

Barangaroo Pedestrian Link

Supplement to Submissions Report

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1 Introduction

1.1 Purpose

The purpose of this report is to present the preferred reference design for the Barangaroo Pedestrian Link (BPL) as a supplement to the Submissions Report. This report serves to support the Sydney Metro Network Stage 1 (Central to Rozelle) project approval application, under Part 3A of the *Environmental Planning and Assessment Act 1979*.

1.2 Background

Sydney Metro is seeking project approval of the Sydney Metro Network Stage 1 (Central to Rozelle) (the 'Project'), which includes the Barangaroo-Wynyard Metro Station, with station entrances at both Barangaroo and Wynyard, and in addition, the design and construction of the BPL.

The Project includes the construction of the BPL between Barangaroo and Wynyard. The BPL is considered critical in ensuring safe and efficient pedestrian movements and transport integration between Barangaroo and the transport hub of Wynyard (ie including future metro, the existing CityRail Wynyard Station and bus services, as detailed within the Environmental Assessment (EA) for the Project (pg 142).

The BPL Reference Scheme as proposed within the EA included a paved boulevard interchange area at the Barangaroo waterfront, a bridge structure over Sussex Street with lifts and escalators, the extension of the Westpac plaza and modification to the Napoleon Street node. The design included a tunnel that commenced at the Napoleon Street node, followed under Margaret Street and turned sharply into Clarence Street to join with the RailCorp and Sydney Metro entrance at sub-surface. This BPL Reference Scheme would require the reconfiguration of Margaret and Napoleon Street traffic lanes to allow the widening of the southern side footpaths of Margaret Street. The BPL Reference Scheme as provided within the Environmental Assessment is shown in Figure 1.1.

1.3 Stakeholder submissions

1.3.1 Submissions received on Barangaroo Pedestrian Link

Submissions referencing matters relating to the BPL and closure of the Kent Street tunnel were received from the Barangaroo Delivery Authority (BDA), RailCorp, Roads and Traffic Authority (RTA), City of Sydney, Westpac Banking Corporation ('Westpac') and Colonial First State (owners of KPMG building 10 Shelly Street).

Key issues raised by stakeholders included:

- That the BPL should:
 - provide the most direct tunnel link to Wynyard in the interest of cost efficiency.
 - consider connections to other buildings and enhancement of the retail nodes along the tunnel.

