

Mr Ben Lusher  
Acting Director  
Key Site Assessments  
Department of Planning and Environment  
GPO Box 39  
Sydney NSW 2001

**Attention:** Sara Roach

Dear Mr Lusher *Ben.*

**Exhibition of Modification Request for the Barangaroo Concept Plan (MP06\_0162  
MOD 8) and Proposed State Environmental Planning Policy Amendment  
(Barangaroo) 2015**

Thank you for your letter dated 16 March 2015 requesting Transport for NSW (TfNSW) comment on the above modification proposal.

Roads and Maritime Services will provide a separate response to the above.

The information presented within the application does not have a complete assessment of the potential impacts of the proposed modification proposal.

The summary of key issues identified during the assessment of the proposal is provided below and the detail of key issues and the remaining issues are included in **Attachment 1**.

- The proposed changes to George Street as a result of the proposed CBD Light Rail will increase traffic movements on the road work located within and adjacent to the Barangaroo Precinct. These changes have not been taken into account within the traffic analysis in the TMAP.
- The transport assessment indicates that the performance of the Hickson Road/Napoleon Street intersection, in comparison to MOD 4, operates above acceptable levels of performance. This impact will have to be mitigated. Additionally traffic analysis suggests the performance of the Sussex Street/Erskine Street intersection will improve with an increase in traffic volume which requires clarification.
- The TMAP proposes that public car parks at Towns Place and Headland Park could be used by visitors to the hotel to cater for a 300 space shortfall in demand. These public car parks will also be used by visitors to the Headland Park and Barangaroo Central. No analysis has been undertaken to demonstrate that sufficient supply is available for visitors to public car parks and the hotel. Additionally no consideration has been given to the impact of circulating traffic as traffic move through the Precinct to assess these parking spaces.

- No detailed information has been provided in relation to the proposed dwelling mix for the residential component. TfNSW is unable to comment on whether the parking provided on site complies with the parking rates adopted in the approved Concept Plan.

TfNSW requests that the proponent provides the additional information requested in this submission to Department of Planning and Environment. TfNSW would be pleased to consider any further material forwarded from Department of Planning and Environment.

Thank you again for the opportunity of providing advice for the above modification proposal. If you require clarification of any issue raised, please don't hesitate to contact Mark Ozinga, Manager Land Use Planning and Development on 8202 2198.

Yours sincerely



Anissa Levy  
**Deputy Director General**  
**Planning Division**

13/5/15

CD15/05102

## **Attachment 1 – Issues identified for the Modification of Barangaroo Concept Plan**

### **Transport Assessment**

#### **Impact of CBD Light Rail**

##### **Issue**

The proposed changes to George Street as a result of the proposed CBD Light Rail will increase traffic movements on the road work located within and adjacent to the Barangaroo Precinct. The changes to the traffic movements have not been taken into account for the estimation of future traffic volumes for the traffic analysis in the TMAP.

The following information is provided in the TMAP in relation to redistribution of traffic as a result introduction of the light rail on George Street.

*“The modelling does not consider the redistribution of traffic arising from changes in transport conditions in the CBD following the introduction of the light rail on George Street. It is understood that Transport for NSW is currently preparing a mesoscopic traffic model which considers the traffic impacts of this proposal. The results of this analysis were not available at the time of writing.”*

The above information is incorrect as the EIS for the CBD Light Rail project has been completed and was on public display November and December 2013. The EIS included the traffic impacts of the CBD Light Rail proposal which also takes into account of the Barangaroo development.

##### **Recommendation**

TfNSW requests that the proponent revises the traffic analysis to incorporate the changes to the traffic movements on the road work located within the Wynyard and Barangaroo Precincts to take into account of the approved CBD Light Rail.

