

9 June 2021



Barry Teeling
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Dear Barry

1. Traffic Engineering Response to Council's RFI DA/1080/2020, Liverpool Civic Place

The applicant is to provide further documentation prior to the determination of this application, including:

1A(i) - Updated SIDRA analysis - using the traffic generation rates in the TfNSW Guide for the Phases B & C development.

The trip generation associated with the development was established through surveys of similar land-uses specifically as the TfNSW Guide does not present trip rates for the proposed uses. The use of the Warren Serviceway car park as a reference was agreed with Council's traffic engineering team during the preparation of the Stage 1 DA and therefore is relevant to the Stage 2 application. The Guide does not contain relevant trip rates and the collection of data at similar land-uses (particularly being within the same CBD) is the highest level of traffic generation prediction possible.

Given the relationship of the application with the Phase B/C component of the project, the TIA presented traffic activity for all phases and in that regard, trip generation rates for the commercial and boarding / student accommodation areas were included in the analysis as a mixed-use commercial building. The rate calculations for all land uses within the development (all phases) are presented below, adopting the TfNSW rates:

- Library = 5,000m² x 1.6 per 100m² = 80 trips
- Council Admin = 16,668m² x 1.6 per 100m² = 267 trips
- Mixed-use commercial Building* = 27,944m² x 1.6 per 100m² = 447 trips

It is evident that the rates, when applied to the floor areas, result in a much greater trip generation than the number of parking spaces. It is not possible for the development to generate these volumes of traffic activity.

The data source for the average trip generation rates is presented in Technical Direction 13/04a which presents information including the peak hour trip rate for 10 commercial buildings throughout the Sydney metropolitan area. Building 7 is located in Liverpool, however it has a small floor area (2,817m²), which results in a high trip rate of 2.49 trips per 100m². Building 6 is located within Parramatta and has a similar area (27,000m²) and generated 0.69 trips per 100m² although it is noted that the parking provision is greater at 400 spaces. Application of this rate to the phase B/C component results in a peak hour traffic activity of 193 trips, which again is greater than the parking provision. This is likely a result of the larger parking provision within the Parramatta building and the effects of induced demand.

In this regard the trips rates adopted in the traffic assessment are robust and does not require the SIDRA modelling to be updated.

Note: The Concept DA condition referencing SIDRA analysis for the Stage 2 DA's is currently proposed to be deleted with in principle support from Council and Architectus.

1A(ii) - Local Area Traffic Management Plan (LATMP)

We have contacted Council to seek agreement on the details of LATMP requirements as the project traffic generation and modelling did not identify any traffic related impacts that would need to be addressed through a LATMP or any other physical works.

Discussions with Council Traffic Unit have commenced and the LATMP for Phase A has been prepared and submitted to Council, and describes the agreed works within the road network (e.g. removal of on-street parking along the site frontage etc.)

Note: The Concept DA condition referencing the LATMP is currently proposed to be deleted with in principle support from Council and Architectus.

1A(iii) - the parking provision required for the proposed boarding houses/ co-living from other comparable developments and amend the parking provision accordingly.

The parking provision for the co-living component was established based on the likely demand for parking being low, which is evidenced by similar developments where very little, if any parking is provided.

Surveys have been undertaken at small boarding house and large student accommodation developments in order to obtain a range of results.

Surveys of four Boarding Houses indicates the following results:

Location	Rooms	Parking Spaces	Demand	Comments
Concord	40	8	2 max	"very low usage of the car park"
Strathfield	45		4 max	Stated as "about 10% if that"
Concord West	Not given	2	0	"nobody brings a car to my place"
Ashfield	9	0	0	Mostly motorbikes and bicycles

The discussions with the operators of these Boarding Houses were consistent in that they all commented that parking usage was low and that most residents did not own a vehicle. It is noted that, unlike the subject development, each of these Boarding Houses is not located within a commercial centre, which would typically increase the need for car usage.

