

Director-General's Requirements

Section 75W of the *Environmental Planning and Assessment Act 1979*

Application number	MP06_0162 (MOD 8)
Project	Barangaroo Concept Plan (MP06_0162)
Modification	Modifications to Barangaroo South, including increases in GFA and height, increase in tourist GFA, redistribution of GFA and land uses across development blocks, modifications to block and building envelopes, reduction in area of the Southern Cove, and a redistribution of public domain areas.
Location	Barangaroo South, Barangaroo, Sydney
Proponent	Lend Lease (Millers Point) Pty Ltd
Date modified	15 April 2014
General requirements	The modification application must include: • An executive summary. • A description of the existing and surrounding environment. • A thorough description and justification of the proposal, including: ○ a detailed justification for the increases in height, GFA and additional car parking; ○ identification and analysis of alternatives, in particular for the hotel, and environmental impacts; ○ description of the public benefits arising from the proposal; and ○ relationship with the proposed changes to Barangaroo Central and the Headland Park. • Consideration of any statutory provisions (see below). • A detailed assessment of the key issues specified below, including: ○ a description of the existing environment; and ○ an assessment of the potential impacts of the modifications, including cumulative impacts. • Consideration of previous reviews, including the Sussex Penn Review into Barangaroo, and Government responses (where relevant). • An amendment to the approved Statement of Commitments (where relevant). • A conclusion justifying the proposal, taking into consideration the environmental impacts of the proposal, and the suitability of the site.
Key issues	The modification application shall: 1. Relevant EPIs, Strategies, Plans and Guidelines • Address the provisions of State environmental planning policies, strategies, plans and guidelines that would apply as if those provisions applied to the carrying out of the project, including the following: ○ State Environmental Planning Policy (State & Regional Development) 2011; ○ State Environmental Planning Policy (Major Development) 2005; ○ State Environmental Planning Policy No 55 – Remediation of Land; ○ State Environmental Planning Policy (Infrastructure) 2007; ○ Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 and Foreshores and Waterways DCP; ○ NSW 2021; ○ Draft Metropolitan Plan for Sydney to 2031; ○ Draft Sydney City Sub-Regional Strategy; ○ Sydney City Centre Access Strategy 2013; and ○ Sydney's Cycling Future 2013.

2. Concept Plan and MD SEPP Modifications

- Outline in detail the proposed changes to the terms of approval of the Barangaroo Concept Plan MP06_0162 (as modified) and the MD SEPP, including heights, GFA, zoning, permissibility, development blocks, land uses, and any other relevant controls that are being sought to be amended.
- All changes to heights, GFA, blocks, zoning, and public and private open space shall be numerically quantified in table form.

3. Urban Design, Development Controls & Land Uses

- Identify the alternative siting options that were considered, particularly for the hotel.
- Prepare revised Built Form Principles and Urban Design Controls.
- Consider land use, height, density, building blocks and envelopes, setbacks, topography, streetscape, shadowing, view corridors, ground floor permeability and connectivity, façade design, streets and lanes, public open space and private open space, and road hierarchy.
- The setbacks for the hotel from Sydney Harbour must be clearly quantified and justified.

4. Streetscape and Public Domain

- Outline and justify the changes to the design and use of the streetscape and public domain.
- Detail and justify the changes to the location, design and function of the Southern Cove and its pedestrian bridges.
- Outline and justify the changes to public spaces, streets and blocks.
- Outline and justify the revised access hierarchy, including the relationship between streets, footpaths and buildings, including Hickson Road, Globe Street, and Transport Place.
- Detail the design and levels of the amended foreshore promenade.

5. Sydney Harbour

- Detail the impacts on Sydney Harbour as a result of the changes to the foreshore promenade and pier, including its interaction with Barangaroo Central.
- Consider the impacts on boating traffic and safety, and the role of Roads and Maritime Services and the Harbour Master of the Port of Sydney.

6. Visual Impact Assessment

- A visual impact assessment must be undertaken. Refer to the attached **Plans & Documents Section**.

7. Wind Impact Assessment

- Modelling of the effects of the wind/airflow environment must be undertaken.