#### **Linsig Intersection Analysis**

##### **Issue**

The table below provides the results of the Linsig intersection analysis for Hickson Road/Napoleon Street and Sussex Street/Erskine Street intersections based on traffic reports prepared as part of the Barangaroo development.



| Peak Period                                      | MOD 2* |      |     | MOD 4^ |      |     | MOD 8+9* |      |     |
|--|--------|------|-----|--------|------|-----|----------|------|-----|
|  | LOS    | DS   | AVD | LOS    | DS   | AVD | LOS      | DS   | AVD |
| <b>Hickson Road/Napoleon Street intersection</b> |        |      |     |        |      |     |          |      |     |
| AM Peak  | E      | 1.00 | 68  | D      | 0.92 | 44  | E        | 1.00 | 69  |
| PM Peak  | D      | 0.94 | 48  | F      | 1.01 | 74  | D        | 0.92 | 43  |
| <b>Sussex Street/Erskine Street intersection</b> |        |      |     |        |      |     |          |      |     |
| AM Peak  | B      | 0.60 | 27  | C      | 0.90 | 41  | B        | 0.60 | 27  |
| PM Peak  | E      | 0.97 | 59  | F      | 1.09 | 122 | D        | 0.97 | 55  |

NOTE: MOD – Modification, LOS – Level of Service, DS – Degree of Saturation, AVD – Average Vehicle Delay (sec/veh)

Source: \* Barangaroo South Concept Plan (MP06\_0612 MOD 8), Transport Management and Accessibility Plan

^ Barangaroo South Precinct – Basement and Bulk Excavation (MP10\_0023) Transport Management and Accessibility Plan (TMAP) Supplementary

The transport assessment indicates that the performance of the Hickson Road/Napoleon Street intersection, in comparison to MOD 4, operates above acceptable performance parameters (LOS E). This impact will have to be mitigated. Additionally traffic analysis suggests the performance of the Sussex Street/Erskine Street intersection will improve with an increase in traffic volume which requires clarification.

### Recommendation

TfNSW requests that the proponent updates transport assessment and reconsiders the operation of these intersections in conjunction with the operation of the Light Rail and identifies the impacts and mitigation measures (if required).

### **Traffic Generation from Hotel**

#### Issue

Traffic generation for the proposed hotel has been estimated as 75 vehicle trips during the morning peak period and 213 vehicle trips during the afternoon peak period based on the traffic surveys undertaken at Crown Resort in Melbourne. No detailed information has been provided in the TMAP how these figures have been derived based on the surveys at Crown Resort in Melbourne. TfNSW is therefore unable to assess whether the traffic generation from the hotel is a representative and potential impacts identified.

#### Recommendation

TfNSW requests that the proponent provides a detailed traffic generation estimation in relation to the traffic generation estimation for the hotel.

## **AM Peak Traffic Generation**

### Issue

The traffic assessment inconsistently reports traffic generation estimates in Tables 6 and 10 and it is unclear which has been used for traffic assessment. TfNSW is therefore unable to accurately assess the development impacts.

### Recommendation

TfNSW requests that future traffic flows for the AM Peak and PM Peak periods be reported in the TMAP.

## **Arrival and Departure Traffic Routes**

### Issue

The arrival and departure routes shown in Figure 8 of the TMAP are based on the Barangaroo Integrated Transport Plan which was superseded by the CBD Access Strategy. Major traffic management changes to travel routes are expected to occur in the future with the proposed CBD Light Rail project.

### Recommendation

TfNSW requests that the proponent updates the TMAP to confirm arrival and departure routes are consistent with the CBD Access Strategy and includes proposed changes to travel routes due to the proposed CBD Light Rail project.

## **Traffic Signals at Shelley Street**

### Issue

The TMAP proposes the existing traffic signals at the Hickson Road/Shelley Street intersection are to be removed. Barangaroo Integrated Transport Plan Working Group is currently investigating the retention of the Hickson Road/Shelley Street traffic signals after converting as a mid block signalised pedestrian crossing.

### Recommendation

TfNSW requests that the proponent consults with the Barangaroo Integrated Transport Plan Working Group to confirm the current status of the signals at the Hickson Road/Shelley Street intersection.

## **King Street Wharf Precinct**

### **Issue**

No information is provided in the TMAP in relation to the traffic modelling and road network operation for the King Street Wharf Precinct. TfNSW is therefore unable to assess the impact of the proposal on the performance of the road network within the King Street Wharf Precinct.

### **Recommendation**

TfNSW requests that an updated TMAP includes traffic modelling and road network operation information for the King Street Wharf Precinct.