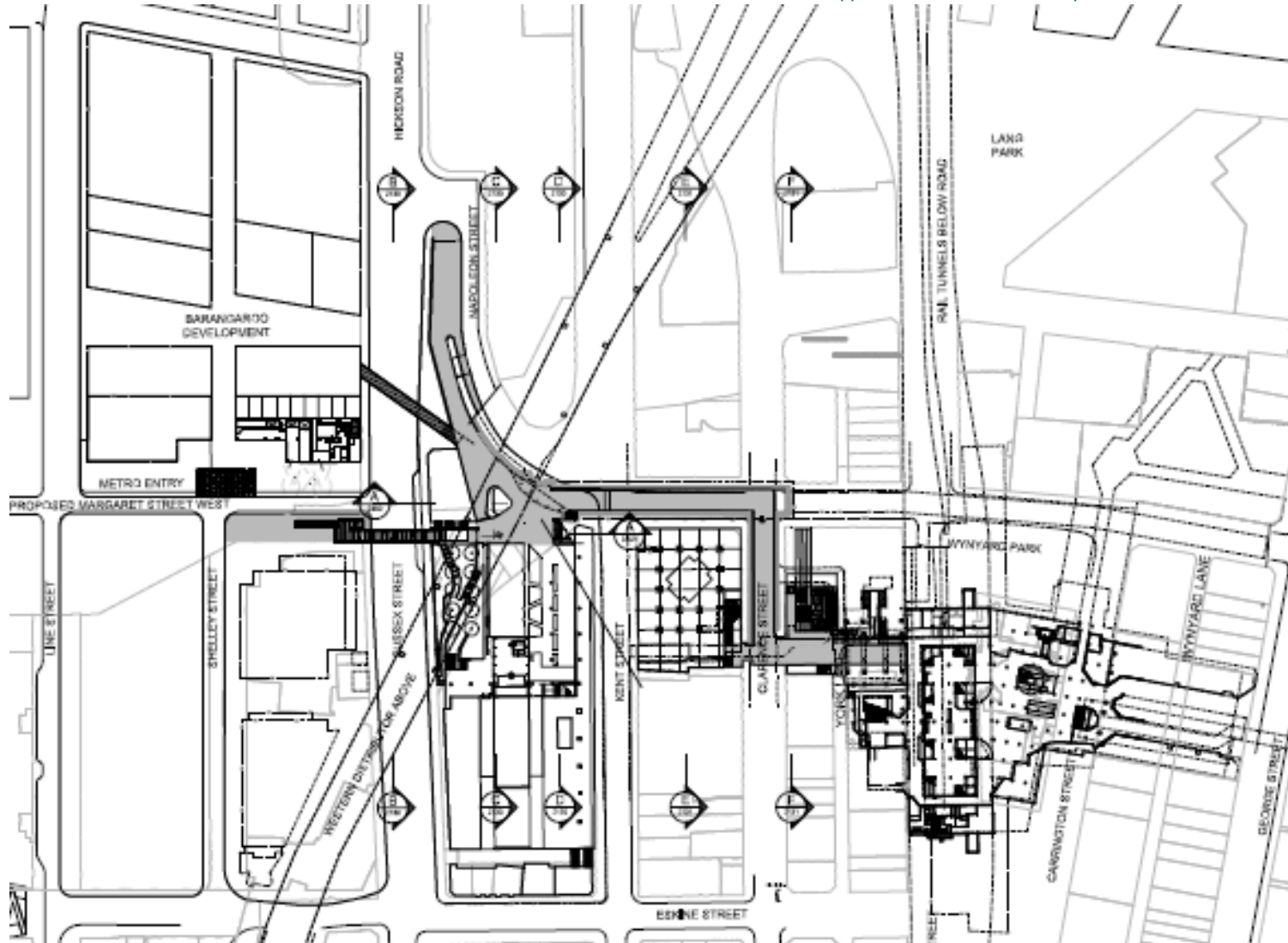


Figure 1.1 BPL Reference Scheme as described within the Environmental Assessment

- address the impact of the ‘dog-leg’ design on large number of pedestrians anticipated to use the BPL.
- have a shorter tunnel length.
- increase exposure to natural light.
- take full advantage of existing pedestrian linkages both at ground and underground.
- look at alternative mid-block tunnel access (rather than under Margaret Street).
- include the implementation of on-surface pedestrian enhancements.
- design is preferred as one bridge over Sussex Street rather than two options.
- The closure of Kent Street tunnel should:
 - seek alternative proposals, with comparable capacity and with an accessible route
 - be closed for the minimal length of time required.
- Other Construction impacts should:
 - address operational traffic network requirements with regard to any closure or capacity restrictions in Margaret Street.
 - develop a strategy for cumulative impacts of construction.
 - provide a pedestrian amendment plan during construction, which is cognisant of the impact on RailCorp’s station at Wynyard.

1.3.2 Sydney Metro Statement of Commitments

Sydney Metro in its Submissions Report and Statement of Commitments has sought to address the issues as described above. Provision is made within the final Statement of Commitments for:

- BPL (new Statement of Commitment 11C)
 - investigate the feasibility an alternative alignment for the BPL along the alignment of the existing Kent Street tunnel.
 - undertake stakeholder consultation.
- Kent Street tunnel closure (new Statement of Commitment 11C)
 - undertake to keep open the existing Kent Street tunnel section from Kent to Clarence Streets, for as long as can practicably be achieved.
 - seek to have in place alternative routes for the Kent to Clarence Street section of the existing Kent Street tunnel when this section has to be closed as result of construction works.
- Construction
 - seek to minimise disruption to traffic and transport movements during construction, including pedestrian movements
 - seek to minimise impacts on access to properties during construction

- inclusion of Statement of Commitments (51 & 52) – with commitment to preparation of Construction Traffic Management Plans and Traffic Control Plans and an extended commitment to establishing a Traffic and Transport Liaison Group.

