

Mr Thomas Hurrell  
Senior Development Manager, Communities Plus Division  
NSW Land and Housing Corporation  
223-239 Liverpool Road  
ASHFIELD NSW 2001

Our ref: SSD 8707

Dear Mr Hurrell

**SEARs for Ivanhoe Estate Redevelopment (Concept Development Application),  
Macquarie Park (SSD 8707)**

Please find attached a copy of the Secretary's environmental assessment requirements (SEARs) for the preparation of an Environmental Impact Statement (EIS) for the Ivanhoe Estate redevelopment, Macquarie Park (concept development application). These requirements have been prepared in consultation with relevant public authorities based on the information you have provided to date. I have also attached a copy of the public authorities' comments for your information. Please note that the Secretary may alter these requirements at any time.

If you do not lodge a development application (DA) and EIS for the development within 2 years, you must consult further with the Secretary in relation to the preparation of the EIS.

Prior to exhibiting the EIS, the Department of Planning and Environment (the Department) will review the document in consultation with relevant authorities to determine if it addresses the requirements in Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*. You will be required to submit an amended EIS if it does not adequately address the requirements.

The Department wishes to emphasise the importance of effective and genuine community consultation where a comprehensive, detailed and genuine community consultation engagement process must be undertaken during the preparation of the EIS. This process must ensure that the community is provided with a good understanding of what is proposed, description of any potential impacts and they are actively engaged in issues of concern to them.

Please contact the Department at least two weeks before you propose to submit your DA and EIS. This will enable the Department to:

- confirm the applicable fee (see Division 1AA, Part 15 of the *Environmental Planning and Assessment Regulation 2000*); and
- determine the number of copies (hard-copy and USB) of the DA and EIS that will be required for reviewing purposes.

Please note the SEARs have been prepared in accordance with the written request for the application to be considered as an interim planning application under the NSW *Biodiversity*

*Conservation (Savings and Transitional) Regulation 2017*. Written confirmation of the Secretary's agreement will be provided separately. Alternatively, revised SEARs will be issued.

If you have any questions, please contact Mr Andy Nixey, who can be contacted on (02) 9274 6379 or via email at [andy.nixey@planning.nsw.gov.au](mailto:andy.nixey@planning.nsw.gov.au)

Yours sincerely



25/9/17

**Cameron Sargent**  
**Acting Director**  
**Key Sites Assessments**  
as delegate of the Secretary

# Secretary's Environmental Assessment Requirements

Section 78A(8A) of the *Environmental Planning and Assessment Act*  
 Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*

<b>Application Number</b>	SSD 8707
<b>Proposal Name</b>	Ivanhoe Estate Redevelopment – Concept development application (staged development)
<b>Location</b>	Ivanhoe Estate (Ivanhoe Place, Wilcannia Way, Nyngan Way and Narromine Way) and part of 2-4 Lyon Park Road, Macquarie Park
<b>Applicant</b>	NSW Land and Housing Corporation
<b>Date of Issue</b>	25 September 2017
<b>General Requirements</b>	<p>The Environmental Impact Statement (EIS) must address the <i>Environmental Planning and Assessment Act 1979</i> and meet the minimum form and content requirements in clauses 6 and 7 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>.</p> <p>Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development.</p> <p>Where relevant, the assessment of the key issues below, and any other significant issues identified in the risk assessment, must include:</p> <ul style="list-style-type: none"> <li>• Adequate baseline data.</li> <li>• Justification of impacts.</li> <li>• Consideration of potential cumulative impacts due to other development in the vicinity.</li> <li>• Measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment.</li> <li>• The EIS must also be accompanied by a report from a qualified quantity surveyor providing:             <ul style="list-style-type: none"> <li>▪ a detailed calculation of the capital investment value (CIV) of the development (as defined in clause 3 of the <i>Environmental Planning and Assessment Regulation 2000</i>), including details of all assumptions and components from which the CIV calculation is derived</li> <li>▪ a close estimate of the jobs that will be created by the development during construction and operation</li> <li>▪ verification that the CIV was accurate on the date that it was prepared.</li> </ul> </li> </ul>
<b>Key issues</b>	<p>The EIS must address the following specific matters:</p> <p><b>1. Environmental Planning Instruments, Policies and Guidelines</b></p> <ul style="list-style-type: none"> <li>• Address the relevant statutory provisions applying to the site contained in the relevant EPIs, including:             <ul style="list-style-type: none"> <li>○ State Environmental Planning Policy (State &amp; Regional Development) 2011</li> <li>○ State Environmental Planning Policy (State Significant Precincts) 2005</li> <li>○ State Environmental Planning Policy (Infrastructure) 2007</li> <li>○ State Environmental Planning Policy (Affordable Rental Housing) 2009</li> <li>○ State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004</li> <li>○ State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)</li> </ul> </li> </ul>