## **Parking Assessment**

### **Parking for Residential Component**

#### **Issue**

No detailed information has been provided in relation to the proposed dwelling mix for the residential component. The parking provision and corresponding dwelling numbers are provided below for each modification of the proposal.

| <b>Modification</b> | <b>Number of Dwellings</b> | <b>Number of Parking Spaces</b> |
|---------------------|----------------------------|---------------------------------|
| Mod 2               | 750                        | 771                             |
| Mod 4               | 1,166                      | 1,166                           |
| Mod 8               | 1,675                      | 2,205                           |

Based on the above, the increase in number of parking spaces from Mod 4 to Mod 8 for the increase of 509 dwellings is 1,039, an average supply of two (2) parking spaces per dwelling. The approved concept plan outlines that a parking supply of 2 (two) spaces per dwelling should only apply to apartments with 3 (three) or more bedrooms. No information is provided about the dwelling mix in the modification and TfNSW is therefore unable to comment on whether the parking provided on site comply with the parking rates adopted in the approved Concept Plan.

#### **Recommendation**

TfNSW requests that the proponent provides the details in relation to the development mix for the additional 509 dwellings and the number of parking spaces assigned for each type of residential development in the TMAP.



## **Carparking Demand for Hotel**

### Issue

The TMAP proposes that public car parks at Towns Place and Headland Park could be used by visitors to the hotel to cater for a 300 space shortfall in demand. These public car parks will also be used by visitors to the Headland Park and Barangaroo Central. No analysis has been undertaken to demonstrate that:

- Sufficient supply is available for both visitors to public car parks and the hotel;
- Why it is appropriate that the hotel does not cater fully for its demand; and
- Circulating traffic would not have impact on road network as traffic move through the Precinct to access the parking spaces.

### Recommendation

TfNSW requests that the proponent undertakes a detailed analysis to confirm that adequate public parking is available for visitors to Headland Park and Barangaroo Central and the hotel at Towns Place and Headland Park.

## **Bicycle Parking**

### Issue

The TMAP does not identify the bicycle parking provision for commuters and visitors as a result of the proposed modification to the proposal in the TMAP.

### Recommendation

TfNSW requests that the proponent identifies and justifies the provision of bicycle parking for commuters and visitors as a result of the proposed modification in the TMAP. This should include provision of public bicycle parking and parking within buildings.

## **Coach Parking**

### Issue

The TMAP does not identify the coach parking provision for the proposed modification to the proposal in the TMAP.

### Recommendation

TfNSW requests that the proponent identifies and justifies the coach parking provision as a result of the proposed modification in the TMAP.

## **Ferry Operation**

### **Ferry Mode Share**

#### **Issue**

The ferry mode share of 4% has been adopted in the Transport Management Accessibility Plan (TMAP) prepared as part of the proposed modification. It is noted that the ferry mode share of 1% has been adopted as a target since the preparation of the Barangaroo Concept Plan in 2008. An increase in ferry mode share from 1% to 4% may have significant network implications.

#### **Recommendation**

TfNSW requests that the proponent provides clear justification and the basis for the increase in ferry mode share in the TMAP.

### **Ferry Services Operation**

#### **Issue**

The TMAP has not considered whether any water based construction activities impact upon the construction of the proposed Barangaroo Ferry Hub (if concurrent) or the operation of the ferry services.

#### **Recommendation**

TfNSW requests that the proponent undertakes an impact assessment on ferry services as a result of the proposed modification to ensure that operations are not affected.

### **Navigation and Safety Assessment**

#### **Issue**

Navigation and safety impact assessment on the Barangaroo Ferry Hub does not consider the following issues:

- Impact on the clear berthing navigation area to the north of the northernmost wharf (NOTE: Page 32/Figure 7 of Environmental Assessment Report shows the public pier close to the northernmost wharf, potentially impacting on the navigation area). TfNSW considers that the modification of the boundary to move the public pier southwards may constrict the space available for navigation to and from the northernmost wharf of Barangaroo Ferry Hub. A minimum width of 17.5m off the berthing face needs to be kept clear at all times for ferry movements.



