

# Supplementary View and Visual Impact Assessment

Barangaroo Concept Plan (06\_0162) - MOD 9 (RtS) | July 2024

Contents

Glossary of terms

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1.0 Introduction

- 1.1 Background
- 1.2 Purpose of this report
- 1.3 Methodology
- 1.4 Selected observer locations

2.0 Consideration of observer locations

3.0 Conclusion

2	Approved Concept Plan	The most recent concept plan iteration for the Barangaroo development approved by the NSW government. The “Approved Concept Plan” refers to the most recently approved plan: MOD 11.
3	Central Barangaroo	The central portion of the Barangaroo development. This area will be a mixed use precinct with commercial, retail, residential, civic and parkland spaces. The area includes Block 5, 6 and 7.
3	Development envelope	The volume of space that buildings and architectural elements (built form) can be constructed within. Built form is not likely to take up all of the envelope volume, however, it shows the is the greatest extend that any built form can inhabit.
3	GFA	Gross floor area
3	Magnitude (of change)	A term that combines judgements about the size and scale of the effect, the extent of the area over which it occurs, whether it is reversible or not, and whether the change is short or long term in duration ( <i>Guidelines for Landscape and Visual Impact Assessment, 2013</i> ).
4	Modification	A formal application to modify an existing development consent.
	MOD 8	The eighth modification to the Barangaroo Concept Plan 06_0162, abbreviated to ‘MOD’ 8. This modification has been approved.
	MOD 9 - RtS, the Project	The response to submission (RtS) is an updated version of the ninth modification to the Barangaroo Concept Plan 06_0162. This modification contains the previous MOD 10 and MOD 11 changes, and the amendments resulting from the design responses to submissions after exhibition of MOD 9 - exhibited. This is the design that has been assessed in this report.
	MOD 10	The 10th modification to the Barangaroo Concept Plan 06_0162. This modification has been approved.
	Observer Location	The location from which an assessment is made of the impact that the MOD 9 - RtS design has on the view.
	Proposed Concept Plan	The proposed changes to the Approved Concept Plan. This will be the ninth modification of the Barangaroo development, which is to be assessed in this report. See also “MOD 9 - RtS”
	RtS Reference Design	A potential arrangement of the built form to show the massing of the GFA in the proposed MOD9 - RtS development envelope. This is one of many iterations that could achieve the GFA within the Proposed MOD9 - RtS development envelope.
	Sensitivity	A term applied to specific observer locations, combining judgements of the susceptibility of the viewpoint to the specific type of change or development proposed and the value related to that view ( <i>Guidelines for Landscape and Visual Impact Assessment, 2013</i> ).
	The Applicant	Infrastructure NSW (INSW)
	Indicative Massing	A potential arrangement of the built form to show the massing of the GFA in the current Approved Concept Plan development envelope. This is one of many iterations that could achieve the GFA within the Approved Concept Plan development envelope.
	Visualisation	A computer simulation, photomontage or other techniques illustrating the predicted appearance of a development ( <i>Guidelines for Landscape and Visual Impact Assessment, 2013</i> ).



# 1.0 Introduction

## 1.1 Background

A View and Visual Impact Assessment (VVIA) was prepared by AECOM in 2023 in support of an application to modify the Approved Concept Plan for Barangaroo, which was approved on 2 September 2020 under the then Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The VVIA (2023) assessed the Proposed Mod 9 - RtS development envelope against the Mod 8 Approved Concept Plan development envelope.

The Department of Planning, Housing and Industry (DPHI) issued a Key Issues letter dated 15 March 2024 with a request for additional information.

## 1.2 Purpose of this report

This supplementary addendum to the VVIA (addendum VVIA, 2024), has been prepared by AECOM on behalf of Aqualand C/-Infrastructure NSW (the Applicant) in relation to a modification to the Barangaroo Concept Plan (MP06\_162 MOD 9). Specifically it has been prepared to assist with the responding to the Key Issues letter issued by the DPHI dated 15 March 2024.

This addendum VVIA (2024) responds to Key Issue 1 of the letter, requiring updates to the submitted VVIA (2023) to respond to additional analysis of approved forms at Central Barangaroo.

The current Approved Concept Plan does not include a reference design or 'indicative massing plan' and none of the representations of the various iterations of the scheme represent the approximately 47,000sqm gross floor area (GFA) in Central Barangaroo. To assist DPHI with the assessment of the MOD9 - Response to Submissions (RtS) scheme (the Project), the Applicant has prepared an Indicative Massing based on the GFA in the current Approved Concept Plan. The Applicant has also prepared an RtS Reference Design based on the 104,000 total GFA in the Proposed MOD9 - RtS (some of which would be below ground level). These reference designs have been prepared by SJB Architects and has been informed by the existing approval framework set out in the Instrument of Approval and Statement of Commitments.

