 32 on-street parking spaces are provided in bays along Road 5 to accommodate for visitor demand generated by these dwellings, as shown in the Civil Engineering Drawings provided at **Appendix E**.

## Pedestrian and circulation

The site provides strong pedestrian linkages within the site and to surrounding areas, as shown in **Figure 17** and in further detail at **Appendix F**. This figure shows the pedestrian linkages within the site, with the following pedestrian links noted:

1. Footpath linking to Calvary Retirement Village
2. Connection to Central Parkland pedestrian network
3. Pedestrian connection to Charles Street
4. Connection to Stage 1 Phase 2 residential development and Victoria Road.



**Figure 17** – Proposed pedestrian access

The external pedestrian connections integrate entirely with the proposed internal pedestrian network, which provides footpaths to all proposed dwellings. This will ensure the development achieves a high level of pedestrian accessibility which encourages walking for local trips.

Ongoing planning and design is currently underway between RRCS and the appropriate authorities for the provision of a pedestrian footbridge across Victoria Road at the intersection with Blaxland Road. This will improve the linkage between the Stage 1 Phase1 site and Ryde Town Centre, improving access to retail, municipal and community services.

### 3.6 External Materials and Finishes

Cox Richardson Architects has prepared a palette of external materials and finishes for the proposed development that complements and enhances the existing character of the Ryde/Putney area. **Appendix D** provides the External Finishes Schedule that illustrates the typical materials detailing of various building elements, including:

- Metal cladding;
- Timber cladding;
- Painted finishes;
- Rendered finishes;
- Tiled roofing; and
- Metal deck roofing.

### 3.7 Services and Infrastructure

Approval is sought for the extension/augmentation of physical infrastructure/utilities as required below:

#### Potable Water

A Hydraulic and Fire Services Report has been prepared for the Stage 1 Phase 1 Residential development by Harris Page and Associates Pty Ltd (**Appendix I**). All water services shall be provided in accordance with the requirements of AS3500 (Plumbing and Drainage Code), the NSW Code of Practice, and the requirements of Sydney Water Corporation. Potable cold water will be supplied via connections from the Authority's mains, with reticulation throughout the site and residential development to all fixtures. A stormwater re-use system will be installed within apartment blocks with collection of rainwater from portions of the roof with storage and reticulation provided to sanitary flush fixtures and landscape irrigation points. Hot water for single dwellings will be provided via gas-supplemented solar hot water systems. All strata-titled residential blocks will have centralised gas heating units with reticulation to all hot water fixtures. Water metering shall be installed to the requirements of the supply authority.

#### Sewerage

All sanitary fixtures, appliances and drainage systems will be connected by gravity feed to the Authority's mains system in accordance with the relevant standards. Where gravity feed is not achievable, fixtures shall discharge to the gravity reticulation system via a collection pit and pump assembly.

## Gas

The gas reticulation systems for the Stage 1 Phase 1 Residential development comprise of connections from the Authority's (Jemena) mains and reticulation throughout the subject site to all appliance outlets, including all residential dwellings within the site. Gas metering will be installed to meet the requirements of the supply authority.

## Fire Services

The fire hose system shall interconnect to the cold water service and be located to provide adequate coverage to floor areas as required by the BCA.

A fire hydrant system shall connect to the Authority's potable cold water main and reticulate throughout the site via a dual point Fire Brigade booster valve, a diesel-powered booster pump and reticulation pipes.

## Electricity

An Electrical Infrastructure Report has been prepared for the Stage 1 Phase 1 Residential development by Meinhardt Infrastructure and Environment Pty Ltd (**Appendix J**). Based on calculations in accordance with AS3000 (Wiring Rules), the site will be required to be supplied by a new high voltage network, which will be installed with required substations and reticulation to the apartment buildings, terraces, semi-detached and single dwellings.

## Communications

It is proposed that two 100mm-diameter communications conduits will be provided throughout the site following the roadways in accordance with the drawings which accompany the Electrical Infrastructure Report. These will be extended directly into apartment buildings for distribution, whilst 50mm dedicated conduits will service dwellings.

## Stormwater

Stormwater plumbing and drainage systems comprise collection from the roof, balcony and terraces within apartment buildings and dwellings, and connection to rainwater tanks for greywater reuse.

# 3.8 Site Preparation Works

## Demolition

The area occupied by the Stage 1 Phase 1 PA is generally vacant land within the RRCS site. This Project Application seeks approval for the demolition of all structures within the entire residential component of the RRCS site (not limited to the Stage 1, Phase 1 site). This scope of works was included in the Preliminary Environmental Assessment Report (PEAR) for the current application. These structures include:

- The Weemala building, associated Annex and engineering services building;
- A portion of the existing rehabilitation facility located on the residential zoned part of the site;
- Riding for the Disabled Association building;
- Moorong Spinal Unit building; and
- ILC and remaining slab of Linen Services buildings.

A plan showing the buildings to be demolished prepared by Cox Richardson Architects is provided at **Appendix D**.



## Tree Retention, Removal and Replanting

Removal of 183 trees is sought as part of this application as outlined in the arborist statement at **Appendix L**.

Under the proposed landscaping treatment of the Stage 1 Phase 1 site, 183 new trees will be planted within the site in accordance with the Landscape Report (**Appendix H**) and Plans (**Appendix F**), with 30 trees identified for retention in the Stage 1 Phase area.

Proposed planting species are predominantly native, with 86% of open space tree and shrub species identified on DECCW web-site as belonging to the endangered Sydney Turpentine Ironbark Forest community, which previously was the dominant vegetation cover on the site.

Proposed tree retention has accommodated the retention of established groups of trees providing habitat as well as significant large specimens that will provide enhanced character to the new development. The large existing *Ficus hillii* is to be protected and retained will provide the focal point for a small pocket park, punctuating the streetscape and contributing to the variety of open space experiences and landscape character. Many existing trees are of poor health. New tree plantings will be robust, predominantly native species with a cohesive character.

## Earthworks

Bulk earthworks will be undertaken to:

- Remove and reconsolidate uncontrolled fill on site.
- Balance, cut and fill volumes.
- Remove the need for retaining walls at the sites boundary.
- Regrade the site to ensure all stormwater over land flows are directed to the central detention basin and wetlands, and preserve existing overland flow paths in their current location.
- Regrade the site to provide effective grades for vehicular, pedestrian movements and disabled access.
- Regrade the site to provide benched areas for building construction.

A bulk earthworks model will be provided with the Construction Certificate documentation, indicating the final cut and fill volumes, and final design levels for the residential development component. A preliminary earthworks plan prepared by Meinhardt is included at **Appendix E**.

## 3.9 Land Titling and Ownership

### Subdivision

A Subdivision Plan prepared by Tasy Moraitis is provided at **Appendix Y**. The dwellings adjoining the Charles Street residences will be Torrens title within a community title scheme. All other landed dwellings will be Torrens title. Strata subdivision of the apartment buildings will be strata titled in accordance with the relevant legislation.

### Dedication of Roads

Condition C13 of the Concept Plan Instrument of Approval required that RRCS negotiate with the Department, in consultation with Council on the delivery of a Section 93 Planning Agreement, and/or Section 94 Development Contributions to provide for community and infrastructure demand.

Development Contributions have been finalised for the site in the form of a Deed of Agreement between RRCS, Frasers Putney Pty Ltd and Ryde City Council. As part of this Section 94 agreement, the internal roads servicing the residential component of the development will be dedicated to Ryde City Council. The designs of the proposed internal road network have been provided for approval with this PA.

### 3.10 Developer Contributions

Development Contributions have been finalised for the site in the form of a Deed of Agreement between RRCS, Frasers Putney Pty Ltd and Ryde City Council. Frasers Putney became a party to this Deed of Agreement on 15 July 2010.

### 3.11 Sales and Marketing Facilities

#### Sales and Marketing Suite

As part of the works for the Project Application, a sales and marketing display suite will be constructed. The display suite will be located within the subject site in the vicinity of the existing Mooring Building. The timeframe for operation of the suite will be for approximately three years.

A copy of the plan is included in the Architectural Drawings prepared by Cox Richardson Architects at **Appendix D (Drawing A-PA-FP-M1)**.

As shown on the plan, the building will be single level structure with a building height of 1-1.5 storeys. The building will have a reception and meeting room area, and will display one of the Type 3 houses and an apartment type within the building. Car parking will be provided alongside the building and separated from the construction traffic. In addition, external signage will be mounted to the facade of this building in order to signal the location of the display suite and guide prospective purchasers.

The approval of a Sales and Display Suite with the Project Application is consistent with other recent Part 3A approvals in the Ryde LGA, in particular the Lipman development at 120-128 Herring Road Macquarie Park (MP 09\_0218).

#### Exhibition Homes

A number of completed houses (by each dwelling type) will be available for inspection and viewing. These houses will be fully furnished homes open for inspection between 9am and 6pm Mondays to Sundays inclusive. The main sales office functions will remain in the sales and marketing suite on Victoria Road.

#### Temporary Marketing Signage

It is proposed to include some temporary business identification signage structures along the Victoria Road site frontage in order to identify the Frasers Putney site and provide the community with information regarding its ongoing development. This signage will be comprised of three main components, being:

- Eight flagpoles disbursed evenly between the palm trees along the site frontage;
- Two skinned container structures; and
- Site shadecloth fencing which will be embellished with Frasers branding.

Details of the above signage are shown in the Architectural Drawings prepared by Cox Richardson Architects provided at **Appendix D (Drawing A-PA-FP-M1)**.

### 3.12 Revised Staging Plan

An indicative project Staging Plan for the overall development was required to be submitted to the Department of Planning prior to an initial application on the site to Concept Plan Condition C13. This information was submitted to DoP prior to the involvement of Frasers Putney Pty Ltd on the site.

This Stage 1 Phase 1 PA is the first residential component stage that will be completed. An updated staging plan for the remainder of the site is shown in **Figure 18** and is included at **Appendix D**. This plan shows the staging of the project into Stage 1 (Phases 1 and 2) and Stage 2, with subset Phases allowing for the orderly development of the site. The Stage 1 area comprises the north-eastern portion of the site between the Central Wetlands area and Victoria Road. Stage 2 is comprised of the south-western portion of the site bounded by Morrison Road, the new RRCS health facility and the Central Wetlands area.

It is anticipated that the Stage 1 Phase 1 works for which approval is sought under this Project Application would be progressed over a timeframe of approximately 2.5 years. Within this overall period, initial works including the sales and marketing suite and temporary marketing signage would be progressed soon after approval, requiring approximately 3 months to complete. The proposed dwelling houses would be constructed over a total works period of 18 months, whilst the two apartment blocks will require a total works period of 24 months. It is anticipated that the Stage 1 Phase 1 residential development could be completed for occupation in 2013.

The Director General's Requirements are currently being sought from the Department of Planning for the environmental assessment of the Stage 1 Phase 2 and Stage 2 residential developments of the remainder of the site. It is anticipated that Stage 1 Phase 2 works will be progressed over a period of approximately 2.5 years from the date of an approval for this phase. Stage 2 works will not commence prior to 2014, and are likely to be constructed over a period of approximately 3 years.

It should be noted that the timeframes outlined above are indicative only, and are subject to a number of influences including the approvals process, market conditions and other external factors. As such these timeframes should be treated as a guide only.



Figure 18 – Staging Plan for residential development

### 3.13 Staging of Construction Certificates for Stage 1 Phase 1

The proposed construction works for the development are not expected to give rise to any unacceptable detrimental impacts that cannot be suitably managed. A comprehensive Construction Management Plan has been prepared by Meinhardt Infrastructure and Environment Pty Ltd (refer **Appendix W**) that outlines appropriate measures to address matters such as construction, traffic and waste management.

#### Staging of Construction Certificates

To facilitate the staging of the construction process, it is proposed to stage the issuing of construction certificates for Stage 1 Phase 1. Separate construction certificates are proposed, as detailed below:

- Stage 1 demolition of existing structures within the overall RRCS site, including:
  - Moorong Spinal Unit building; and
  - ILC and remaining slab of Linen Services buildings.
- Stage 2 demolition of existing structures within the overall RRCS site, including:
  - The Weemala building, associated Annex and engineering services building;
  - A portion the existing rehabilitation facility located on the residential zoned part of the site;
  - Riding for the Disabled Association building;
- early works and infrastructure including roads;
- excavation and construction of basements to ground level;
- each apartment building; and
- each individual dwelling (not including apartments).
- Sales and marketing suite.
- Temporary marketing signage.

It is anticipated that the Department of Planning will structure the Terms of Approval to facilitate the progression of the proposal in accordance with the staged Construction Certificate methodology outlined above.

