

# Director General's Requirements

## Section 75F of the *Environmental Planning and Assessment Act 1979*

<b>Application number</b>	MP11_0058
<b>Project</b>	Southern Cove Public Domain Works
<b>Location</b>	Barangaroo South, Sydney
<b>Proponent</b>	Lend Lease (Millers Point) Pty Limited
<b>Date issued</b>	18 September 2011
<b>Key issues</b>	<p>The Environmental Assessment (EA) must:</p> <ol style="list-style-type: none"> <li><b>1. Relevant EPI's, Policies and Guidelines</b> <ul style="list-style-type: none"> <li>• Demonstrate that the project will comply with the requirements set out in the following provisions: <ul style="list-style-type: none"> <li>◦ Clauses 8, 9, 17 and 18 of Part 12 (Barangaroo site) of Schedule 3 to State Environmental Planning Policy (Major Development) 2005.</li> </ul> </li> <li>• Address the provisions of State environmental planning policies that would apply to the development on the Barangaroo site requiring development consent under Part 4 of the <i>Environmental Planning and Assessment Act 1979</i>, as if those provisions applied to the carrying out of the project, including the following: <ul style="list-style-type: none"> <li>◦ State Environmental Planning Policy (Major Development) 2005;</li> <li>◦ State Environmental Planning Policy No 55 – Remediation of Land;</li> <li>◦ Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005; and</li> </ul> </li> <li>• Demonstrate that the project is consistent with the <i>Metropolitan Plan for Sydney 2036</i> and the draft <i>Sydney City Subregional Strategy</i>.</li> </ul> </li> <li><b>2. Concept Plan &amp; Bulk Excavation and Basement Car Park Project Application</b> <ul style="list-style-type: none"> <li>• Demonstrate consistency with the terms of approval of Concept Plan MP06_0162 (as modified) and Bulk Excavation and Basement Car Park project approval MP10_0023 (as modified).</li> </ul> </li> <li><b>3. Barangaroo Review</b> <ul style="list-style-type: none"> <li>• The EA shall address the following issues: <ul style="list-style-type: none"> <li>◦ How the design of the public domain responds to the recommendations made by the Design Review Panel;</li> <li>◦ The requirement for site remediation plans (RAPs) to be reviewed by another independent NSW EPA accredited site auditor (if relevant); and</li> <li>◦ The requirement for the site auditor to report to a specially constituted Contamination Panel (if relevant).</li> </ul> </li> </ul> </li> <li><b>4. Urban Design and Public Domain</b> <ul style="list-style-type: none"> <li>• Demonstrate how the proposed development will achieve design excellence including a description of the design process leading to the proposal.</li> <li>• A Public Domain Plan is to be prepared for the Southern Cove, which is to address: <ul style="list-style-type: none"> <li>◦ all planning, accessibility and design issues related to the connectivity of the Southern Cove to its surrounding environment, including integration of walking and cycling connections within and to the site;</li> <li>◦ event management and recreational capacity, including passive and active opportunities;</li> <li>◦ proposals and options to increase cultural experiences at the Southern Cove;</li> <li>◦ measures to provide for diverse activation of the Southern Cove while being sensitive to local community needs;</li> <li>◦ Crime Prevention Through Environmental Design (CPTED) safety strategies;</li> <li>◦ heritage conservation and adaptive reuse as part of the urban and landscape design,</li> </ul> </li> </ul> </li> </ol>

- including management and interpretation;
  - sustainability program for the Southern Cove at design, construction and operations stages; and
  - compliance with the Disability Discrimination Act.
- An event plan of management is to be developed to support proposals for events in the public domain, which will also need to inform traffic management.
- Proposals and options to increase cultural experiences at the Southern Cove are to be supported by a local and regional Cultural Needs Analysis.
- Compliance with Australia Standard AS5100 Bridge Design and consideration of the RTA's Technical Direction TD2002/RS02 Policy for safety screening of bridges.

