



8th December 2017

Reference: 17765.01FA

TMG Developments Pty Ltd
Level 4, 55 Grafton Street
BONDI JUNCTION NSW 2022
Attention: Rosemary Croyden

**PEER REVIEW OF
PARKING IMPACT ASSESSMENT OF PROPOSED ARTS & CULTURAL PRECINCT
AT PIER 2/3 AND WHARF 4/5. WALSH BAY**

Dear Rosemary,

Reference is made to your request for a high-level peer review in regards to the proposed parking impacts associated with the proposed arts and cultural precinct at piers 2/3 and piers 4/5, Walsh Bay. As requested, a high-level review has been conducted of the following documents;

- *GTA Consultants Transport Impact Assessment (TIA)* dated 10th November 2017 of the Walsh Bay Arts and Cultural Precinct.
- *GTA Consultants Construction Pedestrian and Traffic Management Plan (CPTMP)* dated 10th November 2017 of the Walsh Bay Arts and Cultural Precinct

The assessment provided within the *GTA* reports in regards to the parking impact of the proposed development of the Walsh Bay Arts and Culture Precinct is inadequate due to the scale and nature of the proposal. No weight can be given to the provided analysis due to the lack of sufficient supporting information and lack of significant impact analysis which has all contributed to an inadequate assessment of the parking impacts of the proposal, which undoubtedly will lead to intolerable parking congestions within the Walsh Bay Precinct. These inadequacies are addressed in the following section.

1 Inadequacies of Assessment

- 1.1 The parking occupancy survey, conducted by *Matrix Traffic* and referenced as justification for the conclusions made within the *GTA* reports, is not accompanied by any extensive investigation into the impacting environmental factors affecting parking demand and occupancy within the Walsh Bay area.
- 1.2 Insufficient investigation and analysis has been provided into the impact of The Sydney Theatre Company's Wharf 4/5 operations on local parking availability.
 - 1.2.1 No analysis has been completed of the event's, functions and classes conducted at the Sydney Theatre Company on the on Saturday 27th August 2016 and Wednesday 31st August 2016.
 - 1.2.2 No comparison has been conducted of the occupancy and patronage levels of the Sydney Theatre Company across an extended period of time in order to identify typical patronage levels for the site, with the intention of comparison to the patronage levels on days the parking occupancy surveys were conducted.
 - 1.2.3 No confidence can be had that the parking analysis was adequately conducted in a manner that would reflect, the average patronage effects of the Sydney Theatre Company on parking demand along Hickson Road. Data including the justification of identified average patronage levels at the Sydney Theatre Company have not been provided within the impact assessment
 - 1.2.4 No analysis has been conducted of large events, functions and shows at the Sydney Theatre Company, and what impact these high levels of patronage have on the parking occupancy levels in Walsh Bay.
- 1.3 Insufficient investigation and analysis has been provided into the impact of The Sydney Dance Company's Wharf 4/5 operations on local parking availability.
 - 1.3.1 No analysis has been completed of the event's, functions and classes conducted at the Sydney Dance Company on the on Saturday 27th August 2016 and Wednesday 31st August 2016.
 - 1.3.2 No comparison has been conducted of the occupancy and patronage levels of the Sydney Dance Company across an extended period of time in order to identify typical patronage levels for the site, with the intention of comparison to the patronage levels on days the parking occupancy surveys were conducted.
 - 1.3.3 No confidence can be had that the parking analysis was adequately conducted in a manner that would reflect, the average patronage effects of the Sydney Dance Company on parking demand along Hickson Road. Data including the justification of average patronage levels at the Sydney Dance Company have not been provided within the impact assessment.
 - 1.3.4 No analysis has been conducted of large events, functions and shows at the Sydney Dance Company, and what impact these high levels of patronage have on the parking occupancy levels in Walsh Bay.

