

ANNEXURE 3

SKM—Review of Environmental Assessment (Traffic & Transport)



Ashington Development 33 Cross St Double Bay Review of Environmental Assessment (Traffic & Transport)

- Draft Report
- 4 May 2009



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1. Introduction

SKM was engaged by Woollahra Municipal Council to review the traffic and transport component of the Environmental Assessment for *Proposed Mixed Use Hotel, Residential & Retail Development, 33 Cross St Double Bay (Major Project Application MP 08_0100)* prepared by Architectus and dated February 2008. A Transport and Accessibility Report titled "*Proposed Mixed Use Hotel, Residential and Retail Development, 33 Cross St Double Bay – Transport and Accessibility Report – Final Report*" dated 11 February 2009 prepared by Halcrow MWT was attached as Appendix F of the Environmental Assessment. This report is the subject of this review and is referred to as the Halcrow MWT Report (2009) in the remainder of this report.

The SKM appointment was a result of a Woollahra Council resolution. The resolution relating to traffic and transport was as follows:

"That Council take the following action in relation to the Ashington development at 33 Cross Street, Double Bay having regard to the imminent lodgement with the Director-General of the environmental assessment for the project:

b) In view of the approximate halving of on site parking (from that existing) as publicly foreshadowed by the developer, the Council retain consultant traffic and parking engineers to assess the environmental assessment once lodged with the Minister;"

2. Scope and Methodology

A site inspection was conducted by SKM on the 29th April 2009. Both the Environmental Assessment traffic and transport summary information and the Traffic and Transport Impact Assessment Report prepared by Halcrow MWT (2009) was reviewed. An assessment and comparison of the recommended parking versus the RTA and Woollahra DCP standards was completed and conclusions drawn. The review also examined the existing and proposed traffic conditions as well as access into the proposed site, vehicle access and manoeuvrability within the site and recommendations related to pedestrian, cycle and public transport.

3. Review of existing traffic conditions

Comments and issues arising from the respective sections of Appendix F of the Environmental Assessment (the Halcrow MWT Report (2009), with additional SKM observations are provided in each of the following sections.

3.1. Site Description

The site description provided in the Halcrow MWT Report (2009) is an accurate description of the location of the site.

Further to the description provided in the report, it is noted that access to the existing Georges Centre basement car park is permitted from east and westbound vehicles travelling in Cross Street. The entrance is approximately 50m from the intersection of Cross and Bay Street. The entrance is accessed by traversing the footpath which is a wide paved area which has a different surface texture/colour as a means of identifying this as a driveway. Adjacent to both sides of the driveway are retail shops. The driveway splay offers sufficient access for two way vehicle movements and turns for car sized vehicles to access the east and westbound lanes of Cross Street.

Signage is provided indicating this is a parking structure, although this signage is partially lost in the clutter of other signage and the building surface finish/design. It was noted at the time of inspection that signage indicating the availability of public casual parking had been covered over and that the carpark was no longer available for casual parking.

The existing (now closed) porte-cochere of the Stanford Hotel is also accessible at either end to both north and southbound vehicles. There is no signage remaining onsite to advise whether access/egress was permitted to the porte-cochere via both ends or with a one way system.

The existing loading area accessed via the porte-cochere was closed during the site inspection.

3.2. Road Network

The road network description provided by Halcrow MWT Report (2009) is a fair assessment of the adjoining roads providing access to the site.

The report fails to note that the Double Bay Public School is located in Cross Street, approximately 200m to the west of the subject development. A 40kph School Zone speed limit is in place on the road network around the school, commencing immediately west of Bay Street. There is a pickup/set down area of parking restrictions for the school located towards the Ocean Street intersection. The Halcrow MWT Report (2009) did not examine the influence of school pick up or drop off traffic, although the influence of the development on school pedestrian or vehicular traffic is not anticipated to be of significant concern.

