

Issue	Key points raised	Lend Lease Response
Public Transport		
General	The development will not be adequately serviced by public transport due to a lack of upgrades to local bus and rail networks.	The NSW Government and the City of Sydney Council are committed to delivering a City Centre that is integrated and connected through effective public transport, pedestrian, cycling and road links.
		Growth and development in the central part of Sydney is supported by a comprehensive planning framework, whereby land use and transport planning is integrated. This framework comprises:
		NSW State Plan - updated in 2010 and supported by detailed delivery plans, the State Plan includes targets to achieve better transport and liveable cities by 2016.
		Metropolitan Strategy and supporting draft Sydney sub-regional strategy.
		Metropolitan Transport Plan – released in February 2010, provides a 25 year vision for transport and land use planning for Sydney and includes a 10 year fully funded package of transport infrastructure to support it. Projects supporting the City Centre include:
		 An expanded light rail service for the inner city; New and enhanced railway lines into the City Centre, enabling increased services from Western Sydney and additional capacity at key city stations; Better bus connections, including the delivery of 1,000 new buses, supporting public transport information and priority measures and depot facilities; Sydney Metropolitan Strategic Cycle Network; Improved ferry services including the delivery of six new ferry vessels at a total cost of \$709 million; Enhanced road and freight network; Improved customer service initiatives including improved passenger

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information, electronic ticketing, station enhancements and additional rolling stock; and

 Long term planning to support future capacity requirements, including corridor protection through the CBD and across the harbour.

Mode strategies, commencing with the release of the NSW BikePlan in May 2010. Mode strategies for rail, bus, ferry and freight are proposed to be released by TNSW for public consultation in late 2010

City Centre Access Plan, which will be conducted on an 'all modes-all trips' basis across the short (to 2016), medium (to 2021) and long (to 2036) term taking into account current and future projects and growth resulting from development such as Barangaroo. The Plan will cover pedestrians, cyclists, public transport (including rail, light rail, buses and ferries) and traffic (that is, all road going modes, such as cars, taxis, trucks and couriers) at all times of day including weekends. The Access Plan is due for competition in early 2011.

Memorandum of Understanding with the City of Sydney Council, which includes a package of short term bus enhancements in the Wynyard Precinct

Wynyard Precinct Master Plan, being undertaken by TNSW and informed by RailCorp's Wynyard Station Plan

Sydney CBD Coach Strategy, prepared by TNSW and released in October 2009.

Planning for Barangaroo is being undertaken within the framework of the Barangaroo TMAP whereby mode split to private vehicles is nominated as 4%. All concept and individual project applications are being over seen by a Transport Working Group comprising Barangaroo Delivery Authority, City of Sydney, Transport NSW and Lend Lease.

This Transport Working Group will oversee the development of a new Barangaroo TMAP in mid 2011 based on the outcomes of the various transport studies currently being undertaken as outlined above.

In light of the preceding discussion, it is considered that this issue has been addressed.



	Future developments should include transport plans to demonstrate sufficient public transport is available to support the development.	Future project applications will address consistency with the Transport Management and Access Plan (Supplementary) prepared by Arup and dated July 2010, where relevant.
	An integrated Metro rail system for Sydney is required.	Noted, however this is outside the scope of the Concept Plan Amendment, and is a matter for Government. Notwithstanding, the proposed amendment to the Concept Plan does not compromise the integrity of the Metro rail corridor nor will it affect the operations of any future Metro project. Provision has been made to accommodate the tunnels of any future Metro scheme running under the southern end of the Barangaroo South site.
Rail	Any upgrades to public transport required should not be funded by the government	Growth and development in Central Sydney is supported by a comprehensive planning framework, whereby land use and transport planning is integrated. As detailed above, this framework comprises: NSW State Plan Metropolitan Strategy Metropolitan Transport Plan Mode strategies City Centre Access Plan Memorandum of Understanding with the City of Sydney Council Wynyard Precinct Master Plan Sydney CBD Coach Strategy
	Wynyard Station does not have adequate passenger capacity to service Barangaroo.	Transport NSW is preparing the Wynyard Precinct Master Plan which is informed by RailCorp's Wynyard Station Plan. The Barangaroo project team will work closely with the various Government agencies to co-ordinate and plan the various passenger links with Barangaroo. Work has already commenced on planning the Barangaroo Pedestrian Link that provides increased pedestrian capacity from Wynyard to Barangaroo.



	Disused platforms at Wynyard to be brought into use, connecting into Circular Quay Station.	This is a matter for Government and is outside the scope of the Concept Plan Amendment. However various planning strategies as noted above are being developed to address public transport needs in central Sydney.
Light Rail	The Light Rail network should expanded to service the site.	NSW Transport has commissioned a detailed Transport Study to consider alternative light rail routes / services within the CBD which will provide information in relation to services pertinent to Barangaroo.
	The proposed light rail is an insufficient public transport solution.	This is a matter for Government and is outside the scope of the Concept Plan Amendment. It should be noted that the development at Barangaroo will not be reliant upon any light rail system which may be provided in the future.
Ferry	The ferry terminal should be designed as an integrated transport hub which facilitates mode interchange.	Noted, however the detailed design and provision of any future ferry terminal at Barangaroo is a matter for Government. Its interrelationship with other modes of public transport is also a matter for Government however it is envisaged within the master plan proposals to have direct connections to any future Metro rail, heavy rail, bus and light rail (if delivered along Hickson Road). Lend Lease has committed to delivering the land side works associated with the Ferry terminal as part of its development obligations under the PDA. On this basis it is considered that this issue has been addressed.
	The construction of a ferry terminal should be made a condition of approval.	Construction of the future ferry wharves and associated infrastructure is proposed to be undertaken by others and does not form part of the proposed Concept Plan amendment. The Concept Plan facilitates the provision of ferry wharves and land side structures, which will be subject of further study in consultation with the Transport NSW and Sydney Ferries. Furthermore, Lend Lease has committed to delivering the land side works associated with the Ferry terminal as part of its development obligations under



		the PDA. On this basis it is considered that this issue has been addressed.
	Additional ferry services should be provided to serve Bays Precinct, Pyrmont, Sydney Fish Markets and the cruise passenger terminal at White Bay.	Whilst the Concept Plan facilitates the provision of ferry wharves and land side structures, these will be subject of further study in consultation with the Transport NSW and Sydney Ferries. Any extension of the services within the inner harbour, implementation (including level of service) is a matter for Government and is outside the scope of the proposed Concept Plan amendment. On this basis, it is considered that this issue has been addressed.
Traffic		
	The development (and increase in GFA) will result in increased traffic congestion in the surrounding area.	 The Concept Plan Modification employs a number of measures to minimise site traffic generation in peak periods, as follows: retains the restrictive parking supply policy (being almost half that of the City of Sydney) for the commercial components of the development established in the approved Concept Plan (as modified); reduced traffic generation as a result of proposed change in land use mix - traffic modelling results indicate the proposed GFA and trip rates is comparable to previously modelled impacts. In fact, Barangaroo South as proposed under the Concept Plan Modification generates slightly lower traffic volumes than the approved Concept Plan (as modified); the introduction of Travel Plans to reduce the need to travel and promotion of sustainable means of transport. Green Travel Plans for employees and residents for both intra and inter-site travel will be developed. These mitigation measures, together with future development occurring within the parameters established by the TMAP address this issue.
	The relocation of the passenger terminal	This is not a matter for the Concept Plan Amendment. The construction of the



will result in increased traffic between Balmain and Sydney.	cruise passenger terminal to White Bay is the subject of a separate project application submitted to the Department of Planning / Minister for Planning for consideration.
The streets surrounding the subject site may not be able to accommodate traffic generated by the development or demands for on-street parking.	Local traffic modelling indicates that there is no significant change expected to the surrounding street network from the approved Concept Plan (as modified). The lower traffic generation rates arising from the proposed change in the land use mix, means that the performance of intersections and streets in the vicinity of the development at Barangaroo South will not be adversely affected. The mitigation measures which have been incorporated in the Concept Plan modification (restrictive parking policy, the development of travel plans etc), together with future development occurring within the parameters established by the TMAP will address this issue.
The amendments will further exacerbate the current bottlenecks that exist on Kent Street and Hickson Road.	Traffic analysis has been undertaken using the same transport principles and assumptions that were used and endorsed for the TMAP as prepared by the NSW Government for Barangaroo in September 2008 including the rates for calculating population, parking and trip generation as well as journey to work mode of only 4% trips by car. Although there have been changes in GFA that have resulted in slightly more car parking spaces, this has not contributed to any additional peak hour traffic generation in the vicinity of the site when compared to the current approved concept plan (MOD 3). This is outlined in the TMAP submitted with the current application. Local traffic modelling undertaken as part of the current application indicates that there is no significant change expected to the surrounding street network. Given the lower traffic generation rates (restrictive parking policy etc), traffic at localised intersections as a result of the development of Barangaroo South will not have a significant detrimental impact. On this basis it is considered that this matter has been addressed.