- 1.4 Insufficient investigation and analysis has been provided into the impact of the Roslyn Packer Theatre on local parking availability.
- 1.4.1 No analysis has been completed of the event's, functions and classes conducted at the Roslyn Packer Theatre on the on Saturday 27th August 2016 and Wednesday 31st August 2016.
 - 1.4.2 No comparison has been conducted to the occupancy and patronage levels of the Roslyn Packer Theatre across an extended period of time in order to identify typical patronage levels for the site, with the intention of comparison to the patronage levels on days the parking occupancy surveys were conducted.
 - 1.4.3 No confidence can be had that the parking analysis was adequately conducted in a manner that would reflect, the average patronage effects of the Roslyn Packer Theatre on parking demand along Hickson Road. Data including the justification of average patronage levels at the Roslyn Packer Theatre have not been provided within the impact assessment.
 - 1.4.4 No analysis has been conducted of large events, functions and shows at the Roslyn Packer Theatre, and what impact these high levels of patronage have on the parking occupancy levels in Walsh Bay.
- 1.5 Insufficient investigation and analysis has been provided into the impact of the Pier One, Sydney Harbour, Autograph Collection Hotel on local parking availability.
- 1.5.1 No analysis has been completed of the event's, functions and classes conducted at Pier One on the on Saturday 27th August 2016 and Wednesday 31st August 2016.
 - 1.5.2 No analysis has been completed of the hotel occupancy rates at Pier One on the on Saturday 27th August 2016 and Wednesday 31st August 2016.
 - 1.5.3 No comparison has been conducted to the occupancy and patronage levels at Pier One across an extended period of time in order to identify typical patronage levels for the site's events, with the intention of comparison to the patronage levels and hotel occupancy on days the parking occupancy surveys were conducted.
 - 1.5.4 No confidence can be had that the parking analysis was adequately conducted in a manner that would reflect, the average patronage and occupancy effects of Pier One on parking demand along Hickson Road. Data including the justification of average patronage levels and occupancy at the Pier One have not been provided within the impact assessment.
 - 1.5.5 No analysis has been conducted of large events and functions at Pier One, and what impact these high levels of patronage has on the parking occupancy in Walsh Bay.
- 1.6 Insufficient justification has been provided for the selection of the days on which the parking occupancy surveys were conducted.
- 1.6.1 Traffic data collected from the automatic tube counts along Hickson Road are incomplete. The tubes were installed to determine the analysis traffic for a full week commencing the 22nd August 2016. but do not provide a complete data set for comparison. No data is provided for Thursday 1st of September 2016 and Friday 2nd September 2016.

- 1.6.2 Due to the lack of data presented it is inappropriate to draw conclusions on when the local traffic peaks occurred during the week of observation.
- 1.6.3 Due to the nature of the precinct, it can be expected that Thursdays and Fridays will typically be the busier weekdays, and hence without supporting data no peak weekday analysis can appropriately be conducted and accurate conclusions cannot be drawn.
- 1.6.4 The general scope of the parking surveys that were conducted and provided within the report are insufficient to identify any trends or demand peaks, and hence no weight should be given, due to the incompleteness of the data provided.
- 1.7 Occupancy data from Pier One indicate lower than average occupancy rates during the days the parking assessment was conducted in 2016.
 - 1.7.1 Analysis of the occupancy levels at the Pier One Hotel shows that on Saturday 27th August 2016, indicate a total hotel occupancy rate of 67.2%, as provide by Pier One, which is considerably less than average occupancy levels for that time of year.
 - 1.7.2 Pier One has revealed that renovations were occurring at the hotel on the 27th August 2016, which lead to the reduction in occupancy rates on that day.
 - 1.7.3 Analysis of the occupancy levels at the Pier One Hotel shows that on Wednesday 31st August 2016, indicate a total hotel occupancy rate of 66.1%, as provided by Pier One, which is considerably less than average occupancy levels for that time of year.
 - 1.7.4 Pier One has identified that renovations were occurring at the hotel on the 31st August 2016, which lead to the reduction in occupancy rates on that day.
 - 1.7.5 Pier One's 2017 average occupancy levels are approximately 87%, with average occupancy levels for August 2017 of 88.4%. This is significantly greater than occupancy rates on the days the parking counts were conducted.
 - 1.7.6 The parking analysis conducted does not consider the average impact on parking demand generated by Pier One, let alone the worst case impact.
- 1.8 The InterPark operated Bond Store 1 Commercial Car Park, located at 26 Hickson Road, Walsh Bay, and adjacent to the Roslyn Packer Theatre was not adequately analysed within the assessment of parking conditions surrounding the proposed development.
 - 1.8.1 Parking occupancy surveys of this commercial car park were not conducted simultaneously with the parking surveys along Hickson Road. No assurance can be given that the parking occupancy levels at the Bond Store 1 car park are comparable to what would have been observed on the same day as the Hickson Road Surveys.
 - 1.8.2 The lack of simultaneous surveys of the Bond Store 1 Carpark in conjunction with the parking occupancy levels along Hickson Road and the other surrounding commercial car parks within Walsh Bay render the individual surveys inconclusive of the existing local parking demand.
 - 1.8.3 The parking occupancy analysis of this commercial carpark for a single half-hour period on Saturday 22nd October 2016 between 8:00 pm and 8:30 pm, is completely inadequate and inconclusive.