## 4.0 Director General's Requirements

On 9 February 2011, in accordance with Section 75F of the EP&A Act, the Director-General of the Department of Planning issued the requirements for the preparation of an Environmental Assessment to accompany a part Project Application for the project. A copy of the DGRs is included in **Appendix B**.

**Table 5** provides a detailed summary of the individual matters listed in the DGRs and identifies where each of these requirements has been addressed in this report and the accompanying technical studies.

**Table 5 – Director General's Requirements**

Requirement	Location in Environmental Assessment	
General		
Executive Summary	Page i	
Statement of Validity	Page ii	
Quantity Surveyor’s Certificate	Appendix A	
Site Analysis	Section 2.0	
Description of the Proposed Development	Section 3.0	
Assessment of the Key Issues	Section 5.0	
Draft Statement of Commitments	Section 6.0	
Conclusion and Justification	Section 7.0	
Key Issues	Report	Technical Study
Relevant EPLs, Policies and Guidelines		
Planning provisions applying to the site, including permissibility and the provisions of: <ul style="list-style-type: none"><li>Objects of the <i>Environmental Planning and Assessment Act 1979</i>;</li><li>NSW State Plan;</li><li>SEPP 55- Remediation of Land;</li><li>SEPP 65- Design Quality of Residential Flat Development &amp; Residential Flat Design Code (Planning NSW) 2004;</li><li>SEPP (Building Sustainability Index: BASIX) 2004;</li><li>SEPP (Infrastructure);</li><li>Ryde Local Environmental Plan 2010; and</li><li>Nature and extent of any non-compliance with relevant environmental planning instrument, plans and guidelines and justification for any non-compliance.</li></ul>	Section 5.0	N/A
Built Form and Height		
The EA shall address the height, bulk, scale and density of the proposed development within the context of the locality and the Ryde LEP 2010. In particular, detailed building envelope/ height and contextual views should be undertaken to ensure the proposal integrates with the local environment.	Sections 5.6, 5.7 and 5.8	Appendices D and S

Requirement	Location in Environmental Assessment	
Urban Design		
The EA shall address the design quality with specific consideration of façade, massing, setbacks, building articulation, use of appropriate colours, building materials, landscaping, 'safer by design' principles and public domain.	Sections 5.6, 5.8, and 5.15	Appendices D, F, H and N
Environmental and Residential Amenity		
The EA must address solar access/ gain, overshadowing, acoustic privacy, visual privacy, view loss and achieve a high level of environmental and residential amenity. In this regard, the EA should consider appropriate separation distances to any adjacent residential buildings.	Sections 5.6, 5.8, and 5.11	Appendices D, F, G, H, N and U
Transport and Accessibility Impacts		
<p>The EA shall provide a Transport and Accessibility Assessment prepared with reference to the <i>Metropolitan Transport Plan-Connecting the City of Cities</i>, the <i>NSW State Plan 2010</i>, <i>NSW Planning Guidelines for Walking and Cycling</i>, the <i>Integrating Land Use and Transport</i> policy package and the RTA's Guide to Traffic generating Developments, including consideration of:</p> <ul style="list-style-type: none"> <li>▪ The potential impacts on the local road network and any required road/ intersection upgrades, in particular, the intersections identified in the RTA response dated 25 January 2011.</li> <li>▪ An estimate of the trips generated by the proposed development, including an assessment of existing and proposed public transport, pedestrian and cycle movements within the vicinity of the subject site and any measures to address increased demand on existing public transport, walking or cycling infrastructure;</li> <li>▪ Identification of measures to manage travel demand and increase the use of public and non-car transport modes and the potential for improving accessibility to local services and facilities and regional connections;</li> <li>▪ Opportunities to improve access to pedestrians through the site;</li> <li>▪ Appropriate on-site parking provision having regard to Council and RTA guidelines and the availability of public transport (Note: the Department supports reduced car parking in areas well-served by public transport)</li> </ul>	Section 5.9	Appendices P and Q

Requirement	Location in Environmental Assessment	
<b>Ecologically Sustainable Development</b>		
<p>The EA shall detail how the development will incorporate ESD principles in the design, construction and ongoing operation phases of the development.</p> <p>The EA must demonstrate that the development has been assessed against a suitably accredited rating scheme to meet industry best practice.</p> <p>The EA shall provide details of BASIX compliance to achieve satisfactory levels of thermal comfort and water and energy ratings for the proposed development.</p>	Section 5.14	Appendix M
<b>Contributions</b>		
<p>The EA shall address the provision of public benefit, services and infrastructure having regard to Council's Section 94 Contribution Plan and provide details of any Voluntary Planning Agreements or other legally binding instrument proposed to facilitate this development.</p>	Section 3.10	N/A
<b>Contamination</b>		
<p>The EA is to demonstrate compliance that the site is suitable for the proposed use in accordance with SEPP55.</p>	Section 5.13	N/A
<b>Tree Retention and Landscaping</b>		
<p>The EA shall provide details on the treatment of open space areas on the site including the provision of screen planting along common boundaries and the retention and protection of significant vegetation.</p>	Sections 3.4 and 5.12	Appendices F, H and O
<b>Flora and Fauna</b>		
<p>The EA shall address impacts on flora and fauna, including threatened species, populations and endangered ecological communities and their habitats and steps taken to mitigate identified impacts.</p>	Section 5.12	Appendices F, H and O
<b>Public Domain</b>		
<p>The EA is to address public domain improvements, pedestrian linkages and street activation.</p>	Sections 3.4, 5.8, 5.9 and 5.15	Appendices F and H
<b>SEPP 65- Design Quality of Residential Flat Development</b>		
<p>The EA must address the design principles of SEPP 65 and the Residential Flat Design Code.</p>	Sections 5.4 and 5.11	Appendix N
<b>Drainage and Groundwater</b>		
<p>This EA shall address drainage / flooding issues associated with the development/ site, including: stormwater, drainage infrastructure and incorporation of Water Sensitive Urban Design measures.</p>	Section 3.7	Appendices E, F, H, I and K



Requirement	Location in Environmental Assessment	
<b>Heritage</b>		
<ul style="list-style-type: none"> <li>A Heritage Impact Statement should be prepared in accordance with the NSW Heritage Office publication "Statements of Heritage Impact".</li> <li>The EA shall provide an Archaeological Assessment of Aboriginal and non-indigenous archaeological resources, including an assessment of the significance and potential impact on the archaeological resources.</li> </ul>	Section 5.19	Appendix X
<b>Draft Statement of Commitments</b>		
The EA must include a draft Statement of Commitments detailing measures for environmental management, mitigation measures and monitoring for the project.	Section 7.0	N/A
<b>Utilities</b>		
In consultation with relevant agencies, the EA shall address the existing capacity and requirements of the development for the provision of utilities.	Section 3.7	Appendices I and J
<b>Staging</b>		
The EA must include details regarding staging of the proposed development (if proposed).	Section 3.12	Appendix D
<b>Consultation</b>		
Undertake an appropriate and justified level of consultation in accordance with the Department's <i>Major Project Community Consultation Guidelines October 2007</i> .	Section 5.16	Appendix R



## 5.0 Environmental Assessment

This section of the report assesses and responds to the environmental impacts of the Project Application proposal. It addresses the matters for consideration set out in the DGRs (see Section 4.0).

The draft Statement of Commitments complements the findings of this section.

### 5.1 Relevant Strategic and Statutory Plans and Policies

The DGRs require the following legislation, planning instruments, strategies and guidelines which are relevant to the proposed development to be addressed:

- *Environment Protection & Biodiversity Conservation Act 1999 (Commonwealth);*
- *Environmental Planning and Assessment Act 1979;*
- *Threatened Species Conservation Act 1995;*
- *NSW State Plan;*
- *Draft Inner North Subregional Strategy;*
- *State Environmental Planning Policy No. 19 – Bushland in Urban Areas;*
- *State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55);*
- *State Environmental Planning Policy No.64- Advertising and Signage;*
- *State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development;*
- *State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004;*
- *State Environmental Planning Policy (Major Development) 2005;*
- *State Environmental Planning Policy (Infrastructure) 2007;*
- *Ryde Local Environmental Plan 2010;*
- *Ryde Development Control Plan 2010;*
- *Healthy Urban Development Checklist; and*
- *Planning Guidelines for Walking and Cycling.*

The Project Application's consistency with the relevant strategic and statutory plans and policies is located in **Table 6** below, with detailed discussion in the following sections of this environmental assessment.

**Table 6** – Summary of instruments/ strategies/ EPIs.

Instrument/Strategy	Comments
<b>Commonwealth Legislation</b>	
<b>Environment Protection &amp; Biodiversity Conservation Act 1999</b>	This Project Application will not result in any significant impacts on any listed flora, fauna or ecological communities, and as such is not a 'controlled activity' for the purpose of this Act.

Instrument/Strategy	Comments
<b>State Legislation</b>	
<b>Environmental Planning and Assessment Act 1979</b>	<p>This Project Application is consistent with the objects of the EP&amp;A Act in that it:</p> <ul style="list-style-type: none"> <li>■ Promotes infill residential development in close proximity to community services, facilities and public transport;</li> <li>■ Provides new housing stock designed in an ecologically sustainable manner;</li> <li>■ Provides land for public purposes including recreation;</li> <li>■ Provides a range of dwelling types and sizes, contributing to an increase in the diversity of local housing stock and improving affordability.</li> </ul>
<b>Threatened Species Conservation Act 1995</b>	<p>This Project Application will not result in any significant impacts on any listed flora, fauna or ecological communities.</p>
<b>Strategic Plans</b>	
<b>NSW State Plan</b>	<p>This Project Application is consistent with the Plan in that it will:</p> <ul style="list-style-type: none"> <li>■ Provide a range of dwelling types and sizes, contributing to improved diversity in local housing stock and improving housing affordability;</li> <li>■ Provide new housing stock which meets the industry standards for ecological sustainable development and residential amenity;</li> <li>■ Provide infill housing in a location with good access to community services, open space and public transport.</li> </ul>
<b>Draft Inner North Subregional Strategy</b>	<p>This Project Application is consistent with the Strategy in that it will:</p> <ul style="list-style-type: none"> <li>■ provide greater housing supply and housing choice;</li> <li>■ contribute to achieving the targets for the Ryde LGA which require 12,000 additional dwellings by 2031;</li> <li>■ better utilise land for residential purposes which is currently underutilised; and</li> <li>■ fulfil the objectives of encouraging urban consolidation.</li> </ul>
<b>State Planning Instruments and Controls</b>	
<b>SEPP 19- Bushland in Urban Areas</b>	<p>No land within the subject site or on adjoining land is zoned as community land nor does the site adjoin bushland, and as such the provisions of SEPP 19 do not apply to the proposed development.</p>
<b>SEPP 55- Remediation of Land</b>	<p>Potential for contamination has been considered and site is considered to be suitable for the proposed development (refer Section 5.13).</p>
<b>SEPP (BASIX)</b>	<p>A Preliminary ESD and BASIX Report prepared by Ecospecifier provided at <b>Appendix M</b>, which demonstrates that the proposed development is on target to achieve BASIX certification. Finalised BASIX certificates will be provided prior to determination.</p>
<b>SEPP (Major Projects)</b>	<p>The residential component of the RRCS site falls into the</p>

Instrument/Strategy	Comments
	class of development described in Clause 13 of Schedule 1 namely "Residential, Commercial or Retail Projects" in excess of \$100 million.
<b>SEPP (Infrastructure)</b>	The project is to be referred to the RTA as required under Clause 104 of the SEPP.
<b>SEPP 64 (Advertising and Signage)</b>	The proposed signage complies with the aims and objectives of this policy and with the assessment criteria established under Schedule 1 of the SEPP.
<b>SEPP 65 (Design Quality of Residential Flat Development)</b>	An assessment of the proposal against the 10 design principles in SEPP 65 is located at <b>Appendix N</b> and discussed in Section 5.11.
<b>Residential Flat Design Code</b>	The Residential Flat Design Code applies only to the residential apartment component. The proposed development is consistent with the relevant objects of each part of the RFDC, and is generally consistent with the relevant design objectives.

## 5.2 Commonwealth Legislation

### 5.2.1 Environment Protection & Biodiversity Conservation Act 1999

The *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places, that are defined in the Act as matters of national environmental significance. The Act requires approval from the federal Minister for Environment for actions that may have national environmental significance.