8. Transport Management, Traffic & Car Parking and Vehicular Access

- Undertake an assessment of the future transport needs associated with Barangaroo South, including a clear understanding of the travel task for all modes at different times of the day (peak, off-peak, and other peak periods relevant to the hotel/casino) and week for the mixed land uses; and confirmation or modification (with justification) to the AM and PM peak commute mode share targets for Barangaroo as outlined in the Barangaroo Integrated Transport Plan 2012.
- Analyse the operation of existing and future transport networks (all modes) to understand the implications for Barangaroo. The analysis of the future road network operations needs to focus on intersections in the north-west quadrant of the CBD in the vicinity of Barangaroo. In particular, address the road network in the King Street Wharf area to ensure that intersections such as Erskine Street and Lime Street and Lime Street itself are modified to cater for the different traffic demands that Barangaroo South will bring to the network.
- Analyse car parking provision and how traffic generation (number of vehicles and time of access) will be managed in response to capacity limitations on the road network. The car

parking breakdown shall identify all approved car parking numbers, and all potential car parking numbers across the whole of the Barangaroo site.

- Undertake a corridor model analysis of the road network, including an analysis of traffic generation and circulation, and service vehicle arrangements as a consequence of the modification; and demonstrate the potential to accommodate additional vehicular movements (including private vehicles, buses, commercial traffic and cyclists) in the surrounding road network.
- Undertake an assessment of the public transport network and associated pedestrian linkages and demonstrate that additional people movements can be accommodated by the surrounding public transport network.
- Outline late night transport provision to support the hotel and casino.
- Outline the timing and responsibility for delivering the transport network to serve Barangaroo.
- Prepare a comprehensive Traffic Management and Accessibility Plan, including an assessment of all of the above matters and:
 - cumulative regional traffic impacts, including but not limited to, local and regional intersections and road improvements, and vehicular access options;
 - impacts from changes to Barangaroo Central and the Headland Park (MOD 9);
 - amendments to accommodate future bus service provision on Hickson Road (in consultation with Transport for NSW);
 - identify provision for taxi ranks and coach parking on site;
 - the timing and cost of infrastructure works and identification of funding;
 - package of travel demand management measures for workers, residents and visitors;
 - emergency vehicle access arrangements; and
 - proposed loading dock provisions and access arrangements to loading docks and car parks.
- Outline provisions for water-based transport.

9. Pedestrian & Cycle Access

- Outline the future cycleway network and demonstrate direct cycle connections between Barangaroo South and the strategic cycleway network as outlined in the Sydney City Centre Access Strategy.
- Outline provisions for walking and demonstrate provision for direct walking connections.

10. Land Ownership

- Detail land to be transferred/managed/owned.

11. Social impacts

- Outline the social benefits and disbenefits of the modification.

12. Economic impacts

- Outline the economic benefits and disbenefits of the modification.

13. Housing Strategy

- An amended Housing Strategy is to be provided.

14. Noise, Air and Odour Impacts

- Identify potential air quality, noise and odour impacts, and appropriate mitigation measures.

15. Drainage and Stormwater

- Outline drainage and stormwater management issues.

16. Utilities

- Outline how the modification will be satisfactorily serviced for utilities.

	17. ESD - Identify how the development will incorporate ESD principles. 18. Contamination - Demonstrate compliance with the requirements of SEPP 55. If remediation works are required, the EIS must include a Remedial Action Plan (RAP). 19. Prescribed Airspace for Sydney Airport and Sydney Observatory impacts - Identify any impacts of the proposal on the prescribed airspace for Sydney Airport. - Undertake an analysis of potential sky view loss and resultant impacts on the functioning of the Sydney Observatory telescopes and astronomical sightlines. 20. Heritage - Undertake an assessment of the likely impacts of the development as modified on surrounding heritage and archaeological items (both on and off the site) and proposed conservation and mitigation measures, including the Millers Point Conservation Special Area, Observatory Hill and Walsh Bay. 21. Staging - Outline the staging of construction for the Barangaroo South project (as modified). 22. Consultation - Undertake an appropriate and justified level of consultation in accordance with Planning & Infrastructure's <i>Major Project Community Consultation Guidelines October 2007</i>. In particular, you should consult with City of Sydney Council, EPA and Sydney Airport. - Undertake an appropriate and justified level of consultation with Transport for NSW. In particular consultation must include discussions around the timing for the provision of Globe Street and the intended opening of Wynyard Walk, and design, use and timing of Transport Place. 23. Updated Statement of Commitments - An updated Statement of Commitments shall be provided.
Deemed refusal period	40 days