- State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development and accompanying Apartment Design Guide (SEPP 65)
  - State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017
  - State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017
  - Ryde Local Environmental Plan 2014.
- Address the relevant provisions, goals and objectives in the following:
    - *NSW State Priorities*
    - *A Plan for Growing Sydney*
    - *Towards our Greater Sydney 2056*
    - *Draft North District Plan*
    - *Development Near Rail Corridors and Busy Roads- Interim Guideline*
    - *Guide to Traffic Generating Developments (RMS)*
    - *Sydney's Bus Future 2013*
    - *Sydney's Walking Future 2013*
    - *Sydney's Cycling Future 2013*
    - *NSW Planning Guidelines for Walking and Cycling*
    - *NSW Long Term Transport Master Plan*
    - *EIS Guidelines – Road and Related Facilities*
    - *Guide to Traffic Management – Part 12: Traffic Impacts of Development (AUSTROADS)*
    - *Future Directions for Social Housing in NSW*
    - *School Assets Strategic Plan*
    - *Draft Better Schools Design Guide*
    - *City of Ryde Development Control Plan 2014*
    - *City of Ryde Section 94 Development Contributions Plan 2007 (Interim Update 2014)*
    - *Ryde 2025 Community Strategic Plan.*
- 2. Staging**
- The EIS shall:
    - outline the proposed stages of the concept development application, including built form, land uses and approval pathways
    - detail alternative design and staging options considered for the redevelopment of the site.
- 3. Land Use, Gross Floor Area and Floor Space Ratio**
- The EIS shall:
    - include a detailed description, analysis and justification of all proposed land uses
    - include a detailed gross floor area (GFA)/floor space ratio (FSR) schedule and calculations.
- 4. Built Form and Urban Design**
- The EIS shall in relation to the concept development application:
    - outline the design process leading to the proposal and justify the suitability of the site for the proposal
    - provide an urban design analysis that considers the proposed building forms, typologies, height, bulk and scale in the context of the immediate locality, the wider Macquarie Park/ Marsfield area and the desired future character of the area
    - detail the proposed site layout, vehicular access, building entries and the proposed use of buildings
    - demonstrate how the proposal will achieve an optimal design and amenity outcome with specific consideration of the site's character, layout, setbacks, amenity, views and vistas, open spaces and public domain, connectivity and street activation

- demonstrate how the proposal encourages a range of housing types, sizes and affordability
- address the height, bulk, scale and setbacks of the proposed development within the context of the locality and ensure it does not create unacceptable environmental impacts. This shall include:
  - view analysis to and from the site from key vantage points and streetscape impacts. Photomontages or perspectives should be provided showing the proposed development
  - view impact analysis from adjoining developments
- outline potential design considerations aimed at mitigating any impacts identified.

**5. Public Domain and Public Access**

- Identify proposed streetscape, open space, public domain and key vehicular, bicycle and pedestrian linkages with and between other public domain spaces, proposed buildings and uses, and surrounding areas.
- Detail and outline the interface between the proposed uses and the public domain, particularly the Shrimptons Creek open space corridor.
- Provide a Recreation Demand Study demonstrating how the development will address demands for open space provision from future residents, workers and school users including passive and active recreation areas.
- Detail any proposed rehabilitation proposals for Shrimptons Creek.
- Identify potential linkages between the proposed school and joint school-community use facilities.
- Identify potential public art locations within the development.

**6. Amenity**

- The EIS shall:
  - include a preliminary assessment demonstrating how the proposal will achieve a high level of environmental amenity for future residents consistent with the provisions of SEPP 65 and the recommendations of the ADG including building separation/visual privacy, solar access, and communal and public open space
  - include a solar access analysis and shadow diagrams outlining impacts on adjoining developments, including design options to minimise impacts
  - include a wind impact report
  - demonstrate how the proposal maintains the amenity of surrounding residential development including potential overshadowing, privacy and view impacts.