This addendum VVIA (2024) provides updated visualisations showing the potential building massing within the respective development envelopes under the current planning framework. It is important to note that the inclusion of this massing does not alter the findings of the VVIA (2023) placed on the Response to Submission exhibition. The VVIA (2023) provided an assessment of the impact between the Approved Concept Plan development envelope and the proposed MOD9-RtS development envelope, not the potential building massing they can accommodate. Future State Significant Development Applications will require further assessment of visual impact, based on the proposed Design Guidelines and framework set by the amendments in MOD 9.

The potential building massing plans sit within their respective development envelopes and therefore do not necessitate a change to the baseline assessment. The purpose of this addendum VVIA report is to identify key views outlined in the Director General's Requirements (DGR's), planning controls (Sydney Development Control Plan 2012) and those identified by agencies following exhibition of the MOD9 RtS design against potential building massing plans under the current development envelopes at the request of DPHI.

## 1.3 Methodology

This addendum VVIA (2024) has been developed to compare the Indicative Massing arrangement within the Approved Concept Plan development envelope, and the RtS Reference Design within the Proposed MOD9 - RtS development envelope. There is no formal landscape character and visual impact assessment undertaken, however, visualisations have been provided to provide a visual comparison.

Visualisations were prepared to illustrate the potential appearance of the reference designs within their landscape setting. The methodology for producing these visualisations is outlined in Chapter 5.2 of the VVIA (2023). Updates to this methodology include:

- The Approved Concept Plan building envelope has been rendered in a transparent white colour (previously shown in purple), with the Indicative Massing under the Approved Concept Plan development envelope rendered in a medium grey. A new Indicative Massing model, has been provided as a dwg file "6759\_A22\_BARANGAROO\_GFASTUDYmod8-Option 1\_ARTICULATED\_World coordinates\_With Envelope.dwg" by SJB on 9 May 2024.
- The Proposed MOD 9 - RtS building envelope has been rendered in a transparent white colour (previously shown in purple), with the RtS Reference Design under the Proposed MOD 9 - RtS development envelope rendered in a medium grey. A new RtS Reference Design, which was provided as a dwg file "6759\_A22\_BARANGAROO\_RTS\_ARTICULATED\_World coordinates" by SJB on 22 May 2024.

This approach is generally consistent with the VVIA (2023) undertaken at MOD 8, with the exception that the existing approved reference design was not representative of GFA. However, at the request of DPHI, a scheme depicting approximately 47,000sqm has been shown.

The visualisations prepared from four observer locations illustrate the comparison between the Approved Concept Plan development envelope and the Indicative Massing, and the Proposed MOD9 - RtS development envelope and the RtS Reference Design.

## 1.4 Selected observer locations

The following four observer locations from the VVIA (2023) were selected from which to provide comparison. These views have been identified in the DGR's and Sydney DCP 2012 as prominent views/vistas and/or have been identified following discussions with DPHI as requiring further attention with respect to potential impacts. The selected views are:

- Observer Location 2: Sydney Observatory
- Observer Location 3: High Street (South)
- Observer Location 9: Gas Lane
- Observer Location 12: Balmain East - Illoura Reserve

Figure 1 shows the observer locations assessed in the VVIA (2023), with those considered in this addendum VVIA (2024) outlined in blue.



Figure 1 Map of Observer Locations (OL's) assessed in the VVIA (2023)

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# 2.0 Visualisation Comparisons



2.4.1 Observer Location 2: Sydney Observatory

The visual assessment of the Observer Location 2 can be found in section 6.2 of the VVIA (2023).



Figure 2 Visualisation showing the development envelope of the Approved Concept Plan (AECOM, May 2024)



Figure 3 Visualisation showing the development envelope of the Approved Concept Plan and the Indicative Massing (AECOM, May 2024)





Figure 4 Visualisation showing the development envelope of the Proposed MOD9 RtS development envelope (AECOM, May 2024)



Figure 5 Visualisation showing the development envelope of the Proposed MOD9 RtS development envelope and the RtS Reference Design (AECOM, May 2024)



2.4.2 Observer Location 3: High Street South

The visual assessment of the Observer Location 3 can be found in section 6.3 of the VVIA (2023).