- 1.8.4 It is inappropriate that conclusions on carpark occupancy demand can be derived from a single observation. No weight can be given to the results of this 'spot check' as they can in no way adequately represent the realistic parking demand within the Bond Store 1 car park.
 - 1.8.5 The occupancy levels observed at the Bond Store 1 car park of 94% at 8 pm on Saturday 22nd of October 2016, represent a high level of occupation, with minimal spare capacity within the commercial car park.
 - 1.8.6 The report notes within Section 2.3.3 that "*This demand was generated by the adjacent Roslyn Packer Theatre where an event was being held at the time of the survey*". While this event is acknowledged within the report, due to the lack of cumulative data over an extended period of time of the Bond Store 1 car parks occupancy, the impact of the individual event on car parking occupancy rates cannot be properly ascertained.
 - 1.8.7 Due to the survey times being identified as between 8:00 pm and 8:30 pm there is insufficient information to conclude that occupancy was not higher within the Bond Store 1 car park prior to 8 pm or after 8:30 pm on Saturday the 22nd of October 2016.
 - 1.8.8 While it is acknowledged that Saturday evening events are a regular occurrence at the Roslyn Packer Theatre there is no comparison or identification of the event or events held on Saturday the 22nd October 2016 and if their attendance levels for that event(s) were lower, average or greater than what is typically observed on a Saturday.
 - 1.8.9 There is no quantitative analysis of the impact of other major events within the Walsh Bay area on the parking occupancy levels with the Bond Store 1 commercial car park.
 - 1.8.10 Misleading and inaccurate information is presented identifying that the Bond Store 1 car park as within 200 metres of the proposed Walsh Bay Arts and Culture Precinct. A direct straight line analysis to the southern edge of the proposed precinct places the car park marginally under 200 metres from the car park. Measurement of typical pedestrian travel routes to the southern edge of the precinct identifies the distance as over 200 metres and in some cases closer to 250 metres. Notwithstanding this the vast majority of the precinct is of a significantly greater distance than 200 metres from the car park, amplifying that this information is not only inaccurate but also misleading.
- 1.9 The Wilson Parking Australia operated Barangaroo Point Commercial Car Park, along Hickson Road, Walsh Bay, was not adequately analysed within the assessment of parking conditions surrounding the proposed development.
- 1.9.1 Parking occupancy surveys of this commercial car park were not conducted simultaneously with the parking surveys along Hickson Road. No assurance can be given that the parking occupancy levels at the Barangaroo Point car park are comparable to what would have been observed on the same day as the Hickson Road surveys.
 - 1.9.2 The lack of simultaneous surveys of the Barangaroo Point Carpark in conjunction with the parking occupancy levels along Hickson Road and the other surrounding commercial car parks within Walsh Bay render the individual surveys inconclusive of the existing local parking demand.