- The Appendix K Navigation Report did not consider the proposed Barangaroo Ferry Hub wharves. The navigational safety report is therefore considered incomplete. It is noted that Barangaroo Ferry Hub does not yet have planning approval, however this application is well progressed. Information on wharf locations has been available to Lend Lease for some months, and the Environmental Impact Statement for Barangaroo Ferry Hub was on public display from December 2014.
- Community building and public pier design have not had regard to the relationship with Barangaroo Ferry Hub wharves, particularly the northernmost wharf. It is not clear from the application whether there is any intent for berthing of vessels on the public pier. This would be incompatible with the Barangaroo Ferry Hub, particularly on the southern face. Any proposed berthing should be considered in a navigational study which considers Barangaroo Ferry Hub.
- Impact of lighting glare on navigational safety. A safeguard should be included that lighting design will ensure no lights are shining into the eyes of vessel masters on approach to Barangaroo Ferry Hub (or other vessels travelling in Darling Harbour).
- Impact of public pier and community building on the ferry masters line of sight to see other vessels coming from the north.

#### Recommendation

TfNSW requests that a detailed navigation and safety impact assessment be undertaken in consultation with TfNSW.

### **Bus Operation**

#### **Impacts on Bus Operation**

##### Issue

The proposed development has the potential to impact on bus operation and these impacts and potential mitigation measures have not been considered in the TMAP. If the revised modelling shows increase in delays to bus operations on Hickson Road and in the vicinity of the Barangaroo site, the analysis should consider the impact on any potential traffic queues on bus services and how to address any impacts on buses.

##### Recommendation

TfNSW requests that the revised TMAP assesses the impacts on bus operation and proposes mitigation measures for the impacts.

## **Amendments to the TMAP**

TfNSW requests that the following amendments be made to reflect the current policies and the status of the transport projects in the TMAP:

- Barangaroo Integrated Transport Plan has been largely superseded by the Sydney City Centre Access Strategy. Any reference should first be made to the Sydney City Centre Access Strategy and subsequently to the Barangaroo Integrated Transport Plan as required.
- Section 4.3.3 (Page 19) – Bus movements reported in Tables 9 and 10 of the TMAP are based on 2008 information and outdated and needs to be updated.
- Section 4.7.1 (Page 40) – Napoleon Street is not the key link for cyclists to Barangaroo as shown in Figure 14 - Strategic Cycleway Map sourced Sydney City Centre Access Strategy.
- Section 4.7.1 (Page 41) – Figure 15 does not reflect the Sydney Centre Access Strategy. In particular, the cycle route along College and Macquarie Streets is not an endorsed cycle route.
- Section 4.7.2 (Page 42) – Figure 16 shows the foreshore promenade as a Shared cycle route but in the text it is mentioned as not having cycling permitted. This needs to be clarified.
- Section 4.8.2 (Page 44) – Wynyard Station upgrade announced in May 2014 (not in May 2015).
- Section 4.8.3 (Page 45) – The South West Rail Link is complete and now open.
- Section 4.8.4 (Page 46) – Rapid Transit Network plans announced in June 2014 (not in June 2015).
- Section 4.9 (Page 47) – Erskine Street is not a bus corridor and the paragraph in relation to Inner West bus services operating to Central is to be removed.
- Section 4.10 (Page 49) – Latest information in relation to Barangaroo Ferry Hub needs to be included as per public announcements.
- Section 4.12.1 (Page 50) – Light rail extension opened in March 2014 (not in March 2015).
- Section 4.12.2 (Page 51) – CBD and South East Light rail is expected to take 4 years to complete (not expected to take five to six years to complete).

## Amendments to the Environmental Assessment Report

TfNSW requests that the following amendments be made to reflect the current policies and status of the transport projects in the Environmental Assessment Report:

- Section 2.1.4 (Page 5) – SSI 6727 has been submitted by Transport for NSW (TfNSW) and was publicly exhibited from December 2014 to February 2015.
- Section 5.2 (Page 36) – Figure 11 – Public Domain Context incorrectly shows the northernmost wharf of Barangaroo Ferry Hub dotted. As all three wharves are proposed, all should be included in diagrams.
- Section 9.8.4 (Page 82) – A State Significant Infrastructure application (SSI 6727) has been submitted by TfNSW.
- Section 9.8.4 (Page 82) – “*The indicative location of the ferry wharves has not been amended in Concept Plan (Mod 8) and are generally consistent with those proposed in SSI 6727*” is not correct. In a number of the diagrams included in Mod 8, the location of the wharves is incorrectly shown too far south, and is inconsistent with the SSI Application submitted in October 2014 and the EIS. All diagrams should show the wharves in their correct locations.