#### **5. Landscape Design**

- The EA is to demonstrate that the final landform shape of the Southern Cove has been determined by relevant design principles, rather than an engineering/fill driven outcome. Such principles may include:
  - finished levels on the edges of Southern Cove should align with, and not exceed, the levels of adjacent streets and public domain;
  - level grade access into the Southern Cove is to be maximised;
  - the gradient is to be designed to maximise accessibility and the gradient transition from the adjoining residential buildings and public domain areas to the north east and south east of the cove to provide accessible walking and cycle paths, and grading should create a variety of topographic experiences, including maximising useable passive recreation spaces; and
  - any structures within the Southern Cove are to integrate with the landscape design of the public domain to maximise opportunities for activation of the public domain adjoining the cove.
- Detailed documentation of the proposed grading and finished levels is to be provided with the Project Application, including detailed spot levels and multiple sections through the site particularly in relation to access points; and
- Outline specific design features, including but not limited to:
  - Footpaths and pavements, treatment to the right of carriageway (of applicable)
  - Materials and finishes
  - Furniture and fixtures
  - Street lighting, pedestrian lighting and feature lighting
  - Edges, screens and fences
  - Walls, embankments and mounds
  - Steps, ramps, vehicle crossings, decks and pathways
  - Services where affected, utility poles, and service pits
  - Civil and stormwater infrastructure
  - Tree planting
  - Mass planting beds, planter boxes and individual plantings
  - Extent of temporary and permanent features to be clearly shown, including bicycle parking facilities, furnishing or footings, finished surfaces, services and planting.

#### **6. Transport and Accessibility Impacts**

- Prepare a Transport Impact Assessment (TIA) consistent with the Barangaroo Transport Management and Accessibility Plan (TMAP) as modified. The TIA must evaluate:
  - Transport and traffic management within the overall Barangaroo precinct, including the demonstration of a minimalist approach to car parking provision;
  - Pedestrian and cycle access/circulation to meet the likely future demand within the precinct and connections to the external networks;
  - Measures to promote public transport usage and pedestrian and bicycle linkages;
  - Government commitments and plans for the provision of public transport (with reference to the TMAP, *Barangaroo Audit Report* and outcomes of the Barangaroo Review);

- Justification of the allocation of on-site car parking for the proposal having regard to the Concept Plan approval (as amended), RTA guidelines and accessibility of the site to public transport; and
- Daily and peak traffic movements likely to be generated by the proposed development, including modelling and assessment of the performance of key intersections providing access to the site, and any upgrades (road/intersections) required as a consequence of the proposal. The modelling of peak traffic movements should be undertaken with the LINSIG modelling package in order to properly consider coordinated intersection operation.
- Prepare a Travel Demand Management Plan that provides an analysis of public transport provision, walking and cycling connections within the vicinity of the proposed site, and measures that will optimise the opportunity provided by the project site's proximity to public transport.
- Prepare a Construction Traffic Management Plan outlining:
  - Cumulative impacts associated with other construction activities on the Barangaroo site;
  - Details of anticipated truck movements to and from the site;
  - Details of access arrangements for workers to/from the site, emergency vehicles and service vehicle movements;
  - Impacts on the temporary cruise ship terminal;
  - Details of any proposed transportation of waste materials via the Harbour and proposed locations for handling materials; and
  - Mitigation measures to reduce impacts on accessibility and amenity, including for pedestrians and cyclists.

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

- Prepare a Stormwater and Drainage Assessment to assess the impacts of the proposal on surface and groundwater hydrology and quality.
- Water quality management focussing on potential impacts from the works on Sydney Harbour.
- Prepare a Water Management Plan. 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.
- Prepare an Infrastructure Management Plan. The proponent shall provide information on the required water and wastewater services and any augmentation of Sydney Water infrastructure that may be required for the proposed development.

#### **8. Maritime Impacts**

- Provide a detailed review of existing water based activities in the area and the impact of the proposal on these activities.
- Provide evidence of consultation with the Harbour Master of the Port of Sydney regarding potential navigation and safety impacts, and details of any mitigation measures to minimise navigation impacts.
- Provide details of the ongoing management and maintenance arrangements for seawalls and other marine structures.