1.4 Design Development

In parallel with the preparation the Environmental Assessment documentation, Sydney Metro has continued with the design development of the BPL and review of construction planning. Initial discussions with key stakeholders commencing in mid August 2009 focused on the BPL Reference Scheme and the need to address key concerns, namely: amenity and safety of the proposed alignment with the sharp changes in direction and long tunnel length; as well as how to address the impacts on pedestrians of construction of the Sydney Metro works, particularly in light of the proposed closure of the existing Kent Street tunnel.

In response to these matters Sydney Metro investigated opportunities to enhance the Reference Scheme. Whilst small kiosk retail units could be provided to activate the tunnel at the intersection of Margaret and Clarence Street, these enhancements to the BPL Reference Scheme as described within the Environmental Assessment were generally regarded by all stakeholders as fairly minimal, and unsatisfactorily addressed the concerns.

Sydney Metro investigated a suite of alternative options to see how best to provide the BPL, with the required capacity and amenity as well as realise the opportunity presented by the closure of the existing Kent Street tunnel as a result of Sydney Metro's works.

2 Preferred BPL Design

2.1 Proposal

The preferred design for the BPL (as shown in Figure 2.1) would be on the alignment of the existing Kent Street pedestrian tunnel which has to be closed as a result of the construction of the Sydney Metro works at Barangaroo-Wynyard Station (Clarence Street entrance). Further design details for the revised reference scheme are provided within Appendix A.

Key features of the preferred design for the BPL with an alignment via the Kent Street pedestrian tunnel include:

Design and Specification

- Connectivity
 - shortest direct route
 - shortest tunnel section
 - mid block subsurface access
 - choice of surface route connectivity
 - not preclude Sydney Metro footpath widening in Margaret Street
 - provides multi modal interchange: ferry, light rail, metro, RailCorp and bus
- Capacity
 - 9m clear internal width, height generally 3m (up to 4m/ min 2.7m)
- Compliance
 - level access generally at RL9.5 from Westpac Plaza to RailCorp concourse
 - increased DDA access
 - safety – meets CPTED principles