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It is also noted in the report that removal of the existing porte-cochere will remove two vehicular footpath crossings, which will improve pedestrian amenity and safety in the area. The removal of the porte-cochere kerb crossings also provides the opportunity to increase the kerb-space available for parking (or loading) in front of the development.

3.3. Traffic Flows

The Halcrow MWT Report (2009) asserts that the critical peak periods for traffic are the Thursday evening peak period, and Saturday late morning/early afternoon. This assertion appears to be anecdotal as there is no further information to support this in the form of traffic survey/count data.

The retail traffic movements described in the report are likely to be associated with vehicles accessing parking spaces. The Cross Street Car Park, which is located close to the intersection of New South Head Road, and vehicles circulating to find on-street car parks as well as to access other small basement car parking areas within the Double Bay commercial area would contribute to the higher volumes of traffic noted in the report toward the New South Head Road end of Cross Street.

3.4. Parking Surveys

It is not clear from the report what the relationship is between public use of the Stamford Plaza Hotel and the Georges Centre, except to state that access to the Stamford Plaza carpark is via the Georges Centre access point. It is not clear whether the Georges Centre has its own car parking accessed also via this entrance. This may impact on the design/use of the driveway crossing. Plans provided with the report do not show how vehicles crossing the kerb splay of Cross Street would find themselves in the basement carpark of the development site nor are details of any parking management they have encounter on the way described or illustrated in the report.

Parking surveys at the Cross Street and Stamford Plaza Car Park have been undertaken for 12:00-24:00 on a Friday and Saturday as well as for 16:00-21:00 on a Thursday. There does not appear to be any justification for the period selected apart from potentially coinciding with the anecdotally reported peak traffic periods. It is noted that there is no information presented as to why peak carparking would coincide with peak traffic generation, as this does not consider all reasons why people would park (long stay/access to public transport/school/retail/leisure/resident parking spaces etc). The full day count of Friday may not be representative of a typical weekday, as travel patterns on Fridays are often different to those experienced on Tuesdays, Wednesdays and Thursdays. Information or justification to support the decision to undertake the surveys over the selected periods is not provided.

It is unclear from the report whether the survey undertaken of the Stamford Plaza Car Park considered all carparking spaces or only those attributable to casual public parking. Further the

report does not contain any information regarding the management of the existing car parking spaces and how they may be allocated between casual, allocated (i.e. leased), permanent residential or other uses which may impact on the availability of the spaces for uses beyond those of the existing Stamford Plaza development to enable the assessment of the impact of the loss of this carparking.

It is noted that in Councils Section 94 Contributions Plan for Double Bay, the extension of the Cross Street carpark is proposed. This would provide an additional deck (story) to the existing structure and provide an additional 86 car parking spaces. No exact timeframe for this to occur is included within the Section 94 Plan.

An assessment of available on-street parking within Double Bay has also not been made, although it is noted this may be outside the reasonable scope of the study. At the time of the SKM site inspection on Wednesday the 29th April at 16.30-17:45, there were minimal onstreet car parking spaces available in Cross Street between New South Head Road and Bay Street. It was noted that this section was subject to meter parking. However moving further away from the retail section of Cross Street towards Ocean Street, it became easier to find a parking space. These spaces were not metered but were however subject to a 2hr time limit.

There is also the potential for the parking utilisation survey to be skewed due to a potential downturn in trade resulting from the current economic downturn.

3.5. Public Transport

The report notes that rail services are located at Edgecliff, a moderate walk or short bus ride away. It is assumed that the significant grade difference between Double Bay and the Edgecliff Railway Station which limits its desirability of access via foot and results in its description as a 'moderate walk'.

The bus service summary may not include non-public services such as school services or local community services which may service the Double Bay retail precinct. It is not known whether any of these services exist in the local area.

The report concludes that Double Bay is well served by buses, however the service is limited to the trunk route along New South Head Road which carries all described services. Moving away from New South Head Road, the service level is reduced due to the walk required to access the bus services. The location of the subject development is approximately 300m walk to the bus stops on New South Head Road via the road network on mostly flat terrain and is appropriate to describe as a good level of public transport accessibility.