The Flora and Fauna Impact Assessment at **Appendix O** and discussed in further detail in Section 5.12 observed the Grey-headed Flying Fox over the subject site during the nocturnal field survey, and identified habitat which may be suitable for the Green and Golden Bell Frog, although a targeted survey failed to identify the presence of this species within the subject site. Both of these species are listed as vulnerable under the EPBC Act, however the assessment concluded that there will be no impact on any listed flora, fauna or ecological communities, including the aforementioned species, as a result of the proposal. Therefore the proposed development is not a 'controlled action' under the EPBC Act.

## 5.3 State Legislation

### 5.3.1 Environmental Planning and Assessment Act 1979

Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act) outlines the process for considering applications under the Major Development SEPP. In particular it outlines:

- What development constitutes a Major Development;
- The matters which the Minister must take into account when assessing a major application;
- Information which must be submitted with a Project Application;
- The environmental assessment requirements for approval;
- Public exhibition of Major Project Applications;
- Assessment report procedures; and
- Appeals under Part 3A.

This report responds to these requirements.

This Project Application is considered to be consistent with the relevant objects of the EP&A Act in that:

- the dwelling yield at Frasers Putney will provide more living opportunities within a highly suitable and accessible site within the existing urban footprint of Sydney, contributing to a reduction in the demand for residential development at the rural fringe;
- the proposed development will create a high quality living environment with good residential amenity, access to services, open space and public transport;
- the proposed development will contribute to the increased supply of residential development within the Ryde LGA and will provide a mix of apartments, terraces, semi-detached and detached dwellings, which will contribute to the provision of a variety of housing options within the region;
- the assessment process for the Project Application by the NSW Government will include the public exhibition of the proposal, and therefore the opportunity for the involvement and participation by local residents and community groups in addition to the extensive community consultation process which has been undertaken by Frasers Putney.

### 5.3.2 Threatened Species Conservation Act 1995

The *Threatened Species Conservation Act 1995* (TSC Act) lists endangered species, populations and ecological communities and provides for their protection.

The Flora and Fauna Impact Assessment at **Appendix O** and discussed in further detail in Section 5.12 recorded one fauna species above the subject area listed as vulnerable under Schedule 2 of the TSC Act (Grey-headed Flying Fox), and identified potential habitat for, but not the presence of, another species listed as endangered under Schedule 1 of the TSC Act (Green and Golden Bell Frog). Further assessment and targeted surveys for these species carried out concluded that the proposed development will not have any adverse effect on threatened species, populations or ecological communities or their habitats within the locality, and as such a Species Impact Statement is not required.

## 5.4 State Environmental Planning Policies

The following State Environmental Planning Policies are relevant to the proposal and are discussed further below:

- SEPP (Major Development) 2005;
- SEPP (Infrastructure) 2007;
- SEPP 55 – Remediation of Land;
- SEPP 65 – Design Quality of Residential Flat Development and the accompanying Residential Flat Design Code (RFDC);
- State Environmental Planning Policy (BASIX) 2004; and
- SEPP 19 – Bushland in Urban Areas.

#### 5.4.1 State Environmental Planning Policy (Major Development) 2005

Group 5 of Clause 13 of Schedule 1 of the State Environmental Planning Policy (Major Development) 2005 (Major Development SEPP) provides for development with a Capital Investment Value (CIV) greater than \$100 million to be considered as a Major Project under Part 3A of the Act. The overall residential development of the Frasers Putney site has an estimated CIV of over \$295 million.

A copy of the quantity surveyor's estimate prepared by WT Partnership is provided at **Appendix A**.

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

State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP) came into force in December 2007 and repealed State Environmental Planning Policy No. 63 – Major Transport Projects. The Infrastructure SEPP aims to facilitate the effective delivery of infrastructure across the state and identifies matters to be considered in the assessment of development adjacent to particular types of infrastructure development.

Division 17 Subdivision 2 requires certain matters to be considered for developments in or adjacent to road corridors and road reservations. Clause 101 requires consideration of developments with a frontage to a classified road. Clause 104 requires consideration of the development as a traffic generating development involving subdivision of 50 or more allotments with access to a classified road. The connection to Victoria Road is addressed in the Stage 1 Phase 1 Transport Review at **Appendix P** and discussed further at Section 5.9.

#### 5.4.3 State Environmental Planning Policy No 55 – Remediation of Land

State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55) aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment. The DGRs require the EAR to consider whether the land is suitable for the proposed use in accordance with SEPP 55, which is addressed at Section 5.13.

#### 5.4.4 State Environmental Planning Policy No.64 – Advertising and Signage

State Environmental Planning Policy No 64- Advertising and Signage (SEPP 64) applies to all signage that under an environmental planning instrument can be displayed with or without development consent and is visible from any public place or public reserve.

The proposed signage on the marketing display suite facade is building identification signage which identifies the marketing activities of this structure. It is considered that the proposed signage is consistent with the objectives of SEPP 64, in that particular care has been taken in the design of the proposed signage in order to provide visual imagery compatible with its location and ensure legible graphics for effective communication. The proposed signage is designed to a high standard of quality and finish.

The proposed temporary marketing signage located along the site's Victoria Road frontage is considered to be business identification signage for the purpose of assessment under SEPP 64, in that it will indicate the name and business being carried out by Frasers Putney on the subject site. The proposed signage is of a high quality finish and design, will provide effective communication to the public.

The signage is compatible with the desired amenity and visual character of Victoria Road in that it provides clear information regarding the development of the Frasers Putney site. It is considered that the Victoria Road site frontage is the most suitable location for the proposed signage as it will allow for clear communication without any adverse impacts on surrounding residential properties. It is noted that both skinned container and flagpole business identification signage structures are utilised in close proximity to the site on Victoria Road.

Under clause 8 of SEPP 64, a consent authority must not grant consent for any signage application unless the consent authority is satisfied that the proposal is consistent with the objectives of the SEPP and with the assessment criteria which are contained in Schedule 1. **Table 7** below demonstrates the consistency of the proposed signage with these assessment criteria.

**Table 7** – Compliance with the Schedule 1 Assessment Criteria of SEP 64

Assessment Criteria	Comments	Compliance
<b>1 Character of the area</b>		
Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located?	The proposed building identification signage is compatible with the proposed marketing suite, and reflects the future development of the Frasers Putney site.  The Victoria Road business identification signage is compatible with the future character of the locality in that it provides the community with information regarding the future development of the Frasers Putney site.	Y
Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?	Victoria Road is characterised by a range of signage types and structures, including business identification signage and building identification signage.  It is considered that the proposed signage is in keeping with this character, and the inclusion of signage is consistent with other large-scale residential developments in the area.	Y
<b>2 Special areas</b>		
Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas?	The proposed development is not located in or within proximity of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways or rural landscapes. Residential development is located on the southern and northern boundaries of the Stage 1 Phase 1 site, and opposite the site across Victoria Road.  The proposed signage is consistent with business identification signage along Victoria Road, including in close proximity to the site, and it is considered that the proposed signage will not detract from the amenity or visual quality of the area.	Y



Assessment Criteria	Comments	Compliance
	Whilst there is some residential development in proximity to the site on Victoria Road, it is considered that the proposed signage is in keeping with the mixed use nature of this major transport corridor and will not adversely impact upon the visual quality of this environment.	Y
<b>3 Views and vistas</b>		
Does the proposal obscure or compromise important views?	The proposed signage along Victoria Road has been designed to provide a visual barrier to unsightly views of a major construction site, whilst maintaining the visual character of the existing street frontage. The proposed building identification signage will be applied to the facade of the temporary marketing suite, and hence will not obscure any views.	Y
Does the proposal dominate the skyline and reduce the quality of vistas?	The proposed marketing suite signage does not extend beyond the building envelope of the temporary marketing suite, which is a single storey structure. The proposed signage along Victoria Road will not protrude above the horizon and will sit comfortably in the context of other signage and development along Victoria Road. As such it is not considered that the proposed signage will dominate the skyline nor reduce the quality of any vistas.	Y
Does the proposal respect the viewing rights of other advertisers?	The proposed signage does not obscure or detract from any other signage structures.	Y
<b>4 Streetscape, setting or landscape</b>		
Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?	The scale, proportion and form of the proposed signage is appropriate for the existing and future streetscape of the development.	Y
Does the proposal contribute to the visual interest of the streetscape, setting or landscape?	The proposed signage along Victoria Road will provide visual interest to the Victoria Road streetscape whilst providing the community with information regarding the development of the site by Frasers Putney. In addition, the proposed signage will screen views of the construction and site preparation from the public domain. The proposed building identification signage has been designed as an integral component of the temporary marketing suite and will contribute to the visual interest of the Frasers Putney site whilst residential construction is taking place.	Y

Assessment Criteria	Comments	Compliance
Does the proposal reduce clutter by rationalising and simplifying existing advertising?	Existing RRCS signage along the Victoria Road will be removed as part of this application, reducing visual clutter and providing a rational and unified signage scheme along this frontage.	Y
Does the proposal screen unsightliness?	The proposed signage will screen views of demolition and construction activities.	Y
Does the proposal protrude above buildings, structures or tree canopies in the area or locality?	The signage proposed along Victoria Road will not protrude above the tree canopy. The proposed building identification signage will not protrude beyond the facade of the proposed temporary marketing suite.	Y
Does the proposal require ongoing vegetation management?	The proposed signage has been located so as not to require ongoing vegetation management	Y
<b>5 Site and building</b>		
Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located?	The proposed temporary signage is compatible with the scale, proportion and other characteristics of other signage within close proximity to the site, and will sit comfortably within the subject site. The proposed signage has been specifically designed to fit within the context of the site and its Victoria Road frontage.	Y
Does the proposal respect important features of the site or building, or both?	The proposed signage respects the existing character of the site's Victoria Road frontage by placing sympathetic signage on this major transport corridor. The proposed signage is complementary to, and an integral part of, the architectural design of the proposed temporary marketing suite.	Y
Does the proposal show innovation and imagination in its relationship to the site or building, or both?	The proposed signage along Victoria Road draws reference from existing site features. Rather than attempting to override the site's features, the signage instead works within the visual scale and form of existing features to deliver a respectful and interesting signage response. The building signage has been specifically designed to complement the proposed temporary marketing suite and will reflect the use of the structure.	Y
<b>6 Associated devices and logos with advertisements and advertising structures</b>		
Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed?	All signage will be fully integrated with the structures on which they are displayed.	Y

Assessment Criteria	Comments	Compliance
<b>7 Illumination</b>		
Would illumination result in unacceptable glare? Would illumination affect safety for pedestrians, vehicles or aircraft?	Illumination of the two skinned containers will be directed so as to illuminate only the signage face so as to prevent any glare when viewed from the public domain. As such it is not considered that the illumination of these signs will affect public safety.	N/A
Would illumination detract from the amenity of any residence or other form of accommodation?	The illumination will be directed so as to illuminate the signage structure only so as to prevent any light spill to surrounding properties. As a result it is not considered that there will be any adverse impacts on the amenity of surrounding residential areas.	N/A
Can the intensity of the illumination be adjusted, if necessary? Is the illumination subject to a curfew?	The illumination intensity of the proposed sign will be set at a suitable level so as not to result in any adverse impacts on surrounding properties and the direction of illumination is towards Victoria Road rather than towards the surrounding residential areas.  Illumination of the skinned container signage will be subject to a curfew of 10pm.	N/A
<b>8 Safety</b>		
Would the proposal reduce safety for any public road?	The proposed signage has been designed to sit within the existing streetscape edge, does not contain images, flashing lights, movable parts and the like which would detract motorists and therefore potentially impact on road safety.	Y
Would the proposal reduce safety for pedestrians/cyclists?	The location and scale of the proposed sign does not pose any adverse impacts on pedestrian or cyclist safety.	Y
Would the proposal reduce safety for pedestrians, particularly children, by obscuring sightlines from public areas?	The proposed sign will not obscure sightlines from public areas.	Y

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

State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development (SEPP 65) aims to improve the design quality of residential flat development in New South Wales. It sets out 10 design quality principles relating to built form and amenity.

All Residential Flat Building development in NSW is required to demonstrate compliance with the ten design principles in SEPP 65, as well as demonstrate how the 'Rules-of-Thumb' in the associated Residential Flat Design Code (RFDC) can be achieved.

The design quality principles are addressed in detail at **Appendix N**. The proposal generally achieves compliance with the RFDC 'Rules of Thumb', with key provisions discussed at Section 5.11.

### 5.4.6 State Environmental Planning Policy (Building Sustainability Index) 2004

BASIX, the Building Sustainability Index, was introduced by the NSW Government, to ensure homes and apartments are designed to use less potable water and emit fewer greenhouse gas emissions. BASIX sets minimum energy and water reduction targets for houses and apartments to achieve this goal. A Preliminary ESD and BASIX Report prepared by Ecospecifier provided at **Appendix M** which demonstrates that the proposed development is on target to achieve BASIX certification. Finalised BASIX certificates will be provided prior to determination.