- 1.9.3 The parking occupancy analysis of this commercial carpark for a single half-hour period on Saturday 22nd of October 2016 between 8:00 pm and 8:30 pm, is completely inadequate and inconclusive.
 - 1.9.4 It is inappropriate that conclusions on carpark occupancy and demand can be derived from a single observation. No weight can be given to the results of this 'spot check' as they can in no way adequately represent the realistic parking demand within the Barangaroo Point car park.
 - 1.9.5 The occupancy levels observed at the Barangaroo Point car park of 20% at 8 pm on Saturday the 22nd October 2016 are not supported by quantitative evidence to indicate this is a typical occupancy level for this commercial car park.
 - 1.9.6 Due to the lack of cumulative data over an extended period of time of the Barangaroo Point car park occupancy levels, accurate car parking occupancy rates cannot be properly ascertained.
 - 1.9.7 Due to the survey times being identified as between 8:00 pm and 8:30 pm there is insufficient information to conclude that occupancy was not higher within the Barangaroo Point car park in a different time frame on Saturday the 22nd October 2016.
 - 1.9.8 There is no quantitative analysis of the impact of major events within the Walsh Bay Precinct on the parking occupancy levels within the Barangaroo Point commercial car park.
 - 1.9.9 Misleading and inaccurate information is presented identifying that the Barangaroo Point Car park is within 200 metres of the proposed Walsh Bay Arts and Culture Precinct. The analysis shows that in fact, this commercial car park is approximately 300 metres walking distance from the edge of the precinct and approximately 650 metres walking distance from the far extents of the Pier 2/3.
- 1.10 The Wilson Parking Australia operated Barangaroo Reserve Commercial Car Park, at the end of Towns Place, Walsh Bay, was not adequately analysed within the assessment of parking conditions surrounding the proposed development.
- 1.10.1 Parking occupancy surveys of this commercial car park were not conducted simultaneously with the parking surveys along Hickson Road. No assurance can be given that the parking occupancy levels at the Barangaroo Reserve car park are comparable to what would have been observed on the same day as the Hickson Road Surveys.
 - 1.10.2 The lack of simultaneous surveys of the Barangaroo Reserve Carpark in conjunction with the parking occupancy levels along Hickson Road and the other surrounding commercial car parks within Walsh Bay render the individual surveys inconclusive of the existing local parking demand.
 - 1.10.3 The parking occupancy analysis of the Barangaroo Reserve commercial car park for a single half-hour period on Saturday 22nd of October 2016 between 8:00 pm and 8:30 pm, is completely inadequate and inconclusive.
 - 1.10.4 It is inappropriate that conclusions on carpark occupancy and demand can be derived from a single observation. No weight can be given to the results of this 'spot check' as they can in no way adequately represent the realistic parking demand for the Barangaroo Reserve car park.

- 1.10.5 The occupancy levels observed at the Barangaroo Reserve car park of 14% at 8 pm on Saturday the 22nd of October 2016 are not supported by quantitative evidence to indicate this is a typical occupancy level for this commercial car park.
- 1.10.6 Due to the lack of cumulative data over an extended period of time of the Barangaroo Reserve car park occupancy levels, accurate car parking occupancy rates cannot be properly ascertained.
- 1.10.7 Due to the survey times being identified as between 8:00 pm and 8:30 pm there is insufficient information to conclude that occupancy was not higher within the Barangaroo Reserve car park in a different time frame on Saturday the 22nd October 2016.
- 1.10.8 There is no quantitative analysis of the impact of major events within the Walsh Bay Precinct on the parking occupancy levels with the Barangaroo Reserve commercial car park.
- 1.11 The observation that '*overall demand for parking in the surrounding area is low relative to supply*' is an unsupported and an unjustified conclusion of the local parking supply across all three commercial car parks and on-street parking along Hickson Road.
- 1.12 Population and patronage scenarios identified within *Section 3.2* of the *GTA Traffic Impact Assessment* are generally supportable and are important to note for this review of the GTA impact assessment.
 - 1.12.1 The site is expected to support a workforce of 650 staff and up to approximately 2,200 visitors on a typical day.
 - 1.12.2 Peak population levels (Scenario 1) are identified as a rare occasion and are expected to generate a weekday population of 4,441 people and a weekend population of 4,151 people.
 - 1.12.3 The assessment does not provide any evidence to justify the rarity of the Peak population scenario
 - 1.12.4 Everyday population levels (Scenario 2) is identified as the expected normal population levels and are expected to generate a weekday population of 2,221 people and a weekend population of 2,2076 people.
 - 1.12.5 Cumulative population levels (Scenario 3) are identified as a rare occasion and are expected to generate a weekday population of 6,947 people and a weekend population of 6,657 people.
 - 1.12.6 The assessment does not provide any evidence to justify the rarity of the Cumulative population scenario, especially seeing that the majority of other major population generators within the Walsh Bay area are considered to be of a similar nature in terms of art and performance centres, which would indicate similar peak periods, such as Friday evenings and typical similar performance times. No evidence is provided within the report to justify or correct this assumption.
 - 1.12.7 Event population levels (Scenario 4) is identified as a rare occasion and are expected to generate a weekend population of 4,250 people.