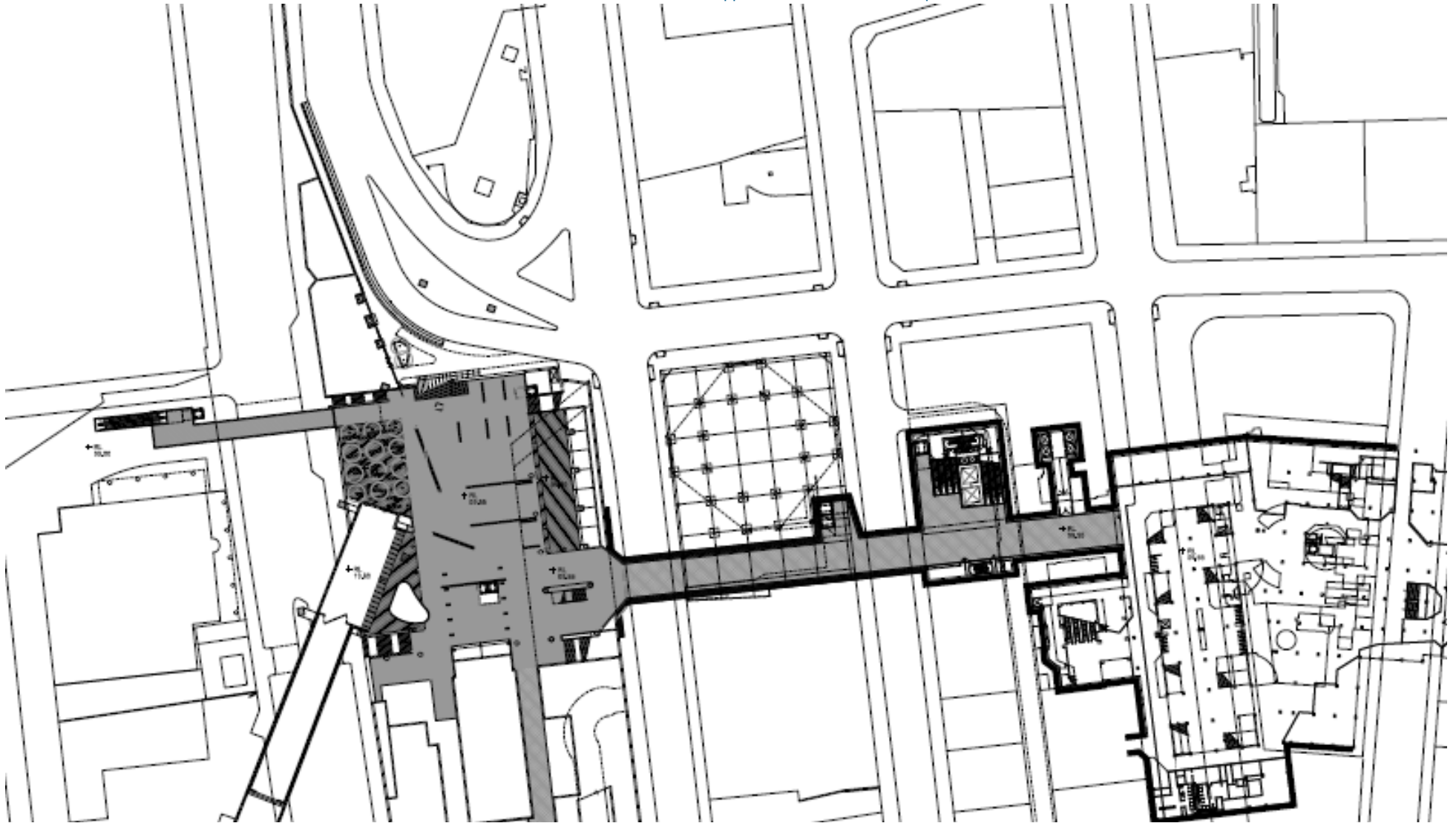


Figure 2.1 Barangaroo Pedestrian Link via the Kent Street tunnel (preferred design)

Construction

- Principles
 - keep the existing Kent Street tunnel from Kent to Clarence Street open for as long as possible
 - not close existing pedestrian routes without first having an alternative route in place
 - complete BPL to coincide with first occupancy of Barangaroo, currently mid 2014
 - minimise impacts in the public domain
 - not take away existing building service access
 - minimise property impacts
 - assumes Kent Street sewer can be relocated
- Work methods
 - cut and cover under Kent (some night work)
 - underpinning within 1 Margaret
 - potential to defer this section of the CoS cycle lane in Kent Street until works completeallow for 3 lane traffic flows (2 north, 1 south) in Kent.
- Spoil removal
 - Reduced tunnel length, therefore reduced spoil
 - reduction in truck numbers given reduced spoil amounts.

2.2 Justification for revised BPL reference design

The rationale for the selection of the scheme shown in figure 2.1 as the preferred alignment for the BPL is that it:

- provides the shortest tunnel length and most direct route:
 - provides mid block tunnel access.
 - takes full advantage of existing pedestrian network both at ground and subsurface.
 - allows implementation of on surface pedestrian enhancements– by Sydney Metro, City of Sydney and others.
- is able to provide enhanced amenity and safety over the reference design:
 - with increased length of route with daylight sections.
 - removal of sharp turns in direction, increased capacity for connections to other buildings and enhancement of the retail nodes along the tunnel.
 - reinforces public element and public access.