### 5.4.7 State Environmental Planning Policy No. 19 – Bushland in Urban Areas

State Environmental Planning Policy No. 19 – Bushland in Urban Areas (SEPP 19) aims to protect and preserve bushland within the urban areas of Sydney. Ryde is listed under SEPP 19 as a Council area to which the Policy applies. Clauses 6, 7 and 8 of the Policy outline requirements for development consent to be considered by a consent authority, when assessing development applications that involve disturbance to bushland zoned for reserve of public open space.

As outlined in the Flora and Fauna Impact Assessment (refer to **Appendix O**) the subject site is not zoned for public open space and does not adjoin bushland areas and as such the provisions of the SEPP do not apply for the purpose of the application.

## 5.5 Strategic Plans and Policy

### 5.5.1 NSW State Plan

#### State Plan

The New South Wales State Plan was released in March 2010. The plan sets a strategic direction and goals for the NSW Government across a broad range of services and infrastructure. The plan nominates one of the key challenges for the state as being the planning challenges that arise from a continuing population growth.

The proposed development will assist in implementing solutions to these challenges. The Stage 1 Phase 1 residential development will provide a substantial amount of housing in an area which is highly accessible to public transport infrastructure and social services, and allow for future residential development within the remainder of the RRCS site. It will also demonstrate a high level of sustainability with the provision of those measures indicated within the ESD and Energy Efficiency assessment at Section 5.14.

The Part 3A Project Application satisfies key priorities of the State Plan, namely:

- *Improve housing affordability*– the dwelling yield proposed within Stage 1 Phase 1 will increase housing supply within the City of Ryde Local Government Area (LGA) and will continue to provide a diversity in housing mix and sizes to meet the demand for housing in this locality and provide a variety of housing options; and
- *Grow cities and centres as functional and attractive places to live, work and visit*– the Stage 1 Phase 1 residential development will provide quality housing in an attractive setting within an established residential area. The close proximity of the Frasers Putney site to the Parramatta to City (via Ryde) Strategic Bus Corridor promotes the integration of transport and urban development and has the potential to enhance the quality of life of residents by making it easier to travel from home to work and to access the services they require.

- *Increase walking and cycling* – The proposed development incorporates a number of design features and pedestrian linkages which improve interconnectedness within the site and promote walking to surrounding centres including Putney and Ryde. A major feature of the Stage 1 Phase 1 residential development will be the through site pedestrian link which will provide access to the Central Parkland, Recreation Circle and Wetland open space areas.

### 5.5.2 Draft Inner North Sub-regional Strategy

The Draft Inner North Subregional Strategy was exhibited in July 2007. It is a key part of the implementation of the Metropolitan Strategy and when adopted is intended to guide land use planning in the City of Ryde local government area (LGA) to 2031.

This Strategy identifies the following targets for the City of Ryde LGA:

- 12,000 additional dwellings by 2031; and
- An employment capacity of 21,000 jobs by 2031.

As a result of the increased population forecast for Sydney to 2036, it is expected the targets for each sub region will be amended or redistributed to some extent. An analysis of the Stage 1 Phase 1 residential development's contribution to the aims of the Sub-regional Strategy is provided below.

#### *Housing*

- The Draft Inner North Subregional Strategy sets dwelling target of 12,000 additional dwellings for the City of Ryde LGA by 2031. The RRCS site is a prime infill development site within an established residential locality, making the site ideal for increased residential densities. A total mix of 118 apartments, terraces, semi-detached and detached dwellings is envisaged for the site under the proposed Stage 1 Phase 1 development.
- The proposal is consistent with the aim of the Metropolitan Strategy to focus residential development in areas with good access to public transport and local services.

#### *Transport*

- The site subject to this Project Application is highly accessible by public transport. The Parramatta to City (via Ryde) Strategic Bus Corridor borders the RRCS site to the north-east, providing direct access to Parramatta and the Sydney CBD. As a result, Sydney Buses have a number of routes which travel directly past the site, providing services to North Sydney (287), Macquarie University (518) and the Sydney CBD (287,500,501,518). Another route runs from Macquarie University to the Sydney CBD (507) via Morrison Rd, Putney along the site's southern boundary. In addition, the Kissing Point Ferry wharf is located approximately 1.1km walking distance to the south-west of the Frasers Putney site.
- The Project Application proposes well connected pedestrian facilities, linking the proposed buildings to the local pedestrian network, public open space and surrounding centres.

#### *Centres and Corridors*

- The subject site is located within walking distance of Putney, which is identified as a 'small village' with a radius of 400m under the strategy. 'Small villages' typically have a small strip of shops and between 80 to 2,700 dwellings within a 5 to 10 minute walk. The proposed Stage 1 Phase 1 development of Frasers Putney will contribute 118 of these dwellings and strengthen the patronage of existing local shops.

- Frasers Putney is approximately 1 km from Ryde Town Centre, which is designated as one of four 'town centres' within the Inner North Subregion, providing good access to regional retail and community services.

#### *Environment, Heritage and Resources*

- The proposed residential development on the site increases housing opportunities within Sydney's existing urban footprint and will contribute to a reduction in the demand for additional land to be used for urban purposes on the urban fringe.
- Heritage values on the site have previously been considered in the Concept Plan approval. The *Royal Rehabilitation Centre Sydney, Ryde: Heritage Interpretation Strategy*, *City Plan Heritage (July 2007)* has been endorsed by the Department of Planning to guide the archival recording of buildings prior to demolition. The heritage surveys and assessments prepared to support the Concept Plan do not recommend the retention of the existing buildings on site.

#### *Parks, Public Places and Culture*

- The Stage 1 Phase 1 development will provide strong pedestrian linkages to the already approved Recreation Circle, Central Parkland and Wetland open space areas which will encourage increased usage of the parks and recreational facilities by future residents. In addition, there are an additional eleven (11) public open space areas within 800m walking distance of the Frasers Putney development.

### 5.5.3 Healthy Urban Development Checklist

The Healthy Urban Development Checklist 2009 has been prepared by NSW Health as a tool for informing and reviewing the health effects of urban development policies, plans or proposals. An assessment of the proposed development against the principles of this checklist is provided in **Table 8** below.

**Table 8** – Healthy Urban Development Quick Guide Checklist

Issue	Response
7. Healthy Food	The proposed development is within walking distance of local retail and business centres at Putney and Ryde which include supermarkets, specialty shops and food premises. The proposed development will not impact upon existing agricultural lands or local food production.
8. Physical Activity	The proposal provides housing in close proximity to usable and quality outdoor spaces, including the Central Pond and Recreation Circle facilities which are currently under construction on the RRCS site, providing significant new opportunities for physical activity and exercise. The development will have strong pedestrian linkages both within the site and to surrounding centres including Putney and Ryde, encouraging incidental pedestrian activity.
9. Housing	The proposed development provides a diverse range of dwellings types and sizes. Dwellings achieve a high level of amenity and accessibility.
10. Transport and Physical Connectivity	The site is highly accessible by public transport, with close proximity to the Parramatta to City (via Ryde) Strategic Bus along Victoria Road and local bus routes on other adjoining roads. In addition, the Kissing Point ferry wharf is located approximately 1.1km walking distance to the south-west of the Frasers Putney site.



Issue	Response
	Providing infill housing in close proximity to public transport is consistent with encouraging public transport use and reducing car dependency. The development will be serviced with both telephone and internet connections.
11. Quality Employment	The subject site has a level of connectivity to local and regional employment centres including Macquarie Park, Parramatta, Chatswood, North Sydney and Sydney CBD.
12. Community Safety and Security	The proposal has been designed in accordance with the principles of Crime Prevention Through Environmental Design (CPTED) (refer to Section 5.15 of this report).
13. Public Open Space	The proposed development is well serviced by new and existing public open space, including the Central Parklands and Recreation Circle facilities which are currently under construction on the RRCS site. The Stage 1 Phase 1 development will provide new linkages from the Calvary Retirement Village to these areas, providing additional access to public open space to the surrounding community.
14. Social Infrastructure	The overall redevelopment of the RRCS site will provide significant new social infrastructure, including a new \$45 million purpose-built rehabilitation centre and significant new open space and recreation facilities.
15. Social Cohesion and Social Connectivity	The proposed public and communal landscaping will create a public domain which encourages community interaction and promote a sense of place. The redevelopment of the overall RRCS site has been subject to an on-going community consultation process which encourages a high level of local involvement in the planning process (refer to Section 5.16 and <b>Appendix R</b> ).
16. Environmental Health	The proposed development will not result in any medium to long-term environmental impacts. Short-term impacts as a result of construction works will be minimised through the employment of comprehensive construction site management and environmental protection measures.

#### 5.5.4 Planning Guidelines for Walking and Cycling

The Department of Planning's "*Planning Guidelines for Walking and Cycling*" aim to improve the consideration of walking and cycling in urban environments, and provides a walking and cycling focus to the Integrated Land Use and Transport Policy.

The proposed Stage 1 Phase 1 Project Application is consistent with the Planning Guidelines for Walking and Cycling as it includes increased densities within a site highly accessible to public transport along the Victoria Road bus corridor. The site is also in close proximity to other services and amenities, including retail at the Top Ryde Shopping Centre and Putney. Local open space areas are provided, including the Recreation Circle and Central Wetlands open space area which is currently under construction within the RRCS site.

## 5.6 Consistency with the Concept Plan

The proposed residential Project Application is consistent with the RRCS zoning controls and development standards as drawn from Ryde LEP 2010 (previously within Schedule 3 SEPP Major Developments), and is generally consistent with the structure of the approved Concept Plan as demonstrated in the plans at **Appendix S**.

### 5.6.1 Concept Plan

The Stage 1 Phase 1 PA is considered to be consistent with the structure of the approved Concept Plan as demonstrated in the Concept Plan Comparison Diagrams prepared by Cox Richardson Architects provided at **Appendix S** and the Table of Compliance - Concept Plan (MP05\_0001) prepared by JBA Planning provided at **Appendix Z**. In particular, the proposed Stage 1 Phase 1 scheme:

- Complies with the heights set out in the SEPP maximum building height map, now translated into Ryde LEP 2010.
- Complies with the densities set out in the SEPP floor space ratio map, now translated into Ryde LEP 2010.
- Complies with the uses set out in the SEPP zones map now translated into Ryde LEP 2010.
- Complies with the street widths proposed in the approved scheme.
- Is structured around a spine road in a similar way to the approved scheme.
- Proposes similar building types – houses, semi's, terraces, and low rise apartments. Stage 1 Phase 1 Project Approval will be sought for 118 dwellings with approximately 15,848m<sup>2</sup> of GFA. This includes 60 apartments, 44 terraces and semi-detached dwellings and 14 detached dwellings, and no alteration to the overall yield of 791 dwellings across the site is proposed. The approved number of dwellings in this area of the site was 143 dwellings with approximately 18,000m<sup>2</sup> of GFA.
- Makes no changes to the entry road from Charles Street, the circular entry road or large Public Park (central parkland / detention pond).
- Better locates buildings along the contours to minimise site disturbance and cut and fill. This will also improve drainage and overland flow.
- Maintains pedestrian and bicycle connectivity through the site, in particular to and through the central detention and parkland area.
- Retains vegetation along the north western boundary and in scattered pockets through the Stage 1 Phase 1 area.

There are, however, some adjustments to the approved plans for this project. These adjustments are part of the normal evaluation that occurs as a Concept Plan moves to a detailed Project Application as greater details of site conditions and design development become available.

The changes represent positive design solutions in response to a number of key issues including more accurate surveying of the site, better appreciations of the contours of the site, accommodating overland flowpath requirements, garbage truck manoeuvring areas, suitable road widths, response to market demand and housing affordability on the site and the like. It is considered that these changes sufficiently conform to the Concept Plan conditions of consent requiring the development to be “generally consistent” with the approved plans and documentation. Importantly, these design improvements have all been achieved within the envelope of the approved building heights, ensuring the overall bulk and scale of the development remains consistent with the approved Concept Plan and does not intensify potential visual or height related impacts. A summary of the proposed layout adjustments and rationale is provided in **Table 9** below.