- 1.12.8 It is extremely important to make note that in all cases, except for the event case (Scenario 4) the period identified as the peak for the population within the precinct is in the evening between 6 pm and 10 pm.
 - 1.12.9 The identified peak period between 6 pm till 10 pm is significant as it aligns with the current peak utilisation of parking along Hickson Road identified in the Matrix parking occupancy surveys conducted on Saturday 27th August 2016 and Wednesday 31st August 2016.
 - 1.12.10 The data identifies that from 7 pm on Wednesday 31st August 2016 Hickson Road parking occupancy rates are at a minimum 68%, reaching a maximum of 76%. Indicating a high level of parking utilisation with limited additional capacity.
 - 1.12.11 This limited capacity aligns with the expected weekend patronage peak for the site and hence the ability for this additional patronage to be accommodated within the current parking along Hickson road is questionable. The *GTA* report does not adequately assess this situation.
 - 1.12.12 The data identifies that from 7 pm on Saturday 27th August 2016 Hickson Road parking occupancy rates are at a minimum 79%, reaching a maximum of 87%. Indicating a very high level of parking utilisation with limited additional capacity.
 - 1.12.13 This limited capacity aligns with the expected weekday patronage peak for the site and hence the ability for this additional patronage to be accommodated within the current parking along Hickson road is questionable. The *GTA* report does not adequately assess this situation.
 - 1.12.14 There is no clear source identified for the population and patronage data provided in *Section 3.2*, and hence the reliability and accuracy of these estimations cannot be confirmed.
- 1.13 Insufficient analysis and emphasis has been placed on the *2011 ABS Journey to Work* data that is provided within the *GTA Transport Impact Assessment* and accessed on the 6th of September 2016.
- 1.13.1 The *2011 Journey to Work* data provided within *Table 2.4* of the assessment provides clear evidence that within the Walsh Bay area 30% of workers travel to work as the vehicle driver. This rate is on par with train travel as the most common method for employees to travel to work within the Walsh Bay area.
 - 1.13.2 The origins of workers within the Walsh Bay area primarily originated within either the Inner City or the Eastern Suburbs of Sydney. From this information, the *GTA Transport Impact Assessment* identifies that 19% of Inner City employees drive, while employees from the North and southern Eastern Suburbs, have identified that 35% and 32%, respectively, travel to work by car, with themselves as the driver. The rates of vehicle drivers are considerably high the observed for workplaces within the centre of the Sydney CBD.
 - 1.13.3 While the *GTA Traffic Impact Assessment* correctly identifies this higher proportion of vehicle drivers than expected, it inappropriately states that this rate is '*significantly lower than the overall rate for Sydney*' which is a significantly misleading statement. While correct in nature, no parallels should be drawn to the rates of vehicle usage across the entire Sydney metropolitan area. More appropriately the rate should be compared to Sydney CBD employee private vehicle rates, which are significantly lower than the 30% average outlined in the report for Walsh Bay.

- 1.13.4 Critically, the report makes the assessment in *Section 2.7.1* that “**Where there are visitors to the site, an assumption is made that the visitors will adopt comparable mode splits as the employees on site.**” This clearly suggests that expected visitor patronage to the site via private car will be in the vicinity of the 30%.
- 1.13.5 This 30% rate is not applied throughout the remainder of the *GTA Traffic Impact Assessment* providing a significant shortfall in the analysis conducted within the reports.
- 1.13.6 The application of this 30% rate to determine vehicle trips to the site, with the assumption that all of these vehicles will require parking close to Walsh Bay, for at least some period of time, identify significant demands for parking throughout the day, which has not been adequately addressed.
- 1.13.7 The application of this rate to the expected everyday population levels, of 2,221 individuals on weekdays which is outlined within *Table 3.1* of the *GTA Traffic Impact Assessment*, produces a daily parking demand of 666 spaces for the site. This is a significant parking demand on a typical weekday for the area.
- 1.13.8 The application of this rate to the cumulative population levels, or 6,947 individuals on weekdays which is outlined within *Table 3.1* of the *GTA Traffic Impact Assessment*, produces a daily parking demand of 2,084 spaces for the site. This is a significant parking demand for the area, which has not been effectively analysed.
- 1.13.9 There are significant and extensive shortfalls within the analysis due to the lack of application of the quoted *2011 Journey to Work* data for the Walsh Bay area.
- 1.14 The assessment of future traffic demands within *Section 7.1* of the *GTA Traffic Impact Assessment* provides a mode share rates without sufficient justification and supporting evidence. These rates are then inappropriately applied to generate the parking demand for the site.
 - 1.14.1 *Table 7.1* of the *GTA assessment* outlines that the mode share rate of 8% has been applied to car trips made to the site.
 - 1.14.2 The identified 8% mode share is significantly inconsistent with the previous *2011 Journey to Work* data presented in earlier sections of this peer review letter, which provides an approximately 30% mode share rate for cars.
 - 1.14.3 No clear justification has been provided for the basis of the application of the 8% rate, while references are made to the “*extrapolation*” of the intentions within the *Barangaroo Integrated Transport Plan* released in 2012 in conjunction with the *ABS Journey to Work* data, the assessment makes no clear justification or explanation as to how supposed “*extrapolation*” has occurred.
 - 1.14.4 No clear correlation has been able to be made between the two identified sources for this 8% rate quoted within the *GTA assessment* that produces a similar result.
 - 1.14.5 Further investigation into the source of the 8% mode share rate for cars has determined that the likely source of this rate is within the *GTA Consultants Traffic Management and Accessibility Report* dated 14 January 2015, where within *Section 5.4* of that report, it refers to pedestrian surveys undertaken within the previously identified site peak of 6 pm till 7 pm. It is within these one-hour surveys that the data identified that 8% of people accessed the site via car during that period. Though this cannot be verified as the source for the 8% rate applied within the mode split.

