

08149
21 December 2009

Director General
Department of Planning
23-33 Bridge Street
SYDNEY NSW 2000

Attention: Ellie Cauldwell

Dear Ellie

**PROJECT APPLICATION MP_08_0093 - RESPONSE TO ISSUES
DARLING WALK, DARLING HARBOUR**

Following the exhibition of the Project Application MP_08_0093 for Public Domain Works at Darling Walk, Darling Harbour, on behalf of Lend Lease Development, JBA Urban Planning Consultants has prepared this response to respond to the issues raised during the public consultation, describe the proposed revisions to the development and provide a revised Statement of Commitments.

Accordingly, this letter is accompanied by the following supporting documents:

- Revised Landscape Drawings, prepared by Aspect Studios Pty Ltd (**Attachment A**);
- Amended Shade Structure Drawings, Prepared by FJMT (**Attachment B**);
- Lighting Design Statement Prepared by Lend Lease Design, dated 23rd November 2009 (**Attachment C**);
- Footpath Alignment Level Statement, prepared by Hyder Consulting Pty Ltd (**Attachment D**);
- Rainwater Quality Report, prepared by Warren Smith & Partners (**Attachment E**); and
- Public Domain Archaeological Issues Report, prepared by Casey & Lowe (**Attachment F**).

1.0 SUBMISSIONS

In September 2009 a Project Application and Environmental Assessment Report (EAR) for the upgrade of the public domain areas of the Darling Walk site and improvements to the existing Bathurst Street footbridge, was submitted to the Department of Planning.

The application was exhibited from 23rd September 2009 to 23rd October 2009. In response to the public exhibition, we understand that the Department of Planning received a total of six submissions to the proposed development from the following authorities and agencies:

- City of Sydney Council (Planning Division and Health Division);
- Heritage Branch of the Department of Planning;
- RTA;
- Sydney South West Area Health Service - Public Health Unit; and

- NSW Transport and Infrastructure.

The proponent, Lend Lease Development and its consultant team have reviewed and considered the submissions and, in accordance with clause 75(H) of the *Environmental Planning and Assessment Act 1979*, address each issue raised below.

1.1 City of Sydney Council Submission

Table 1 provides a summary of the issues raised by the City of Sydney Council and the proponents response.

Table 1 – Response to issues raised by the City of Sydney Council

Comment	Response
Water Features	
Request that water features along the Civic Connector be designed to incorporate injecting or moving water elements to act as background noise to the considerable traffic noise that prevails along Harbour Street. This has potential to 'comfort' out door diners.	The proposed water feature in the Civic Connector will create some noise at the eastern end of the water feature. In addition, the water running along the through and over the drainage weir will also provide some low water sounds. Whilst these features will assist with improving the ambience of the space, Lend Lease Development do not propose to alter the design of the water features to provide additional sound to provide an acoustic barrier to the Harbour Street traffic. The water features are not intended to be nor designed to act as acoustic barriers.
Request that the water feature within the Civic Connector be designed in accordance with all relevant Australian Standards and ensure that water not become stagnant and of a quality that is of a standard appropriate for its use in accordance with ANZECC Guidelines for Fresh and Marine Water Quality.	The Civic Connector water feature will contain chlorinated water, appropriate for its use in accordance with the Australian Standards for swimming pools. The water quality will be monitored and sampled regularly to ensure that appropriate chlorine levels are maintained. It is noted that the ANZECC guidelines are for 'natural' marine and fresh water systems, such as lakes, rivers and the ocean. The ANZECC guidelines are not applicable to a chlorinated water system that does not contain marine life, as proposed within Darling Walk.
Request that any proposed removable safety grates be fitted with a lock, or designed such that they cannot be removed by children.	The inlet grate within the Civic Connector water feature will be mechanically fixed to the structure with concealed fixings.
Lighting	
Request details to ensure that the lighting conforms to Australian and Council Standards, with particular reference to road safety and pedestrian security.	The proposed lighting complies to Australian Standards S 4282 and AS/NZS 115.3.1 – 2005 Pedestrian Lighting. At 100% capacity light levels comply with Category P7 and at 50% dimmed capacity they comply with Category P1 (P8), the default lighting requirement of City of Sydney light design code.
Request that lighting be provided to the	Lighting is to be provided on the pedestrian