**7. Transport, Traffic, Parking and Access (Operation)**

- The EIS must include a Transport and Traffic Impact Assessment that provides, but is not limited to, the following:
  - accurate details of the current daily and peak hour vehicle, public transport, pedestrian and bicycle movements and existing traffic and transport facilities provided on the road network located adjacent to the proposed development
  - estimated total daily and peak hour trips likely to be generated by the proposed development including vehicle, public transport, pedestrian and bicycle trips
  - detailed assessment of the existing and future safety and performance of key intersections providing access to the site and/or otherwise nominated by Roads and Maritime Services, and any road/intersection upgrades or new roads/intersections required as a result of the development. The assessment of the existing and future road network operations needs to consider the cumulative impacts of traffic volumes from other developments in the locality. The assessment needs to be supported by appropriate modelling and analysis to the satisfaction of Roads and Maritime Services

- details of measures to mitigate any associated traffic impacts including any upgrading or road improvement works required to accommodate the proposed development
- design and operation of the proposed road network in consultation with Roads and Maritime Services and City of Ryde Council
- a staging plan for all proposed civil infrastructure works
- an assessment of traffic impacts in the event external transport infrastructure to be delivered by third parties is not delivered
- details of the proposed number of car parking spaces and compliance with appropriate parking codes and Australian Standards. It should demonstrate a minimalist approach to the provision of on-site parking and how traffic generation (number of vehicles and time of access) will be managed in response to capacity limitations on the road network
- the adequacy of public transport, pedestrian and bicycle networks and infrastructure to meet the likely future demand of the proposed development and details of measures to mitigate potential impacts including required upgrades to pedestrian/cycle connections
- connections to existing and planned public transport networks and services and opportunities for greater usage for residents, school users, workers and visitors
- details of existing and proposed vehicular access for residents, school users, workers, visitors and emergency vehicles
- opportunities to provide safe and efficient loading and servicing for the development
- a Transport and Management Accessibility Plan including details of travel demand management measures to minimise the impact on general traffic and bus operations and to encourage sustainable travel choices and details of programs for implementation
- a Green Travel Plan containing details of sustainable travel initiatives for residents, school users, workers and visitors.

**8. Social Assessment**

- Include a Social Impact Assessment which considers the social benefits and disbenefits of the concept development application and outlines how the future operation of amenities will facilitate social inclusion.
- Provide a description of the intended operation of the proposal including details of the community housing provider/s operating the housing and the mix of housing (private, social and affordable) to be provided.
- Provide evidence justifying demand for the proposed non-government high school.

**9. Ecologically Sustainable Development (ESD)**

- Identify how ESD principles (as defined in clause 7(4) Schedule 2 of the EP&A Regulation 2000) will be incorporated in the design, construction and ongoing stages and operation of the development.
- Outline resource, energy and water efficiency initiatives, including the use of sustainable technologies and or/renewable energy.

**10. Safety**

- Outline built and management measures to ensure the safety of residents, school users, workers and visitors within the development and in the surrounding public domain.
- Consider CPTED principles including any opportunities for street activation, surveillance and other crime prevention treatments.

**11. Flora and Fauna Assessment**

- Provide a detailed assessment of all vegetation clearing on the site including the removal of trees, and any impact on threatened species populations, endangered ecological communities or their habitat and potential for offset requirements.

- In accordance with the transitional provisions of the *Biodiversity Conservation (Savings and Transitional) Regulation 2017*, biodiversity impacts are to be assessed and documented in accordance with the *NSW Biodiversity Offsets Policy for Major Projects (2014)* and the *Framework for Biodiversity Assessment*, by a person accredited in accordance with section 142B(1)(c) of the *Threatened Species Conservation Act 1995*.