- 1.14.6 Significant justification and explanation needs to be provided in regards to the mode split applied for any weight to be held on this analysis.
- 1.15 The *GTA Traffic Impact Assessment* inappropriate quotes the use of the *Barangaroo Integrated Transport Plan* released in 2012 as a basis for identifying mode split within the sites traffic generation.
- 1.15.1 It is significant to note the differences between the Barangaroo Development, which is primarily commercial office space and some residential dwellings and the proposed Walsh Bay Arts and Culture Precinct, which is primarily an entertainment land use. The mode share targets from Barangaroo are inappropriate to be applied directly as a reference to the expected mode share for the Walsh Bay Arts and Culture Precinct.
- 1.15.2 The information contained within the *Barangaroo Integrated Transport Plan* outlines 'Mode Share Targets', and as such is not necessarily reflective of the existing mode split exhibited for the area surrounding the site, or other areas of the Sydney CBD.
- 1.15.3 It is not considered "appropriate" to base traffic generations off the *Barangaroo Integrated Transport Plan*, though despite the "proximity" of WBACP, significant differences in land use and public transport access are exhibited.
- 1.15.4 The application of this *Barangaroo Integrated Transport Plan* as a source is inaccurate and does not reflect the reality of the Walsh Bay site.
- 1.16 The provided mode splits for transport access to the site contradicts other data provided within the report. The explanation of the applied mode splits is simplistic and insufficient.
- 1.16.1 The application of an 8% rate for visitors by car, is a significant contradiction to the currently exhibited 30% rate exhibited within the *2011 Journey to Work* data for the Walsh Bay area applied within the report.
- 1.16.2 The report does not satisfactorily justify why the 8% rate has been applied in preference to the observed 30% rate.
- 1.17 The assessment references a range of public transport initiatives and developments proposed for the Sydney CBD in the general vicinity of Walsh Bay, though the application of these planned public transport improvements as justification for lower parking demand is seen as simplistic and the impact overestimated.
- 1.18 The assessment of the impacts of the *Sydney Centre Access Strategy* (TfNSW, December 2013) concluding that the features of this strategy would "contribute to improved access to the Walsh Bay Arts and Culture Precinct" is questionable and unsupported.
- 1.18.1 The identification of the Wynyard Walk as a key component of improving pedestrian access to the Walsh Bay Arts and Culture Precinct is questionable.
- 1.18.2 Wynyard Walk does provide significant access improvements from Wynyard Station to Barangaroo and does reduce the travel time and walking distance between the two areas of the CBD, but from the Sussex Street exit of the Wynyard Walk, it is still over 1.2 kilometres to reach the edge of the Walsh Bay Arts and Culture Precinct.
- 1.18.3 Insufficient analysis is provided to support the contribution of the Wynyard Walk to increasing access to the site, and hence no weight should be given to this observation.