Comment	Response
Bathurst Street Pedestrian Bridge augmentation.	bridge to comply with Category P8 of Australian Standard AS/ NZS 1158.3.1- 2005 (refer to Attachment C).
Paving	
Request that consideration be given to finding a paver for the Harbour Street frontage that would match the rest of the footway i.e. outside the Chinese Gardens and Cockle Bay.	Lend Lease Development will seek to match the new pavers with the existing. However the Gertrudis Brown paver will be used if matching pavers are not able to be sourced. The Gertrudis Brown brick paver was chosen as a higher quality brick than the paver currently outside the Chinese Gardens and Cockle Bay, as they closely relate to the surrounding context and the existing pavers are in low supply. Should the Gertrudis Brown paver be used, an 'interwoven' interface between the surrounding brick and the Darling Walk brick will be provided to ensure that the two sets of pavers mix together.
Alignment Levels	
Comment that very little information has been given with regard to the proposed alignment levels of footways. Council assume that the footways will be graded adequately.	Footpath alignment levels have been set with regard to building entry levels and have been designed in accordance with Australian Standard 1428.1 – 2001 – Design for access and mobility – Part 1: general requirements for access – New building work. The footpath area has also been designed to provide a safe overland flow path (refer to Attachment D).
Request that the footways to the Harbour/ Day Street frontages have appropriate alignment levels in accordance with Council's standards.	A minimum footpath width of 3.5m along Harbour Street, with a maximum crossfall of 2.5% falling away from the building is provided. This is as required by the RTA and complies with Australian Standard 1428.1 – 2001 and is therefore considered appropriate (refer to Attachment D). We note that the City of Sydney Council Standards do not apply to this development.
Irrigation	
Comment that the proposal includes an extensive stormwater harvesting scheme with the intention of use of the treated water for irrigation and water feature purposes. Request that careful consideration be given to whether the level of treatment required in making the stormwater adequate for use in water features, noting that in particular that children's activities in the vicinity may require a very high purification level.	Warren Smith & Partners (WSP) have prepared a Rainwater Quality Report (refer to Attachment E). To clarify, the 300,000L Darling Walk public domain rainwater re-use system storage tank located under the public domain area and will receive rainwater from the building's roof, external roof service areas and part open plant room areas. The proposed rainwater re-use system uses rainwater for irrigation, the water feature in the Civic Connector and the public toilets and not stormwater. A separate recycled water system will be used to supply the cooling towers, toilet flushing and the irrigation on Level 6, within the building.

Comment	Response
	This system is integrated into the buildings, and is approved under the Project Application for the Buildings and not the Project Application for Public Domain works. The report outlines the proposed method of treatment incorporated into the rainwater re-use system and a risk management assessment. The report concludes that the water treatment systems provided as part of the water feature and water play areas will ensure that the water quality is suitable for the proposed use. In addition, the WSP report confirms that domestic water will be used for the water supply for the children's activities/ water play treatment systems. Commitments to the use of rainwater for irrigation, Civic Connector water feature and public toilets and the use of domestic water for the children's activities/ water play system are included as part of the revised Statement of Commitments at Section 3.
Comment that investigation into the stormwater use for the public toilets could also be considered.	The rainwater re-use water system will be used to supply water for toilet flushing within the public toilets.
Flood Levels	
Comment that the submission identifies that a detailed flood study has not been completed. Request for this to be undertaken to establish flood levels, floor levels, basement entry crest levels and flood risk management measures.	Flooding has been addressed as part of the Concept Plan, Project Application for the Bulk Excavation and construction of the Buildings, and also the Project Application for the Public Domain Works (within Section 6.8 and the Worley Parsons Flood Studies and Addendum reports (included at Appendix K)). The Worley Parsons reports clearly identify the flood levels and resultant flood mitigation measures for the public domain works. As set out in the Statement of Commitments (Section 3), the Landscaping and Public Domain works are to be undertaken in accordance with the recommendations contained within the Worley Parsons flood studies.
Signage	
Request that consideration be given to reinforcing the connections between the development area and the CBD.	New signage to match the existing Darling Harbour signs will be provided throughout the Darling Walk site. This will include wayfinding information for visitors to locate key destinations in the CBD, such as Town Hall and China Town.