#### **12. Water, Drainage, Stormwater and Groundwater**

- Prepare a Stormwater, Groundwater and Drainage Assessment including modelling, contour maps and methodologies, to assess the impacts of the proposal on surface and groundwater hydrology and quality.
- Detail erosion, sediment and stormwater management controls during construction and management and mitigation measures for the prevention of potential water quality impacts during construction.
- Identify appropriate water quality management measures focussing on the management of the impacts from the proposed works, including new road crossing, on Shrimptons Creek and water courses, riparian corridors and groundwater dependent systems located in the vicinity of Shrimptons Creek.
- Identify any water licencing requirements or other approvals required under the *Water Act 1912* or *Water Management Act 2000*.
- Prepare an Integrated Water Management Plan /drainage concept. This should include stormwater and wastewater management, including any re-use and disposal requirements, demonstration of water sensitive urban design and any water conservation measures.
- Provide details of adequate and secure water supply for the life of the project including cumulative impacts on water resources, consideration of alternative water supply arrangements, water sensitive urban design and water conservation measures.

#### **13. Flooding**

- The EIS shall include a Flood Impact Assessment which shall address:
  - potential flood impacts of the proposal
  - consistency with Council's floodplain risk management studies and plans
  - compatibility with the flood hazard of the land
  - impact on the flood affectation of other development or properties
  - impacts on erosion, siltation, riparian vegetation, and bank stability
  - impacts on existing emergency management measures
  - impacts in terms of social and economic costs to the community as a consequence of flooding.

#### **14. Heritage and Archaeology**

- Provide an assessment that documents and addresses the impacts of the proposal on any heritage significance of the site and adjacent areas, including heritage items, places or relics significant to Aboriginal or European culture or history. The EIS must demonstrate attempts to avoid impact upon the heritage significance or cultural heritage values of the site, identify any conservation outcomes and outline proposed mitigation measures where impacts are unavoidable.
- Where Aboriginal cultural heritage values are identified, consultation with Aboriginal people must be undertaken and documented. The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the EIS.
- Provide a Heritage Interpretation Plan that reflects and interprets the history of the site.

#### **15. Contamination**

- Demonstrate compliance with the requirements of SEPP 55.

	<ul style="list-style-type: none"> <li>• Provide a detailed assessment of site contamination including information about groundwater and a detailed assessment of the footprint and surrounds of existing buildings and roads following demolition.</li> </ul> <p><b>16. Utilities</b></p> <ul style="list-style-type: none"> <li>• Address the existing capacity of the site to service the development proposed and any augmentation requirements for utilities, including staging of infrastructure arising from the development in consultation with relevant agencies.</li> </ul> <p><b>17. Infrastructure Delivery</b></p> <ul style="list-style-type: none"> <li>• Identify key infrastructure components to be delivered with the development including open space land, open space embellishments, roads, drainage, power, telecommunications and community facilities.</li> <li>• Identify future asset owners of key infrastructure.</li> <li>• Provide details of the proposed staging delivery of key infrastructure.</li> <li>• The estimated value of key infrastructure.</li> </ul> <p><b>18. Contributions</b></p> <p>The EIS shall address in regard to contributions:</p> <ul style="list-style-type: none"> <li>• Investigation of any Special Infrastructure Contribution in discussion with the Department of Planning and Environment.</li> <li>• The proposed method of calculating developer contributions payable pursuant to the <i>City of Ryde Section 94 Development Contributions Plan 2007 (Interim Update 2014)</i>.</li> <li>• Any additional contributions proposed or material public benefits associated with any proposed floor space above existing planning controls.</li> <li>• Any proposed Voluntary Planning Agreement with Council, including staging details if applicable.</li> </ul> <p><b>19. Consultation</b></p> <ul style="list-style-type: none"> <li>• Undertake an appropriate level of consultation with Council and State Government agencies.</li> <li>• Provide details of consultation activities undertaken in preparation of the concept plan including with existing residents of the Ivanhoe Estate, Macquarie Connect, and residents and business owners in the surrounding area.</li> </ul>
	<p>During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners. In particular, you must consult with:</p> <ul style="list-style-type: none"> <li>• City of Ryde Council.</li> <li>• Roads and Maritime Services.</li> <li>• CBD Coordination Office within Transport for NSW.</li> <li>• NSW Office of Environment and Heritage.</li> <li>• NSW Department for Education.</li> <li>• NSW Environment Protection Authority.</li> <li>• NSW Department of Primary Industries – Office of Water.</li> <li>• Sydney Trains.</li> <li>• NSW Police.</li> <li>• NSW Ambulance Service.</li> <li>• Fire and Rescue NSW.</li> <li>• Sydney Water.</li> <li>• Ausgrid.</li> <li>• Macquarie Connect.</li> <li>• Appropriate social service organisations.</li> <li>• Neighbouring residents and the local community.</li> </ul>



	The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.
<b>Further consultation after 2 years</b>	If you do not lodge a development application and EIS for the development within 2 years of the issue date of these SEARs, you must consult further with the Secretary in relation to the preparation of the EIS.