In order to expand the study, we contacted Iglu, who operate large scale student accommodation buildings in Sydney (3 buildings in Chippendale, 1 in Redfern and 1 in Chatswood) and recorded the following results:

Location	Beds	Parking Spaces	Demand	Comments
Broadway	271	Up to 6	0	Nobody has registered for a parking space at present. The parking is for manager and part of the larger Central Park development

Central	98	0	0	
Central Park	770	0	0	
Chatswood	395	0	0	
Redfern	370	0	0	

While this is a specific type of user group it is evident that there is no parking demand associated with these five buildings accommodating up to 1,904 students, regardless of the location (i.e. Chippendale/Redfern compared with Chatswood).

Given the location of the proposed co-living building within the context of Liverpool CBD, it is reasonable to expect that users would not own a vehicle and generate parking demand.

1E(i) - The proposal suggests a shared zone on Scott Street. Further details are required as all shared zones must comply with TDT 2016/001.

The shared zone proposed has been adopted as a means of prioritising pedestrian movement across the plaza in line with the objectives of the Technical Direction. Other examples that have been referenced in the design of the shared zone include, St Marys Cathedral car park, The Crescent, Mosman, St Margarets in Surry Hills, Mount Street in North Sydney and Circular Quay (east).

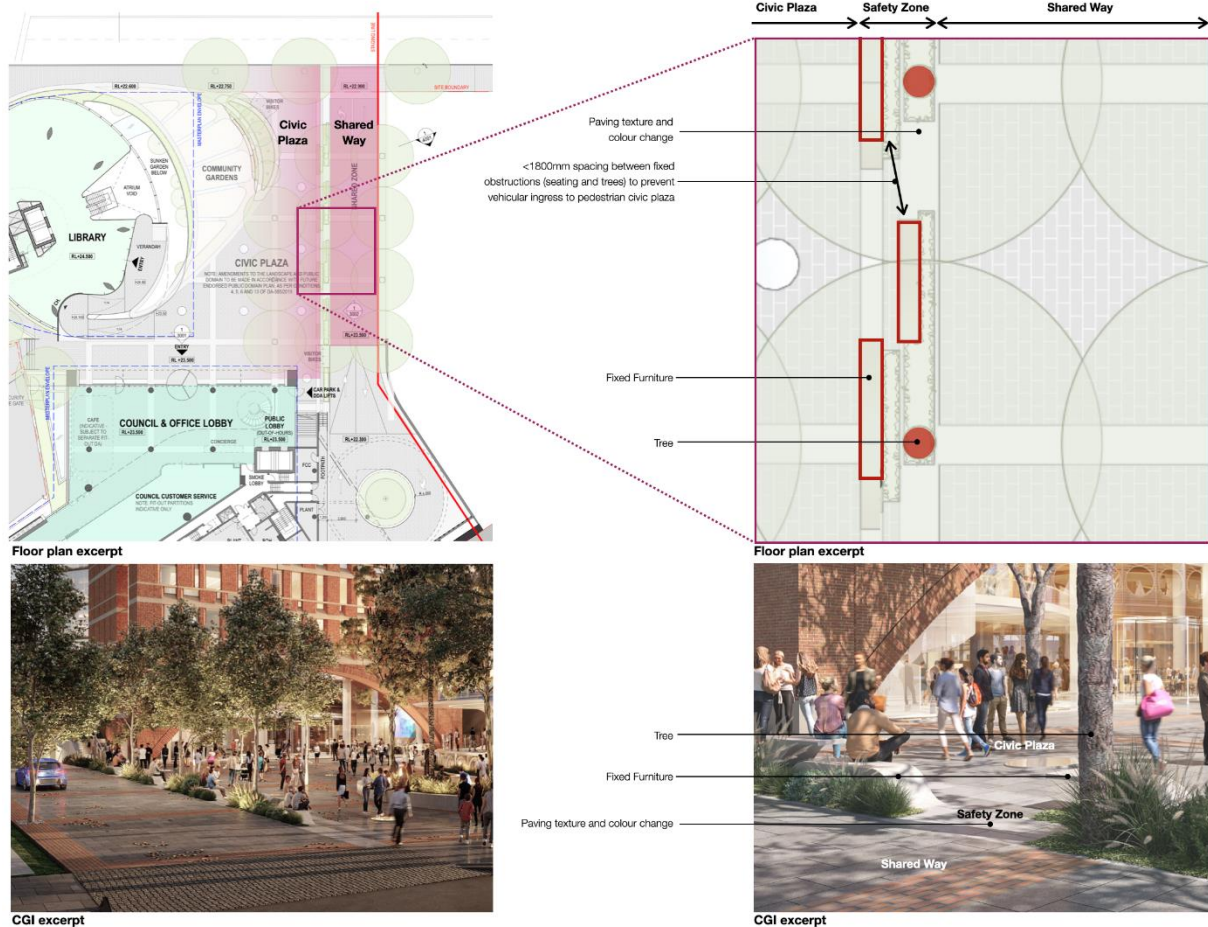


St Marys Cathedral car park



St Margarets, Surry Hills

The shared zone will be supported by the required signage, and safety provisions such as the high contrast edge-lines designed into the plaza landscaping design, the trees and seating to prevent errant vehicles accessing the plaza etc. This will be subject to detailed design during the CC stage of the project to ensure compliance with TDT 2016/001.



Public domain plan includes physical items that prevent a vehicle travelling from the shared zone to the plaza (maximum gap of 1800mm to prevent vehicles pass between the physical objects).

1E(ii) - The TIA refers to the proposed slip lane from Terminus into Scott Street which shows a right turn movement into Scott Street. As noted in TfNSW responses for DA 585/2019, this movement is not supported. It is noted plans for the aforementioned application have been updated; the TIA for this application should be updated to reflect the same.