3.6. Pedestrian and Cycle Network

The report provides a fair description of the existing pedestrian and cycle network.

3.7. Existing Development on the Site

As reported previously, the report does not elaborate on the allocation or management of the existing parking spaces.

The report states that there are 20 car parking spaces available in the Georges Centre car park, however it is unclear to which development those spaces apply, what is proposed to happen to those spaces under the new development, how they are accessed or any parking management which will be applied to those spaces.

3.8. Intersection Analysis

As reported previously, no supporting data has been provided to demonstrate that the peak periods occur on Thursday evenings and Saturday early afternoon.

It is unclear whether SIDRA has used the existing real life signal timings for the New South Head Road intersection, or optimised the results itself. When a signalised intersection forms part of the Sydney Co-ordinated Adaptive Traffic Signals (SCATS) network, the cycle time and phase splits are dictated based on network traffic flows rather than the intersection operating in isolation. Often at non critical intersections (it is unclear if New South Head Road and Cross Street is non-critical) intersection operation can be shown to be much better than in reality if SIDRA models the intersection as optimised itself rather than using RTA cycle and phase times representative of real life working conditions.

The level of service quoted for the whole intersection as a whole may not be the same as for certain movements which may perform worse than the average intersection. The report notes that the right turn from New South Head Road to Kiaora Road and Bellevue Road operates near capacity.

The report has not examined the friction which currently occurs at the Cross Street and Cross Street carpark entrance/exit which is in close proximity to the New South Head Road intersection. The close proximity of the driveway and New South Head Road could create friction and vehicle movement conflicts on this leg of the intersection and would not be reflected in the model.

Information to inform readers of the implications of Level of Service D are not given. However, in the overall context and conclusion of the report this may be appropriate. There is nothing to suggest the other two intersections would not perform similarly to the model results for the vehicle volumes modelled.

4. Proposed Development

It is unclear from the basement parking description what the intention / future use of the previously reported 20 car parking spaces located in the Georges Centre will be utilised for.

It is noted that the carpark will have a vertical clearance of 2.1m. This is quite low especially when it is considered that basement loading is expected to occur within the carpark.

Table 1 below provides the external dimensions of a common commercial vehicle (a Ford Transit Van – **Figure 1**) and in particular the ‘Overall height (unladen)’.



Figure 1: Ford Transit

Exterior Dimensions				
Exterior (mm)	SWB	MWB	LWB	Jumbo
Overall length	4863	5230	5680	6403
Overall width with door mirrors	2360	2360	2360	2360
Overall height (unladen)	1989-2083 LR, 2304-2398 MR	1987-2047 LR, 2302-2397 MR, 2532-2611 HR	2330-2394 MR, 2538-2606 HR	2623-2624
Loading height (unladen)	538-732	535-715	542-710	711-715

Van

Key: SWB - short wheel base, MWB - medium wheel base , LWB - long wheel base , LR - low roof , MR - medium roof , HR - high roof

Table 1: Extract from Ford Transit online technical specification

Source: <http://www.fordtransitdirect.co.uk/newsales/newvans/transit/technicalspec.aspx>

As can be seen from the table, the physical height of the van is higher than the proposed 2.1m basement height in nearly all configurations. The operational clearance required for the van in its lowest height configuration is likely to be greater than 2.1m given transitions in ramp grade throughout the basement carpark. As such, it would appear that this vehicle would not be able to access the basement car park.

As such, the limited height of the basement is likely to severely constrain loading activity associated with the building. This is likely to prevent almost all commercial delivery activities including residential removals, garbage and retail/hotel/restaurant deliveries etc from occurring within the basement.

The Halcrow report notes that removal of the porte-cochere from the existing development will result in the opportunity to reconfigure parking restrictions at the Cross Street frontage. It is certain that the new parking restrictions will need to incorporate a loading facility, as suggested by the report. The location of the loading zone will need to consider appropriate street level access to into the development for bulky goods, and all other servicing requirements. The approval authority for this development will have to consider whether these servicing arrangements are consistent with the desired street environment of the area.