Table 9 – Stage 1 Phase 1 Adjustments to the approved Concept Plan

Adjustment from Approved Concept Plan	Reason/Justification
Layout of dwelling types in Stage 1 Phase 1, and associated road layout changes	<p>The layout of the apartments, terraces, semi-detached and detached dwellings has been adjusted to respond to the contours of the site and overland flow path requirements. The layout continues to provide:</p> <ul style="list-style-type: none"> <li>- A transition to the low scale residential zone adjoining the site.</li> <li>- a better interface to the central detention parkland area by providing detached and semi-detached development fronting this principal area of open space.</li> <li>- Functional and useable access streets to the dwellings.</li> <li>- Provides a central spine road that will connect through to Victoria Road.</li> <li>- Breaks up the bulk and scale and long external walls of the approved apartment building design.</li> <li>- Centralised common open space areas that connect through to the central detention parkland area.</li> </ul>
Smaller lot sizes and low scale semi-detached development adjoining the south east boundary to Charles Street	<p>Semi-detached development allotments sizes have been included on the boundary adjoining the Charles Street residences. This is in response to the very large detached dwelling blocks approved in the Concept Plan, which were unusually large, with very large unwieldy building footprints. It is considered that these approved 'indicative' dwelling locations would result in very large 'McMansion style' developments and/or would impact on the affordability of these blocks. Hence, Frasers Putney have responded to these urban design constraints by introducing a choice of smaller semi-detached dwellings in this part of the site with rear lane driveway access. These dwellings comply with the 9.5 metre height limit for this part of the site as contained in Ryde LEP 2010. Setbacks have generally been increased from adjoining residential lots when compared to the approved Concept Plan scheme (refer to Section 5.8.3).</p>
Dwelling Numbers	<p>The Concept Plan approved dwelling numbers on the Stage 1 Phase 1 area are 11 detached dwellings, 26 attached dwellings and 106 apartments = 143 dwellings with a GFA of 18,000m<sup>2</sup>.</p> <p>The Stage 1 Phase 1 PA proposes 44 semi-detached/terraced dwellings, 14 detached dwellings and 60 apartments = 118 dwellings with a GFA of approximately 15,848m<sup>2</sup>.</p>
Rear Lane Access for dwellings adjoining Charles Street	<p>A new minor road is proposed to provide rear lane access to the semi detached houses adjoining the Charles Street residences. This road will provide a landscape buffer on the boundary to protect the visual privacy of these residences. Vehicular movements along this lane will be low (resident and vehicular movement only) whilst setbacks/ separation distances to the adjoining residences have generally been increased (refer to Section 5.8.3).</p>

## 5.6.2 Statement of Commitments

The Stage 1 Phase 1 Project Application meets the vast majority of Statement of Commitments associated with the Concept Plan approval. **Table 10** below identifies areas of the proposal which does not meet the commitments and therefore requires an amendment to the approved Concept Plan Statement of Commitments.

**Table 10** – Compliance with Concept Plan Statement of Commitments

Commitment	Proposal	Comment
<b>C3 Urban Design</b> <i>Maintain privacy by ensuring adequate distances between dwellings - windows of habitable rooms be a minimum of 12m apart or if these distances are not achievable other design measures, such as appropriate window and balcony locations and screening, being incorporated.</i>	18 metre separation is provided between the proposed Stage 1 Phase 1 apartment buildings.	This Statement of Commitment applies to the apartment component of the development only as the statement of commitment references SEPP 65. The proposal complies with the RFDC 'Rule of Thumb' applicable to the proposed apartment buildings, being 18 metres. The proposal provides suitable levels of privacy as described at Section 5.11.
<b>C3 Urban Design</b> <i>Accessible, planted rooftops.</i>  <b>C4 Landscaping</b> <i>To create accessible, landscapes roof-tops for use as private open space.</i>	The apartment buildings provide a BBQ accessible area, however the entire rooftop is not planted or available for private open space.	A form of accessible roof top active recreation space has been provided. The proposal provides ample open space in the form of balconies, communal open space at ground level and public open space in the form of the central recreation circle within the site, as outlined in Section 3.4. Therefore, a variation to this requirement is considered reasonable.
<b>C7 Traffic and Transport</b> <i>Provision of a cycleway network</i>	Whilst the roads will be accessible to cycle users, a dedicated cycleway is not proposed.	Unmarked cycle routes have been established by the City of Ryde Council which run along both Charles Street and Morrison Road which function within an integrated, region-wide network. In this context it is considered that the site is well served by the existing cycle network, and consequently that a variation to this requirement is considered reasonable.

Commitment	Proposal	Comment
<b>C10 State Environmental Planning Policy Building Sustainability Index (BASIX)</b> <i>Solar access – photovoltaic electricity generation and solar panels for water heating.</i>	Photovoltaic electricity is not proposed.	This Statement of Commitment included a range of measures that could be used to achieve BASIX compliance. A review of the scheme indicates that BASIX compliance can be achieved without the use of photovoltaic cells. As such the revised BASIX assessment should be used as the principle point of assessment for the current application. The ESD Statement at <b>Appendix M</b> indicates that BASIX certification can be achieved on the proposed design. Certified BASIX certificates for the application will be submitted prior to determination.

The proposal is substantially consistent with the approved Concept Plan. A significant number of Statement of Commitments were included in the Concept Plan approval and Frasers Putney as the new purchasers are able to meet the vast majority of these commitments. Given the broad nature and scale of the approved Concept Plan the four minor deviations are considered to be of minimal impact and in all instances a similar environmental outcome is achieved.

## 5.7 Ryde City Council Planning Instruments and Controls

The Minister for Planning is not bound by the provisions of an environmental planning instrument, other than a State Environmental Planning Policy in determining an application for a Major Project (section 75R(3)). In the giving of approval for a Project Application the Minister may take into account (but is not required to) the provisions of any environmental planning instrument that would apply but for the application of section 75R. Despite this, the DGRs require the proposal to consider the development standards in Ryde Council policies as they relate to the site.

### 5.7.1 Summary of Compliance with Ryde LEP 2010

The zoning, height, FSR and density controls for the Royal Rehabilitation Centre site adopt those previously established under the State Significant Site (SSS) listing for the site. The compliance of the Stage 1 Phase 1 with the relevant development standards under the Ryde Local Environmental plan 2010 is demonstrated in the Comparison Diagrams prepared by Cox Richardson Architects at **Appendix S** and in further detail in **Table 11** below.

Table 11 – Key controls of Ryde Local Environmental Plan 2010

Requirement	Compliance
Land Use Table– R1 General Residential Zone	Dwelling houses, multi-dwelling housing, residential flat buildings and roads (that are not classified roads) are all permissible with consent.
Clause 4.3 – Height of Buildings <ul style="list-style-type: none"> <li>▪ Part 9.5m</li> <li>▪ Part 11.5m</li> <li>▪ Part 18.5m</li> </ul>	Development is in accordance with height map. See <b>Appendix S</b> .
Clause 4.4 – Floor Space Ratio <ul style="list-style-type: none"> <li>▪ Part 0.33:1</li> <li>▪ Part 2.9:1</li> <li>▪ Part 0.88:1</li> </ul>	Development is in accordance with FSR map and is below maximum FSR permitted. See <b>Appendix S</b> .
Clause 4.5D- Density controls for Royal Rehabilitation Centre Sydney	Average density of no more than 50 dwellings per hectare. With a site area of 15.829 hectares for the residential component – 791 dwellings are permitted on the site. The proposed development seeks consent for the first stage of residential development for 118 dwellings.
Clause 5.9 – Tree Preservation	Consent is required to remove trees, which is included in this application.
Clause 6.2 - Earthworks	Development to minimise disruption on the environment and locality, which is addressed in <b>Sections 3.8 and 5.18</b> .

## 5.7.2 Ryde Development Control Plan 2010

The development controls for the Royal Rehabilitation Centre site were established under the Concept Plan approval (MP05\_0001) and State Significant Site (SSS) listing in 2006. It is noted that the Ryde Development Control Plan 2010 did not come into force for some four years after this approval, and as such was not relevant to the assessment of the Concept Plan.

The primary development controls and planning regime for the site are those established under the 2006 Concept Plan approval. Despite this it is considered that the proposed development achieves consistency with the aims and objectives of the Ryde Development Control Plan 2010 as follows:

### Overall

- Enhances the existing amenity of the City of Ryde by providing high quality development with through-site links to the approved recreation and open space facilities;
- Achieves a high level of sustainability through incorporation of design features such as ESD and amenity measures which are consistent with the principles of SEPP 65 and BASIX; and
- Creates an urban environment with high amenity which is appropriate to the subject site and its context within the localities of Ryde and Putney.



### Part 3.2 - Dwelling Houses and Dual Occupancy

- Provides dwelling which are well designed and attractive, and provides a high level of amenity with good access to services and public transport; and
- Protects the residential amenity of surrounding properties by incorporating appropriate setbacks and design measures.

### Part 3.3- Residential Flat Buildings and Multi Dwelling Housing

- Achieves a high standard of architectural and landscape design which is integrated with other development both within and surrounding the subject site;
- Incorporates appropriate design measures to maintain and improve the amenity of surrounding development, including the provision of pedestrian linkages to the approved recreation facilities and open space;
- Ensures a high degree of amenity for all dwellings in terms of privacy, sunlight and ventilation; and
- Provides a suitable level of parking for the proposed development within the subject site for both residents and visitors.

### Part 7.1- Energy Smart, Water Wise

- Incorporates energy efficiency and ESD measures which are consistent with the principles of the Residential Flat Design Code, SEPP65 and BASIX; and
- Ensures dwellings are oriented to optimise solar access and thus reducing reliance on artificial lighting.

### Part 7.2- Waste Minimisation and Management

- Provides appropriate facilities and storage areas which encourage ongoing source separation and complements the waste and management services offered by Council; and
- Encourages demolition and construction waste minimisation techniques through the implementation of site management measures and purchasing policies which reduce the amount of waste required to be exported from the site.

### Part 9.2- Access

- Complies with the relevant access provisions of the Building Code of Australia and the Disability Discrimination Act 1992;
- Provides accessible site linkages to surrounding development; and
- Promotes the concept of an urban environment which is accessible to the community.

## 5.8 Built Form

### 5.8.1 Height, Bulk and Scale

The proposal's built form has been designed to respond to the urban design parameters determined by the approved Concept Plan and its Statement of Commitments, the site conditions, relevant planning controls, and to provide a high level of residential and environmental amenity.

The proposed buildings are within the maximum development parameters of the Concept Plan and Ryde LEP 2010 (previously within Schedule 3 of the Major Developments SEPP) and are consistent with the urban design principles set out in SEPP 65.

The proposal's high quality urban and architectural design will enhance the visual character of the development. Despite having a generally larger scale than the surrounding development, the proposed buildings have been designed to ensure that they will be compatible with the prevailing form, scale and character of existing development along Charles Street and with the desired future character as set by the Concept Plan approval as set out below. In fact, the proposed scheme in its design and placement of apartments buildings and houses appears less dense than the approved Concept Plan for this location.

#### Dwellings Adjoining Charles Street Residences and the Little Company of Mary (Calvary Retirement Village)

The proposed development continues to respond to the Concept Plan philosophy of creating a series of transitional "low-rise" residential zones, detached, semi-detached and terrace forms, which create a scale relationship with adjoining residential development. This is in the form of the semi-detached, terrace and detached dwellings that adjoin the north west and south east property boundaries.

Semi-detached dwellings have been included on the boundary adjoining the Charles Street residences. This is in response to very large detached dwelling blocks approved in the Concept Plan, which were unusually large, with very large unwieldy building footprints. It is considered that these approved 'indicative' dwelling locations would result in very large 'McMansion style' developments and/or would impact on the affordability of these blocks. Hence, Frasers Putney have responded to these urban design constraints by introducing semi-detached development in this part of the site. Dwelling typologies comply with the 9.5 metre height limit for this part of the site as contained in Ryde LEP 2010. The setback to these adjoining properties is further discussed in Section 5.8.3 of this report.

#### Apartments

The built form of the two five storey residential apartment buildings is proportional to their function within the context of the site, as acknowledged by the Concept Plan approval, which considered that a higher density development in the proposed locations within the site would be both appropriate and desirable.

The buildings are arranged around an open space and are oriented to the north west parallel and will allow individual apartments to receive solar access and ventilation in accordance with the RFDC 'Rules of Thumb'. The bulk of the building mass is located away from the adjoining residential properties in order to minimise the impact of the development on those properties' residential amenity. The placement of the apartment buildings has been designed to respond to the topography of the site and minimise the impacts of their bulk and scale. Importantly the architecture and landscape of the proposed buildings are integrally linked and complement each other.

## 5.8.2 Streetscape

All dwellings are oriented and designed to address the streets and open spaces and provide casual surveillance to both. Entry to all buildings is from streets, open spaces or pedestrian pathways.

