



Planning &
Environment

Study Requirements

*Nominated State
Significant Precinct
– Riverwood Estate*

December 2016

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Introduction

Purpose of study

Investigate preparation of a new planning framework for the Riverwood Estate State Significant Precinct, to facilitate an increase in building height and density to allow development for a mix of land uses including the provision of social, affordable and private housing, supported by adequate infrastructure.

Site

Riverwood Estate State Significant Precinct is an area of approximately 30.5 ha of primarily government owned land located to the south of the M5 Motorway and to the west of Belmore Road North, Riverwood in the Canterbury-Bankstown LGA.

Map



Applicant

NSW Land and Housing Corporation.

Date of issue

9 December, 2016.

Scope of study

The following issues will be considered and assessed as part of the study:

- (1) State or regional planning significance of the site.
- (2) Suitability of the site for any proposed land use taking into consideration heritage, environmental, social, economic and urban design factors, the principles of ecological sustainable development and any State, regional or local planning strategy/plan.
- (3) Implications of any proposed land use for infrastructure and service delivery.
- (4) Means by which developer contributions should be secured for the site
- (5) Local and regional economic impacts of the proposed development.
- (6) Recommended land uses and development controls for the site.

Key study requirements

The Study must address the key requirements listed below and, where appropriate, this should be done separately for each precinct.

1. Vision, Strategic Context and Justification

- 1.1. Outline the vision for the proposal.
- 1.2. Outline the strategic planning context for the proposal including an assessment of relevant State planning documents such as A Plan for Growing Sydney, draft South District Plan, State Environmental Planning Policies (SEPPs) and consideration of local planning documents including Canterbury Local Environmental Plan 2012
- 1.3. Provide justification for the overall urban renewal project and the proposal for Riverwood Estate.

2. Urban Design

- 2.1. Prepare a detailed site and context analysis.
- 2.2. Prepare opportunities and constraints mapping.
- 2.3. Provide a view corridor and visual assessment, including but not limited to an analysis of any visual impacts on surrounding areas and mitigation measures.
- 2.4. Provide a shadow analysis both within the site, addressing open space and dwellings, and on adjoining land, including Winter Solstice and Equinox.
- 2.5. Given the proximity of the M5 Motorway and nearby industrial land uses, outline the acoustic and air quality impacts of the proposal and the mitigation measures to ensure a high standard of amenity for future residents. The State Environmental Planning Policy (Infrastructure) 2007 and the Development Near Rail Corridors and Busy Roads – Interim Guideline must be addressed.
- 2.6. Provide an analysis of proposed distribution of gross floor area, development yields, building typologies, building envelopes and heights.
- 2.7. Outline urban design principles for the proposal and demonstrate how they have informed the allocation of, and relationships between proposed land uses.
- 2.8. Provide a Public Domain Plan identifying proposed open space, public domain and pedestrian/cycle links including links to Salt Pan Creek Reserve, including an accurate CAD set-out of streets, parks and open spaces.
- 2.9. Identify key aspects of the road layout and design which is responsive to existing and proposed land uses including providing linkages to key destinations points such as centres, employment lands and recreation areas within and surrounding the site.
- 2.10. Identify pedestrian and cycle connectivity within the site and to adjoining areas, including to the Riverwood Railway Station and major bus stops and key destinations points such as centres, employment lands and recreation areas within and surrounding the site. This should include bicycle parking in residential, commercial and retail portions of the proposed development (including provision of amenities for cyclists).
- 2.11. Provide typical street sections and future pathways in the precinct.

- 2.12. Provide a 3D massing model in Revit, Sketch Up or similar, a fly through and photomontages of key sites.
- 2.13. Outline the proposed design excellence/integrity process to be adopted for the precinct during design phases and throughout the development phase.
- 2.14. Outline draft LEP controls with a block by block approach to permissible height and FSR (including residential and non-residential split) with all schedules/calculations provided for each individual block.
- 2.15. Prepare a draft DCP including appropriate development controls to inform future development of the precinct such as: building footprints, heights, shadowing, view corridors, heritage, public domain and private open space, streetscapes, connectivity, road hierarchy, street typologies (where relevant), car parking, accessibility and waste management.

3. Land Use and Planning Controls

- 3.1. Explain the zoning pattern proposed and provide justification for the mix and location of proposed land uses.
- 3.2. Provide draft zoning and planning controls to amend the Canterbury Local Environmental Plan 2012 including zoning, maximum building height, FSR and heritage maps.
- 3.3. Justify the proposed heights and explain the methodology adopted to ensure appropriate transitions to adjoining areas.