This traffic assessment has not examined the compliance of the basement carpark to the AS2890.1:2004 or examined turning path templates, however a high level review of the layouts proposed from a traffic operations perspective has been undertaken and no obvious significant traffic issues were observed.

However it is noted that a number of carparks are suitable for "small car" only. It is unclear how these would be managed – i.e. whether these would be for valet to park hotel guests in, or whether they would be allocated to other uses such as residential where the small space may be unsuitable for the residents potential vehicle size. A layout linking each numbered carpark to its use within the development would assist in the assessment of the operational capability of carpark. Based on the currently provided information, it is not possible to assess whether the carpark would work from an operational perspective given the potential restriction relating to small car park size.

4.1. Pedestrian Access

Plans demonstrating the improved permeability for pedestrians of the site are not included in the traffic report, however they are provided in the EA main report. The additional point of access is likely to improve pedestrian permeability over the existing configuration.

4.2. Proposed Bicycle Facility

In the absence of any formal requirement for cycle parking, the proposed bicycle storage for 30 bikes with additional racks for 5 visitor bikes is encouraged. However it is noted that this would allow storage of less than one bike for each of the 39 proposed residential units.

The proposed on street loading facility would need to be checked to ensure it would not reduce the safety for cyclists travelling on the Cross Street bike route, particularly as loading activities can reduce the lane widths available when cyclists are using on road facilities.

As the carpark previously catered for Hotel parking, and in the proposed development the parking calculation is only based on the rented rooms, it is assumed that there will be no basement parking for Function Room use. The report notes that function room use may double the trip generation of the development, however no further information is provided. The report has not undertaken any analysis on the impact of function parking in the Cross Street carpark, and this could constitute a significant impact in terms of parking demand.

5. Traffic Assessment

5.1. Proposed Use

A key assumption of the trip generation calculated, is that the entire Double Bay precinct acts as a large combined retail centre and as such, lower trip volumes can be used as it is argued that people will visit more than one shop per trip. This appears to be a fair assumption based on the variety of retail services available within the precinct. SKM have not checked the calculation of the number given in the report that the existing Double Bay centre has a gross retail area of 23,000m².

It is noted that as there is no on-site provision for parking resulting from the function room use of the development, and hence the trip generation for this use would be likely to be to/from the surrounding streets and the Cross Street carpark. The report has not included any traffic impact associated with the function rooms on the basis that this would be highly variable from day to day. Without any supporting information, it has been assumed that trip generation of the existing function room use would be similar to the proposed use, however there is no longer any provision for onsite parking for this use so these movements it is assumed would take place to/from the Cross Street carpark.

The Halcrow MWT Report (2009) have discounted the trip generation of the residential land use on Saturday morning. This does not correspond with the methodology proposed in the RTA Guide to Traffic Generating Developments Section 3.4.

The report does not address any change to traffic impact arising from displacement of traffic trips from the site to the Cross Street carpark. The Cross Street carpark experiences conflict with traffic queued from New South Head Road and the redistribution of traffic movements to this location may exacerbate the issues experienced here. No assessment of this has been made in the report.

5.2. Construction Traffic

The production of a Construction Traffic Management Plan (CTMP) after appointment of the builder and submission for approval to Traffic Committee is appropriate way to ensure general and construction traffic is managed during the construction period.

6. Parking Assessment

The Woollahra DCPs and the RTA Guide to Traffic Generating Developments are the applicable guidelines that provide parking generation rates.

The site of the proposed development falls within the area covered by the Double Bay Centre Development Control Plan for Off-Street Car Parking Provision and Servicing Facilities.

The minimum parking provision rates used in the Halcrow report conform to the rates contained in the Woollahra Municipal Council Development Control Plan and where applicable the Double Bay Centre Development Control Plan.