#### **9. Aquatic Ecology**

- Assess impacts on estuarine circulation, estuarine water quality and aquatic ecology of land formation works (including impacts on aquatic vegetation from direct smothering and any changes that may result from altered hydrological regimes of surrounding waters and bays). Any modification of estuarine foreshores (including the incorporation of measures to improve the habitat value of newly created waters (such as environmentally friendly seawalls) should consider *Environmentally Friendly Seawalls - A Guide to Improving the Environmental Value of Seawalls and Seawall-lined Foreshores in Estuaries* (DECC, 2009).
- Assess the potential impacts on aquatic habitat from altered hydrological regimes, contaminated sediments and potential acid sulphate soils from dredging activities whilst

constructing the Southern Cove.

#### **10. Air, Noise and Odour Quality**

- Address potential air quality, noise and odour impacts, in particular during the construction and operation of the development and appropriate mitigation measures. In particular the following must be addressed:

##### Air and Odour

The Environmental Assessment must include an Air Quality Impact Assessment that is prepared strictly in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales 2005*, available at:

<http://www.environment.nsw.gov.au/resources/air/ammodelling05361.pdf>.

The Air Quality Impact Assessment must also make appropriate reference to the *Assessment and Management of Odour from Stationary Sources in NSW: Technical Framework 2006* and *Assessment and Management of Odour from Stationary Sources in NSW: Technical Notes 2006*, available at: <http://www.environment.nsw.gov.au/air/odour.htm>.

The key air quality issues for the proposal will depend on the methods used to manage and remediate the contaminated material. Potential matters that must be covered in the Air Quality Impact Assessment include, where applicable:

- the identification of the pollutants of concern, including individual toxic air pollutants, dust and odours;
- the identification and assessment of all relevant fugitive and point source emissions;
- appropriate coverage of all aspects of the remediation, including the excavation, storage, transport and treatment of contaminated material; and
- proposed air quality management and monitoring procedures during remediation.

The Air Quality Impact Assessment must consider the requirements of the Protection of the Environment Operations (Clean Air) Regulation 2010.

##### Noise

The Environmental Assessment should include an assessment of noise and vibration impacts, including cumulative construction related noise impacts, prepared in consultation with Office of Environment and Heritage. All feasible and reasonable noise impact mitigation measures should be implemented. The assessment should be prepared in accordance with the NSW Government's *Interim Construction Noise Guideline*, *Industrial Noise Policy* and Application Notes, *Environmental Criteria for Road Traffic Noise* and *Assessing Vibration: A Technical Guide*, as appropriate, available at <http://www.environment.nsw.gov.au/noise/> and *Development Near Rail Corridors and Busy roads – Interim Guideline 2008*.

#### **11. Climate Change and Sea Level Rise**

- An assessment of the risks associated with sea level rise on the proposal as set out in the *NSW Coastal Planning Guideline: Adapting to Sea Level Rise*.

#### **12. Heritage**

- An archaeological assessment of the likely impacts of the proposal on any Aboriginal cultural heritage, European cultural heritage and other archaeological items and outline proposed mitigation and conservation measures;
- An interpretation strategy that includes the provision for interpretation of any archaeological resources uncovered during the works.

### 13. Infrastructure Provision

- Detail the existing infrastructure on site and identify possible impacts on any such infrastructure from the proposal, including the Railcorp 33Kv underground cable located in Hickson Road.
- Detail measures to mitigate the impacts of the proposal on any infrastructure items, including proposed relocation.

### 14. Ecologically Sustainable Development (ESD)

- Identify how the development will incorporate ESD principles in the design, construction and ongoing operation phases of the development.
- Address water quality management for the site including an *"Integrated Water Management Plan"* to include any proposed alternative water supply, proposed end uses of potable and non-potable water, demonstration of water sensitive urban design and any water conservation measures.
- Operational waste management and reduction measures.