The proposed number of car parking spaces should be reduced	In order to minimise site traffic generation in peak periods the parking rates for future uses and development set out in the Concept Plan (as approved) are much stricter for commercial car parking than those applied by the City of Sydney Council. The parking rates for residential development at Barangaroo reflect the Sydney City Council's existing parking rates under Sydney LEP 2005.
Inadequate roads and footpaths are being provided to service the development	The proposed widths of streets and laneways have been designed to accommodate pedestrian flows in peak times, while ensuring at other times there is sufficient activity to enliven the public domain.
	Given the generous provision of space on the waterfront promenade and the desire for this to be the primary focus within the public domain, it is considered important to retain a degree of intimacy within the street and laneway network. This is particularly the case for those laneways that are dedicated to solely for pedestrian use where any greater dimensions would compromise the scale and vitality of these laneways.
	There are many precedents internationally (e.g. Venice) and in Sydney (e.g. Ash Place) and other Australian cities (e.g. Melbourne lanes) of vital and amenable pedestrian lanes of narrow dimensions, and these are important in informing the resolution of the Barangaroo South public domain. There is an opportunity to establish a vital and distinctive precinct at Barangaroo South that provides a network of streets and laneways that complement the city's public domain framework, yet provide a series of unique experiences with each street or lane with its own character adjacent to the harbours edge.
	Vehicular access within the Barangaroo South site is available via Margaret Street West, Globe Street and Napoleon Street. Healy Street defines the northern edge of Barangaroo South and provides vehicular access and a street address to future residential buildings within Block 4C.
	A key component of the proposed modification to the Concept Plan is the strong focus on pedestrian only access and connections. Pedestrian access is also



	available in Margaret, Globe and Napoleon Streets, together with a series of pedestrian only environments, including:
	27m wide Waterfront Promenade connecting with the King Street Wharf precinct in the south;
	City Walk (12m wide) providing a connection to / from Wynyard;
	Shelley Lane (an urban design report submitted with this PPR increases the width of Shelley Lane from 4m to 6m) provides a secondary north-south connection through the site;
	 two east-west connections (8m) between Hickson Road and the Waterfront (one between commercial buildings C4 and C5 and the other to the north of C3) both of which will be public streets; and
	 Bull Street frames the Southern Cove's northern foreshore and will be accessible to both pedestrians and cyclists.
	The street layout provides pedestrian and vehicle circulation routes within the urban precinct and encourages future connections into existing streets at Walsh Bay, Millers Point, King Street Wharf, and the western grid of the city.
	The street footpaths are comparable to those provided elsewhere in the CBD and provide efficient pedestrian movement within the urban precinct. The new street alignments have been positioned in response to the re-oriented commercial towers and the introduction of the low rise residential uses in Development Block X, however they also provide water vistas, and bring the surrounding network of city streets and the Harbour together.
	It is therefore considered that this issue has been addressed.
Proposed changes to street network will concentrate traffic onto Shelley Street, resulting in reduced pedestrian amenity.	The Concept Plan amendment is predicated on using the same trip generation rates that were used to assess the approved Concept Plan (as modified), but reflecting the land use mix now proposed under the current Concept Plan amendment ARUP traffic consultants estimate that the changes in the quantum and type of floor space will generate slightly lower traffic volumes at peak times to that previously anticipated. As a consequence, the traffic outcome for the





Hotel		
		Having regard to the comments above, it is considered that the issue of accessibility has been addressed satisfactorily by the proposed Concept Plan modification.
		The number of east-west connections exceeds that proposed by the approved Concept Plan but prioritises the number of pedestrian links (as opposed to vehicle links) as some 96% of people visiting the site will arrive by modes other than car.
		The number of east-west vehicle connections across the site is considered to be adequate and is supplemented by strong pedestrian links.
		Margaret Street West and Globe Street / Napoleon Street will provide service vehicle access and access to the limited amount of basement car parking. Healy Street (at the northern end of Barangaroo South) will provide vehicular access to future residential buildings within Block 4C.
	Removal of two east-west vehicular links between Globe Street and Hickson Road will reduce the accessibility of the site.	The Concept Plan modification is predicated on achieving high levels of permeability and in so doing, providing connections to the CBD. Four vehicular access streets (Healy, Bull, Napoleon and Margaret Street West) were identified in the approved Concept Plan (as modified).
		Pedestrian amenity in Shelley Street will remain unchanged from the conditions contemplated in the approved Concept Plan (as modified). It should also be noted that the development is occurring within the context of a highly urbanised CBD environment and as a consequence, the pedestrian environment on all the streets in and around Barangaroo can reasonably be expected to be consistent with prevailing conditions elsewhere in the city. On this basis, it is considered that this matter has been addressed.
		Transport Management and Access Plan (Supplementary) (TMAP) report is unchanged when compared to the original TMAP prepared in 2008.





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No justification has been provided for the location of the hotel over Sydney Harbour.	The landmark hotel and pier is a core element of the Concept Plan Amendment for Barangaroo South. It helps define and frame the waterfront square, which is the key cultural and public domain heart of this western edge of the city. The landmark hotel provides economic and activation benefits that will help attract retail and leisure operators to the area and will retain vibrancy beyond the working day, into the evenings and at weekends.
	The existing Barangaroo site is almost entirely man made and consists of reclaimed land and infill between the old piers and wharfs that made up this former working port. The proposed new pier at Barangaroo South reflects this industrial heritage and reinforces the principle of full public access to the waterfront with a boardwalk around the hotel.
	It is considered that the landmark hotel and pier is justified on urban design grounds. Furthermore, it has been examined in the context of the planning principles contained in Sydney Region Environmental Plan (Sydney Harbour Foreshores) 2005 and has been found to be generally consistent. It is therefore considered that adequate justification for the location of the hotel has been provided and that this matter has been addressed.
The hotel significantly contributes to an overdevelopment of the site.	It should be noted that the hotel component is contemplated in the approved Concept Plan (as modified). The pier projects 85m from the current harbour edge and occupies approximately 4,000sqm of harbour area. This is offset by the creation of the Northern and Southern Coves, which together will give back 3.5 hectares of water area to the Harbour (in excess of 7 times the area covered by the pier). The net increase of water are as part of the proposed Concept Plan amendment is a significant public benefit and does not suggest that this element of the scheme contributes to over development of the site, particularly since the resultant FSR for Barangaroo South proposed under the Concept Plan amendment equating to only 10.8:1, compared with the maximum permissible in the City of Sydney of up to 14:1. In view of the above, it is considered that the hotel does not significantly alter the



	scope or scale of development at Barangaroo. Hence this matter has been addressed.
The building height of the hotel is excessive.	The landmark hotel will exemplify design excellence and is planned to stand out from other city buildings as an architecturally stunning, iconic structure that makes a bold statement about Barangaroo and its sustainability credentials and that sends a message to the world that Sydney and Australia are innovative and exciting places to visit and do business.
The hotel sets an undesirable precedent of allowing private development over Sydney Harbour and is detrimental to the character of Sydney Harbour.	There are existing precedents of private development over the harbour - two of Sydney's reclaimed piers contain hotels – at Pier One in Walsh Bay and the Finger Wharf at Woolloomooloo Bay. Whilst privately operated, a hotel is a quasi-public place, with restaurants, bars, function rooms and other facilities designed to attract visitors throughout the day, even more so than recognised public buildings such as theatres, concert halls or museums, which are often only open to ticketholders and at fixed times. It is noted that at Woolloomooloo, public access is limited to the southern part of the pier that contains the hotel and restaurants and it does not extend to any part of the pier to the north that contains residential apartments. In the case of the proposed pier / hotel at Barangaroo South, it is intended that the pier will be publicly accessible for its entire length. The proposed hotel clearly does not set a precedent and therefore this matter has been addressed.
The hotel will have unacceptable visual impacts, particularly from Pyrmont Bridge and Cockle Bay, the new Headland Park and to the harbour and Goat Island	The view impact assessment has been undertaken including a detailed assessment of the Visual impacts of the Landmark Building. The Landmark building is a key response to the Concept Plan's requirements to "celebrate the water theme" and is located to assist in a sense of arrival and to locate the



	approach to the destination. The building's location will assist in creating a strong edge in this location for the new grid to the CBD that completes the CBD framework There will be key views past the building as suitable separation will be achieved. There will be ample sky and view corridor space to allow visual access to other directional and placemarkers in either direction along the foreshore and beyond. The visual impact associated with the Concept Plan amendment, including the proposed landmark hotel building has been addressed in both the visual impact assessment that accompanies the application and the PPR.
Public access to the hotel as an iconic building should be ensured through the provision of cultural facilities within the building.	The built form controls proposed as part of the Concept Plan amendment include a provision for cultural facilities to be provided at the base of the hotel as well as at the top of the hotel. Hence this matter has been addressed.
The hotel creates navigational hazard.	A Navigation Study has been prepared as part of the EA documentation in accordance with the Director General's Requirements. The report concludes that the proposed Hotel and the Public Pier contemplated under the Concept Plan Amendment will not give rise to adverse cumulative impacts on boating activities, including ferries, (both existing and proposed future services), within the locality of Darling Harbour. Furthermore, consultation with NSW Maritime and the Harbour Master of the Port of Sydney indicates that the addition of the proposed Hotel and Public Pier at the Barangaroo South site will not adversely impact on navigation and the movement of vessels in Darling Harbour. Having regard to the above, this matter has been addressed.
The plan for the hotel conflicts with the	The planning principles for land within the Foreshores and Waterways Area are as

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planning principles contained within Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

follows:

 (a) development should protect, maintain and enhance the natural assets and unique environmental qualities of Sydney Harbour and its islands and foreshores.

The existing foreshore at Barangaroo is entirely man-made and reflects the historic evolution of the working harbour.

Following the international design competition (the winning entry of which largely retained the artificial shoreline), the State government embarked on a detailed planning study and further design development which resulted in the approved Concept Plan (as modified) which reintroduces a more naturalistic shoreline (based on the shoreline that existed in 1836) at the northern end of the site, in the creation of a Headland Park.

The Headland Park will mirror Balls Head, Goat Island and eventually Ballast Point, to complete the archipelago of green headlands characteristic of Sydney Harbour. The creation of the Headland Park continues the NSW Government's commitment to transforming western harbour headlands into open space for the people of NSW and is consistent with the planning principles in the SREP.

Barangaroo South is an urban precinct, featuring a public waterfront, shops, waterfront restaurants, community and cultural facilities, an international hotel, 500 apartments, including key worker housing, and a financial headquarters for top Australian and international corporations.

The proposed hotel on the new public pier is consistent with the historic treatment of the highly urbanised edges of the Sydney Harbour Foreshore, eg. Bennelong Point / Sydney Opera House; and the Finger Wharfs at Pyrmont, Walsh Bay and Woolloomooloo. Furthermore it does not compromise the natural assets and unique environmental qualities of Sydney Harbour and on this basis, it is considered to be consistent with this planning principle.

(b) public access to and along the foreshore should be increased, maintained and improved, while minimising its impact on watercourses, wetlands, riparian lands and remnant vegetation,

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The proposed pier will be accessible to the general public and will create an entirely new vantage point from which to enjoy the Harbour, supported by a range of facilities for recreation and entertainment.

The Barangaroo South precinct is highly permeable, with pedestrian and vehicular connections providing direct access to / from the existing CBD and the newly accessible section of harbour foreshore.

The development at Barangaroo South involves the remediation of contaminated land and will incorporate Water Sensitive Urban Design initiatives. Together, these will improve water quality within the Harbour.

The Sydney Harbour Master has been consulted in relation to the navigational aspects of the proposed pier and has advised that it will not adversely impact on navigation and the movement of vessels in Darling Harbour

(c) access to and from the waterways should be increased, maintained and improved for public recreational purposes (such as swimming, fishing and boating), while minimising its impact on watercourses, wetlands, riparian lands and remnant vegetation,

As indicated above, the northern part of Barangaroo is being redeveloped in a more naturalistic manner, consistent with its future recreational use.