- 1.18.4 The new ferry Wharf at Barangaroo, while providing increased public transport access to the Barangaroo area provides limited improvements to access to the proposed Walsh Bay Arts and Culture precinct, with a considerable walking distance from the Wharf of over 1.2 kilometres.
- 1.18.5 Insufficient analysis is provided to support the contribution of the Barangaroo Ferry Wharf in increasing access to the site, and hence no weight should be given to this observation
- 1.18.6 New interchange precincts at various locations within the CBD including Wynyard and Circular key do not provide any significant direct access improvements to the Walsh Bay area, with a walking distance of approximately 1 kilometre still required in order to access the site directly from these interchanges.
- 1.18.7 The new light rail route along George Street and to Circular Quay will not provide any significant direct access improvements when completed, to the Walsh Bay area, with a walking distance of approximately 1 kilometre or more still required in order to access the site directly from any light rail stations.
- 1.18.8 While it is agreed that the construction of the new Barangaroo Metro Station, as part of the greater Sydney Metro development, will provide some access improvements to the site, the station will still be at least a 500m walk from the site. In addition, the Metro Station will not be operational until at least 2024, a significant period of time after the opening of the Walsh Bay Arts and Culture precinct.
- 1.18.9 While these public transport initiatives will considerably improve access to the CBD in general, there is limited evidence that they will provide any increases in access to the proposed Walsh Bay Arts and Culture Precinct and hence no weight should be placed on these public transport improvements.
- 1.19 The assessment of the impacts of the *Sydney's Bus Future (TfNSW, December 2013)* concluding that the features of this strategy "*would contribute to improved access to the Walsh Bay Arts and Culture Precinct*" is questionable.
 - 1.19.1 While the *Sydney Bus Future (TfNSW, December 2013)* report outlines in *Figure 9*, Hickson Road as one of many '*Planned city centre key bus corridors*', it is not supported by any further reference within this report to what the objectives and plans are for Hickson Road and whether this would increase direct bus services to the site.
- 1.20 Inconclusive and unjustifiable public transport analysis has been conducted which does not adequately support the justification that the provision of public transport to the site is "*sufficient to accommodate increased future demand associated with the development*"
 - 1.20.1 While Hickson Road is identified as a key corridor, the proposed Walsh Bay Arts and Culture Precinct is located at the end of this corridor and thorough investigation of 26th November 2017 Sydney CBD bus timetable only two bus routes currently service the site directly the 324 and 325 and one other service, the 311 bus route, is located nearby with its nearest stop 250m from the site. It is unclear if further services will be provided to the site, and that Bus access will increase.
 - 1.20.2 While the included public transport initiatives improve general CBD access, all major public transport access points are generally 1 kilometre or more from the site, and none of the currently proposed initiatives will significantly reduce this distance in the near future.

- 1.20.3 The significant distance required to walk to the site from all major transport hubs within the CBD will cause public transport to not be the preferred option for many visitors to the site, and as reflected in the *2011 Journey to Work* data, increase demand for vehicular access.
- 1.21 Insufficient analysis has been conducted in regards to the regularity of the occurrence of simultaneous peak parking demand caused by the multiple different entertainment sites surrounding WBACP.
 - 1.21.1 It is expected, but not identified within the report, that peak parking demand for all of the entertainment uses in Walsh Bay including the WBACP, would regularly overlap, especially in the expected peak periods of Friday and Saturday nights. There is no meaningful analysis within the provided *GTA* assessments as to the regularity of this occurrence.
- 1.22 Insufficient explanation and evidence is provided to support the proposed parking demand of 64-84 vehicle spaces, outlined within the *GTA Traffic Impact Assessment*.
 - 1.22.1 The *GTA Traffic Impact Assessment* makes reference to the previously *GTA Traffic Management and Accessibility* dated 14 January 2015 report as the source and justification of the parking demand expected.
 - 1.22.2 The generation of the parking demand of 64-84 spaces is produced from the application of the 8% mode share allocation to car parking being applied to the expected population of the site during the day. This can be found in *Section 5.5* of the *Management and Accessibility* report.
 - 1.22.3 The assumption is also made within *Section 5.5* of that report, that an average of 2 passengers will be in each vehicle, though no justification or source for this assumption is provided.
 - 1.22.4 The application of 8% is insufficient and inconsistent with the existing mode share rates for the Walsh Bay area which equate to approximately 30%, according to the *Journey to Work* data.
 - 1.22.5 An application of 30% to the same population numbers used previously within *Section 5.5* produces a parking demand of 255-314 spaces, which is considerably larger than the represented 8% rate previously applied.
 - 1.22.6 It is doubtful that the existing parking supply would sufficiently be able to absorb such a significant demand for parking.
- 1.23 Incomplete and insufficient justification has been provided on how the identified parking demand for the Walsh Bay Arts and Culture Precinct can be accommodated within the local parking supply.
 - 1.23.1 With the application of a more reflective 30% rate for car users and an associated peak parking demand of 255-314 spaces, it is doubtful that the demand will be able to be supported by the current parking supply within the Walsh Bay area.
 - 1.23.2 Due to the significant shortfalls in research and quantitative data supporting the ability for the WBACP parking demand to be able to be accommodated within the current parking facilities surrounding the site, it is insufficient to make conclusions on the impact of the sites parking demand.