### 15. Remediation and Contamination

The Environmental Assessment must include a Remedial Action Plan (RAP). The RAP must be prepared in accordance with the contaminated land planning guidelines under section 145C of the *Environmental Planning and Assessment Act 1979* and relevant guidelines produced or approved under section 105 of the *Contaminated Land Management Act 1997*.

**Note:** The current guidelines under section 145C of the *Environmental Planning and Assessment Act 1979* are the guidelines *"Managing Land Contamination, Planning Guidelines, SEPP 55 – Remediation of Land"* 1998

### 16. Waste

- Provide details of the quantity and type of liquid and non-liquid waste generated, handled, processed or disposed of on-site. Waste must be classified according to the Office of Environment and Heritage's *Waste Classification Guidelines 2008*.
- Provide details of the quantity, type and specifications for all output products proposed to be produced. The description should include the physical, chemical and biological characteristics (including contaminant concentrations) of those output products as well as relevant accredited standards against which the products would comply.
- Provide details of intended (or potential) end uses for output products and the relevant product standards used against which those products would be assessed.
- Provide details of the layout, the treatment process and the environmental controls of the proposal.
- Provide details of liquid waste and non-liquid waste management, including:
  - the transportation, assessment and handling of waste arriving at or generated at the site;
  - any stockpiling of wastes or recovered materials at the site;
  - any waste processing related to the proposal, including reuse, recycling, reprocessing or treatment both on- and off-site;
  - the method for disposing of all wastes or recovered materials;
  - the emissions arising from the handling, storage, processing and reprocessing of waste; and
  - the proposed controls for managing the environmental impacts of these activities.
- Provide details of spoil disposal (if applicable) with particular attention to:
  - the quantity of spoil material likely to be generated;
  - proposed strategies for the handling, stockpiling, reuse/recycling and disposal of spoil;
  - the need to maximise reuse of spoil material in the construction industry;
  - identification of the history of spoil material and whether there is any likelihood of contaminated material, and if so, measures for the management of any contaminated material; and

	<ul style="list-style-type: none"> <li>○ designation of transportation routes for transport of spoil.</li> <li>• Provide details of procedures for the assessment, handling, storage, transport and disposal of all hazardous and dangerous materials used, stored, processed or disposed of, in addition to the requirements for liquid and non-liquid wastes.</li> <li>• Provide details of the type and quantity of any chemical substances to be used or stored and describe arrangements for their safe use and storage.</li> <li>• In documenting or describing the composition of output products and/or wastes generated, reference should be made to the Office of Environment and Heritage's <i>Waste Classification Guidelines 2008</i>.</li> </ul> <p><b>17. Planning Agreements / Developer Contributions</b></p> <ul style="list-style-type: none"> <li>• Scope and justification for any planning agreement / developer contributions proposed.</li> </ul> <p><b>18. Environmental, Construction and Site Management Plan</b></p> <p>The EA shall provide an Environmental and Construction Management Plan for the proposed works, and is to include:</p> <ul style="list-style-type: none"> <li>• Community consultation, notification and complaints handling;</li> <li>• Impacts of construction on adjoining development and proposed measures to mitigate construction impacts;</li> <li>• Noise and vibration impacts on and off site;</li> <li>• Air quality impacts on the neighbourhood;</li> <li>• Odour impacts;</li> <li>• Water quality management for the site; and</li> <li>• Waste and chemical management.</li> </ul> <p><b>19. Staging</b></p> <ul style="list-style-type: none"> <li>• Details regarding the staging of the proposed development.</li> </ul> <p><b>20. Consultation</b></p> <ul style="list-style-type: none"> <li>• Undertake an appropriate and justified level of consultation in accordance with the Department's Major Project Community Consultation Guidelines October 2007.</li> <li>• Undertake an appropriate level of consultation with council and state government agencies regarding the recommendations of the Barangaroo Review.</li> </ul>
<b>Deemed refusal period</b>	60 days