However, there is a slight difference of two parking spaces between the total calculated by Halcrow and SKM (using the Woollahra guidelines), due to rounding differences for the Restaurant figure. Halcrow have rounded down from 44.25, whereas SKM have rounded up to the nearest whole number of 45. In addition, Halcrow have calculated the residential sub-total incorrectly ($4+12+29+8 = 53$ not 52).

The main difference between the RTA and Woollahra parking generation rates is related to retail. Woollahra states a rate of 3.5 spaces per 100m², while the RTA states a rate of 6.1 spaces per 100m² (for retail - shopping centres). It is expected that the Woollahra generation rates would be more suitable, as Woollahra Council has a policy of reducing car parking to ensure the impact of vehicles on their local network is reduced where possible. The RTA Guideline is more generous in this regard as it is designed to apply to development across NSW often where car reliance is higher.

A comparison of the parking generation calculations is shown in the Table 2 below.

Table 2: Comparison of Parking Rates

Uses	Floor Space (m ²) / Number of Rooms / Units	Number of Parking Spaces Required (Halcrow / MWT Report)	Number of Parking Spaces Required (Woollahra Municipal Council Double Bay Centre DCP / DCP for Off- Street Car Parking Provision and Servicing Facilities)	Number of Parking Spaces Required (RTA Guide to Traffic Generating Developments)
Retail	1,081m ²	38	3.5 spaces per 100m ² = 38	6.1 spaces per 100m ² = 66
Restaurant	295m ²	44	15 spaces per 100m ² = 45	15 spaces per 100m ² = 45
<i>Retail / Restaurant Sub-Total</i>	-	82	83	111
Hotel	66 Rooms	33	1 space per 2 rooms = 33	Comparisons should be drawn with regard to similar developments = 33
<i>Hotel Sub-Total</i>	-	33	33	33
Residential				
- 1 Bed	8 Units	4	0.5 spaces per 1 bedroom unit = 4	0.6 spaces per 1 bedroom unit = 5
- 2 Bed	12 Units	12	1 space per 2 bedroom unit = 12	0.9 spaces per 2 bedroom unit = 11
- 3 Bed	19 Units	29	1.5 spaces per 3 bedroom unit = 29	1.4 spaces per 3 bedroom unit = 27
- Visitor	39 Units	8	1 space per 5 units = 8	1 space per 5 units = 8
<i>Residential Sub-Total</i>	-	52	53	51
<i>Sub-Total</i>	-	167	169	195
<i>Parking Credits (Clause 40 of DA No. 88/176)</i>	-	50		
Total		117	169	195
Proposed number of spaces:		107		

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It is obvious from the table above that there is a significant shortfall between the number of car parking spaces required in the DCP and the number that are proposed to be provided onsite.

The parking assessment final number proposed in the report relies on the 50 car parking spaces which were previously subject to a cash payment to Council in lieu of provision onsite for the existing development. There is a lack of clarity in the EA as to how the lower number of car parking spaces was actually agreed and paid for. The EA suggests this may have occurred through a modification to the scheme, and essentially concluding that as the arrangement was built, the contribution must have been made.

Council's Section 94 Contributions Plan 2002 (June 2008 Update) notes the following:

3.11. Major development

As defined in the following table, major development should as far as possible make provision (on or off site) for those facilities for which a contribution is required under this Plan. An applicant for major development should discuss the proposal with Council at an early stage to agree on how the development should be designed to comply with this requirement.

Table 3.1: Major Development

Type of development	Scale of development
Residential other than housing for older people or people with a disability	more than 50 dwellings
Housing for older people or people with a disability	more than 20 dwellings
Residential subdivision for dwelling houses	more than 25 allotments
Retail	more than 500m ² gross floor area
Commercial or other business	more than 500m ² gross floor area

The development proposed would be a Major Development in accordance with the table. As such, this would appear to trigger the requirement for the developer to make provision (on or offsite) for certain facilities including car parking. The Section 94 Plan suggests that agreement is required to be reached between the Council and the Proponent so that the development can be designed to meet this requirement. No information is contained within the report demonstrating that agreement has been reached between Council and the Proponent on how the car parking which is additional to that required in the DCP is to be provided for, whether on or offsite.