Barangaroo South is a highly urbanised precinct which has been designed to improve public access to the waterways through the creation of the enlarged Southern Cove and its associated opportunities for interface with the water; the public pier; provision having been made for future ferry wharfs and the Waterfront Promenade.

The proposed Concept Plan amendment is consistent with this principle on the basis that it clearly increases access to / from the waterway and by virtue of the remediation of the site and the implementation of Water Sensitive Urban Design features, will ultimately result in improvements to the water quality of the harbour waters.

(d) development along the foreshore and waterways should maintain, protect and

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enhance the unique visual qualities of Sydney Harbour and its islands and foreshores.

The Harbour foreshores in and around Darling Harbour and Pyrmont have been significantly altered from their natural state which reflects the highly urbanised context. The treatment proposed at Barangaroo South, including the pier is therefore entirely consistent with the development in this part of the Harbour.

When viewed from vantage points on the eastern side of the Harbour Bridge the development at Barangaroo South will sit behind existing CBD buildings. In some cases the proposal will fill gaps between buildings but will not result in any major changes to the CBD skyline.

Similarly, when viewed from the south-west, west and north-west, the proposal will read as a group of buildings providing a new western face to the CBD and will be seen within the context of the backdrop of the existing CBD skyline.

The development at Barangaroo South will not compromise the visual quality of Sydney Harbour and will enhance and revitalise this disused industrial area for public access and enjoyment.

(e) adequate provision should be made for the retention of foreshore land to meet existing and future demand for working harbour uses,

In 2003, the long term stevedoring operator of the site announced that it would not renew its lease and that after 2006 it would relocate its operations to Port Botany and Port Kembla. The State government subsequently made the decision to make the site available for redevelopment. The approved Concept Plan (as modified) makes provision for future ferry facilities at Barangaroo South and enables the temporary operation of the Cruise Passenger Terminal until 2012.

(f) public access along foreshore land should be provided on land used for industrial or commercial maritime purposes where such access does not interfere with the use of the land for those purposes,

The site is no longer required for industrial or commercial maritime uses.

The redevelopment at Barangaroo will return in the order of 3.5ha of water area to



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		the Harbour, including two new coves. It completes the 14 km Harbour foreshore walk from Woolloomooloo to the ANZAC Bridge and for the first time in more than a century and restores public access this part of the foreshore.
		(g) the use of foreshore land adjacent to land used for industrial or commercial maritime purposes should be compatible with those purposes,
		This principle is no longer relevant as the site is not used for industrial or commercial maritime purposes, with the exception of the temporary Cruise Passenger Terminal, which can be accommodated until 2012.
		(h) water-based public transport (such as ferries) should be encouraged to link with land-based public transport (such as buses and trains) at appropriate public spaces along the waterfront,
		The Concept Plan amendment does not preclude the provision of ferry facilities. Pedestrian connections to / from the waterfront (including any ferry terminal) are provided which will afford access to a range of public transport options including bus, heavy rail, light rail and potentially a Metro.
		(i) the provision and use of public boating facilities along the waterfront should be encouraged.
		The proposed Concept Plan amendment facilitates a new ferry terminal, however this is not part of this application.
		In light of the preceding discussion, the proposed hotel and public pier is considered to be consistent with the principles enshrined in Sydney Regional Environmental Plan (Sydney Harbour) 2005 and accordingly, this matter has been addressed.
	The hotel is a fundamental change to the Concept Plan should not be considered an amendment as it is a new concept.	It should be noted that the approved Concept Plan (as modified) contemplates a hotel in the range of permitted land uses at the site.
	amonament do telo d flow donoopt.	The Concept Plan Amendment has been prepared strictly in accordance with the provisions of the Environmental Planning and Assessment Act 1979. Section 75W sets out the circumstances under which the Minister for Planning can consider an





		amendment to an approval. Subclause (7) specifically provides that: This section does not limit the circumstances in which the Minister may modify a determination made by the Minister under Division 3 in connection with the approval of a concept plan. Furthermore, the Department of Planning has confirmed that the Concept Plan Amendment is considered to be an amendment under 75W of the Environmental Planning and Assessment Act. Accordingly, this issue has been addressed.
Relocation of passenger term	minal	
	The CPT should not be relocated as it adds to the vibrancy of King Street Wharf area, will have a negative impact on the tourist industry and result in a lack of berths for ships close to the CBD.	This is not a matter for the Concept Plan Amendment. The proposed relocation of the cruise passenger terminal to White Bay is a decision taken by Government in consultation with the cruise passenger industry.
	The modification should not be determined until the relocation of the Cruise Ship Terminal is resolved.	As above.
Urban Design		
	There should be a clear public domain framework of streets, squares and parks and permeability.	A Public Domain Plan for Barangaroo South was submitted with the Concept Plan Amendment. Further to this an Urban Design Report – Streets and Lanes within Blocks 2 and 3 accompanies the PPR.
		At grade pedestrian access to and through the site will be available via Hickson Road; Globe Street; Shelley Lane; Margaret Street West; Napoleon Street; Bull Street; and Healy Street. In addition to these, a series of secondary and tertiary



	laneways are proposed to facilitate pedestrian access both north-south and east-west across Barangaroo South. The Concept Plan Modification retains the concept of squares and civic places for concentrated activity, events and community gathering. They will be of various sizes and will be located along the waterfront and interspersed amongst buildings and streets. In addition, Johnson Pilton Walker in association with Peter Walker and Partners
	Landscape Architecture have been engaged by the Barangaroo Delivery Authority to prepare a detailed Public Domain Plan for the overall Barangaroo site. Having regard to the preceding discussion, this matter has been addressed.
The replacement of the laneways of the original Concept Plan with the retail mall 'gallerias' is unacceptable.	As stated above Lend Lease has undertaken more detailed analysis of the ground plane and the relationship of the future built form to the public domain. As a consequence, the gallerias have been deleted. Hence this matter has been addressed.
The urban design analysis is inadequate and should extend to the full catchment of the precinct, which includes the western portion of the existing CBD.	A comprehensive site analysis is included in the Urban Design Statement (pp. 6-9) which accompanies the application and examines the site in the context of the CBD. Accordingly, this matter has been addressed.
No 'through streets' are provided which is unacceptable for such a large inner city precinct.	This statement is incorrect. Whilst Globe Street does not traverse the entire site (becoming pedestrian only at Globe Square), it turns eastward into the Napoleon Street extension thereby providing a through-site vehicular and pedestrian connection.
	One of the underlying principles adopted for the Concept Plan Amendment is to enrich the streetscape through permeability – providing a series of streets and laneways with clear connections east to west, from the waterside to the rest of the CBD, and from south to north via the Waterfront Promenade and Hickson Road



	and Shelley Lane.
The supporting urban design report does not provide a coherent urban design justification.	Cities need to adapt to changes in the global economic order to maintain their national and regional relevance. This major renewal project provides the opportunity for Sydney to recast or reinforce its unique attributes and to market these to the world.
	The proximity of the site to public transport, its adjacency to the financial centre of the State and its potential to provide a new generation of workplace and cultural facilities means that it is ideal as a new commercial precinct for Sydney.
	The prominence of the site and its location on the foreshore adds to the importance of renewing this site as the contemporary "gateway" to the city. This is also in line with the site's history of change and adaptation to support commerce and trade, dating back to early European settlement.
	The renewed site can offer a lively location which maximises the accessibility, amenity and activities equivalent to that of any major global city. It can accommodate a critical mass of resident workers to create a new and authentic working precinct of the city in addition to a new tourist destination.
	A Supplementary Urban Design Statement has been prepared as part of the PPR documentation and accordingly it is considered that this matter has been addressed.
Globe Street has been shortened, the alignment changed and lacks continuity	Globe Street has been reconfigured to accommodate the requirement (which was a condition of the approved Concept Plan (as modified)) to enlarge the Southern Cove. However, it still fulfils its function of providing the primary north-south link within the site – pedestrians can continue in a northerly direction around or over the Southern Cove and vehicles are redirected to Hickson Road via the Napoleon Street extension. The strong visual north-south connection is retained. This matter has therefore been addressed.

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The design provides poor connections to the city and there is a loss of the east-west, north-south pattern of surrounding streets.

The Concept Plan Amendment has been prepared in cognisance of the need to provide safe access for pedestrians and vehicles and to minimise potential conflicts.

The axis to the heart of the precinct is the main pedestrian artery, City Walk, which extends from Wynyard and the central CBD to Globe Square and the pier. It crosses over Hickson Road, via a future bridge, before descending to ground level at Shelley Lane.

City Walk is the principal east-west connector and intersects with the three north south connectors along its length: the transport node at Hickson Road; the less trafficked and cyclist-safe Globe Street; and the pedestrianised Shelley Lane. City Walk terminates at the hotel and pier and the entrance to Globe Square, the prime new north-facing waterside space.

City Walk will bring people from the City and Wynyard transport nodes over Hickson Road via a future pedestrian bridge and down to the ground level.

Current conditions included in the approved Concept Plan (as modified) which restrict overhead pedestrian bridges are proposed to be amended to facilitate the provision of the City Walk and the future pedestrian bridge in the vicinity of 189 Kent Street.

Globe Street provides the major north-south vehicle route. Low level buildings have been introduced on its western side, creating a safe pedestrian foreshore promenade along the western waterfront, similar to the arrangement at King Street Wharf. The Concept Plan Amendment proposes that Globe Street does not dissect the entire site, but becomes pedestrian only at Globe Square, with vehicular traffic turning eastwards along the Napoleon Street extension and back towards Hickson Road and the city.

The extensions to the existing Margaret and Napoleon Streets provide the access to the site-wide basement servicing levels and the basement car park.

In light of the points detailed above, it is considered that this matter has been addressed.