Figure 6 Visualisation showing the development envelope of the Approved Concept Plan (AECOM, May 2024)



Figure 7 Visualisation showing the development envelope of the Approved Concept Plan and the Indicative Massing (AECOM, May 2024)





Figure 8 Visualisation showing the development envelope of the Proposed MOD9 RtS development envelope (AECOM, May 2024)



Figure 9 Visualisation showing the development envelope of the Proposed MOD9 RtS development envelope and the RtS Reference Design (AECOM, May 2024)



2.4.3 Observer Location 9: Gas Lane

The visual assessment of the Observer Location 9 can be found in section 6.9 of the VVIA (2023).



Figure 10 Visualisation showing the development envelope of the Approved Concept Plan (AECOM, May 2024)



Figure 11 Visualisation showing the development envelope of the Approved Concept Plan and the Indicative Massing (AECOM, May 2024)





Figure 12 Visualisation showing the development envelope of the Proposed MOD9 RtS development envelope (AECOM, May 2024)



Figure 13 Visualisation showing the development envelope of the Proposed MOD9 RtS development envelope and the RtS Reference Design (AECOM, May 2024)



2.4.4 Observer Location 12: Balmain East - Illoura Reserve

The visual assessment of the Observer Location 12 can be found in section 6.12 of the VVIA (2023).

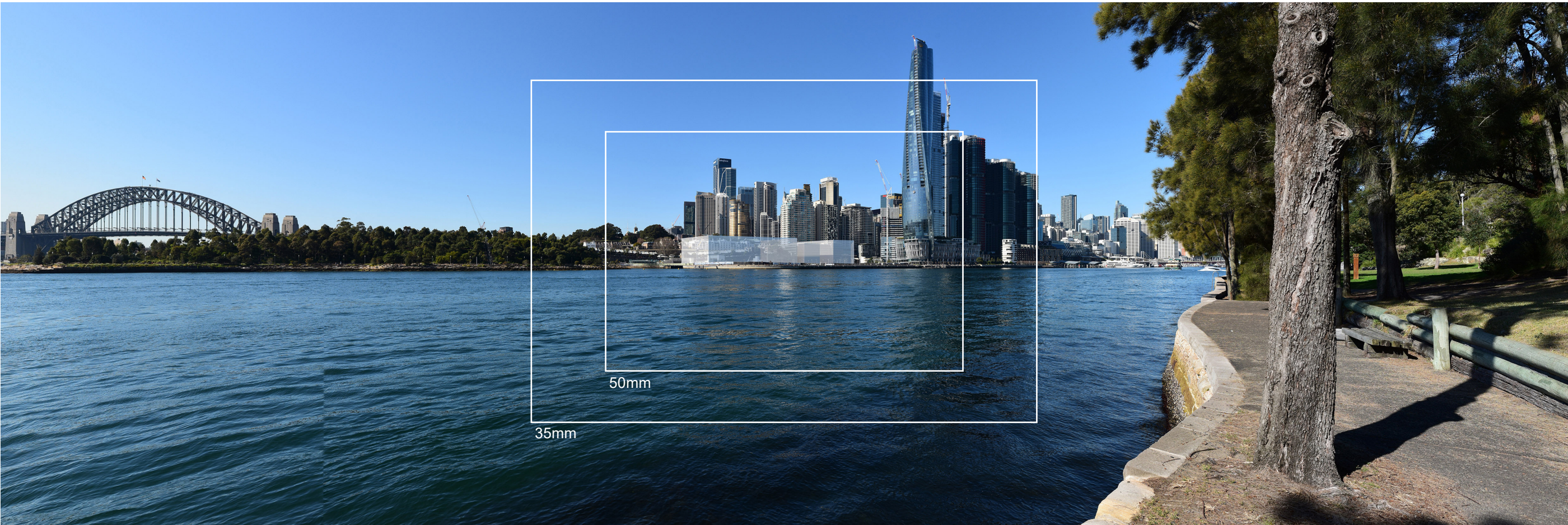


Figure 14 Visualisation showing the development envelope of the Approved Concept Plan (AECOM, May 2024)



Figure 15 Visualisation showing the development envelope of the Approved Concept Plan and the Indicative Massing (AECOM, May 2024)





Figure 16 Visualisation showing the development envelope of the Proposed MOD9 RtS development envelope (AECOM, May 2024)



Figure 17 Visualisation showing the development envelope of the Proposed MOD9 RtS development envelope and the RtS Reference Design (AECOM, May 2024)



# 3.0 Conclusion

This addendum to the VVIA compares the Approved Concept Plan development envelope to the Proposed MOD9 - RtS development envelope and therefore there is no change in the outcome of the VVIA (2023). Comparison visualisations have been provided for reference only.