- provides a cost effective solution:
 - shortest tunnel length and most direct route
 - shorter construction period
- meets key stakeholders expectations:
 - provides an alignment that best meets the more optimal specification for the BPL, wider precinct pedestrian planning principles of access mid block, integrated with the existing surface and subsurface network.
 - allows the existing Kent Street pedestrian tunnel from Kent to Clarence Street to remain open (for approximately two years from the start of Sydney Metro's construction work)
 - allows for integration with adjoining developments both on opening and over the long term.
 - meets specific concerns raised to the Reference Design as exhibited in the Environmental Assessment.

2.3 Stakeholder Consultation

Extensive stakeholder consultation has been undertaken regarding the BPL Reference Scheme as included within the Environmental Assessment, regarding the development of the preferred design for the BPL with an alignment via the Kent Street pedestrian tunnel. Consultation has been focused on discussion with the following key parties:

Key Government stakeholders:

- Barangaroo Delivery Authority (BDA)
- City of Sydney Council
- Department of Premier and Cabinet (DPC)
- NSW Transport and Infrastructure
- RailCorp
- Roads and Traffic Authority (RTA)
- Sydney Metro Design Review Panel

Affected Property Owners

- Dexu Property Group
- Westpac.

To achieve an alignment of the BPL on the route of the existing Kent Street tunnel, requires a wider route of access through 1 Margaret Street (owned by Dexu Property Group), increasing this from the existing 3+ metres width to up to 10 metres external width and requiring internal property alterations, as well as modifications to Westpac Plaza and the City of Sydney's plaza and gardens.

Ongoing meetings and briefings have been undertaken with these parties from mid August through to mid November 2009, as detailed in Appendix B.

All government and council stakeholders support the preferred design as evidenced in ongoing meetings. Westpac in their submission to the Department of Planning (submission No. 1168), support an alternative BPL along the Kent Street pedestrian tunnel alignment.

The Dexus Property Group has expressed objections to the proposal raising concerns that this might prejudice the future redevelopment of these premises as well as their adjoining holding at 83 Clarence Street. Sydney Metro wrote to Dexus regarding this matter on 8 September and subsequently two meetings have been held with them. However, no submission was received from Dexus to the Environmental Assessment, regarding these proposals for the BPL or the proposed BPL Reference Scheme and Sydney Metro works, which also affect their property at 1 Margaret Street.

2.4 Environmental Issues

Key environmental impacts of the Sydney Metro Network Stage 1 (Central to Rozelle) relate to construction impacts pertaining to spoil management, traffic, noise and vibration and non-indigenous heritage; and operational impacts pertaining to improved local and regional transport, noise and vibration, social and land use impacts and changes to the public domain.

Regarding the preferred design for the BPL with an alignment via the Kent Street pedestrian tunnel, the following environmental impacts are noted:

Table 2.1 Summary of environmental impacts of preferred design

Category	Item	BPL Preferred Design	Environmental outcome over the Reference Scheme
Construction impacts	Spoil management	Reduced tunnelling, reduced spoil	Positive
	Traffic	Reduced number of truck movements due to reduced excavation.	Positive
	Noise and vibration	Located away from residential apartments at Napoleon Street. Likely to impact on some commercial receivers whilst the portion of the BPL between Clarence and Kent Street in constructed.	Minor negative
	Non-indigenous heritage	Potential for impacts to heritage sewer along Kent Street. Reduced area of excavation at Napoleon node.	Minimal changes
	Social and land use	Impacts to property with alterations required to	Negative