There is a lack of variety in building design, urban grain, texture and articulation.	It should be noted that the individual buildings are yet to be design and will be the subject of future Project Applications. The Urban Design Statement includes a set of controls which are designed to allow for innovation and flexibility to assist in achieving an improved outcome, but are also viewed as minimum requirements to ensure that the primary urban design objectives and design excellence are achieved. In addition, the final designs for each development block will be subject to an approved "Design Excellence Strategy", which has been submitted for approval. On this basis it is considered that this matter has been addressed.
High rise buildings should be set back from the water's edge.	The tower elements of the scheme observe minimum setbacks in excess of 70 metres from the water's edge, with a low-rise building adjacent to the water to 'step down' towards the water. This arrangement addressed the matter raised in this submission.
The separation of functions and flows of both people and service vehicles needs greater consideration	The Concept Plan Amendment has been prepared in cognisance of the need to provide safe access for pedestrians and vehicles and to minimise potential conflicts. The axis to the heart of the precinct is the main pedestrian artery, City Walk, which extends from Wynyard and the central CBD to Globe Square and the pier. It crosses over Hickson Road, via a future bridge, before descending to ground level at Shelley Lane. City Walk is the principal east-west connector and intersects with the three main north south connectors along its length: the transport node at Hickson Road; the less trafficked and cyclist-safe Globe Street; and the pedestrianised Shelley Lane. City Walk terminates at the hotel and pier and the entrance to Globe Square, the prime new north-facing waterside space. Globe Street provides the major north-south vehicle route. Low level buildings





		have been introduced on its western side, creating a safe pedestrian foreshore promenade along the western waterfront, similar to the arrangement at King Street Wharf. The Concept Plan Amendment proposes that Globe Street does not dissect the entire site, but becomes pedestrian only at Globe Square, with vehicular traffic turning eastwards along the Napoleon Street extension and back towards Hickson Road and the city.
		At ground level, the landmark hotel building arrival will be limited to a vehicular drop-off and pick-up for visitors. This facility will not be utilised for coach drop off, taxi layover or car parking. All servicing associated with the landmark building is proposed by vehicle access through the basement, where all movements related to deliveries, garbage collection, laundry collection etc will occur.
		The extensions to the existing Margaret and Napoleon Streets provide the access to the site-wide basement servicing levels and the basement car park.
		The information detailed above clearly demonstrates the functions and flows of pedestrians and vehicles have been considered in the proposed Concept Plan modification, thereby addressing this matter raised in the submissions.
Overall Density		
	The increased bulk and scale of the buildings is out of character with surrounding development.	The proposed Concept Plan modification is consistent with the approved Concept Plan (as modified) in that it concentrates the majority of development in the southern section of the site. This arrangement provides an appropriate transition between the urban form of the CBD and the significant area of new public domain (Headland Park) to the north.
		In order for the benefits of the redevelopment of Barangaroo to be fully realised, it is essential that Barangaroo South forms an integrated part of the existing CBD rather than a stand alone development. This requires the new buildings to be connected to the rest of the city, which can be achieved through clear pedestrian and vehicular links. However the buildings at Barangaroo South provide an



	opportunity to create a new but complementary identity for the western edge of the CBD. The buildings can offer design and dimensions that will not only attract major organisations and support the growth of the city, but will also create new features which contribute to the visual interest of the skyline.
	The design intent is to build fewer, but larger commercial towers at Barangaroo South that respond to the site and its location adjacent to the CBD. The towers have an east to west orientation and are placed in a fan arrangement to provide a better outcome for solar penetration, view corridors and shading. All proposed towers within Barangaroo South remain within the established heights of the core buildings within the CBD.
	The Concept Plan modification has satisfactorily addressed the matter of bulk and scale within Barangaroo's CBD context.
The proposal is an overdevelopment of the site with excessive GFA.	The allowable floor space ratio (FSR) for Sydney CBD ranges from 12.5:1 for commercial uses and up to 14.0:1 for residential uses. It should be noted that the Concept Plan Amendment provides for an FSR of 10.8:1 for Barangaroo South which is well below both these existing controls, which addresses this matter.
Lower scale development should occur around Sydney Harbour foreshores.	As indicated above, the proposed Concept Plan Amendment is consistent with the approved Concept Plan (as modified) in that it concentrates the majority of development in the southern section of the site. This arrangement provides an appropriate transition between the urban form of the CBD and the significant area of new public domain (Headland Park) to the north.
	Within the development area there is a clear definition of building typologies – tower forms "bookend" the north and south of Barangaroo South; a low-rise ribbon of predominantly residential buildings face the Harbour and low level commercial buildings addressing Hickson Road.
	The tower elements are set well back from the foreshore (in the order of 70 metres) and the lower scale ribbon of residential building along the provides an



		appropriate transition down to the water's edge. In light of the preceding discussion it is considered that this matter has been addressed.
Height of Buildings		
	Building heights are excessive.	The proposed height assists in completing the strong city framework of tall buildings, at Circular Quay and adjacent to the Botanical Gardens. Together the towers will establish a rising form from south to north and a strong edge to the open water beyond. This cluster of buildings, which are similar in height to existing tall CBD buildings, completes the City's north-western limit, provides for world class buildings exhibiting design excellence, and is a catalyst for the wider regeneration of the area in the future. It will not dominate the City skyline as Barangaroo's tallest building is only the 6th tallest building in Sydney. The heights enable the buildings to contribute to the evolving interest in Sydney's city skyline, with proposed variations in building heights and building designs adding further visual interest. Building heights are also important in delivering improved sustainability outcomes with increased density enabling efficiencies from shared infrastructure. Taller buildings also enable this density to be achieved with lower concentration of buildings at ground level, improving public realm outcomes and ensuring more equitable sun, shade and view sharing. The Concept Plan amendment and the information submitted as part of the PPR fully addresses the issue of height.
	The building heights bear no relationship to the site or local context	The proposed Concept Plan Modification is the result of further detailed site analysis which examines prevailing site conditions as well as the contextual relationship of the site to the surrounding area.



Scale/ Mass of buildings		
	The height of buildings in Blocks 3 and 4 should be reduced	Refer comments above.
	The heights of the towers contradict the predominantly staggered height of buildings from the waterfront to the city centre.	The heights of the proposed tower forms are comparable in height to many existing buildings in the CBD and are no taller than the existing CBD skyline, in fact the tallest building at Barangaroo will only be the 6 th tallest building in Sydney.
		city skyline, with proposed variations in building heights and building designs adding further visual interest. It is considered that the Concept Plan amendment and the information submitted as part of the PPR fully address the issue of height.
		In the context of its relationship to the CBD, the proposed height assists in completing the strong city framework of tall buildings, at Circular Quay and adjacent to the Botanical Gardens. Together the towers will establish a rising form from south to north and a strong edge to the open water beyond. This cluster of buildings, which are similar in height to existing tall CBD buildings, completes the City's north-western limit, provides for world class buildings exhibiting design excellence, and is a catalyst for the wider regeneration of the area in the future. It will not dominate the City skyline as Barangaroo's tallest building is only the 6th tallest building in Sydney. The heights enable the buildings to contribute to the evolving interest in Sydney's
		The tall commercial and residential towers are moderated in scale a street level by lower scale buildings (adjacent to the waterfront and along Hickson Road) and by podia. While the intention is for the tower structures to be read at ground level, the impact of the high rise elements will be mitigated at the base by a human-scaled element.



The commercial towers are too bulky and will create the appearance of a wall when viewed from the north and the south.	It appears from the submissions that the perception of the indicative building envelopes presented as part of the proposed Concept Plan amendment was that these reflected the form that any future buildings on the site would take. This has generated submissions raising concern about the lack of articulation and detailing, the length of the building walls, etc.
	The intent of the building envelopes is to illustrate the maximum extent of the block envelopes with significant scope for varying the form given that the model does not "build out" the block envelope box. Furthermore the proposed urban design controls have been prepared to limit the extent of the buildings within these envelopes.
	Accordingly there remains significant scope for the ultimate built form to be varied and thereby achieve design excellence. The use of differing facade materials and innovative lighting will also contribute to reducing apparent building mass and create variety in the site landscape.
Building widths are excessive. The footprint of the commercial buildings should be reduced.	The PPR includes amended Urban Design Controls and Built Form Principles which respond to the design intent. The PPR also includes a letter and report from Jones Lang LaSalle which clearly articulates the commercial drivers for major tenants in the CBD. Its global research indicates a trend towards new office developments in CBD locations that have typical floor plates in excess of 2,000 sqm. This trend is not only evident domestically, but also in major financial centres in Asia, Western Europe and North America.
	It is therefore critical for Sydney to respond to the trend in order to maintain its status as a global city.
	The east-west orientation of the three commercial towers at Barangaroo South aligns the more slender elevations with the City and the harbour views. These elevations are further reduced in width by the use of corner redents, which introduce narrower "prows" on each facade and give the perception of reduced bulk. The use of architectural components and elements such as prows and corner redents will also ensure the integration of the buildings into the western city



	skyline. In addition, the placement of the three buildings in a fan arrangement optimises solar access and view-sharing both from within and between the buildings. This effect has been further improved by the repositioning of the external structures on the middle tower to its north elevation, creating more equal view sharing and solar penetration between each of these towers.
	Other design modifications that have been implemented to address perceived bulk include:
	- a reduction in the length of the buildings from 90m to 85m,
	 the concentration of the lift cores in the centre of each building, giving them a more compacted appearance,
	 the addition of articulated components to the north and south elevations to add visual variety to the built form and to modulate and reduce the appearance of building mass,
	 the extension of building podiums to better frame the areas of public realm and to enhance the human scale environment at ground level.
	These design amendments, together with the use of differing facade materials and innovative lighting, will all contribute to reducing apparent building mass and add human scale to the buildings.
	Within the parameters of the Concept Plan Modification, opportunities exist for additional modulation of building heights within the proposed block envelopes. These opportunities continue to be considered and explored, which will provide further perceived reductions in visual bulk, thereby satisfactorily addressing this issue.
The scale of the buildings exceeds site constraints and should be reduced.	The allowable floor space ratio (FSR) for Sydney CBD ranges from 12.5:1 for commercial uses and up to 14.0:1 for residential uses. It should be noted that this is a Concept Plan Amendment and provides for an FSR of 10.8:1 for Barangaroo



	South which is well below both these existing controls.
	Furthermore the proposed Concept Plan modification is the result of detailed site analysis in terms of the site specific opportunities and constraints which reflect the environmental capacity of the site. On this basis it is considered that the proposed development is appropriate and within the environmental capacity of the site.
The tower blocks are almost twice as long as existing city towers and present as one mass.	Sydney's building stock is becoming increasingly dated and reflects the designs and characteristics of the 1980s. There is a shortage of prime stock in the Sydney CBD that fits the requirements of firms in the Finance & Industry sector, in particular for buildings with average floor plates above 1,500 m²and increasingly over 2,000 m².
	The process of trying to create prime buildings or development sites in the Sydney CBD is increasingly difficult as it requires buying a series of smaller adjacent sites and amalgamating them. This is a slow and often expensive process that has resulted in Sydney's limited supply of prime office space. The scale and form of development at Barangaroo South will go some way to meeting this need, thereby maintaining Sydney's status as a global city.
	Large floor plate buildings of 2,000+ m ² require a proportional response in terms of building height and articulation. To mitigate the perceived facade length of the office towers, the floor plates have been revised from 25 x 90m to 30 x 85.5m, with the introduction of corner redents to accentuate verticality.
	The visual effect is one of reduced elevational mass. By introducing architectural elements such as "prows" to the eastern and western ends of these reduced floor plates, the facade will appear shorter, with "accoutrements".
	The placement of the external lift cores in the centre of the north-facing facade and the introduction of vertical villages to both the north and south elevations adds articulation and provides for the use of different building materials. The result is increased visual variety and mitigation of the elevational mass of these longer