## Summary of findings between the Approved Concept Plan and MOD9 - RtS VVIA (2023)

A summary of findings between the Approved Concept Plan and MOD9 - RtS from the VVIA (2023) is provided here for reference.

The key views identified in the planning and background documents (including DGRs) as relevant to the Central Barangaroo development are outlined in Chapter 3 of the VVIA (2023). The following four observer locations from the VVIA (2023) were selected from which to provide comparison. These views have been identified in Sydney DCP 2012 as prominent views/vistas and/or have been identified following discussions with DPHI as requiring further attention with respect to potential impacts. The selected views are:

- Observer Location 2: Sydney Observatory
- Observer Location 3: High Street (South)
- Observer Location 9: Gas Lane
- Observer Location 12: Balmain East - Illoura Reserve

The majority of views west to Darling Harbour and beyond from Millers Point and east from Balmain East looking back towards Millers Point, have already been lost to the Approved Concept Plan, with MOD 9 - RtS marginally increasing height at the southern end of Central Barangaroo adjacent to the much taller South Barangaroo and Sydney CBD high-rise buildings.

Extensive harbour views are still available north of Central Barangaroo from sensitive viewing locations within Millers Point, including from Observatory Hill Park and High Street. A substantial and visually cohesive component of the Millers Point Heritage Conservation Area remains visible from observer locations along the western shore of Darling Harbour.

MOD 9 - RtS is generally seen to exhibit a High to Moderate level of visual integration into the landscape compared with the Approved Concept Plan due the compositional form, scale, line and massing of the three development blocks, relative to that of towers within Barangaroo South.

Overall, the key driver of High to Moderate ratings arose from the sensitivity of visual receptors to proposed change rather than the magnitude of change between the Approved Concept Plan and MOD 9 - RtS.

For views from the public domain, sensitivity was the key driver of High to Moderate ratings of visual impact, with most ratings of magnitude of change falling within the range of Moderate and Low / Negligible.

Table 1 provides a summary of findings arising from MOD 9 - RtS for each representative OL taken from the VVIA (2023), with the four Addendum locations outlined in blue.

## Extent of change between the Approved Concept Plan and MOD9 - RtS

The degree of change between the Approved Concept Plan and Mod 9 - RtS is reflected in the magnitude rating illustrated in Table 1. As part of this process, context is provided with regard to the development that was in place prior to the bringing into existence of Barangaroo to assist in understanding the cumulative changes seen.

The pre-Barangaroo development of East Darling Harbour Wharves facilitated effectively unimpeded views from the Millers Point Heritage Conservation Area, including Sydney Observatory and Observatory Hill Park, across Darling Harbour to the inner western suburbs (OLs, 02, 03, 09, shown in Figure 1), and conversely, effectively unimpeded views back to the Millers Point Heritage Conservation Area from the western shores of Darling Harbour (OL 12 shown in Figure 1).

The Approved Concept Plan incorporates the completed towers within Barangaroo South, and a long, relatively low development envelope within Central Barangaroo of between about 8-10 storeys in height. The Central Barangaroo development envelope extends across the southern face of the Millers Point Heritage Conservation Area, from midway along the length of the State Heritage Register listed terraces on High Street, to the south beyond the Highgate residential tower on Kent Street. It projects above both the High Street terraces and the more elevated terraces behind on Kent Street. This effectively results in full view loss across Darling Harbour from these terraces (OL 08 shown in Figure 1), and conversely, effective full view loss from locations on the western shores of Darling Harbour (OL 12 shown in Figure 1) to the southern end of the Millers Point Heritage Conservation Area (including the terraces).

Views to the harbour from Sydney Observatory and Observatory Hill Park are predominantly obscured by the development. The view to the horizon is maintained, with all the Block heights within the development sitting below the Sydney Observatory domes.

The key driver of the High to Moderate overall visual impact ratings is the sensitivity of visual receptors to the proposed change, rather than the magnitude of change.

MOD 9 - RtS exhibits a High level of visual absorption capacity within the surrounding landscape compared with the Approved Concept Plan due the compositional form of the three development blocks, relative to that of towers within Barangaroo South.

Overall, the similar central and northern block heights, stacking of height towards the southern end of Central Barangaroo and additional and relocated separations of MOD 9 - RtS over that of the Approved Concept Plan development envelope is considered to provide a positive outcome with regards to the impact to the visual amenity of the proposal in the landscape surrounds.