Category	Item	BPL Preferred Design	Environmental outcome over the Reference Scheme
		Westpac and Dexus property basement areas. Disruption to food court area during construction.	
Operational impacts	Local and regional transport	Pedestrian access subsurface is mid block, increased access to DDA accessible route, integrated with existing surface and subsurface routes	Positive
	Noise and vibration	Whilst different alignment, no significant impacts	No change
	Social and land use impacts	Greater integration with Westpac and City of Sydney's public plaza. Opportunities for breakthroughs with adjoining properties on redevelopment	Positive

3 Conclusions and Recommendation

3.1 Conclusions

The preferred reference scheme for the BPL is via the Kent Street tunnel alignment, which has received strong endorsement from the key government stakeholders. In addition, Westpac has stated its support of this option.

A BPL alignment via the Kent Street tunnel best meets the specification for the link, it provides the shortest tunnel section, mid block access and integrates well with existing surface and subsurface pedestrian routes. The environmental impacts during construction are reduced over the reference design, with a shorter construction period and reduced tunnelling works. Costs are also reduced for the construction works. Environmental impacts would be reduced overall than the current BPL Reference Scheme.

However, it is acknowledged that the impact of this alignment for the BPL has a greater property impact on Dexu's holding of 1 Margaret Street, than the current Reference Scheme.

3.2 Recommendation

Sydney Metro seeks planning approval for the Baranagaroo Pedestrian Link (BPL) on the alignment via the Kent Street tunnel, as an integral part of the Sydney Metro Network Stage 1 (Central to Rozelle) project.



Appendix A Preferred BPL design





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BARANGAROO PEDESTRIAN LINK

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WESTPAC TUNNEL [A]
SUB-SURFACE PLAN
ALTERNATIVE LIFT ARRANGEMENT

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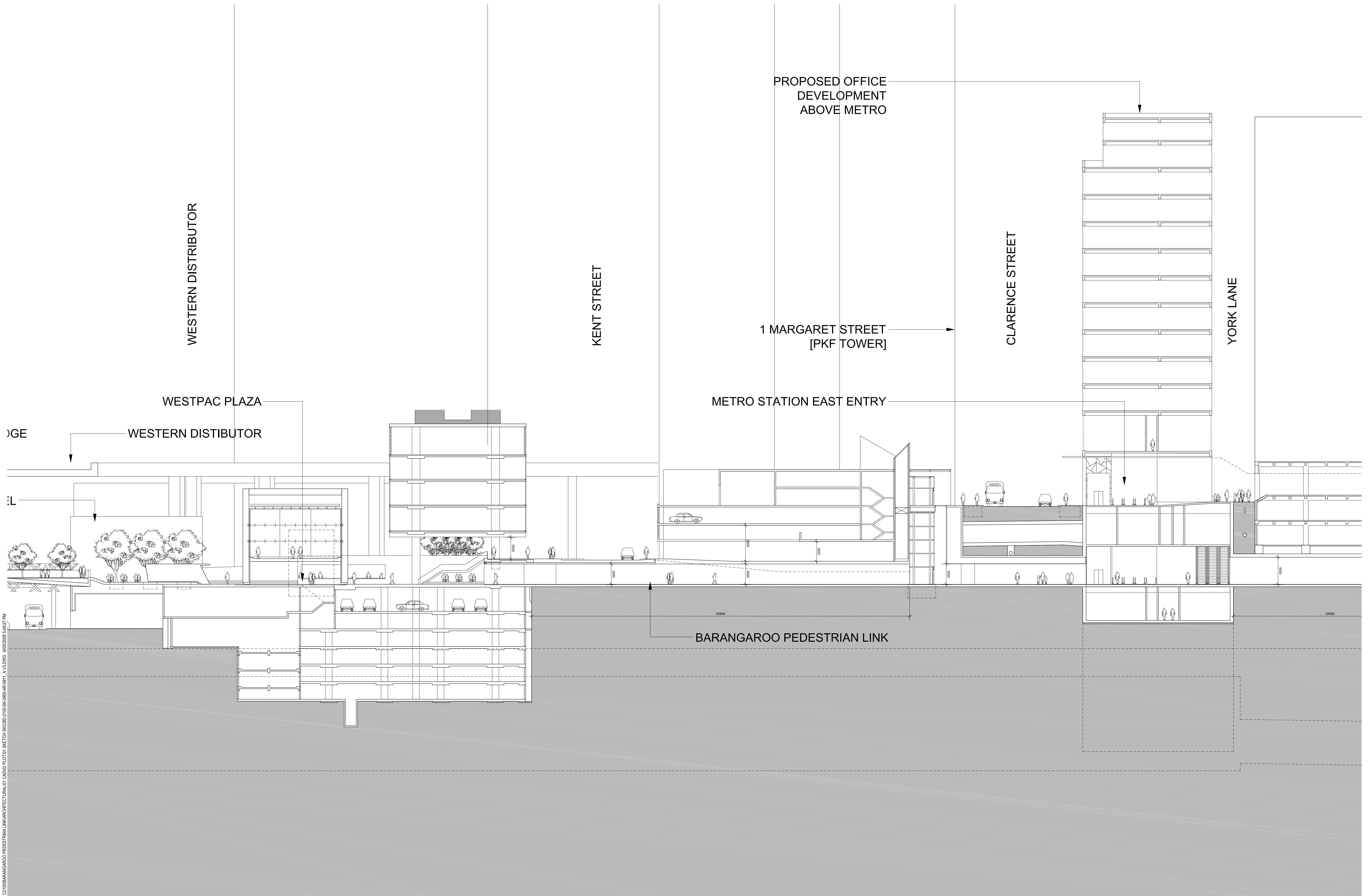
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NAME