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	facades.
	Vertical mass of the building is also reduced at ground level using:
	- three and four storey podiums;
	 horizontal articulation through the introduction of two plant levels at the 17th and 30th floors, which are inset from the main façade and provide space for green planting.
	As discussed in the Supplementary Urban Design Statement prepared by RSHP, the configuration of the commercial tower forms has been amended to reduce their bulk when viewed from long distances. The Built Form Principles and the Urban Design Controls have also been amended to reflect this amendment and include requirements for articulation and modulation. This matter has therefore been addressed.
The proposed envelopes are out of scale with their surroundings and the scale and character of the CBD.	The allowable floor space ratio (FSR) for Sydney CBD ranges from 12.5:1 for commercial uses and up to 14.0:1 for residential uses. It should be noted that this is a Concept Plan Amendment and provides for an FSR of 10.8:1 for Barangaroo South which is well below both these existing controls.
	The height limits proposed are consistent with that being developed in the CBD with the tallest proposed tower only being the 6 th tallest in Sydney.
	The proposed height assists in completing the strong city framework of tall buildings, at Circular Quay and adjacent to the Botanical Gardens. Together the towers will establish a rising form from south to north and a strong edge to the open water beyond. This cluster of buildings, which are similar in height to existing tall CBD buildings, completes the city's north-western limit, provides for world class buildings of design excellence, and is a catalyst for the wider regeneration of the area in the future. It will not dominate the City skyline as Barangaroo's tallest building is only the 6th tallest building in Sydney.
	The proposed heights enable the buildings to contribute to the evolving interest in Sydney's city skyline, with proposed variations in building heights and building



		designs adding further visual interest. The building heights are also important aspects in delivering improved sustainability outcomes with increased density enabling efficiencies from shared infrastructure. Taller buildings will enable this density to be achieved with a lower concentration of buildings at ground level, improving public realm outcomes and ensuring more equitable sun, shade and view sharing. On this basis, this matter has been addressed.
	The proposed GFA is now 80% more than what was originally proposed.	This is not correct. The proposed Concept Plan Amendment is an overall increase of 62,965 m² which represents an uplift of 12.57% in overall GFA across the entire Barangaroo site and 59,965m² which represents a 13.9% increase in Barangaroo South Mixed Uses Precinct. This is broken down into an increase of 14,777m² for commercial uses and 45,188m² for residential uses representing a 4.8% increase for commercial and 87% increase for residential.
View Loss		
	The proposed envelopes for Block 4 block views from residential apartments on Kent Street and Hickson Road	The PPR includes an assessment of both the oblique and orthogonal views resulting from proposed envelopes for Block 4. Furthermore Lend Lease has provided additional Urban Design Controls to minimise the reduction of the view sharing corridors between blocks 4A and 4C as well as between the buildings in Block 4B.
		It should be noted that the planning and urban design approach for the urban renewal of Barangaroo has been one that seeks, first and foremost, to ensure that future development retains, enhances and / or creates significant views to and from the site from the public domain.
		Whilst both the approved Concept Plan and the proposed Amendment represents significant private view loss to some existing buildings, the enhancement and establishment of public views, view corridors and vistas along streets and



		pedestrian connections, and from other existing public open spaces have been protected. Private views cannot be guaranteed or protected, but need to be considered in determining the public benefits of a proposal.
		Furthermore the Concept Plan Amendment represents the maximum potential building mass (building envelopes) that can be achieved on the site. The ultimate built form will not fill the envelopes and as a result, the view impacts are likely to be less in net terms.
		Whilst it acknowledged that the proposed Barangaroo redevelopment will result in some view loss, the rationale adopted by Lend Lease and the Barangaroo Delivery Authority is that the wider public good generated by the development must take precedence over private interests.
		In light of the preceding discussion it is clear that the impacts on views have been comprehensively addressed as part of the application to modify the Concept Plan.
	The vista along Margaret Street to water will be lost with no justification provided.	The Margaret Street view corridor has been maintained through the alignment of Margaret Street West being set out to run along the southern edge of the Sussex Hotel to allow for water views under the bridge approach. At the same time the C5 building envelope has been rotated and setback to provide a sky view aligned with Margaret Street which can be viewed from higher up Margaret Street over the bridge approach. The result is that C5 now frames this view corridor down Margaret Street. It is therefore considered that appropriate justification has been provided.
	The proposal has significant adverse impacts on views from all directions including Kent, Margaret, Lime and Shelley Streets.	The detailed view analysis has been provided with the Concept Plan amendment and section 5.4 of this report addresses each of these views whilst Margaret Street is referred to above. The impact on views has been comprehensively addressed as part of the application to modify the Concept Plan.
	The proposal results in the complete obstruction of all oblique views from KPMG	Whilst it is acknowledged that the proposed Barangaroo redevelopment will result in view loss, the rationale adopted by Lend Lease and the BDA is that wider public



Tower and unreasonable loss and reduction in quality of harbour views from the KPMG Tower, Macquarie Bank building and AMEX Building.	good provided by the development should take precedence over private interests. The impact on views has been comprehensively addressed as part of the application to modify the Concept Plan.
The low rise residential buildings should be removed to restore views to the harbour.	The inclusion of low rise residential buildings along the western edge of the site is consistent with the form of development to the south on King Street Wharf and adds to the diversity of built form on the site. The impact on views has been comprehensively addressed as part of the application to modify the Concept Plan.
View analysis is inaccurate or misleading	The PPR provides a justification for the methodology and approach adopted. Virtual Ideas has provided further discussion on this topic which is included as part of the PPR documentation and set out in the following paragraphs.
	The intention of a photomontage rendering is to visually communicate how proposed built form sits in respect to its surroundings. To achieve this, a digitally rendered image from a digital 3D model is accurately superimposed into a digital photograph to provide a representation in terms of light, material, scale, and form.
	Camera lens selection also plays an important part in creating a photomontage that clearly communicates visual impact. There are several things to consider with respect to lens selection, as summarised below:
	Field of View of the Human Eye
	This is a topic that varies depending on the source of information. In many cases the field of view of the eye is stated to be 17mm. Other sources of information on the web say that it is more like 22 - 24mm. Whichever the case it is clear that the human eye has quite a wide field of view and when we stand close to a subject (say a building) we have quite allot of vision towards the top, sides and bottom. In addition to this the human eye can change focus and target direction extremely quickly allowing us to view a large structure in a very short period of time, effectively making our perceived

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field of view even larger.

The Perspective of the human eye

It is difficult to accurately reproduce what the human eye sees by the means of a printed image. As the back of the human eye is curved and the sensors on cameras are flat the perspective of a photograph can look quite different to how we see things in the real world, especially with a larger field of view, or wider lens.

In digital photography circles it is commonly stated that using a longer lens (approx 50mm) reduces the amount of perspective in an image and therefore looks more like the human eye would see reality, but this is talking about perspective only, and does not consider the field of view of the eye. If you take a photo using a 50mm lens, print the photo, and hold the print out against the actual view in the same location from which the photo was taken, it becomes very clear that the human eye can see much more of the surrounding information than what is shown on the print out.

Changing the FOV on a digital camera

The main difference in using a longer lens vs. a wider lens is the amount of information that is displayed at the edges of the subject. Changing the lens to a smaller FOV produces the same result as cropping in on the wide angle image, providing that the position and the angle of the camera remains constant while taking the photographs. In short, a lens with a wider FOV does not create an image that has incorrect perspective it simply means that the perspective is extended at the edges of the image showing more of the surrounds in the images.

What all of this means for visual assessment is that there is no one "fits all" solution for lens selection. If we adopt the opinion that a longer lens produces images that are closer to the perspective of the human eye, we will inevitably be in the situation where we cannot show the entirety of our subject and enough of the surrounds that it resides in. Also if we strictly stick to a 17mm lens we will have situations where the subject is far away and looks very small in the image, again making it difficult to assess visual impact. For these reasons we have taken the view that we can never totally represent what the human eye will see on a piece of paper, and for visual impact photomontages we should select lenses that strike a balance between the two





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		and can accurately display the built form in its surroundings.	
		The most effective way to accurately gauge visual impact and get a "real world" feeling for scale would be to take prints of the photomontages to the exact site photography locations and compare the prints with the scale of the existing built form.	
		As discussed with the Department of Planning, a series of new photomontages are being prepared which illustrate the approved Block Envelopes as per the approved Concept Plan (as modified), the proposed Block Envelopes as per the Concept Plan Amendment and the proposed Block Envelopes and Indicative Design utilising the methodology discussed above.	
		The information provided above together with the amended Visual Impact Assessment that is currently being prepared (to be submitted under separate cover) addresses this matter.	
Overshadowing	Overshadowing		
	Block 4 overshadows the Kent Street residential apartments	Residential properties to the east of the site are largely unaffected with the extent of additional shadowing generated by the proposed Concept Plan amendment falling mainly over commercial buildings.	
		It should be noted that in mid-Winter the shadows cast by the buildings in Block 4 do not begin to encroach on the Kent Street residential buildings until 2.00pm. This is considered to be acceptable and satisfies the City Council's controls for solar access (min 2 hours per day at the equinox (March 21), measured on the main window of the living room – source: Information to be submitted with Major Development Applications March 2000).	
		An updated shadow analysis for the proposed concept plan amendment has been undertaken as part of the Preferred Project Report.	
		It is considered that this issue has been appropriately addressed.	

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The development will cause unacceptable overshadowing of Pyrmont, the CBD, King Street Wharves, Darling Island and Sydney Harbour.

An updated shadow analysis for the proposed concept plan amendment has been undertaken as part of the Preferred Project Report.

The analysis identifies the maximum area within which shadows may potentially be cast by buildings within the block control envelopes included in the concept plan. However, it should be noted that the maximum potential extent of overshadowing cannot be fully realised at this stage of the assessment as the development controls contained within the concept plan do not allow for an end building design to fill the maximum permitted envelopes.