It is noted that the currently proposed non-provision of retail and restaurant parking within the basement of the building will result in all basement parking being essentially private in nature, with the public/ casual parking provided off site in Council owned facilities/on street. This may provide the opportunity for the development to provide a secure gated facility.

The report fails to explore the nexus between the current potential under-utilisation of parking within the existing development and the results of the car parking utilisation survey of the Cross Street car park facility. It notes that the hotel has been trading significantly under capacity which will no doubt correspond with the reported under utilisation of its car park. However it does not note what use the existing car parking spaces within the Stamford Plaza are being used for (i.e. hotel/casual etc). Once the new development is trading at full capacity the comparison with the existing under-utilisation of the Cross Street car park may not be valid as temporary/casual parking previously provided in the Stamford Plaza and potentially used as parking for other adjacent development may have relocated to the Cross Street facility. This may impact the current availability of parking in the Cross Street facility.

7. Director Generals Requirements

The following comment is provided on the responses given to the Director Generals requirements where there are issues which have not been examined in this review already.

- 5) There is no evidence to suggest the pedestrian generation of the site will be reduced. Although the proposed retail use is lower in a square metre basis than the proposed, there is no direct comparison between the pedestrian generation of the new vs. old, especially as the previous arcade style of retail may have been underperforming.
- 6) A Green Travel Plan for hotel guests/residents etc may be a more appropriate means of encouraging use of public transport. Details could be included on the Hotel website/provided as maps to guests to help them explore the area etc.
- 11) The report has not addressed manoeuvring of vehicles – either car or service, in the basement except to note that compliance with the Australian Standard is not always possible due to the retention of the existing structure. Locations where compliance with the Australian Standard and turning paths are deficient have not been highlighted.
- 12) The impact of service vehicles and servicing is likely to be greater than anticipated by the Halcrow MWT report (2009), as it has been shown that they will all have to be accommodated on street.

8. Summary of Main Issues

This review of the Traffic Impact Assessment report has highlighted the following main concerns.

8.1. Car Parking

Conflicts with vehicle turning paths and compliance with the Australian Standards remains an issue and has not been examined in detail in the report.

There is insufficient detail in the plans provided to determine whether the issue of 'small car' spaces is likely to be an operational concern.

The robustness of the methodology adopted for the parking surveys (dates and times) is in question as it relies on assumptions for which no information has been provided. It is difficult to state with confidence that the relocation of car parking to the Cross Street facility will be adequate, due to lack of information regarding the previous uses of Stamford Plaza parking, which may have relocated to the Cross St facility now that no public parking is proposed in the new development.

There are minor arithmetic/rounding inconsistencies in the Halcrow MWT Report (2009) numbers in relation to required numbers of carparks to be provided onsite which may impact on the Section 94 contribution amount and the number of spaces required to be available elsewhere. There is a shortfall of spaces compared to the requirement of the DCP.

The assumption that spaces required to be provided onsite under the DCP can automatically be transferred to Council owned infrastructure through payment of a contribution appears to be questionable given details of the Section 94 Contributions Plan.

Overall there are serious deficiencies in the analysis of impact of proposed changes to car parking within the report. As such it is not possible to quantify the overall impact resulting from the proposed changes to parking or conclude on the validity of the report's conclusion that adequate parking supply is available to absorb the proposed undersupply.

8.2. Traffic Generation and Impact

It is noted that the proposed development has a lower trip generation than the existing development, however the report states that the existing development is underutilised and hence the traffic impacts which have been modelled may not be representative.

There may be discrepancies between the modelled vs. real life traffic impacts at the New South Head Road/Cross St intersection depending on how the SIDRA model was applied. Detailed