Table 1 Summary of significance of visual impact at each Observer Location

	OBSERVER LOCATION	SENSITIVITY*	MAGNITUDE**	SIGNIFICANCE OF VISUAL IMPACT+
PUBLIC DOMAIN	OL 1 - SYDNEY OBSERVATORY HILL PARK	HIGH	LOW	MODERATE
	OL 2 - SYDNEY OBSERVATORY	HIGH	LOW	MODERATE
	OL 3 - HIGH STREET (SOUTH)	MODERATE	LOW	MODERATE-LOW
	OL 4 - MUNN RESERVE	HIGH	LOW	MODERATE
	OL 5 - CLYNE RESERVE	HIGH	NEGLECTIBLE	NEGLECTIBLE
	OL 6 - BARANGAROO RESERVE - WULUGUL PARK	HIGH	LOW	MODERATE
	OL 7 - BARANGAROO RESERVE - STARGAZER LAWN PARK	MODERATE	NEGLECTIBLE	NEGLECTIBLE
	OL 8 - HICKSON ROAD	MODERATE	LOW	MODERATE-LOW
	OL 9 - GAS LANE	LOW	HIGH	MODERATE
	OL 10 - BALLAARAT PARK	HIGH	LOW	MODERATE
	OL 11 - PIRRAMA PARK	HIGH	LOW	MODERATE
	OL12 - BALMAIN EAST - ILLOURA RESERVE	HIGH	LOW	MODERATE
	OL13 - BALLS HEAD	MODERATE	NEGLECTIBLE	NEGLECTIBLE
	OL14 - BLUES POINT	MODERATE	NEGLECTIBLE	NEGLECTIBLE
	OL15 - SYDNEY HARBOUR BRIDGE	MODERATE	NEGLECTIBLE	NEGLECTIBLE
PRIVATE DOMAIN	OL16 - LANGHAM HOTEL - LEVEL 3	HIGH	MODERATE	HIGH - MODERATE
	OL17 - HIGHGATE - LEVEL 15	HIGH	LOW	MODERATE
	OL18 - HIGHGATE - LEVEL 25	HIGH	LOW	MODERATE
	OL 19 - THE GEORGIA - LEVEL 15	HIGH	LOW	MODERATE
	OL 20 - THE GEORGIA - LEVEL 25	HIGH	LOW	MODERATE
	OL 21 - STAMFORD MARQUE - LEVEL 15	HIGH	LOW	MODERATE
	OL 22 - STAMFORD MARQUE - LEVEL 25	HIGH	LOW	MODERATE
	OL 23 - STAMFORD ON KENT - LEVEL 15	HIGH	LOW	MODERATE
	OL 24 - STAMFORD ON KENT - LEVEL 25	HIGH	LOW	MODERATE
	OL 25 - 189 KENT STREET - LEVEL 15	HIGH	LOW	MODERATE
	OL 26 - ONE SYDNEY HARBOUR - LEVEL 9	HIGH	MODERATE	HIGH - MODERATE
	OL 27 - CROWN SYDNEY HOTEL - LEVEL 13	HIGH	MODERATE	HIGH - MODERATE
	OL 28 - CROWN SYDNEY APARTMENTS - LEVEL 34	HIGH	LOW	MODERATE
PUBLIC DOMAIN	OL 29 - SHELLEY STREET (FROM KING STREET BRIDGE)	N/A	N/A	N/A
	OL 30 - LIME STREET	N/A	N/A	N/A
	OL 31 - DARLING HARBOUR (PYRMONT BRIDGE)	N/A	N/A	N/A
	OL 32 - DARLING HARBOUR - AUSTRALIAN NATIONAL MARITIME MUSEUM	N/A	N/A	N/A
	OL 33 - SYDNEY OBSERVATORY HILL PARK - SOUTH PATH	HIGH	LOW	MODERATE
	OL 34 - SYDNEY OBSERVATORY - SOUTH WEST	HIGH	LOW	MODERATE
	OL 35 - NATIONAL TRUST CAR PARK	N/A	N/A	N/A
	OL 36 - HIGH STREET - NORTH	HIGH	LOW	MODERATE
	OL 37 - HIGH STREET - SOUTH	HIGH	LOW	MODERATE
	OL 38 - HICKSON ROAD - CORNER OF WATERMANS QUAY	MODERATE	LOW	MODERATE-LOW
	OL 39 - JAMES WATKINSON RESERVE	MODERATE	NEGLECTIBLE	NEGLECTIBLE
	OL 40 - GIBA PARK	MODERATE	LOW	MODERATE-LOW
	OL 41 - CORNER OF GRAFTON STREET AND GRAFTON LANE	MODERATE	LOW	MODERATE-LOW