The shadow analysis demonstrates that the most significant impacts are to the south and south-east, primarily on commercial buildings in King Street Wharf and on Sussex and Kent streets.

Residential buildings in King Street Wharf will generally only be overshadowed in the morning (up until 1.00pm) in mid-winter. The Westpac building will only be overshadowed from 2.00pm onwards by development on Barangaroo.

It is acknowledged that there will be some overshadowing impact on surrounding properties as a consequence of the development resulting from the Concept Plan however considering the CBD context, these impacts are deemed to be within acceptable limits.

More detailed analysis of the overshadowing impacts of individual buildings, and of solar access achieved within the Barangaroo site, will be provided at subsequent stages of the development through the assessment of individual project applications. The Statement of Commitments for the Concept Plan incorporates recommendations with respect to future solar access criteria for the project.

The detailed analysis of the overshadowing impacts of individual buildings, and of solar access achieved within the development will be provided at subsequent stages of the development. It is inevitable that some additional overshadowing will occur to the south and south-east however a constant feature of the various iterations of the Concept Plan, from the winning design for Barangaroo to the current proposed amendment, has been the concentration of high-rise commercial



	buildings at the southern end of the site. The overshadowing impacts are considered to be within acceptable limits given the highly urbanised CBD context. This matter is therefore addressed.
New and existing streets are heavily overshadowed and the existing waterfront and the proposed waterfront at Barangaroo will be overshadowed by the hotel during lunchtime throughout the year.	Overshadowing of streets in a highly urbanised, CBD context is typical because of the scale and nature of development. In relation to the likely impact of the proposed development on the waterfront, the Proponent has prepared additional shadow analysis as part of the PPR documentation, which demonstrates that the shadows cast by the towers move across the public domain relatively quickly throughout the day so that when a certain area is in shadow, other areas enjoy full sunlight. This creates a diverse range of spaces and places with differing characteristics at different times of the year. The PPR documentation also provides an assessment of the actual area of the waterfront promenade which remains in shadow during the key parts of the day. Lend Lease sees the waterfront promenade will be an active public area whereas the Globe Waterfront Square, which will remain in sunlight for the majority of the day throughout the year will be the more passive public space within the master plan. It should be noted that the provision of shade in such an exposed environment is an important feature to ensure thermal comfort and usability of public spaces during the summer months. An updated shadow analysis for the proposed concept plan amendment has been undertaken as part of the Preferred Project Report. The shadow impact associated with the proposed Concept Plan modification has therefore been addressed.
Due to the proposal's splayed buildings the spaces between the buildings and the buildings themselves will be constantly	The radial fanned arrangement actually provides for deeper sunlight penetration into the spaces between the buildings. Furthermore, the buildings above the streets / walkways are not parallel and create a funnel of space that opens up the





	overshadowed.	viewing corridors, which widen out towards the water. The preceding comment, together with the additional information provided as part of the PPR documentation addresses this issue.
Privacy		
	There will be a loss of privacy at the Stamford, The Georgia and Highgate apartments on Kent Street	Physical separation between the existing residential buildings along Kent Street varies, with 84m from Stamford on Kent; 95m from the Stamford Marque and the Georgia and more than100m from the Highgate. All this distances are well in excess of what might reasonably be expected in an inner city environment. On this basis, the likelihood of any substantive loss of privacy to these properties is considered to be minimal. On this basis, it is considered that this issue has been addressed.
Community Consultation		
	There has been a lack of public consultation	The Department of Planning has exhibited the application in accordance with the provisions of the Environmental Planning and Assessment Act 1979. Furthermore, Lend Lease has established a Stakeholder Engagement Strategy and is consulting with local residents and other relevant stakeholders as part of its
		ongoing community engagement program. The opportunity to participate has been provided through a number of direct and indirect mediums:
		 the Barangaroo Display at Hickson Road attracted 3,000 visitors and 250 written comments; the Barangaroo Online Forum has attracted 1,400 unique visitors; some 6,500 have visited the Online Information Display; 400 people attended a series of four community forum events in Sydney's CBD, Parramatta and Caringbah;



	 9,000 people have visited the dedicated Barangaroo South Website since it was launched on 16 June 2010; and Barangaroo South Information events and attendance at community meetings have engaged with over 500 community members to date. The extensive program of community engagement undertaken to date is aimed at providing direct public feedback into the ongoing design process for Barangaroo South and enabling the community to develop a sense of ownership over the project. It is therefore considered that the amount of community consultation undertaken is more than adequate.
The public exhibition period has been too short	The Department of Planning has exhibited the application in accordance with the statutory provisions embodied in the Environmental Planning and Assessment Act 1979.
The proposal has not been properly publicised to allow nearby owners to determine the impact on views.	As indicated above the Department of Planning has exhibited the application in accordance with the relevant statutory requirements. Furthermore, Lend Lease has established a Stakeholder Engagement Strategy and is consulting with local residents and other relevant stakeholders as part of its ongoing community engagement program. The opportunity to participate has been provided through a number of direct and indirect mediums as detailed above.
The BDA or LL should demonstrate how community feedback has been considered.	Since selection as the Preferred Proponent, Lend Lease (in conjunction with the Barangaroo Delivery Authority) has undertaken extensive consultation including public displays, on line information and community / stakeholder meetings and forums. Feedback from this consultation resulted in a range of changes to the design announced in June 2010 including: • redesign of the hotel to reduce the building height and gross floor area



and footprint nearly halved;
 repositioning of the public pier and a significant reduction in its length;
 overall building massing by reducing the number of commercial towers from four to three;
 a 5% increase in public space across Barangaroo South than envisaged in the approved Concept Plan (as modified);
 inclusion of low rise buildings along the waterfront, with retail/leisure at ground level and residential above to the west of Globe Street;
 separation of vehicles and pedestrians along the waterfront promenade;
 improved East/West and North/South connections within the heart of the development;
 better pedestrian connections back to the central CBD and more access points to the harbour from within the development;
 reduced amount of first floor elevated space within the development;
 pedestrians come down to the ground plane as soon as they cross Hickson Road; and
 addition of Margaret Street West view corridor.
The design was duly refined and lodged with the Department of Planning in July 2010 as a Concept Plan Amendment.
Since this time further consultation, including the launch of the Barangaroo South website, advertising, additional community / stakeholder meetings, together with the range of submissions arising from the public exhibition of the application has given rise to further refinements being proposed as part of the PPR including:
amendments to the Urban Design Controls such that:
■ reduction in the tower lengths from a maximum 90m to 85.5m;



 broadening of the tower widths from a maximum 24m to 30m;
 additional structural articulation has been introduced to articulate the massing and elongate the tower forms;
 introduction of an additional Block 2 control to ensure that there is a reduction in the height and/or a reduction in the floor plate size above RL 160 on one or both of the towers;
 the introduction of a minimum 40m separation between the towers forms in Block 4B and Block 4C;
 the introduction of a minimum 15m separation between individual buildings fronting Hickson Road in Block 4C to contribute to an improved view sharing outcome;
revisions to the Built Form Principles to reflect the above design changes;
amendments to the street and pedestrian network, comprising:
 the widening of Shelley Lane by an additional 2m to provide a 6m road reserve;
 replacement of gallerias with 24 hour, weather protected public laneways;
 provision of additional finer grain connections through the commercial towers and Hickson Road building lobbies to strengthen connections between Hickson Road and Globe Street;
 extension of the northern laneway through Block 4A to the Southern Cove; and
 introduction of design performance standards for the Hotel Pick-up / Drop-off and Waterfront Square.
The information clearly demonstrates the manner in which Lend Lease has adopted feedback from the community during the course of the design process associated with the proposed Concept Plan modification.





Community Facilities		
	The new cultural facility is a smaller and less useful community building. It should be larger and in a better location	The Concept Plan Amendment seeks approval for some 10,000sqm of community floor space across the site, which represents a 400% increase on what is contemplated in the Approved Concept Plan. The design, size and final location of the community building / cultural centre will be detailed in a future Project Application.
	There is a lack of genuine cultural space.	As indicated above, the Concept Plan Amendment makes provision for 10,000sqm for community / cultural space. The precise nature, location and configuration of these spaces will be detailed in future Project Applications.
	An Aboriginal art gallery should be provided	Noted. Refer comments above.
	Provision should be made for a range of cultural facilities and social infrastructure including public theatres, gallery spaces, performance spaces cinema, netball courts, tennis courts, sports ovals, preschools, and childcare.	Noted. Refer comments above.
	A range of retail facilities to service residents should be provided and shops should be used to activate streets.	Noted. The retail mix will be the subject of future applications but can reasonably be expected to include a range of shops and facilities to serve the needs of both the local (resident and commercial) community as well as visitors / tourists to Sydney.
Public Domain	JL	



The reduction in the width of the public promenade is not supported and not wide enough for a public promenade.	It should be noted that the Waterfront Promenade is slightly wider than the width of the existing promenade along King Street Wharf and provides a seamless transition thereto. On this basis it is considered that the proposed width of this important pedestrian element is satisfactory within the existing context of public access to the foreshore.
The concept plan amendment provides inadequate justification for the reduction in public space.	There is no reduction in the quantum of public space from what is contemplated under the approved Concept Plan (as modified). Approximately 11 hectares of new public open space/public domain, with a range of formal and informal open spaces serving separate recreational functions and including a 1.4km public foreshore promenade.
The amount of public space has been dramatically reduced	This statement is incorrect. Refer comment above.
The amount of open space should be increased.	Barangaroo occupies a total area in the order of 22 hectares. The site previously comprised 5 wharves which, until mid 2007, were used for commercial shipping for berthing and unloading of container ships and were not accessible to the general public.
	The Concept Plan makes provision for approximately 11 hectares (50%) of new public open space / public domain, with a range of formal and informal open spaces serving separate recreational function and including a 2.2km public foreshore promenade.
	The quantum of open space is considered to be appropriate given the highly urbanised nature of the southern end of the site and its relationship to the CBD, particularly given the significant public benefit provided at the northern end of Barangaroo.
The embayments fracture the continuity of	The Northern and Southern Coves are key design elements of the Concept Plan



the public foreshore and reduce its extent, resulting in disjointed and inaccessible enclaves.	for Barangaroo and are designed to bring the harbour water into the site, modulating the existing industrial linear harbour edge and adding visual interest to the surrounding parklands. The inlets will allow visitors to access and touch the water and have been aligned with various view lines from the mixed use precinct and beyond. Rather than creating enclaves, the embayments/coves create the opportunity to define different landscape and urban characters along the length of the site, contributing to the rich urban fabric of the Sydney CBD.
The footpath over the Southern Cove is too narrow.	The design and specifications for the bridge over the Southern Cove have not yet been determined and will be detailed in a future Project Application. The ultimate width of the footway will be designed using a number of criteria including likely pedestrian volumes.
The proposal represents a reduction in permeability across the site.	This statement is incorrect. One of the underlying principles adopted for the Concept Plan Amendment is to provide a high degree of permeability – providing a series of streets and laneways with clear connections east to west, from the waterside to the rest of the CBD, and from south to north via the Waterfront Promenade and Hickson Road and Shelley Lane. Vehicular access within the confines of the Barangaroo South site is available via Margaret Street West, Globe Street (minimum 15m wide) and Napoleon Street. Healy Street defines the northern edge of Barangaroo South and provides vehicular access and a street address to future residential buildings within Block 4C. A key component of the proposed modification to the Concept Plan is the strong focus on pedestrian only access and connections. Pedestrian access is also available in Margaret, Globe and Napoleon Streets, together with a series of pedestrian only environments, including:



