

	<ul style="list-style-type: none"> o Railcorp o WorleyParsons, incorporating Planning Workshop Australia o Caldis Cook (Architects)
Engagement techniques	Round table discussion
Assessment of how objectives were met	<ul style="list-style-type: none"> o Proposed future freight line, and traction substation upgrades on the eastern side of the track are unlikely to impact upon the Project. o Access to Railcorp land for survey purposes was agreed. o Geotechnical assessment required to ensure excavations for basement levels does not affect Railcorp land. o Electrolysis testing to be carried out to show impacts on plumbing reticulation design & reinforcing steel layout. o Acoustic report to be prepared to address vibration issues o Railcorp to prepare a report to show there is no risk of derailment o Permanent fence to boundary is required. o Railcorp to review development documentation as the design is developed. o Railcorp support reduced parking facilities for properties located close to tail links and refers to the South Sydney model which requires 1 space per 125m². o Railcorp has no issue with height. o The project should not have an impact on the West Ryde station.

Department of Planning	
Objectives	To clarify DGR's including Item 8, Consultation
When consultation was carried out	15 May 2009
Number and type of stakeholders involved	<ul style="list-style-type: none"> o Department of Planning o Housing NSW o Caldis Cook (Architects)
Engagement techniques	Round table discussion
Assessment of how objectives were met	DoP clarified that Housing NSW was to advise in the EA how consultation was carried out with the broader community

West Ryde Stakeholders	
Objectives	Discussion of the west Ryde Town Centre Masterplan by Council, relevant stakeholders and community interest groups.

When consultation was carried out	<ul style="list-style-type: none"> - 29 August 2008 - 1 December 2008 - 18 March 2009
Number and type of stakeholders involved	<ul style="list-style-type: none"> - Council <ul style="list-style-type: none"> o Councillors o Strategic Planning o Urban Planning o Parks o Social Policy and Planning o Major Projects o Building & Property o Traffic o Private Citizens o Community Interest Groups - RTA - Department of Planning - State Transit Authority - Railcorp - Major Projects Directorate, Housing NSW - Local Member of Parliament - Members of the public
Engagement techniques	Round table discussion
Assessment of how objectives were met	<ul style="list-style-type: none"> - Housing NSW advised of the proposed West Ryde Redevelopment Project that was in preliminary phase. - Council advised that they do not want to lose social housing. - Council had a positive attitude towards the West Ryde Redevelopment and are open to discussing the proposal

Letter Box Drop	
Objectives	Inform surrounding residents of the West Ryde Redevelopment Project and advise residents of how they may submit comments.
When consultation was carried out	Letter box drop was carried out on 12 August 2008
Number and type of stakeholders involved	192 residential units and dwelling houses.

Engagement techniques	<p>Letter box drop at the following residences:</p> <ul style="list-style-type: none"> ○ 57-61 West Parade (units 1-76) ○ 36 West Parade (units 1-12) ○ 38 West Parade (units 1-12) ○ 40 West Parade (units 1-12) ○ 42 West Parade (units 1-12) ○ 44 West Parade (units 1-12) ○ 46 West Parade (units 1-12) ○ 48 West Parade (units 1-12) ○ 50 West Parade (units 1-12) ○ 54 West Parade ○ 56A West Parade ○ 58 West Parade ○ 60 West Parade ○ 62 West Parade ○ 2 Miriam Road / 52 West Parade (units 1-15) <p>A copy of the letter can be found at Appendix 22.</p>
Assessment of how objectives were met	Adjoining residents have been notified of the proposed development and their input has been sought.

Meeting with Council	
Objectives	Provide a general update to Council on the progress of the West Ryde Redevelopment Project.
When consultation was carried out	4 August 2009
Number and type of stakeholders involved	<ul style="list-style-type: none"> ○ Housing NSW ○ Ryde City Council
Engagement techniques	Round table discussion.
Assessment of how objectives were met	<ul style="list-style-type: none"> ○ Provided Council with specific details of the Part 3A Concept Application. ○ Advised Council of letter box drop to neighbouring properties. ○ Council referred to DCP 2006 'Notification of Development Applications'. Housing NSW has endeavoured to meet those controls.

Meeting with Local Member, Victor Dominello MP	
Objectives	Provide a briefing to Mr Dominello MP on the West Ryde Redevelopment Project, and seek comment.
When consultation was carried out	4 August 2009
Number and type of stakeholders involved	<ul style="list-style-type: none"> ○ Housing NSW ○ Mr Dominello MP
Engagement techniques	Round table discussion.
Assessment of how objectives were met	<ul style="list-style-type: none"> ○ Mr Dominello MP was briefed on the project, including the aims and objectives of Housing NSW. ○ Mr Dominello MP raised two issues: <ul style="list-style-type: none"> ○ Consistency in the external appearance of all elements of the project. This issue will be addressed at the Project Specific Application stage, having regard to the comments of Mr Dominello MP, the requirements of the DoP whilst maintaining the high quality of the external appearance in accordance with Housing NSW aims and objectives for the project. ○ Inclusion of commuter parking facilities. This will be taken on board and Housing NSW is in the process of investigating the issue and preparing an internal discussion paper for consideration.