BARANGAROO PEDESTRIAN LINK

DRAWING TITLE

WESTPAC TUNNEL [A]
SURFACE LOCATION PLAN
ALTERNATIVE LIFT ARRANGEMENT



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Appendix B Stakeholder consultation

Date	Subject	Organisations
18.08.09	Meeting: BPL – advise that Sydney Metro in consultation with key stakeholders will seek to develop further the Reference Scheme	Sydney Metro Design Review Panel
26.08.09	Meeting: BPL – update	BDA
08.09.09	Letter: BPL given preliminary notice of intentions	To Dexus
10.09.09	Meeting: BDA Pedestrian Study	BDA, SM, NSWTI
14.09.09	BPL interface with RailCorp and Master planning of Precinct	RailCorp, SM
22.09.09	Sydney Metro Design Review Panel	SM
28.09.09	Meeting briefing of Westpac	Westpac
28.09.09	Meeting: BDA development	DoP
01.10.09	Meeting: BDA development	BDA
07.10.09	Meeting 02: BPL impacts on Dexus	Dexus Property Group, SM
09.10.09	Letter: Westpac	From Westpac
19.10.09	Meeting: BPL via Kent Street tunnel option	BDA
26.10.09	Meeting: RailCorp interface at Barangaroo Wynyard with SM and BPL	RailCorp
29.10.09	Meeting: RailCorp interface at Barangaroo Wynyard with SM and BPL	RailCorp
04.11.09	Barangaroo Wynyard Sydney Metro interface with Wynyard Station	RailCorp
05.11.09	Sydney Metro BPL Development :Options Assessment	BDA
05.11.09	Sydney Metro BPL Development :Options Assessment	Department of Premier and Cabinet
10.11.09	Sydney Metro BPL Development :Options Assessment	BDA
11.11.09	Sydney Metro BPL Development :Options Assessment	CoS
12.11.09	Sydney Metro BPL Development :Options Assessment	RTA
12.11.09	Sydney Metro BPL Development :Options Assessment	NSWTI
17.11.09	Sydney Metro BPL Development :Options Assessment	RailCorp