	27m wide Waterfront Promenade connecting with the King Street Wharf precinct in the south;
	City Walk (12m wide) providing a connection to / from Wynyard;
	Shelley Lane (an urban design report submitted with this PPR increases the width of Shelley Lane from 4m to 6m) provides a secondary north-south connection through the site;
	 two east-west connections (8m) between Hickson Road and the Waterfront (one between commercial buildings C4 and C5 and the other to the north of C3) both of which will be public streets; and
	Bull Street frames the Southern Cove's northern foreshore and will be accessible to both pedestrians and cyclists.
	The street layout provides pedestrian and vehicle circulation routes within the urban precinct and encourages future connections into existing streets at Walsh Bay, Millers Point, King Street Wharf, and the western grid of the city.
	The street footpaths provide efficient pedestrian movement within the urban precinct. The new street alignments have been positioned in response to the reoriented commercial towers and the introduction of the low rise residential uses in Development Block X, however they also provide water vistas, and bring the surrounding network of city streets and the Harbour together.
The ground floor plane needs to be reviewed to establish clearly demarcated areas of public domain.	It should be noted that all streets and laneways will be accessible to the public.
Public access to the pier may be restricted due to security concerns and servicing requirements.	All servicing of the hotel will occur from the common basement and as such is not expected to interfere with or restrict public access to the pier at ground level. No specific security concerns are anticipated at this stage which would restrict access to the pier. Security requirements associated with the landmark hotel cannot be determined until such time as an operator is identified.



A connected network of public streets linked to the CBD should be introduced.	One of the underlying principles adopted for the Concept Plan Amendment is to provide a high degree of permeability – providing a series of streets and laneways with clear connections east to west, from the waterside to the rest of the CBD, and from south to north via the Waterfront Promenade and Hickson Road and Shelley Lane.
The Southern Cove is of limited public use and reduces the amount of public land available for use.	The Southern Cove enlargement was a requirement of the jury decision for the international design competition and is a condition of the approved Concept Plan (as modified). The Southern Cove will form a new southern water body that is overlooked by commercial, residential and public buildings as well as the landmark building.
	The Southern Cove may contain a weir to set water levels on its eastern side to eliminate tidal variation and facilitate greater water access and integration from the Promenade. The western side of Southern Cove will remain tidal.
	A pedestrian bridge will connect the waterfront promenade with the central parkland along the waterfront and onto the Headland Park.
	The purpose of the Southern Cove is to create new ways to experience the water and harbour, creating a new edge which will enable people to interact with and "feel" the water. This will contribute to the rich variety of edge treatments on the site adding interest and experience for visitors, residents and workers.
	The preceding comments provide the background and outline the rationale for the creation of the Southern Cove, thereby addressing this submission.
Removal of east-west vehicular connections off Hickson Road raises CPTED concerns, in particular the reduction in passive surveillance as a result of decreased vehicular traffic.	CPTED applies knowledge about situational crime prevention to the planning and design stages of buildings and public spaces. Key CPTED principles include: Natural surveillance – the activation of the ground plane maximises opportunities for passers-by or residents to observe what happens in the area



	(the 'safety in numbers' concept).
	Access control – control of who enters an area so that unauthorised people are excluded, for instance, via physical barriers such as fences and grills.
	Territorial reinforcement/ownership – people are more likely to protect territory they feel they own and have a certain respect for the territory of others. This can be expressed through installation of fences, paving, signs, high standards of maintenance and landscape treatment.
	Space management – ensures that space is appropriately utilised and maintained. Space management strategies include: activity coordination, site cleanliness, rapid repair of vandalism and graffiti, the replacement of lighting and the removal or refurbishment of damaged physical elements.
	The range of uses (commercial, residential, hotel, retail and leisure) to be included within Barangaroo South will retain vibrancy within the precinct beyond the working day, into the evenings and at weekends, thereby ensuring that levels of passive surveillance are maintained.
	The mixed use nature of the precinct will ensure that it is activated at all times of the day – commercial / retail activities during the working day; entertainment and leisure uses extending the level of activity into the evenings and on weekends, together with the constant activity and passive surveillance opportunities provided by the residential component.
	Based on the preceding comments it is clear that CPTED principles have been addressed in the design of the proposed Concept Plan modification.
None of the proposed street widths meet City of Sydney Standards	The street pattern and corresponding road widths proposed in the Concept Plan amendment are the result of thorough site analysis, pedestrian and traffic modelling and are appropriate (given the quantum of floor space and range of uses on the site.



Noise		
	The level of retail floor space provided will impact of existing retail tenants in the CBD and lead to reduced rental incomes	The proposed Amendment does not seek to increase the quantum of retail floor space (39,000sqm) under the approved Concept Plan.
	Property values at Stamford on Kent will be reduced	Property values are not a matter for consideration under the provisions of the Environmental Planning and Assessment Act 1979 and therefore no comment can be made in this regard. Notwithstanding the above, the range of amenities that will be provided at Barangaroo South, including a supermarket, shops, restaurants, cafes, hotel and cultural facilities, together with a vastly improved public realm across the whole Barangaroo area, including the Headland Park and waterfront promenade, will add significant value to the local area.
Property Values		
	The modification does not make clear which public domain land will be publicly owned and managed.	All land at Barangaroo will remain in public ownership. 99 year leases will be granted only on the buildings within the development zone. Management of the public domain will also remain in government control under the terms of the Project Delivery Agreement.
		The street widths as proposed, as designed to create "intimate" streets which make adequate provision for service vehicle access and access to on-site parking but which also acknowledge the pedestrian priority of the place. The streets will be constructed to satisfy the relevant Australian Standards.



	Objection to the hours of construction. Construction hours should be limited to 8am to 5pm Monday to Friday.	Construction hours are not a matter for the Concept Plan Amendment. However it should be noted that the Minister's approval issued in respect of the Project Application for the Basement and Bulk Excavation (MP10_0023) restricts the hours of construction to 7.00am – 6.00pm Monday to Friday and between 7.00am and 5.00pm on Saturdays. Furthermore, it should be noted that the approved hours are within the City Of Sydney's Code of Practice for CBD Construction
	Noise mitigation measures should be clarified.	Noise mitigation measures are not a matter for the Concept Plan Amendment as it does not seek approval for any works. Each subsequent Project Application for the construction of built form will be accompanied by a Construction Noise Management Plan
	The proposed development will result in constant construction noise for 15 years.	The nature of construction noise varies according to the type of activity. For example, excavation generates a different type of noise to say, pouring of footings or the application of building facade systems. It should be noted that the Minister's approval issued in respect of the Project Application for the Basement and Bulk Excavation (MP10_0023) restricts the hours of construction to 7.00am – 6.00pm Monday to Friday and between 7.00am and 5.00pm on Saturdays. No work will be undertaken on Sundays or Public Holidays.
Planning Process/Single Developer		
	A single developer should not have control over such a large site.	It should be noted that Barangaroo South only represents approximately one third of the overall site.



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	The scheme submitted by Lend Lease and selected by the State Government was chosen as the winning bid on the basis that it exhibits the urban structure, place making, sustainability, and financial drivers required to ensure the viability of the mixed use precinct at Barangaroo South.
	The appointment of a single developer to undertake the redevelopment of a large site is not uncommon in NSW eg. Rouse Hill Regional Centre, the former Carlton & United Brewery, the former Prince Henry Hospital, Jacksons Landing and Walsh Bay.
	Furthermore there are a number of advantages associated with the appointment of a single developer, including co-ordination of the provision of infrastructure and services and application of a consistent approach to design.
There should be greater number of development parcels, offered to multiple developers.	This is a decision for Government and is not a matter for consideration of the Concept Plan Amendment.
The proposal constitutes private profiteering over public benefit.	It should be noted that the Concept Plan (as modified) has been approved following extended community consultation and environmental assessment and provides for significant community benefits. For example, the Headland Park is funded by the project revenue from the development of Barangaroo South
	Lend Lease has embarked on a thorough review of the approved Concept Plan with a particular focus on how the development could be improved. As part of that review process, Lend Lease in conjunction with the Barangaroo Delivery Authority also undertook several consultation sessions with the local community, government agencies and other major stakeholders to ascertain their thoughts and suggestions on the redevelopment of the site.
	The proposed modification relates to an increase in the amount of commercial floor space to ensure the development maximises the site's potential and caters to the demand for premium quality commercial office space in a highly accessible



	CBD location. The proposed modification is considered to be in the public interest given that it will enhance the growth and availability of commercial floor space in the CBD, will augment Sydney CBD as a premier commercial centre in the Asia-Pacific Region.
Single site ownership, lack of fine grain streets and the size of the car park will restrict incremental change to the development and possibly sterilise future changes	The NSW State Government retains ownership of the site. One of the underlying principles adopted for the Concept Plan Amendment is to provide a high degree of permeability – providing a series of streets and laneways with clear connections east to west, from the waterside to the rest of the CBD, and from south to north via the Waterfront Promenade and Hickson Road and Shelley Lane.
	The development of a Concept Plan is designed to provide a co-ordinated approach to future decisions about the design and development of the site.
	The provision of basement parking will maintain maximum flexibility with respect to the potential options for the detailed design and distribution of above ground floor space (commercial, residential, community and retail floor space).
	The proposed basement car park has also been designed to ensure that it is capable of expansion / connection to additional basement areas at subsequent stages of the development to accommodate additional parking as required to support the quantum of floor space and the land use mix.
There is a lack of transparency in the approvals process and lack of disclosure of contract documentation	The proposed Concept Plan Amendment has been subject to the stringent requirements for public exhibition set out in Part 3A (Section 75H) of the <i>Environmental Planning and Assessment Act 1979,</i> which makes provision for any person may make a written submission.
	The Project Delivery Agreement was publicly released in accordance with the requirements of the <i>Government Information (Public Access) Act 2009</i> in August 2010.