4. Traffic and Transport

- 4.1. Prepare a transport impact assessment to understand the impact of the proposed development on the transport network and to identify the transport improvements required to support the proposal. A scoping meeting to agree upon an acceptable methodology should be held with Transport for NSW, Roads and Maritime Services and local Council.
- 4.2. The assessment should consider, but not be limited to:
 - performance of the existing public transport and road network surrounding the site (study area must be agreed with Transport for NSW and Roads and Maritime).
 - existing trip generation by mode
 - trip generating potential for all modes and purposes associated with the proposed development
 - cumulative growth of surrounding area based on committed and planned developments
 - impact of additional travel demands on the transport network serving the proposed development
 - undertaking trip generation surveys for all modes of a development site of similar scale and geographic context
 - providing an understanding of the travel behaviours and patterns of residents, workers and visitors of the proposed development through benchmarking, forecast modelling tools and other sources of evidence

- developing a traffic model to determine the road network improvements required to support the proposed development
- detailing the on-site parking, access and egress requirements in accordance with RMS and Council guidelines and relevant Australian Standards
- detailing transport infrastructure and servicing improvements to support the proposed development including costings and funding responsibilities
- preparing a staging plan for the proposed development and the trigger points for transport infrastructure and service improvements
- preparing a Travel Plan detailing all modes of transport available to residents, visitors and employees of the development, and
- preparing a construction traffic management plan that outlines how construction related traffic will be managed and any impacts mitigated for the duration of the construction period.

5. Biodiversity

- 5.1. Assess and document biodiversity impacts in accordance with the Framework for Biodiversity Assessment, unless otherwise agreed by OEHL, by a person accredited in accordance with s142B(1)(c) of the Threatened Species Conservation Act 1995.

6. Ecologically Sustainable Development (ESD)

- 6.1. Provide an Ecologically Sustainable Development Report which details how ESD principles (as defined in clause 7(4) of Schedule 2 of the Environmental Planning and Assessment Regulation 2000) will be incorporated in the construction and ongoing operation phases of the development to achieve sustainability best practice initiatives.
- 6.2. Provide an Integrated Waste Water Management Strategy that considers water, waste water and stormwater plus potential alternative water supply, demonstration of water sensitive urban design and any future water conservation measures.
- 6.3. Demonstrate how compliance with BASIX will be achieved.
- 6.4. In line with NSW Government Policy, outline how this development will; demonstrate Government leadership and directly contribute to NSW achieving net-zero carbon emissions by 2050, accelerate clean energy uptake, put downward pressure on household bills, and directly support those most vulnerable.

7. Climate Change Mitigation and Adaptation

- 7.1. Provide a Climate Change Adaptation Report which details how the development will address temperature increases from climate change (see NSW and ACT Regional Climate Modelling: NARCLIM), including the integration of vegetation (existing and future), permeable and reflective surfaces and Water Sensitive Urban Design features into the design of the development.
- 7.2. Demonstrate consideration of the Urban Green Cover in NSW Technical Guidelines (OEHL, 2015).

8. Indigenous and European Heritage

- 8.1. Provide a Statement of Heritage Impact in accordance with the Statement of Heritage Impact guide.
- 8.2. This should include a desktop review of the possible existence of any archaeological (both indigenous and European) relics which may be disturbed during the works that may require an archaeological assessment to be undertaken at future development stages.

9. Utilities

- 9.1. Provide a utilities and infrastructure servicing report identifying existing capacity, required capacity and augmentation needed for the proposal, sustainability measures (eg WSUD) and staging.
- 9.2. The utilities and infrastructure servicing report must include a component to be endorsed by Sydney Water and prepared by a suitably qualified hydraulic consultant. The report shall outline the development yield and staging, a high-level assessment of the capacity of Sydney Water's network to service the development and the proposed servicing options considered for the development. The report shall outline any integrated water cycle management and/or sustainability initiatives proposed for the development, particularly if they result in a reduction in drinking water demand.

10. Social Infrastructure Needs

- 10.1. Prepare a demographic report which outlines the future community profile in age groups and time series format of the Riverwood State Significant Precinct.
- 10.2. Prepare a social impact assessment including a social infrastructure needs analysis to support the new and existing community.