1.2 Heritage Branch (Department of Planning) Submission

Table 2 provides a summary of the issues raised by the Heritage Branch of the Department of Planning and the proponents response.

Table 2 - Response to issues raised by the Heritage Branch

Comment	Response
Implement the recommendations of the Heritage Impact Statement (HIS) by Tanner & Associates dated 11/7/2008;	The recommendations included within the HIS by Tanner & Associates will be implemented. This is included as a commitment within the revised Statement of Commitments at Section 3 .
Implement the recommendations of the Non-Indigenous Archaeological assessment (NIAA) by Casey & Lowe dated 2008 so that accurate archaeological information from the site can inform all proposed excavation works well prior to issue of a construction certificate and/ or site remediation and future applications.	A Public Domain Archaeological Issues Report has been prepared by Casey & Lowe (Attachment F). This statement identifies that in general the proposed works will not impact upon the archaeology within Areas 4, 5 or 6, with the exception of the proposed pipeworks and excavation for the plant room and balance tank. These works will impact on the potential archaeological deposits within those particular areas. In order to mitigate the impacts of the proposed works and ensure that the heritage significance or the archaeological sites are preserved, the Statement of Commitments at Section 3 has been revised to include a commitment to implement the recommendations within the NIAA dated 2008 and Casey & Lowes Public Domain Archaeological Issues Report.
Revise Section 1.3 of the Project Report - Table 1, which states that heritage and excavation issues have been dealt with previously under MP_08_00092. The EA gives no indication that it has incorporated recommendations from the HIS or NIAA addressing the relationship between the development and identified archaeological potential areas.	The recommendations of the HIS and the NIAA and Public Domain Archaeological Issues Report (Attachment F) prepared by Casey & Lowe, will be implemented. The implementation of the recommendations within the reports is included within the Statement of Commitments at Section 3 .
Revise section 6.11, section 7.1 statement of commitments and the construction management plan to demonstrate that they have been informed by and include provision for a programme of archaeological investigation and salvage.	
Request that a programme of archaeological investigation be undertaken prior to other site excavation works to discover, salvage and document any archaeological remains. Request that any discoveries be adequately recorded in conformity with current Heritage Council guidelines and inform revised and specific site	A programme of archaeological investigation will be undertaken in accordance with the NIAA and Public Domain Archaeological Issues Report (Attachment F) prepared by Casey & Lowe, prior to commencement of works on the public domain site.

Comment	Response
works to interpret the history of the area to future users.	
Request for revised detailed plans to document clearly-specified heritage interpretation works, incorporating and being informed by the results of the archaeological investigation and salvage programme	As approved within the Statement of Commitments for the Concept Plan and reiterated within the Statement of Commitments for the Project Application for Public Domain Works, an Interpretation Plan for the entire Darling Walk site will be prepared in accordance with NSW Heritage Office Heritage Interpretation Policy prior to the issue of a Construction Certificate for commencement of the Public Domain Works.

1.3 Roads and Traffic Authority Submission

The RTA requires the appropriate Road Occupancy Licence to be obtained from the RTA's Planned Incident Unit prior to the commencement of any works affecting Harbour Street.

Response

Lend Lease Development commit to obtaining the appropriate Road Occupancy Licence prior to the commencement of any works affecting Harbour Street. This is included as a Statement of Commitment at **Section 3**.

1.4 Sydney South West Area Health Service– Public Health Unit Submission

The Public Health Unit noted the following:

- it is essential that recycled water is appropriately treated and managed to protect human health; and
- human exposure through water features etc and possibility for transmission of organisms and chemicals via inhalation/ are high public health risks and water will need to be treated to an maintained to a high standard.