14. DRAINAGE

A Stormwater and Groundwater Assessment dated May 2009 has been prepared by BMD Consulting (Appendix 9). A number of drainage/flooding issues have been identified and appropriate solutions have been proposed. Those solutions will be incorporated into the Project Specific Application.

14.1 Water Sensitive Urban Design

The Stormwater and Groundwater Assessment identify the following issues with the proposed development:

- *BASIX requires rainwater to be harvested and reused appropriately;*
- *The size of the proposed development, and the limited open space available for water quality treatment is an issue for on-site water quality treatment devices;*
- *The significant yield of units compared with the available area for harvesting rainwater means that it is not practical to supply rainwater for toilet flushing to all units as demand would far outstrip supply.*

The Stormwater and Groundwater Assessment recommends that the following measures be incorporated into the design:

- *A rainwater tank of around 50m³ be installed to capture runoff from the proposed development;*
- *Rainwater harvested is to be utilised for irrigation on landscaped areas as well as toilet flushing for the proposed commercial area only. A MUSIC model indicates that there is potential for annual savings of up to 220,000 litres of reticulated water.*

These measures will be included in the Project Specific Applications.

14.2 On-site Stormwater Detention

The Stormwater and Groundwater Assessment identify the following issues with the proposed development:

- *The City of Ryde's Stormwater Management Code requires stormwater discharge from the redeveloped Site not increase or worsen flooding potential on downstream properties;*
- *Onsite detention will need to be provided to limit post development discharges to predevelopment levels for minor and major storm events (5 and 100 yr ARI levels).*

Based upon the results of a DRAINS model, the Stormwater and Groundwater Assessment recommends that the following measures be incorporated into the design:

- *An onsite detention system of 35m³ be installed to accommodate the required detention storage on the Site to ensure post development discharges are less than predevelopment levels.*

These measures will be included in the Project Specific Applications.

15. GROUNDWATER

A Stormwater and Groundwater Assessment dated May 2009 has been prepared by BMD Consulting (Appendix 9). The potential impact of the proposal on groundwater is addressed and appropriate mitigation measures have been proposed. Those measures will be incorporated into the Project Specific Application.

The Assessment identifies the closest monitoring bores to the Site and carries out an analysis of those bores.

In relation to the potential impact of the development on groundwater usage, the Assessment provides:

The development is designed to not increase peak out flow of stormwater that exceeds predevelopment conditions with 100% perviousness. An onsite detention system of 35 cubic m is specified in order to attenuate outflows to less than the peak outflow of 5 and 100 ARI storms (See stormwater section).

Additionally the building design includes a rainwater capture and reuse system. A tank of approximately 50 cubic m capacity will be used to capture water, allowing reuse of irrigation and car washing.

The irrigation activities will allow at least some of the rainfall to percolate into the soil. Some of this will eventually reach groundwater. Whilst the percolation volume/year will be less than that from a 'bushland' site, it is significantly higher than that likely from nearby commercial buildings which are almost completely impervious.

It is concluded that that development will reduce infiltration to the groundwater. However demand, water quality and water flows are all very low so that the impact of the proposed development on regional groundwater availability will be minimal.

In relation to the potential impact of the development on groundwater quality, the Assessment provides:

The proposed drainage system will involve capture of roof water via an onsite detention & rainwater vault. The onsite detention system will have a regulated discharge to the local stormwater infrastructure. The water in the rainwater tank will be used for irrigation.

These results suggest it is preferable to capture rainwater from the roof, store then use it rather than let the simple collect road runoff and use it for irrigation. If roof water is used for irrigation it is less likely to be adding contamination to the groundwater. (It is noted that any contamination in infiltrating water would need to pass through filtration via over more than 30m of rock before it reached groundwater. This filtration is likely to remove the bulk of contaminants).

It is concluded that the capture of some rainwater in tanks will have minimal impact on regional hydrology, but it will assist in reducing the contaminant load in the water used for irrigation.

Given that the Assessment concludes that the impact on regional groundwater availability will be minimal, and that the capture of rainwater in tanks will have minimal impact on regional hydrology, and assist in reducing the contaminant load, it is considered that the Minister should be satisfied that the Concept Application will have minimal environmental impact.

16. NOISE AND VIBRATION ASSESSMENT

The Site is located adjacent to a rail corridor which runs along the eastern boundary.