11. Local Infrastructure and Contributions

- 11.1. Outline the proposed local infrastructure, including recreation, open space (active and passive), community and education facilities required to meet the characteristics and likely needs of the future population, including the estimated costs and timing of the works.
- 11.2. Outline the proposed ongoing responsibilities and maintenance of any proposed open space/connections, drainage reserves and community facilities.
- 11.3. Outline details of any arrangements with Council for public use of community facilities.
- 11.4. Outline the scope and mechanism/s for development contributions between the Proponent and Council for infrastructure that meets the needs of the future population having regard to Council's existing contributions plans.

12. State and Regional Infrastructure

- 12.1. Outline the impact of the proposal on State and regional infrastructure, including public transport, roads, schools and regional open spaces required to meet the characteristics

and likely needs of the future population, including the estimated costs and timing of the works.

13. Economic feasibility

- 13.1. Provide an analysis of the market demand for the proposal.
- 13.2. Provide an assessment of the development feasibility of the proposal.
- 13.3. Provide an assessment of the commercial and retail impact of the proposal.
- 13.4. Undertake an economic analysis testing feasibility of development to contribute towards local, State and regional infrastructure, provision of affordable housing and other design initiatives including but not limited to ESD, BASIX and design excellence. It is recommended that feasibility responds to design initiatives.

14. Geotechnical and Contamination

- 14.1. Provide an assessment of the local soil, outlining its suitability for the proposed uses with respect to erosion, salinity and acid sulphate soils.
- 14.2. Provide an assessment of the proposed land uses in accordance with State Environmental Planning Policy No 55 – Remediation of Land (SEPP 55). The previous use of the adjoining Salt Pan Creek Reserve as a Tip must be considered.

15. Water

- 15.1. Provide an assessment of any potential impacts of the proposal on the hydrology and hydrogeology of the urban renewal precinct and adjoining areas, with particular focus on water quality, groundwater levels, aquifer properties and maintaining any groundwater flow to the Saltpan Creek system.
- 15.2. Demonstrate compliance with the DPI Water's Guidelines for Controlled Activities (2012)
- 15.3. Provide a concept Stormwater Management Plan outlining the general stormwater management measures for the proposal, with particular emphasis on possible WSUD options.
- 15.4. Provide details of, and an assessment of impacts of the proposal on watercourses, wetlands and riparian land on an adjoining the urban renewal precinct.

16. Flooding and Stormwater

- 16.1. Provide a flood risk assessment developed in consultation with Council, identifying flooding behaviour for existing and developed scenarios in order to outline the suitability of the land for proposed uses. The flood assessment should identify flooding characteristics i.e. flow, levels, extent, velocity, rate of rise, hydraulic and hazard categories, for the full range of flooding up to the probable maximum flood (PMF), for both mainstream and overland flow path.
- 16.2. Address the impact of flooding on future proposed development including flood risk to people and properties for key flood events including the 1% AEP and the probable

maximum flood (PMF). The assessment should address relevant provisions of the NSW Floodplain Development Manual (2005).

- 16.3. Provide an assessment of possible impacts of the proposal on the flood behaviour (i.e flow levels, extent, velocities and duration of flooding) and the impact of the proposal on adjacent, downstream and upstream areas.
- 16.4. Provide concept level information on the impacts of future earthworks and filling of land within the proposal. This assessment should be based on an understanding of cumulative flood impacts.
- 16.5. Provide preliminary assessment on recommended flood management measures including mitigation works and development controls.
- 16.6. Provide recommendations regarding the most appropriate emergency response strategy to manage risk to life.
- 16.7. Undertake sensitivity analysis to address the impact of climate change due to increase of rainfall intensity.
- 16.8. Provide concept level details of the drainage associated with the proposal, including stormwater drainage infrastructure and address the impact of stormwater flows on the site from other catchments.

17. Staging

- 17.1. Outline the proposed staging of Riverwood Estate redevelopment. The staging of the redevelopment is to minimise impact on its tenants/residents.

18. Consultation

- 18.1. Provide evidence of consultation (including letters, minutes of meetings, charrette/drop in event summaries and formal advice) with Council, government agencies, residents and adjoining land owners.
- 18.2. Outline the proposed community consultation strategy, noting and addressing that Council should have a high level of involvement in the preparation of the draft planning controls. The community strategy will address the proposed consultation with the current tenants/residents of Riverwood Estate.
- 18.3. An appropriate and justified level of consultation with Council, other relevant State and Federal government agencies and community stakeholders should be undertaken during the preparation of the study.