In addition, the submission referenced various guidelines for assessing human health and environmental risks associated with private recycled schemes.

Response

Warren Smith and Partners (WSP) have prepared a Rainwater Quality Report (**Attachment E**) which clearly clarifies that the proposed Darling Walk public domain water system for irrigation, the water feature in the Civic Connector and the public toilets is a rainwater re-use system and not a recycled water system.

The guidelines set out within the Health Service submission do not therefore apply, however we note that the rainwater re-use system is designed in accordance with the following standards and guides:

- AS 3500.1 – Plumbing and Drainage – Water Services
- *Guidance on use of rainwater tanks* – Australian Government enHealth Council 2004; and
- *Plumbing for rainwater tanks* – Sydney Water

Furthermore we clarify the recycled water system for the cooling towers, toilets and irrigation within the buildings have been approved under the Project Application for the Buildings and do not form part of this Project Application for Public Domain works.

In order to ensure that the proposed re-use water system does not present a risk to human health pre and post treatment systems are incorporated into the rainwater re-use system. Furthermore, WSP have undertaken a risk assessment and consider that risk minimisation is achieved by maintenance process and communication between the operator and Sydney Harbour Foreshore Authority and recommend the following risk management measures:

- ensure that roof cleaning involves non toxic, non foaming biodegradable cleaning compounds;
- ensure spillages of chemicals are contained using spill kits and procedures are in place to prevent chemicals from entering the rainwater re-use system;
- ensure that the first flush tank will hold the initial spill and arrangements are in place to pump it out by an authorised disposal company;
- ensure the rainwater tank is inspected on completion of the works, then 3 and 12 months after completion;
- ensure that the rainwater treatment plant is maintained; and
- ensure that the rainwater tank is inspected on a 3 monthly basis following the initial 12 month defects period and cleaned on a 12 monthly basis.

Overall, with the risk management measures in place WSP consider that the water treatment systems provided as part of the water feature and water play areas will ensure that the water quality is generally suitable for their proposed use. The Statement of Commitments provides for the implementation of these risk management measures.

1.5 NSW Transport and Infrastructure Submission

NSW Transport and Infrastructure requested that the implications of the proposed for bicycle access be addressed having regard to the Department of Planning's *Guidelines for Walking and Cycling*.

Response

It is noted that the NSW Transport and Infrastructure support the active living opportunities within the public domain. The Department of Planning's *Guidelines for Walking and Cycling* detail a range of policy, planning and design matters for planners aimed at improving walking and cycling considerations in planning and development.

As detailed in the Project Application, the public domain works aim to deliver a diverse range of active and passive spaces, and an enlivened public domain with significantly improved pedestrian connections to the CBD and the wider Darling Harbour precinct. The Pedestrian Boulevard and Retail Terrace strengthen the north / south link towards Cockle Bay and the Civic Connector provides a significant and identifiable link to the CBD. A 3.5m wide shared cycle/ pedestrian pathway along the western side of Harbour Street is provided.

In addition the Darling Walk development includes the provision for bicycle parking within the basement of the commercial buildings and within the public domain.

2.0 CHANGES TO THE PROJECT APPLICATION

As a result of design development, amendments to the following are proposed:

- layout of the Children's Playground;
- shade structures in the Children's Playground;
- Menu Display Windows and Tenants Totems; and
- Kiosk signage.

Accordingly, the Project Application together with the amendments discussed below comprise the Preferred Project.

2.1 Children's Playground

Separate to the public exhibition, Sydney Water requested that the location for some of the proposed play equipment be amended as it was sited over the Sydney Water stormwater channel and they considered the equipment not to be light-weight structure.

In response, the layout of the play equipment in the north west corner of the Children's Playground has been amended to ensure that there is no play equipment over the stormwater channel.

The design of the shade structures in the Children's Playground has been further refined due to structural load issues.

The angle and length of the shade structures has been altered, and additional trees are to be positioned to provide more shade over the seating area. In addition, due to structural load and engineering issues, the span originally proposed over the toilet building has been deleted.

Amended plans of the shade structure are included at **Attachment B**.