Car parking has been designed to minimise garage dominance, through the employment of the following design measures:

- Basement car parking will be provided for residents and visitors to the two apartment buildings;
- Dwellings along the Charles Street boundary will incorporate rear-lane access to parking;
- Single garages are provided to all front loaded attached and semi detached dwellings; and
- Garages are generally setback behind the facade of the main building line.

The other key streetscape issue is the front yard area. All frontages will be well defined by either a strong landscape edge or level change. As noted above where a terrace or other dwelling frontage faces north, the frontage will include a sunny terrace area linked to a living area. An additional courtyard is located to the rear of the dwellings providing areas for summer dining.

The apartment buildings will address the open space located between them, with pedestrian entries off that space.

## 5.8.3 Setbacks

As shown in **Figure 19**, the proposed Stage 1 Phase 1 Residential development achieves setbacks which are generally consistent with those which were incorporated under the approved Concept Plan scheme. The proposed setbacks have been designed in order to achieve a more appropriate response to the scale and density of surrounding residential properties, with setbacks generally increased from the scheme approved under the Concept Plan (MP05\_0001).

Under the current design the setbacks to the Charles Street properties along the south eastern site boundary will be setback between 15.4 metres and 16.4 metres, which is significantly improved from the originally approved setback of only 10 metres under the Concept Plan. A new minor road is proposed to provide rear lane access to the semi detached houses adjoining the Charles Street residences. This road will provide a landscape buffer on the boundary to protect the visual privacy of these residences. Vehicular movements along this lane will be low (resident and vehicular movement only) whilst setbacks/ separation distances to the adjoining residences has been increased.

The Concept Plan provided for setbacks to the Calvary Retirement Village boundary for apartment buildings of a minimum of 9 metres and setbacks to attached dwellings ranged from 9 to 18 metres. This Project Application provides for an increase in the minimum setback for apartment buildings to a distance of between 18.5 and 22.25 metres along this boundary, providing space for a more substantial vegetated buffer. Semi-detached and detached dwelling setbacks along this interface will generally range between 9 and 14 metres, and the number of dwellings which address this boundary has been substantially reduced from the Concept Plan scheme. In addition, the development remains separated from the retirement village by a vegetated buffer and road access on their property. Hence sufficient separation between the Concept Plan and the adjoining use is maintained.

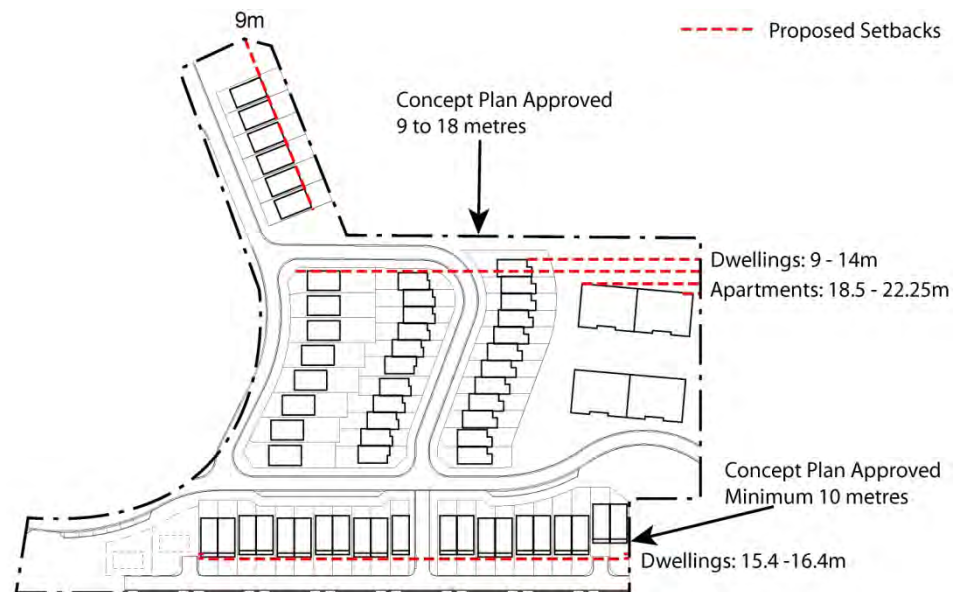


Figure 19 – Setback diagram measured from outside boundaries.

#### 5.8.4 Views

As the proposed development involves a residential development on the site of an approved Concept Plan and the proposal is contained within the height envelopes set by the approved Concept Plan, it is considered that it will have no impact on any long distance views and vistas that may be available from the surrounding public domain.

#### 5.8.5 Overshadowing

Shadow diagrams have been prepared for the proposed development by Cox Richardson Architects (**Appendix U**). These diagrams illustrate the overshadowing generated by the proposed development for a range of times between 9am and 3pm for three dates, including the worst case scenario of 21 June (winter solstice).

These diagrams demonstrate that overshadowing resulting from the proposed development are generally contained within the subject site, apart from during worst case periods. The shadow diagrams for the two equinoxes on 21 March and 21 September show all overshadowing as being contained within the Stage 1 Phase 1 site. During the worst case period of 2pm and 3pm on 21 June, shadows cast by dwellings along the southern site boundary will encroach marginally into the backyards of neighbouring properties, however, these shadows will not extend to the dwellings situated on these lots and a significant portion of the backyards of these lots will remain unshaded. No overshadowing occurs during the morning and lunch time period.

### 5.9 Transport and Access

A Transport Report has been prepared by Colston Budd to respond to the DGRs for Transport and Accessibility for the Stage 1 Phase 1 Residential Development, and is located at **Appendix P**. It is noted that the DGRs for the Project Application (and comments from transport agencies) require details that were addressed as part of the Concept Plan approval for 791 dwellings. As such the Stage 1 Phase 1 report does not replicate this assessment, however the Concept Plan Transport Report prepared by Colston Budd Hunt and Kafes is included at **Appendix Q** for information purposes.

### 5.9.1 Traffic Generation

The proposed Stage 1 Phase 1 development provides for the first 118 residential dwellings of a total of 791 residential dwellings across the RRCS site. The traffic generation impact of the total quantum of dwelling was assessed at the time of the Concept Plan approval. As the proposed number of dwellings under Stage 1 Phase 1 is consistent with the approved number of dwellings for this portion of the site, there will be no further impacts above those which were assessed and approved at the Concept Plan stage.

The peak hour traffic generation of the proposed Stage 1 Phase 1 residential development is estimated to be 65 vehicles per hour. As detailed in the Traffic Report, this level of traffic generation is able to be fully accommodated at the Charles Street ingress/egress without adverse impacts on traffic flows, and is less than the approved Concept Plan peak flow for this intersection of 120 vehicles per hour. As such it is noted that the Stage 1 Phase 1 development is not reliant on the proposed access to Victoria Road.

### 5.9.2 Local Traffic Measures

Under the Deed of Agreement between RRCS, Frasers Putney and the City of Ryde, a number of traffic measures are to be provided by the relevant party in satisfaction of Conditions B4.3 and B4.4 of the Concept Plan approval. These measures will be provided as relevant to each stage in accordance with the terms of the Deed Agreement and relevant to each future stage of works.

### 5.9.3 Car Parking

Parking rates for the proposed development of Stage 1 Phase 1 have been provided at the relevant rates established under the Ryde DCP 2010, as detailed in Section 3.5. These rates take into consideration the high level of public transport which services the site, and incorporates a reduced provision of parking to reflect this. These rates ensure that parking provision within the site is provided at a rate appropriate to local conditions and household demands.

For the apartment buildings, basement carparking with a total of 78 resident spaces will be provided in accordance with the rates established under the DCP. 12 residential visitor parking spaces (including 2 disabled spaces) will be provided within the basement, with the remaining three spaces provided on street in the vicinity of the apartment buildings providing greater flexibility in access to parking and is considered appropriate.

The Stage 1 Phase 1 Transport Review states that the provision of residential and visitor parking is considered to be appropriate. It is understood that Ryde Council's residential apartment parking rates reflect a reduced rate for the desire to encourage public transport and minimise car usage where possible.

### 5.9.4 Pedestrian and Cycle Access

The proposed development of the Stage 1 Phase 1 site provides strong pedestrian linkages both within the site and to surrounding areas, as detailed in **Figure 17** and **Appendices F and S**. Footpaths provide connections to all dwellings with circulation aside local roads and open space areas. The proposed pedestrian network will be fully integrated with existing connections, providing pedestrian access to local centres, open space and community facilities, as well as to future stages of the Frasers Putney residential development. Overall, it is considered that the proposed pedestrian network will promote pedestrian activity and encourage walking for short trips.



The proposed through-site link providing access between the Calvary Retirement Village and the approved Central Parklands area will deliver significant benefits to the community by promoting use of this new public open space for the community.

The subject site is well serviced by existing cycle routes in close proximity. Unmarked routes have been established in close proximity to the subject site by the City of Ryde along both Charles Street and Morrison Road within the framework of a coordinated bike network across the local government area. Ample secure bicycle parking is provided for both residents of and visitors to apartment buildings as described in Section 3.5, which will promote cycling as a mode of both transport and recreation. In light of this it is considered that the proposed development is well serviced by cycling facilities.

## 5.10 Accessibility

An Access Review has been prepared by Morris-Goding Accessibility Consulting to assess the suitability of the Stage 1 Phase 1 Project Application from an accessibility perspective (refer to **Appendix T**). The proposal has been assessed against the following criteria:

- *Australian Standards AS1428.1 (Design for Access and Mobility);*
- *Australian Standards 1735.12 (Lifts, Escalators and Moving Walks);*
- *Australian Standard AS 4299 (Adaptable Housing);*
- *Building Code of Australia Part D3;*
- *Disability Discrimination Act 1992;*
- *DDA Premises Standards 2010.*

For the two proposed apartment buildings, this assessment has focused on the following areas as the primary access considerations:

- main entrances to apartment blocks;
- paths of travel within apartment blocks;
- lifts;
- residential units;
- adaptable unit design;
- car parking; and
- common facilities.

The report has addressed these areas and includes a number of recommendations relating to the apartment buildings which are able to be incorporated in the detailed design at construction certificate stage to ensure that the proposed development complies with the appropriate controls.

For the apartment building, there are continuous paths of travel to the units on all floors of the apartment building from the ground floor entrance lobbies, via the lift facilities compliant with DDA Premises Standard and SEPP 65 Residential Design Code. Six (6) adaptable units are provided and associated adaptable car parking bays to meet DDA and SEPP 65 objectives.

Housing Types 1-5 do not require accessibility provisions based on DDA Premises Standards. Compliance with the recommendations of the Access Report has been included in the Statement of Commitments to ensure the detailed fine grained recommendations are incorporated into the Construction Certificate documentation.

## 5.11 Internal Amenity

The proposed development has been designed to provide all dwellings with a high quality of internal amenity and outlook. The elements that warrant consideration in respect of internal amenity are discussed below, with a SEPP 65 Design Principles Statement prepared by Cox Richardson Architects included at **Appendix N** and a Schedule of Areas prepared by Cox Richardson Architects included at **Appendix S**.

### Circulation and Storage

The proposed development provides generous dwelling and room sizes to provide efficient circulation spaces within each dwelling. The open plan living arrangements provide adaptability to suit the changing needs of the future occupants.

In conformity with SEPP 65 and the Residential Flat Design Code, all habitable spaces for the apartments have at least 2.7 metre high ceilings.

As detailed in the plans and schedule of areas at **Appendices D and S**, each 2 bedroom apartment is allocated a secure 5m<sup>3</sup> storage locker within the basement level. All 3 bedroom apartments will be allocated two lockers, providing a total storage space of 10m<sup>3</sup>. These storage lockers will be provided to the rear of allocated parking spaces where practical (refer to plans). Whilst the 'Rule of Thumb' for storage space is not strictly met, the storage space within the basement will be allocated to specific tenants and placed on title. Given the generous sizing of the proposed apartments however, it is considered that there will be ample space provided for storage within apartments. The extent of the provided storage is considered adequate as:

- generous open plan living areas provide opportunity for provision for a range of additional storage space options if required by the occupant (e.g. pantries, studies and wardrobes);
- the proposed storage space have been designed to be easily accessible; and
- the designated provision of storage space within the car park allows for flexibility of space.

### Sunlight and daylight access

Shadow diagrams for the development have been prepared by Cox Richardson Architects and are included at **Appendix U**.