The DGR's provide:

11. Noise and Vibration Assessment

The EA shall address the issue of noise and vibration impact from the railway corridor and provide detail of how this will be managed and ameliorated through the design of the building, in compliance with relevant Australian Standards and the Department's Interim Guidelines for Development near Rail Corridors and Busy Roads.

A Traffic and Railway Noise and Vibration Assessment dated 7 May 2009 has been prepared by Acoustic Logic Consultancy (Appendix 8).

The Assessment identifies the following external noise and vibration sources in the vicinity of the Site:

- Traffic noise from West Parade which runs along the western boundary of the Site.
- Train noise and vibration from the Northern Train Line which runs along the eastern boundary of the Site.

The Assessment identifies the relevant noise criterion (identified in the State Environmental Planning Policy (Infrastructure) 2007, and the NSW Department of Planning's Development Near Rail Corridors and Busy Roads – Interim Guideline) for bedrooms and living areas and proposes mitigation measures to be incorporated into the Project Specific Applications.

Those mitigation measures will ensure that the design of the proposed development complies with the relevant noise criterion, thereby achieving acceptable acoustic privacy levels for residents.

The Assessment concludes:

It has been found that the Concept Application (MP 09_2009) can comply with noise and vibration objectives with upgraded single glazing, and building structure vibration isolation.

16.1.1 Traffic & Train Noise

The Assessment makes the following comments in relation to traffic and train noise:

*Internal noise levels will primarily be as a result of noise transfer through windows and doors and roof, as these are relatively light building elements that offer less resistance to the transmission of sound. **All external walls are proposed to be heavy masonry elements that will not require upgrading.***

The Assessment makes the following recommendations to ameliorate traffic and train noise which will be incorporated into the Project Specific Applications to ensure compliance with accepted acoustic privacy criterion:

- **Recommended Glazing:** *Windows and doors will require upgrading to a single glazed system from standard installations. Precise thickness and glazing type to be determined as the project stages advance.*
- **Roof/Ceiling:** *The roof is to be constructed of a concrete slab and will not require upgrading.*

- **External Walls:** *External walls composed of concrete or masonry elements would not require upgrading. Light weight walls will require upgrading in some areas to ensure that internal noise goals are met.*
- **Mechanical Ventilation:** *In some units facing the rail corridor and West Parade, internal levels cannot be achieved with windows open; in these instances it is required that an alternative outside air supply system or air conditioning be installed to meet AS 1668.2 requirements. Any mechanical ventilation system that is installed should be acoustically designed such that the acoustic performance of the recommended constructions are not reduced by any duct or pipe penetrating the wall/ceiling/roof. Noise emitted to the property boundaries by any ventilation system shall comply with the Council requirements.*

The Minister may be satisfied that the proposed development is capable of complying with the relevant acoustic criteria.

16.1.2 Railway Vibration Noise

The Assessment makes the following comments in relation to railway vibration:

Vibration generated by train passbys adjacent to the proposed development will potentially generate structure borne vibration which will be radiated of internal building elements such as walls, floors and ceiling as audible noise. Internal noise levels associated with structure borne noise goals generated from train passbys should comply with Table 3 of the Interim Guidelines for the Assessment of Noise from Rail Infrastructure Projects (DECC 2007) which sets out internal noise goals for structure borne noise.

The Assessment makes the following recommendations to ameliorate railway vibration noise which will be incorporated into the Project Specific Applications:

The results of the structure born vibration investigation indicate that internal structure borne noise levels will potentially exceed project requirements without the addition of vibration isolation. Specific vibration isolation to the structure to ameliorate any adverse impacts of the residents of occupants of the development will be provided as the project stages progress.

These mitigations measures for specific vibration isolation will be incorporated into the proposed development and included in the Project Specific Applications. The Minister may be satisfied that the proposed development is capable of complying with the relevant vibration criteria.

17. GEOTECHNICAL

The DGR's provide:

Geotechnical Report - prepared by a recognised professional which assesses the risk of Geotechnical failure on the site and identifies design solutions and works to be carried out to ensure the stability of the land and structures and safety persons.

The Concept Application proposes a basement level carpark, which will we are told requires excavation to a depth greater than 2 metres.

A Site Investigation Report dated 22 February 2005 has been prepared by SMEC Testing Services Pty Ltd (Appendix 11).

From the four boreholes sunk on part of the Site (lots 71 & 73), the Report identifies that there is a 0.3 – 0.4 metre thick topsoil overlying silty clays between 1.0 to 1.6 metres, and weathered shale to depths of 2.0 to 2.7. The Report classifies the Site as *moderately reactive (M)* based upon AS2870 – 1996.

SMEC advises that such geotechnical strata banding is likely to be uniform across the Site. Provided that appropriate engineering practices are included in the Project Specific Application, it is considered that the proposed basement may be engineered to obviate any incurred risk having regard to the findings of the Report, and the surrounding land use including the nine storey residential flat building to the south of the Site.