2.2 Menu Display Boards and Tenants Totems

Lend Lease Development seeks a minor amendment to the Project Application to allow the provision of menu display boards and tenant totems along the Retail Promenade. It is proposed that the totems will identify the retail tenants names, the Children's Theatre and Car Park Entrance Lobby. The proposed menu display boards and tenant totems are similar to those provided along Cockle Bay Wharf and elsewhere within the Darling Harbour precinct, as shown in the revised Landscape Drawings at **Attachment A**.

Approval for the menu boards and totems is being sought as part of the application to ensure uniformity in design and size of structures in the Darling Walk precinct. One menu board per tenancy is proposed, and they are to be located at the entrance to the outdoor seating areas on the retail promenade. The proposed Menu Boards are consistent with the Sydney Harbour Foreshore Authority's Commercial Signage Policy.

2.3 Kiosk Signage

Lend Lease Development seeks approval for a tenant signage zone on the side of the kiosk as shown on the plans at **Attachment B**. The design of the signage will be related to the future tenant use, will sit within the approved signage zone and will be in accordance with the Sydney Harbour Foreshore Authority's Commercial Signage Policy.

3.0 FINAL STATEMENT OF COMMITMENTS

In response to the issues raised in the submissions and amendments to the Bathurst Street Pedestrian Bridge and the Children's Playground, the Statement of Commitments has been revised to clarify and strengthen the future planning and management actions. The final Statement of Commitments is set out below.

Construction Management

LLD commits to implementing the following plans during the construction phase:

- Pedestrian and Traffic Management Plans
- Noise and Vibration Management Plan
- Sediment and Erosion Control Plan
- Waste Management Plan

Archaeology

LLD commits to implementing the following during the construction of the public domain works:

- Implementing the recommendations of the Casey & Lowe supplementary statements;
- Implementing the recommendations included within the HIS by Tanner & Associates within their report (as included within the Project Application for the Buildings).

Archaeology Interpretation

- Prior to the issue of a Construction Certificate for commencement of the Public Domain Works, an appropriately experienced and qualified heritage practitioner, or interpretation specialist in consultation with a heritage practitioner, will be engaged to prepare an Interpretation Plan for the site in accordance with the NSW Heritage Office Heritage Interpretation Policy. The plan will explore various cultural, social and environmental themes related to the site, including:
 - Barkers Mill
 - 1830s-1840s commercial growth
 - Warehousing sector
 - Darling Harbour as an international port
 - Darling Harbour Reborn
 - Darling Harbour and 2000 Olympic Games

BCA and Accessibility

- The proposed works will comply with all relevant BCA requirements and Australian Standards.
- LLD commit to implementing the recommendations within the Accessibility Report.

Stormwater Management and Water Re-Use

- The stormwater management strategies outlined within Aspects report will be adopted and implemented.
- Re-used rainwater is to be used for the water feature treatment system in the Civic Connector, the irrigation system and flushing of public toilets.
- Domestic water is to be used for the water supply for the water play treatment system.
- Risk management measures for the rainwater system are to be implemented in accordance with the WSP Rainwater Quality Report (**Attachment D**).

Flooding

- Landscaping and Public Domain works are to be undertaken in accordance with the recommendations contained within Worley Parsons flood studies (included in Appendix K of the EAR).

Landscape and Public Domain

- The proposed works are to be undertaken in accordance with the Aspect Landscape Masterplan and FJMT design statement and drawings.

Bathurst Street Bridge Augmentation Works

- The Bathurst Street Pedestrian Bridge Works are to be augmented in accordance with the FJMT design statement and drawings.

Traffic

- LLD commit to obtaining the appropriate Road Occupant Licence prior to the commencement of any works affecting Harbour Street.

4.0 CONCLUSION

We trust the above, sufficiently responds to the issues raised from the submissions and appropriately sets out the preferred project for the Darling Walk Public Domain works to enable the Project Application to be approved.

Should you have any queries about this matter, please do not hesitate to contact me on 02 9956 6962 or kosborne@jbaplanning.com.au.

Yours faithfully



Kirk Osborne
Principal Planner