For residential flat buildings, the 'Rule of Thumb' for solar access is that living rooms and private open spaces for at least 70% of apartments in a development should receive a minimum of three hours direct sunlight between 9am and 3pm in mid winter. In dense urban areas a minimum of two hours may be acceptable. As demonstrated in the shadow diagrams provided at **Appendix U**, apartments on all levels of the proposed apartment buildings will receive four and a half (4.5) hours of direct sunlight between these times on 21 June, except for Levels 1 and 2 of Apartment Building B which receives between three (3) and three and a half (3.5) hours. As such 100% of the apartments in Stage 1 Phase 1 meet this 'Rule of Thumb', which is significantly superior to the minimum standard and will provide a high level of residential amenity.

All semi-detached and detached dwellings with north facing living-area windows (being 81% of all non-apartment dwellings) will receive at least three hours of direct sunlight to these windows between 9am and 3pm on 21 June. In addition, private open space areas for all dwellings will receive a minimum of two hours of direct sunlight access between 9am and 3pm on 21 June.

## Privacy

The proposed buildings are designed to minimise the potential for adverse visual and acoustic privacy impacts on development within the vicinity of the site as:

- The development generally retains the approved stepping down in heights to the boundaries of the site, so that development does not adversely impact, in terms of scale and privacy on adjacent dwellings on Charles Street and the Calvary Retirement Village (Little Company of Mary).
- Where a different dwelling typology has been introduced such as the smaller scale semi-detached dwellings on the south east boundary, these have been designed to comply the maximum height limit permitted in this area under Ryde LEP 2010 (i.e. 9.5 metres), thereby remaining consistent with the approved Concept Plan height limit in this portion of the site.
- Landscape improvements will be made within and on the boundaries of the site to ensure further visual break up and screening.
- Setbacks from both the existing Charles Street dwellings and the Calvary Retirement Village boundaries are greater than those approved under Concept Plan scheme as discussed in Section 5.8.4.
- Privacy is achieved by building siting, dwelling design and the layout of private open space and terraces. A high level of construction will achieve good acoustic building performance.

## Cross Ventilation

The proposed development maximises the opportunity for cross ventilation, with 66.7% of the apartments achieving cross ventilation. This rate of apartments which are naturally cross-ventilated exceeds the 'Rules of Thumb' of the RFDC. In addition, 33.3% of all kitchens receive natural cross ventilation, which exceeds the 'Rule of Thumb' standard of 25%. Apartments are designed to be of suitable depth to support natural ventilation.

The dwellings, semi detached dwellings and terraces are of sufficient size and layout to ensure cross ventilation is achieved.

## Dwelling size and dimensions

The apartment sizes and layouts have been designed to satisfy the evolving housing market in a market which is seeking a greater range of housing types. The two residential flat buildings together with the other dwelling types within Stage 1 Phase 1 provide a very wide range of housing choices. Apartments and dwellings are generously sized, and 100% of the proposed apartments comply with and indeed exceed the RFDC 'Rules of Thumb' for apartment sizes.

## Private open space

All apartments have generous private outdoor spaces in the form of balconies directly accessible from primary living spaces. The detached, semi-detached and terrace dwellings have direct access from primary living spaces to their areas of private open space.

## 5.12 Flora and Fauna

A Flora and Fauna Impact Assessment Report has been prepared by UBM Ecological Consultants Pty Ltd to assess the impact of the proposed development on the existing vegetation and habitat present within the subject site (**Appendix O**). The preparation of this report involved a desktop review of existing studies, field surveys and site monitoring.

The site assessment considered the relevant objectives and provisions of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (Commonwealth), *Threatened Species Conservation Act 1995* (TSC Act) (State), *Environmental Planning and Assessment Act 1979* (State), and *State Environmental Planning Policy No 19- Bushland in Urban Areas* (State).

### 5.12.1 Flora

The flora investigation of the site revealed the presence of 20 locally indigenous species and a further 105 non-indigenous species, horticultural introductions and weeds. Whilst a number of threatened species and ecological communities have previously been recorded within a 10km radius of the subject site, the field study did not locate any threatened flora species or populations within the subject site. There is no intact native bushland identified within the site, however some individual mature trees are representative of the Sydney Turpentine Ironbark Forest which would once have occupied the site. A small number of trees listed as locally significant within the Ryde LGA were found to be present within the site, however due to the highly disturbed and degraded nature of vegetation within the site, it was concluded that no potential habitat for any threatened flora species was identified within the subject site.

The assessment report recommended the retention of existing mature habitat trees as far as is practical, subject to the findings of an appropriately qualified arborist. In addition, the report recommends that landscaping use predominately locally occurring flora species which are consistent with the Sydney Turpentine Ironbark Margin Forest which historically occupied the site.

The phase 1 development requires that approximately 183 trees are removed to facilitate construction over 50% of which were assessed as trees that are stressed or damaged and / or have poor form or structure. 30 existing trees through the phase 1 area are retained and protected. Approximately 183 new trees are proposed for planting within open space areas and streetscape planting throughout phase 1.

To respond to the recommendations of the flora and fauna report proposed planting species are predominantly native, with 86% of open space tree and shrub species identified on DECCW web-site as belonging to the endangered Sydney Turpentine Ironbark Forest community (refer to Landscape Report at **Appendix H**).

### 5.12.2 Fauna

The Grey-headed Flying Fox (which is listed as vulnerable under the TSC and EPBC Acts) was observed flying over the subject site during the nocturnal field survey, and whilst a small number of potential habitat trees exist within the subject site, they make up a very small minority of the large foraging range of this species. There was no evidence identified that the study area is being used as a roosting camp, and it is not considered that the proposed development will have an impact on this species. As such, it was not considered that an Assessment of Significance was required to be carried out for this species.

Potential habitat for the threatened Green and Golden Bell Frog was identified within the subject site, and as such a targeted search for this species was conducted which did not locate this species. Despite this and in accordance with the precautionary principle, an Assessment of Significance was conducted (the 7-Part Test) which concluded that the impacts of the proposed development on the species would not be significant, and that no further studies or referrals would be required.

The report recommends that a representative of WIRES be commissioned to be present on site during the excavation phase in case any native fauna are present.

Any native fauna disturbed as a result of the excavation are to be relocated to the nearest suitable habitat.

In addition, the fauna field survey identified a large population of breeding Australian Ibis within and surrounding the introduced palm trees located along the RRCS site's frontage to Victoria Road. The Australian White Ibis is not listed as a threatened species under either the TSC or EPBC Acts.

This area is only the subject of this application to the extent that the proposed Victoria Road site access road will pass through Lot 1. The bulk of the Stage 1 Phase 1 Residential Development which is the subject of this application will occur away from this area and as such it is not considered that this population will be significantly impacted by the proposed development.

Overall the fauna habitat occurring within the study area was considered to be "generally of low value" and is not considered important for any other threatened species. In considering the proposed development and its likely impacts on the existing flora and fauna present within the subject site, the report concluded that there would be no impact on threatened species as a result of the proposed development.

### 5.13 Contamination

Condition B7 of the Concept Plan Instrument of Approval required that a Contamination Study be prepared in accordance with State Environmental Planning Policy 55 Remediation of Land. The study was to be submitted prior to the lodgement of the first project application (PA) and was to include a comprehensive preliminary assessment of the subject site with clear conclusions and recommendations showing that the subject site is suitable, or can be made suitable, for the proposed uses.

A comprehensive contamination study was undertaken by Environmental Investigation Services (EIS) and submitted by RRCS to the Department prior to the subdivision PA. The Department reviewed the report and advised that it is satisfied, subject to further investigation being undertaken at a later stage in relation to the bore hole number 35, which was located on the RRCS rehabilitation centre part of the site. This bore hole is therefore not relevant to the current Project Application and it is considered that by the EIS consultant report, the site has been demonstrated as suitable for the proposed residential uses.

### 5.14 Environmentally Sustainable Development

A Preliminary Ecologically Sustainable Development and BASIX report has been prepared by Ecospecifier (**Appendix M**) to address the ability of the proposed development to achieve the ESD standards established under both BASIX and other industry best practice rating systems. The proposal seeks to provide a holistic approach to environmental performance across a wide range of parameters, integrating a variety of sustainability initiatives into the design of the development.

Preliminary testing has been conducted for thermal comfort, water and energy efficiency using a range of tools including the BASIX scoring system. Preliminary thermal comfort testing using the BERS Pro rating tool indicates that the proposed development will achieve thermal comfort scores beyond those required under the BASIX certification process. Likewise, the incorporation of energy and water efficiency design measures for natural light and ventilation and the collection of stormwater will ensure that the proposal meets the standards under BASIX. Where practical, sustainable materials and appliances will be incorporated to further ensure the sustainability of the development.



Final BASIX Certificates for the proposed development will be submitted prior to determination of the application.

### 5.14.1 Water Sensitive Urban Design

The Stage 1 Phase 1 residential development incorporates Water Sensitive Urban Design measures which work in association with the site-wide measures. The central on-site stormwater detention basin which is currently under construction is the primary WSUD measure implemented on a site wide basis.

Rainwater tanks will be installed below ground to all semi-detached/terraced and detached dwellings to collect roofwater run-off. Water collected from these tanks will be utilised for watering of private open space. A stormwater re-use system will be installed within both apartment blocks with the collection and storage of rainwater from portions of the roof and reticulation to sanitary flush fixtures and landscape irrigation points.

Site landscaping within the Stage 1 Phase 1 site will incorporate paved areas within communal and private open spaces which drain into garden beds, maximising the utilisation of stormwater runoff within the site prior to discharge to the on-site detention basin.

## 5.15 Safety and Security

The design of the proposed development optimises safety and security, both internal to the development and for the public domain. The proposed development uses appropriate design measures to minimise the incidence of crime by addressing the principles outlined in the Department of Planning's guidelines titled '*Crime prevention and the assessment of development applications*' (2001), being surveillance, access control, territorial reinforcement and space management.

Safety and security has also been considered in accordance with CPTED principles of surveillance, access, territorial reinforcement and space management. The proposed development makes the following positive contribution in terms of safety and security, in accordance with the recommended design principles of CPTED and SEPP 65, by:

- The design and structure of the buildings on the site provide a clear distinction between private and public spaces, employing architectural features such as entry awnings, fences, walls and gates to encourage this distinction;
- Living areas are generally orientated over public and communal open spaces to encourage casual surveillance, whilst balconies are effectively used to enable a wider angle of vision to the street;
- Opportunities for concealment have been minimised. Blind or dark alcoves are avoided in proximity to lifts, stairwells, entries, within basement car parks nor along corridors and walkways;
- Clear sightlines between spaces including public and private interfaces have been established through building design, orientation and landscape treatments;
- Public open space areas have been designed to promote broad use by the wider community and as a result achieve high levels of active surveillance; and
- The development optimises visibility, functionality and safety of the buildings by orientating entrances towards the internal roads, and providing clear lines of sight between entrances, foyers and the street.

## 5.16 Consultation

In accordance with the Environmental Assessment Requirements for this project issued by the Director-General, consultation must be undertaken with relevant public authorities, community groups and affected landowners. This section details the consultation undertaken as part of the preparation of the proposal.

### 5.16.1 Community

The lodgement of the Stage 1 Phase 1 residential project application represents the culmination of significant community and public authority consultation that has occurred from lodgement and approval of the Concept Plan to post approval consultation in order to satisfy the Concept Plan conditions of consent.

In particular, it is noted that Condition B3 and C11 as part of the RRCS Statement of Commitments required RRCS to produce a framework for communication and consultation. This Communications and Consultation Strategy (March 2007) has been submitted to and endorsed by the Department of Planning (DoP) and forms the basis by which consultation for both the hospital and residential project applications occurs.

Frasers Putney have engaged Elton Consulting Pty Ltd to independently undertake additional community consultation prior to lodgement of the EA, as detailed in the Consultation Report provided at **Appendix R**. This community consultation program has included:

- On Saturday 31 July 2010, Frasers held a local area tour of the Putney area, followed by an on-site discussion at the Royal Rehabilitation Centre Sydney (RRCS) in Ryde.
- On Wednesday 25 August 2010 a meeting was held with the NSW Roads and Traffic Authority and representatives from the Coalition Against Private Overdevelopment (CAPO) to discuss future placement of traffic lights on Victoria Road.
- On Wednesday 6 October 2010 a meeting was held with the residents and management of the Calvary Retirement Village to provide a project update and discuss matters of interest to this neighbour.
- On Saturday 6 November 2010 a project update meeting was held on site and was attended by local organisations and stakeholder groups, two Councillors and the Mayor of the City of Ryde, and the Federal MP for Bennelong.
- On Monday 15 November 2010 a follow-up meeting was held with management representatives from the Calvary Retirement Village to discuss the interface with the new development.
- On Saturday 27 November 2010 a Community Open Day was held on site attended by 44 local residents to provide an update on the status of the overall Frasers Putney development, the Stage 1 Phase 1 PA, the Parklands delivery and to generally consult and receive feedback from local residents.