Policies & Guidelines

Aspect	Policy /Guideline/Plan
Air Quality & Health	- Protection of the Environment Operations (Clean Air) Regulation 2002 - Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (OEH) - Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (OEH) - Protection of the Environment operation (Clear Air) Regulation - Environmental Health Risk Assessment Guidelines for Assessing Human Health Risks from Environmental Hazards (Department of Health and Ageing and Health Council) - Assessment and Management of Odour from Stationary Sources in NSW: Technical Framework 2006
Water	- Managing Urban Stormwater: Treatment Techniques (OEH) - Managing Urban Stormwater: Source Control (OEH) - Managing Urban Stormwater: Soils & Construction (Landcom) - Technical Guidelines: Bunding & Spill Management (OEH) - National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ) - Using the ANZECC Guideline and Water Quality Objectives in NSW (OEH) - Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (OEH)
Noise	- NSW Industrial Noise Policy (OEH) - Environmental Criteria for Road Traffic Noise (NSW EPA) - Environmental Noise Control Manual (OEH) - Development Near Rail Corridors and Busy roads – Interim Guideline 2008.
Waste	- Waste Avoidance and Resource Recovery Strategy (Resource NSW) - Waste Classification Guidelines 2008 (OEH)
Transport	- Guide to Traffic Generating Developments (RMS) - Ausroads Guide to Road Design - Sydney City Centre Access Strategy (2013) - NSW Long Term Master Plan (2012) - Barangaroo Integrated Transport Plan (2012) - Ausroads Guide to Traffic Management – Part 12 – Traffic Impacts of Development
Visual	See below
Contamination	The RAP must be prepared in accordance with Managing Land Contamination, Planning Guidelines, SEPP 55 – Remediation of Land 1998 and Guidelines produced or approved under section 105 of the <i>Contaminated Land Management Act 1997</i>.

Plans & Documents

Plans and Documents

The following plans and relevant documentation shall be submitted;

1. An **existing site survey plan** drawn at an appropriate scale illustrating:
 - the location of the land, boundary measurements, area (sqm) 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 and private open space; and
 - 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; and
 - 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;
 - detailed plans, sections and elevations of the concrete batching plant;
 - 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. **Landscape plan** illustrating treatment of open space areas on the site.
5. **Shadow diagrams** showing solar access to the site and surrounding areas at summer solstice (Dec 21), winter solstice (June 21) and the equinox (March 21 and September 21) at 9.00 am, 12.00 midday and 3.00 pm.
6. **3D modelling** and a physical model of the proposed modifications shall be prepared in accordance with City of Sydney's requirements.
7. **Shadow diagrams** showing solar access to the site and surrounding areas at summer solstice (Dec 21), winter solstice (June 21) and the equinox (March 21 and September 21) at 9.00 am, 12.00 midday and 3.00 pm.
8. **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 Hickson Road, Kent Street, Shelley Street, Lime Street, Gas Lane, High Street, Sydney Observatory, Sydney Observatory Park, Clyne Reserve, Munn Reserve, Sydney Harbour Bridge, Pyrmont Bridge, Ballart Park Darling Island, Jones Bay Wharf Pyrmont, East Balmain, Darling Harbour, Blues Point, Millers

	Point, Sydney Opera House, Cremorne Point, Watsons Bay and the Gladesville Bridge. • Categories of views (e.g. from the water, 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. Visual material • Reference to be made to site analysis. • Provide key plan indicating where viewpoints are located and narrative explaining why these have been selected. • The modified and approved built form should be illustrated in the context of the visual catchment to enable assessment of the visual impact. • 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. • Vertical exaggeration should provide an accurate rather than 'flattened' impression of buildings in the context of the visual catchment. • 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. • Assessment must benchmark against the existing situation and currently approved plans. • Photomontages to be provided for key viewpoints from all directions, and from several positions within the visual catchment. • As above, support visual evidence such as cross sections to be drawn to realistic scales and shown in context. • A comparison of 'before', 'approved' 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, as well as a comparison analysis with the approved Concept Plan.
Documents to be submitted	• 1 hard copy and 1 electronic copy of all the documents and plans for the Test of Adequacy; • 14 hard copies of the documents (once the application has been determined adequate); • 14 hard copies of the plans at A3 and 2 hard copies of the plans at A0 or A1 (whichever is to scale); • 4 copies of photomontage boards at A0 in size illustrating key visual elements of the proposal; and • 14 copies of all the documentation and plans on CD-ROM (PDF format), not exceeding 5Mb in size.