	The Part 3A process results in a lack of transparency, meaningful consultation and inadequate time to review the documentation	This is not a matter for the Concept Plan Amendment, however the Proponent has prepared and submitted the application to satisfy the requirements of Part 3A of the Environmental Planning and Assessment Act 1979.	
	A new concept plan should be prepared as the amendments include significantly increased floor space and building heights, hotel in the public domain and residential uses in an area previously zoned for public recreation.	Subclause (7) of Section 75W of the Environmental Planning and Assessment Act 1979 does not limit the circumstances in which the Minister can modify a determination issued in respect of a Concept Plan.	
	The proposed modifications will result in a development which is not substantially the same as that which was proposed in the original Concept Plan.	There is no "substantially the same development" test under Section 75W of the Environmental Planning and Assessment Act 1979. Furthermore, S75W (7) specifically provides that: This section does not limit the circumstances in which the Minister may modify a determination made by the Minister under Division 3 in connection with the approval of a concept plan.	
Land Use mix			
	The reduction of Affordable Housing from 7.5% to 2.3% is unacceptable	No reduction in the provision of Affordable Housing is proposed. Lend Lease has committed to delivering intermediate housing for essential and key workers employed within the Barangaroo South precinct and the wider Sydney CBD area via the Australian Affordable Housing Partnership (AAHP). Lend Lease's intermediate housing component will offer a range of tenures including rentals and sales to households with incomes ± 50% of median income via the	





	AAHP.
	Lend Lease proposes to provide 2.3% of the total proposed residential GFA as intermediate housing.
	Future dwelling typologies will cater for a broad cross section of the community including singles, couples and small families, and will be targeted at households with incomes ± 50% of median income (\$30k-\$90k). This level of household income falls within the income bracket of essential and key worker households within Barangaroo and the wider Sydney CBD.
	Whilst specific buildings have not been earmarked for affordable housing at this stage, the product offerings may include 1-bedroom and 2-bedroom apartments with shared community access to the precinct and building facilities.
The proposal will result in too much commercial floor space to the detriment of the CBD.	As mentioned above the letter and report included in the PPR documentation prepared by Jones Lang LaSalle provides support for this additional commercial floor space.
	Jones Lang LaSalle Research forecast that the underlying demand for space in the Sydney CBD between 2011 and 2020 is 636,000 sqm. Excluding the F&I sector, other industry sectors will contribute 390,000 sqm, or 61% of net absorption over the next 10 years. Based on this underlying demand projection, the capacity at Barangaroo will only be able to absorb 47% of the expected new demand in the Sydney CBD to 2020.
	The Metropolitan Strategy recognises Sydney's role in the Asia Pacific 'complex' of cities. Sydney is considered a focus for Australian and international firms in finance and legal services, information technology, media, advertising, and design; and is the gateway to international travel and transactions.
	In granting approval to the redevelopment of Barangaroo, government is addressing the growing demand for central office space of prime quality in Australia's only global city.





		However, the existing CBD has limited potential for larger floor plate development, and extensions or re-fits to include new and upgraded technologies, improve environmental performance and meet new workplace culture demands can be costly. To satisfy these requirements, firms are moving to new developments in what have been considered 'fringe' precincts, such as the southern CBD and more recently, also taking advantage of water views, to the western edge of the CBD (eg. King Wharf Street area). The proposed mixed use development at Barangaroo South is an opportunity to support the Sydney CBD as it maintains and grows its economic position as a global city into the future.		
Wind Impacts	Wind Impacts			
	The development will result in wind tunnels.	Additional wind analysis has been undertaken and will be submitted under separate cover as soon as it is complete. However it should be noted that it is not possible to accurately predict the wind impacts of the proposed development until such time as the detailed design of the buildings has been undertaken. Accordingly it is recognised that in addition to the desk top study and the additional wind analysis this issue will be further assessed as part of each Project Application for built form. The Concept Plan Modification will result in increased wind velocities around the site on an intermittent basis. Wind mitigation measures have been recommended and will be refined during the detailed design of the built form on the site using wind tunnel testing prepared at the Project Application stage. These mitigation measures, combined with landscape treatment will significantly improve the wind environments in and around the site.		
	The buildings orientation will result in a wind tunnel directed at Gas Lane.	Refer comments above.		



	A more detailed management plan of wind impacts should be prepared.	Additional wind analysis has been undertaken and will be submitted under separate cover as soon as it is complete. A desk top wind assessment has been submitted with the Concept Plan Amendment which indicates that a range of measures (including architectural devices and landscape treatment) will be required to be incorporated in the future detailed designs of built form at Barangaroo South to ameliorate adverse wind impacts.
Contamination		
	The disclosure of the extent of potential contamination is inadequate.	A number of environmental site investigations have been undertaken to assess the extent and nature of contaminants within the Barangaroo site as a whole, as well as within the Barangaroo South precinct.
		Additional environmental investigative works are being undertaken as part of the various remedial works contemplated under future Project Applications. These investigations inform the Remedial Action Plan(s) for Barangaroo, which have been disclosed in the Project Application for the Basement and Bulk Excavation (MP10_0023) and will be further detailed in the Project Application for remediation works. In addition, an overarching Remedial Action Plan has been prepared for Baranagaroo.
	Excavation of contaminated material will cause a health hazard.	The potential impacts on human health arising from the remediation of the site will be the (are) subject of detailed investigations which will be documented as part of any future Project Application for the remediation of the site.
		Relevant environmental management measures will be required to be implemented to ensure that there is minimal risk to human health and the environment in accordance with the recommendations arising from the various human health impact assessments, which will be prepared as part of future Project Applications.





	The risk of the migration of contamination has not been adequately dealt with.	The risk of the migration of contamination is not a matter for the Concept Plan amendment. The risk of migration of contamination, will be discussed in relevant future Project Applications		
	Long term stockpiling of contaminated soils should not occur on site to protect public health.	It should be noted that the Concept Plan Amendment does not grant approval for any works. The potential impacts on human health arising from the long term stockpiling of contaminated soils on the site will be (are) the subject of a future Project Application for the remediation of the site.		
General objections / comme	General objections / comments			
	The concept plan amendment provides inadequate justification for the changes.	Cities need to adapt to changes in the global economic order to maintain their national and regional relevance. A major renewal project such as that proposed at Barangaroo provides the opportunity for Sydney to recast and reinforce its unique attributes and market these to the world.		
	The previous iterations of the Concept Plan approved by the Minister to date have been initiated by the Barangaroo Delivery Authority, in response to more detailed planning investigations and market analysis. The Urban Design Analysis which accompanied the PPR for MOD2 (which resulted in an additional 120,000sqm of GFA being permitted on the site) acknowledged that "the final design for Barangaroo South would not be determined until the tender was awarded and the successful tenderer completed the final design for the site, subject to planning review and comment".			
		Following the award of the tender for Stage 1 of the site Lend Lease has embarked on a thorough review of the approved Concept Plan with a particular focus on how the development could be improved. As part of that review process, Lend Lease in conjunction with the Barangaroo Delivery Authority also undertook		



	several consultation sessions with the local community, government agencies and other major stakeholders to ascertain their thoughts and suggestions on the redevelopment of the site.
	The proposed modification relates to an increase in the amount of commercial floor space to ensure the development maximises the site's potential and caters to the demand for premium quality commercial office space in a highly accessible CBD location. The proposed modification is considered to be in the public interest given that it will enhance the growth and availability of commercial floor space in the CBD, will augment Sydney CBD as a premier commercial centre in the Asia-Pacific Region.
The proposed modification is an overdevelopment of the site	The allowable floor space ratio (FSR) for Sydney CBD ranges from 12.5:1 for commercial uses and up to 14.0:1 for residential uses. It should be noted that the Concept Plan Amendment provides for an FSR of 10.8:1 for Barangaroo South which is well below both these existing controls.
The proposal has disregarded planning controls which aim to step down finely scaled buildings to the foreshore.	The historical use of the site involved commercial shipping for berthing and unloading of container ships and until the initial Concept Plan was prepared and approved, there were no planning controls applicable to the site which could facilitate its redevelopment.
	The purpose of the design competition sponsored by Government in 2005 was to identify options for future urban form to underpin the vision for the site and to generate public discussion and debate on the opportunities for renewal.
	The jury decision on the winning design was unanimous but also identified the need to develop the scheme further, particularly to create a naturalised headland and the introduction of two coves into the shoreline.
	Following selection of a winning design, the Sydney Harbour Foreshore Authority undertook a detailed planning study to support a change to the existing zoning of the land and develop a Concept Plan (which, it should be noted, modified various



	aspects of the competition design) for the site.
	On 9 February 2007 the Minister for Planning approved the Barangaroo Concept Plan (subject to further minor alterations).
	The Minister has approved 3 subsequent amendments, which represent the evolution of the design to better respond to market conditions, user needs and future-proofing Sydney to maintain and enhance its global city status.
	It should be noted that the tower elements of the proposed Concept Plan amendment observe setbacks from the waterfront in the order of 70m, enabling lower scale residential buildings (similar in scale and form to those to the south in King Street Wharf) to be developed parallel to the western boundary.
	The proposed amendments do not prejudice the fundamental elements of the approved Concept Plan (as amended). These include design excellence, high quality and active public domain, the foreshore promenade and parklands, water interventions, high levels of pedestrian connectivity and ESD.
There are no provisions for Water Sensitive Urban Design in this proposal.	The Stormwater Concept Plan (Appendix L of the EA), is predicated on the implementation of Water Sensitive Urban Design initiatives. Details of the Treatment Strategy will be subject to further design development and will be detailed in future relevant Project Applications.
Increases in retail/commercial floorspace have not been proportional to increases in public/community floorspace.	This statement is incorrect. There is no proposed increase in retail floor space. Commercial floor space is proposed to increase by 14,777m ² which equates to 4.8%.
	The Concept Plan (as modified) makes provision for 2,000m² of floor space allocated to community uses. The current application seeks approval for a total of 10,000m² which is the result of the reallocation of the 8,500m² of passenger terminal GFA previously approved under the Concept Plan and an increase in total community uses GFA by 1,500m². This equates to a net increase of 8,000m²



	or 400%.
	01 400%.