## 5.16.2 Council and Agency Consultation

In accordance with Part 3A of the EP&A Act consultation is required to occur at the following stages:

- the Director General of the Department of Planning is required to consult with relevant public authorities in preparing the environmental assessment requirements for the Concept Plan; and
- the Director-General is required to advertise and exhibit the Environmental Assessment and appended reports and documentation.

In preparing the DGRs for the Environmental Assessment, the Department of Planning consulted with the following assessment authorities and groups:

- City of Ryde Council;
- Transport NSW; and
- Road and Traffic Authority.

Comments and issues raised by these authorities and groups were considered in preparing the DGRs and are included in **Appendix B**. Further to this consultation, several of the specialists responsible for the preparation of the technical reports that comprise the appendices of this EAR, engaged in various consultations with relevant stakeholders, including the relevant utility providers.

## 5.17 Waste Management

A Waste Management Report has been prepared by Meinhardt Infrastructure and Environment Pty Ltd and is included at **Appendix V** and discussed briefly below.

### 5.17.1 Demolition

During the demolition phase of a project there will be the high potential to reuse and/or recycle the majority of wastes produced from the demolition of buildings and infrastructure. By implementing procedures such as on site sorting and storage of materials, it will be possible to significantly reduce the amount and costs for waste disposal.

### 5.17.2 Construction

Strategies/actions developed during the demolition phase will be incorporated into the construction phase (i.e. separation, reuse, resale and recycling of generated wastes).

The majority of the improvements in waste minimisation in the construction phase will occur through the implementation of a purchasing policy. Careful planning and design in the initial stages, and by purchasing only the required amounts of materials is an essential strategy to incorporate. Accurately estimating the amount of materials required can be improved throughout the project from the comparison of initial estimations and waste quantities produced with actual quantities. Regular monitoring and auditing will enable this to occur more efficiently and effectively.

It is noted that it is standard practice for a Construction Management Plan to be reviewed prior to the issue of a Construction Certificate, after a builder has been appointed and when better knowledge of the potential waste quantities are known. In this regard, the Project Application CMP provides the general commitment and measures to avoid/prevent waste, minimise waste and encourage the reuse/recycling of generated wastes in line with the waste hierarchy. A refined and detailed CMP, including demolition/construction checklist will be submitted prior to issue of CC.

### 5.17.3 Operational Waste Storage Methods (apartments)

#### Garbage

Each household will be responsible for transporting their own waste to the garbage chutes which will be accessed from the waste cupboard located on each level, which will discharge to garbage bins located in the basement waste room. These bins will then be transported from the basement to the designated collection point at the kerb for collection by Council's private waste contractor.

#### Recycling

Separate garbage chutes for recyclable materials only will be provided within apartment buildings, discharging to recycling bins located in the basement level waste room. The recycling bins are to be picked up and located in the same manner as the garbage disposal methods.

### 5.17.4 Operational Waste Storage Methods (town houses and houses)

#### Garbage

- No of garbage bins: 1 per dwelling.
- Size of garbage bins: 140 Litre.

Households will be responsible for transporting their own bins to the kerb on for weekly collection by Council's private waste contractor.

#### Recycling

- No of Recycling bins: 1 per dwelling
- No of Green Waste bins: 1 per dwelling
- Size of recycling and green waste bins: 240 Litre

The recycling and green waste bins are to be picked up in the same manner as the garbage disposal method on an alternate week basis, and will again be located in a utility area on site.

## 5.18 Environmental and Construction Management

A Construction Management Plan (CMP) has been prepared for the proposed development by Meinhardt Infrastructure and Environment Pty Ltd and is included at **Appendix W**. This document assesses ways of minimising the impact of construction works associated with the proposed development. It outlines the procedures which are intended to be implemented to manage construction activities so as to ensure that these activities do not lead to the generation of unacceptably high levels of environmental or community disturbance over the life of project.

The development on the site will include a range of civil infrastructure and building construction activities as the development progresses through site establishment, base civil infrastructure works and residential construction works. During this period the normal working hours will be 7:30am to 5:00pm Monday to Friday and 8:00am to 1:00pm Saturdays. No construction works will occur on Sundays or Public Holidays. All project managers and contractors will be advised of their responsibilities under the Construction Management Plan and will be required to adhere to its provisions, and all personnel working on site will be required to possess a WorkCover Green Card and be inducted into the site.

In order to protect the amenity of the local community, a Communications and Consultation Plan will be prepared based on the Communications and Consultation Framework for the project, and will serve to ensure that the local community is kept informed of the construction activities on site. This will involve the use of a range of mediums, and include the publication of a telephone contact number for the purpose of Community Relation, and a 24/7 contact for the builder responsible for the site.

The environmental quality of the subject site and its surrounds will be protected during the construction period through the implementation of a range of construction management measures. Prior to commencing work on site an Environmental Management Plan will be prepared for the works and be submitted to the relevant consent authority for approval prior to issue of the Construction Certificate, which will be the guiding document for the implementation of environmental protection measures. These measures will include stormwater, erosion and sediment control, and the protection of vegetation designated to be retained. Trucks will be loaded and unloaded within the site, and will be adequately cleaned to prevent soil, mud and debris from leaving the site.

Throughout the course of the project, the management team and contractors will be responsible for process control, document control, and on-going monitoring of site management procedures in order to ensure compliance with the CMP.

## 5.19 Heritage and Archaeology

Condition C5 of the Minister's Concept Plan Consent (under separate cover) requires a number of initiatives to recognise the history of the RRCS site. The following actions have been completed by RRCS to satisfy Condition C5:

- Photographic Archival Recording, by City Plan Heritage
- Heritage Interpretation Strategy, by City Plan Heritage
- Historical Archaeological Assessment, by Austral Archaeology Pty Ltd
- Overall Interpretation Strategy Plan (for the entire RRCS site), by Environmental Partnership (Volume 2) showing possible locations for interpretive elements recognising the following elements:
  - A place for caring - RRCS
  - Aboriginal heritage
  - Landscape.

During the assessment of the Concept Plan, the environmental assessment reports prepared by both the proponent and the Department of Planning considered the sites heritage significance. In assessing the Concept Plan, the Department of Planning determined that the *"existing buildings are not worthy of retention given they have limited architectural or aesthetic merit and several have been subject to significant alteration and modification"* (Director-General's Environmental Assessment Report RRCS).

In addition, the Department of Planning considered that the recommendations of the heritage survey and assessment report, prepared to support the Concept Plan, will ensure the cultural and heritage value of the site is maintained without the requirement to retain the existing buildings. Full compliance with the recommendations of the heritage survey and assessment report is a condition of the Concept Plan approval. The conditions in the Part 3A approval focus on photographing and recording buildings prior to demolition, which will be undertaken by Frasers for the buildings proposed for demolition.



The previous archaeological assessments indicate that there is a high potential for archaeological structural features to survive from the original Weemala only (which will have appropriate archival recording undertaken at the time of demolition of Weemala). However, these archaeological remnants are not located within the Stage 1 Phase 1 area and will be addressed as part of the Stage 2 environmental assessment.

The proponent is committed to implement the requirements of the Overall Interpretation Strategy Plan prepared by Environmental Partnership.

### Aboriginal Archaeology

An Aboriginal Archaeological Assessment has been undertaken by Artefact Heritage Services in accordance with the Director General's Requirements and is included at **Appendix X**. Aboriginal community stakeholders were consulted as part of the initial assessment process, however as no Aboriginal object, places, or areas of potential were located within the study area a full Aboriginal consultation is not required.

The assessment found the study area to be:

- devoid of Aboriginal archaeological sites or places;
- highly disturbed and to have a low/no archaeological potential; and
- of a low archaeological significance.

The Aboriginal Archaeological Assessment concludes that the site area is unconstrained by indigenous archaeological matters and that no intact Aboriginal archaeological deposits are likely to exist within the development area.

A Statement of Commitment has been included at Section 6.0 requiring that if any Aboriginal objects are located during construction, work will stop immediately and the Department of Environment, Climate Change and Water (DECCW), an archaeologist, and the Metropolitan Local Aboriginal Land Council will be contacted.

## 6.0 Draft Statement of Commitments

In accordance with the Director-General's Environmental Assessment Requirements, the proponent is required to include a Draft Statement of Commitments in respect of environmental management and mitigation measures on the site.

The majority of environmental commitments for the site are covered by the Statement of Commitments included as part of the Concept Plan approval.

**Table 12** below identifies additional commitments made by Frasers Putney Pty Ltd to manage and minimise potential impacts arising from the Stage 1 Phase 1 residential project.

**Table 12** – Draft Statement of Commitments

Subject	Commitment	Approved by Who	Timing
Approved Project	The development of the Stage 1 Phase 1 residential development will be carried out generally in accordance with the architectural drawings prepared by Cox Richardson Architects dated 7 April 2011, landscape architect drawings prepared by Environmental Partnership dated April 2011, and with the Environmental Assessment Report prepared by JBA Planning dated 7 April 2011.	Department of Planning	No timing. General Statement of Commitment.
Infrastructure and Services	Future development on the site will include upgrades to energy, water, sewer and telecommunications infrastructure in accordance with service provider requirements.	Relevant service provider	No timing. General Statement of Commitment.
Tree Replacement	The proponent commits to the replanting of vegetation as described in the Landscape Report prepared by Environmental Partnership.	-	No timing. General Statement of Commitment.
Environmental and Construction Management	The development of the Stage 1 Phase 1 residential development will be carried out in compliance with the Construction Management Plan (CMP). The CMP will specifically include components addressing: <ul style="list-style-type: none"> <li>Construction Waste Management;</li> <li>Noise and Vibration Management;</li> <li>Air Quality Management;</li> <li>Construction Traffic Management; and</li> <li>Dust, Erosion and Sedimentation Control.</li> </ul>	Private Certifying Authority (PCA)	Prior to issue of CC

Subject	Commitment	Approved by Who	Timing
Waste Management	Waste management procedures will be carried out generally in compliance with the Waste Management Plan prepared by Meinhardt dated 6 April 2011, with a detailed Waste Management Plan to be submitted once a builder is appointed.	Private Certifying Authority (PCA)	Ongoing
Bulk Earthworks	A bulk earthworks model will be provided with the Construction Certificate documentation, indicating final cut and fill volumes and final design levels for the Stage 1 Phase 1 residential component.	PCA	Prior to issue of CC
Communication and Consultation Plan for Construction	A Communications Plan to address construction related impacts will be prepared.	Department of Planning	Prior to issue of CC
Accessibility	The recommendations of the Access Review prepared by Morris Goding Accessibility Consulting dated 17 March 2011 will be incorporated in the Construction Certificate documentation.	PCA	Prior to issue of CC
Traffic	A detailed Construction Traffic Management Plan will be incorporated in the Construction Certificate documentation.	PCA	Prior to issue of CC
Aboriginal Archaeology	If any Aboriginal objects are located during construction, work will stop immediately and the Department of Environment, Climate Change and Water (DECCW), an archaeologist, and the Metropolitan Local Aboriginal Land Council will be contacted.	DECCW	Ongoing

## 7.0 Conclusion

The proposed Project Application will commence the first stage of the residential development of the Concept Plan.

The proposed development contributes to the supply of housing stock in Sydney as part of a major residential redevelopment of the Royal Rehabilitation Centre site which has been envisaged since the Concept Plan approval in 2006. Since the time of the Concept Plan approval the demand to provide additional housing within the metropolitan region has become more critical in light of revised population forecasts and rising housing prices. In light of this, it is essential that new residential development which has been planned for is progressed to market as rapidly as possible.

The Project Application seeks approval for 118 dwellings within the central portion of the site, associated landscaping and road works as well as demolition. This environmental assessment report provides detailed assessment and justification for the development, generally consistent with the Concept Plan.

The preceding environmental assessment demonstrates that the matters for which approval is sought are consistent with the zoning and development controls contained for the site under Ryde LEP 2010 (as translated from Schedule 3 of the Major Projects SEPP), the Concept Plan approval and Director General's Requirements, and will have no significant adverse environmental impacts. Furthermore the development is of a high architectural standard and will provide a range of housing types.

The Draft Statement of Commitments has been prepared to inform the detailed design of the development and manage construction and on-going environmental impacts. The overall Statement of Commitments for the Concept Plan will continue to guide the further stages and construction stages of the development. As such, we have no hesitation in recommending this Project Application be approved.