1.24 Incomplete and insufficient justification has been provided on the capacity of the Walsh Bay area to accommodate for the impact of a peak parking demand caused by the cumulative impact of simultaneous events held across multiple venues within the Walsh Bay area.

1.24.1 The likely occurrence of multiple events simultaneously at venues including the Sydney Theatre Company, Sydney Dance Company, Roslyn Packer Theatre, Pier One and at the proposed Walsh Bay Arts and Culture Precinct, would most likely produce significant parking demand for the Walsh Bay area, possibly far exceeding the available capacity. This scenario is not sufficiently analysed within any of the GTA assessments.

1.24.2 The lack of analysis of the impact of multiple simultaneous events within Walsh Bay show a significant and detrimental shortfall within the analysis conducted.

2 Summary and Conclusion

The proposed Walsh Bay Arts and Culture precinct will produce intolerable parking congestion within the Walsh Bay area. Significant shortfalls are exhibited within the analysis presented as part of the *GTA Transport Impact Assessment* and *GTA Construction Pedestrian and Traffic Management Plan* that do not provide an accurate and holistic representation of the parking impacts of the proposal. The parking occupancy survey data used in this report is insufficient to draw meaningful conclusions and is not supported by any significant analysis of other influencing environmental factors sounding the site.

Without appropriate and well-based analysis and justification of the conclusions made within these reports, no weight can be given to their outcomes.

The true impact of this proposed Walsh Bay Arts and Culture Precinct is underestimated and should be reassessed in an appropriate manner.

Please contact the undersigned should you require further information or assistance.

Yours faithfully
McLaren Traffic Engineering

A handwritten signature in black ink, appearing to read 'Craig McLaren'.

Craig McLaren

Director

BE Civil. Graduate Diploma (Transport Eng) MAITPM MITE [1985]

RMS Accredited Level 3 Road Safety Auditor

RMS Accredited Traffic Control Planner, Auditor & Certifier (Orange Card)

ANNEXURE A: CURRICULUM VITAE



Craig McLaren
(Director)

Craig is an acknowledged traffic consultant since the company inception in 1995. The company's primary function has been to serve both the public and private sectors focusing on traffic impact assessments, transport planning, special event transport planning, local area traffic management, road safety and expert evidence at Land and Environment Court, Supreme Court and the Commission of Inquiry.

Qualifications

Bachelor of Civil Engineering, UNSW, 1985

Graduate Diploma in Traffic Engineering, University of New South Wales, 1991

Accredited Level 3 Road Safety Auditor, 1998

Traffic Control Plan Certifier (Orange Card), 2012

Affiliations:

Member, Australian Institute of Traffic Planning and Management - AITPM

Member, Institute of Transportation Engineers USA (Australian Branch) – ITE

Experience:

MCLAREN TRAFFIC ENGINEERING

1995 to date:

Director and experienced traffic engineer responsible for the conduct of all facets of traffic impact assessment ranging from report preparation, design advice and giving evidence at the Land and Environment Court.

Curriculum Vitae

Trading as McLaren Traffic Engineering © RAMTRANS (AUST) Pty Ltd (2013)



SINCLAIR KNIGHT MERZ

1994 to 1995:

Executive Traffic Engineer. Responsible for the conduct of all facets of traffic impact assessment ranging from report preparation, design advice and giving evidence at the Land and Environment Court.

TRANSPORTATION WORKSHOP

PLANNING

1989 to 1994:

Senior Associate. Responsible for the conduct of a vast number of traffic impact assessment report and gained invaluable experience in giving expert evidence before the Land and Environment Court.

ROADS AND TRAFFIC AUTHORITY, NSW

1988 to 1989:

Traffic Engineer, Traffic Engineering Section, involved in traffic/transport research, policy development and assisting councils in the application of the Authority's guidelines.

OVE ARUP TRANSPORTATION PLANNING

1985 to 1988:

Traffic Engineer. Involved in the preparation of traffic impact reports for a wide range of projects.

GUTTERIDGE HASKINS & DAVEY

1980 to 1982:

Trainee Civil Engineer. Involved in assisting with road and subdivision design and field surveying.

Papers at Conferences

"Safe & Liveable Communities, Can You Have Both?" Georgia Institute of Transportation Engineers, St Simons Island, Georgia USA July 1999.

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