## Plans & Documents

### Plans and Documents

The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the *Environmental Planning and Assessment Regulation 2000*. Provide these as part of the EIS rather than as separate documents.

In addition, the EIS must include the following:

1. An existing site survey plan drawn at an appropriate scale illustrating:
  - The location of the land, boundary measurements, area (sq.m) and north point.
  - The existing levels of the land in relation to buildings and roads.
  - Location and height of existing structures on the site.
  - Location and height of adjacent buildings.
  - All levels to be to Australian Height Datum (AHD).
2. A locality/context plan drawn at an appropriate scale should be submitted indicating:
  - Significant local features such as parks, community facilities and open space and heritage items.
  - The location and uses of existing buildings, shopping and employment areas.
  - Traffic and road patterns, pedestrian routes and public transport nodes.
3. Drawings at an appropriate scale illustrating:
  - The location of any existing building envelopes or structures on the land in relation to the boundaries of the land and any development on adjoining land.
  - The proposed land uses, building locations, building envelopes and heights, new roads and access arrangements, landscaping, public domain works and all other information relevant to the proposed concept development application.
  - Detailed plans, sections and elevations for first stage of development, including all road and landscape works.
  - The height (AHD) of the proposed development in relation to the land and any changes that will be made to the level of the land by excavation, filling or otherwise.

#### 4. Visual Impact Assessment

The visual impact assessment, including focal lengths, must be done in accordance with Land and Environment Court requirements.

##### Visual assessment methodology

- The consultant's methodology should be explicit. This may include a flow-chart indicating how the analysis is to be undertaken, or a narrative description of the proposed sequence of activities.
- As part of the methodology, the consultant should provide, and explain, criteria for assessment relevant to the site, local context and proposed built form and public domain outcomes. A rationale should be provided for the choice of criteria. Criteria must include reference to the planning framework.
- Visual catchment should be defined and explained (see below).
- An assessment matrix should be produced including number of viewers, period of view, distance of view, location of viewer to determine potential visual impact - i.e. high, medium or low.

##### Visual catchment

- Potential visual catchments and view locations, including contours (areas from which the development is visible) should be identified. This must include, but is not limited to Epping Road, Herring Road, Peach Tree Road and Shrimptons Creek foot/bicycle path.
- Categories of views (e.g. from public open space, from key streets, from main buildings and from key heritage items) should be defined.
- Photos are required for representative view categories, plotted on a map.

	<p><u>Visual material</u></p> <ul style="list-style-type: none"> <li>• Reference to be made to site analysis.</li> <li>• Provide key plan indicating where viewpoints are located and narrative explaining why these have been selected.</li> <li>• The built form should be illustrated in the context of the visual catchment to enable assessment of the visual impact.</li> <li>• The location of cross-sections should be clearly shown on a key plan and the choice of positions explained. The cross sections should be shown in the context of the visual catchment.</li> <li>• Vertical exaggeration should provide an accurate rather than 'flattened' impression of buildings in the context of the visual catchment.</li> <li>• A key plan must be provided for photomontages. In addition, the choice of locations should be explained. Photomontages should be provided for close as well as distant views.</li> <li>• Assessment must benchmark against the existing situation with the proposed plans.</li> <li>• Photomontages to be provided for key viewpoints from all directions, and from several positions within the visual catchment.</li> <li>• As above, support visual evidence such as cross sections to be drawn to realistic scales and shown in context.</li> </ul> <p>A comparison of 'before' and 'proposed' is fundamental to a visual impact assessment, therefore the visual impact assessment (A3 in size) should be undertaken using human eye focal lengths (50mm at 35mm FX format and 46° angle of view) from long range, medium range and short range positions so that they can be assessed with respect to visibility, visual absorption capacity and visual impact rating.</p>
<p><b>Documents to be submitted</b></p>	<ul style="list-style-type: none"> <li>• 1 hard copy and 1 electronic copy of all the documents and plans for review prior to exhibition.</li> <li>• 5 hard copies and 12 electronic copies (USB) of the documents and plans (once the application is considered acceptable).</li> </ul>