Housing NSW has engaged SMEC to carry out a further geotechnical survey to be submitted further to this concept application. The further geotechnical survey report, and Project Specific Applications will:

- Further address RailCorp's brief;
- Include a construction methodology with details pertaining to structural support during excavation;
- Track monitoring requirements during excavation and construction phases;
- Include cross sectional drawings showing ground surface, rock tracks, sub soil profile, proposed basement excavation and structural design of sub ground support adjacent to rail corridor;
- Include a rail safety plan including instrumentation and monitoring regime to be submitted for review.

18. STATEMENT OF COMMITMENTS

A Draft Statement of Commitments has been prepared by Housing NSW in respect of the Concept Application (Appendix 4).

The Draft Statement of Commitments outlines the environmental management, mitigation and monitoring measures to be implemented to minimise any potential impacts of the project.

A Final Statement of Commitments will be submitted with the Project Specific Applications.

19. CAPITAL INVESTMENT VALUE

The capital investment value of the project has been calculated by valuing all costs necessary to establish and operate the development including the design and construction of buildings, structures, associated infrastructure and fixed or mobile plant and equipment (but excluding land costs and GST).

The Capital Investment Value Certification has been included at Appendix 3. The Certification concludes:

*Our expectation is that the capital investment value of the project will be **\$55 million (\$55,000,000)**; this correspondence serves as our **Certification** of the same.*

Accordingly, the proposal is a development of a kind that is described in Schedule 1 of the *State Environmental Planning Policy (Major Projects) 2005* – namely Clause 13 Residential, commercial or retail projects, development for the purpose of a residential development with associated commercial and community facility uses, and declared the project to be a project to which Part 3A of the EPA Act applies.

20. CONCLUSION

This Concept Application seeks approval for a residential development (use, building envelopes and staging) comprising approximately 142 residential units (social housing, private housing and potential affordable housing), associated commercial and retail areas, parking and services on the site known as 63-77 West Parade, West Ryde.

It is considered that the Concept Application:

- Will achieve the aims and objectives of the NSW State Plan, the Metropolitan Strategy and the Draft Inner North Subregional Strategy by providing a mix of housing types in a high density development located in close proximity to a 'Village' and transport centre;
- Is compliant (for the Concept stage of assessment) with the provisions of the relevant State Environmental Planning Policies. The concept layout has sufficient scope to satisfy issues related to internal design such as cross ventilation and solar access during the detailed design process and associated assessment;
- Is permissible within the Residential 2(c5) zone under the Ryde Planning Scheme Ordinance 2006;
- Will achieve the objectives of the local environmental planning instruments;
- Will not have significant adverse environmental impacts on the surrounding locality;
- Will achieve the aims and objectives of Housing NSW by redeveloping existing underutilised housing stock located in strategic locations;
- Will contribute to, and compliment the development of the West Ryde Town Centre; and
- Will generate positive social impacts and public benefits for the locality.

The Concept Application will allow Housing NSW to achieve a yield that delivers private, social and affordable housing, whilst delivering a high quality development that is sympathetic to the surrounding locality.

Future Project Specific Applications will address the specific design related issues set out in the DGR's including, but not limited to:

- State Environmental Planning Policy 55 Remediation of Land;
- State Environmental Planning Policy 65 Design Quality of Residential Flat Buildings
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004
- The relevant provisions of the local environmental planning instruments and development control plans

Environmental assessment will be carried out having regard to those specific design related issues in the subsequent Project Specific Applications. Such applications shall have regard to internal layout, composition, yield, external materials and specific design.

Whilst the proposed development exceeds the present development standards in relation to height, density and parking prescribed by the Ryde Planning Scheme Ordinance 2006, it is considered to be consistent with the proposed objectives of the Draft Ryde Local Environmental Plan 2008. In the circumstances, it has been demonstrated that strict compliance with local development standards

would be unreasonable and unnecessary, and hinder the attainment of the objects of the EPA Act, state, regional and future local planning policy. Specifically, the proposed development will:

- Provide for the housing needs of the community within a high density residential environment;
- Provide a variety of housing types within a high density residential environment;
- Allow higher density development around transport nodes; and
- Allow for revitalisation, rehabilitation and redevelopment of residential areas while ensuring that building design does not adversely affect the amenity of the locality.

The Concept Application is considered to have minimal adverse impact on the environment and the locality. Accordingly, it is considered that the Concept Application should be approved.

Appendix 1 Minister's Declaration

Appendix 2 Director General's Requirements dated 4/5/09

Appendix 3 Quantity Surveyor's Certificate of Cost and Capital Investment Value Certification

Appendix 4 Draft Statement of Commitments