## Plans and Documents to accompany the Application

<b>General</b>	<p>The Environmental Assessment (EA) must include:</p> <ol style="list-style-type: none"> <li>1. An executive summary;</li> <li>2. A thorough site analysis including site plans, areal photographs and a description of the existing and surrounding environment;</li> <li>3. A thorough description of the proposed development;</li> <li>4. An assessment of the key issues specified above and a table outlining how these key issues have been addressed;</li> <li>5. An assessment of the potential impacts of the project and a draft Statement of Commitments, outlining environmental management, mitigation and monitoring measures to be implemented to minimise any potential impacts of the project;</li> <li>6. The plans and documents outlined below;</li> <li>7. A signed statement from the author of the Environmental Assessment certifying that the information contained in the report is neither false nor misleading;</li> <li>8. A Quantity Surveyor's Certificate of Cost to verify the capital investment value of the project (in accordance with the definition contained in the Major Projects SEPP; and</li> <li>9. A conclusion justifying the project, taking into consideration the environmental impacts of the proposal, the suitability of the site, and whether or not the project is in the public interest.</li> </ol>
<b>Plans and Documents</b>	<p>The following plans, architectural drawings, diagrams and relevant documentation shall be submitted (where relevant);</p> <ol style="list-style-type: none"> <li>1. An <b>existing site survey plan</b> drawn at an appropriate scale illustrating: <ul style="list-style-type: none"> <li>• the location of the land, boundary measurements, area (s.q.m) and north point;</li> <li>• the existing levels of the land in relation to buildings and roads;</li> <li>• location and height of existing structures on the site; and</li> <li>• location and height of adjacent buildings and private open space.</li> <li>• all levels to be to Australian Height Datum.</li> </ul> </li> <li>2. A <b>Site Analysis Plan</b> must be provided which identifies existing natural elements of the site (including all hazards and constraints), existing vegetation, footpath crossing levels and alignments, existing pedestrian and vehicular access points and other facilities, slope and topography, utility services, boundaries, orientation, view corridors and all structures on neighbouring properties where relevant to the application (including windows, driveways, private open space etc).</li> <li>3. A <b>locality/context plan</b> drawn at an appropriate scale should be submitted indicating: <ul style="list-style-type: none"> <li>• significant local features such as parks, community facilities and open space and heritage items;</li> <li>• the location and uses of existing buildings, shopping and employment areas;</li> <li>• traffic and road patterns, pedestrian routes and public transport nodes.</li> </ul> </li> <li>4. <b>Architectural drawings</b> at an appropriate scale illustrating: <ul style="list-style-type: none"> <li>• 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;</li> <li>• detailed floor plans, sections and elevations of the proposed buildings;</li> <li>• elevation plans providing details of external building materials and colours proposed;</li> <li>• fenestrations, balconies and other features;</li> <li>• accessibility requirements of the Building Code of Australia and the Disability Discrimination Act;</li> <li>• the height (AHD) of the proposed development in relation to the land;</li> <li>• the level of the lowest floor, the level of any unbuilt area and the level of the ground;</li> </ul> </li> </ol>

	<ul style="list-style-type: none"> <li>any changes that will be made to the level of the land by excavation, filling or otherwise.</li> </ul> <p>5. <b>Other plans (where relevant):</b></p> <ul style="list-style-type: none"> <li><b>Stormwater Concept Plan</b> - illustrating the concept for stormwater management;</li> <li><b>Erosion and Sediment Control Plan</b> – plan or drawing that shows the nature and location of all erosion and sedimentation control measures to be utilised on the site;</li> <li><b>Geotechnical Report</b> – 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 of persons;</li> <li><b>Landscape plan</b> - illustrating treatment of open space areas on the site, screen planting along common boundaries and tree protection measures both on and off the site.</li> </ul>
<b>Documents to be submitted</b>	<ul style="list-style-type: none"> <li>1 copy of the EA, plans and documentation for the Test of Adequacy;</li> <li>12 hard copies of the EA (once the EA has been determined adequate);</li> <li>12 sets of architectural and landscape plans to scale, including one (1) set at A3 size (to scale); and</li> <li>1 copy of the Environmental Assessment and plans on CD-ROM (PDF format), not exceeding 5Mb in size.</li> </ul>