The works at the Terminus Street / Scott Street intersection do not form part of this application and were included within the TIA to provide context with regard to planned changes to the surrounding roads. The intersection changes are being proposed by Council and revised to reflect input from TfNSW. Given that the intersection design may be subject to further amendment the images in our TIA should be seen as a guide only. Notwithstanding the minor changes to the intersection design have no bearing on the outcome of the proposed development.

1E(iii) - Any TIA/SIDRA modelling should be updated to reflect the existing road network, as the upgrade of Terminus Street is a long term proposal.

The traffic modelling associated with the DA has been undertaken based on the current road layout. This revision was made following the Stage 1 DA when it was confirmed that the Terminus Street project would not take place prior to the completion of the subject project. Similarly, the driveway has been designed to suit both the current and widened road geometry. The concept central median island has also been designed within the existing width of Terminus Street.

I trust that this information will assist in the assessment of the development, however, should any clarification be required, please do not hesitate to contact me.

Your Faithfully



Andrew Morse

Managing Director

Document Control: Prepared by *AM* on *9 June 2021*. Reviewed by *AM* on *9 June 2021*.

22 February 2022
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Dear Dan

1. DA-1080/2020 - Phase B/C Car Parking Provisions

This letter has been prepared to accompany a an RFI response for the Stage 2 Detailed DA (DA-1080/2020), relating to Phase B/C of Liverpool Civic Place and relates to the provision and allocation of parking within the basement car park and acts as an amendment to the Transport Impact Assessment (TIA) that accompanied the DA.

The provision of parking has been assessed against the requirements of the applicable LEP clause (7.3 Car parking in Liverpool city centre) and related land uses.

With regard to the parking requirements of the development, Clause 7.3. states:

(1) The objective of this clause is to ensure that adequate car parking is provided for new or extended buildings on land in the Liverpool city centre that is commensurate with the traffic likely to be generated by the development and is appropriate for the road network capacity and proposed mix of transport modes for the city centre.

(a) at least one car parking space is provided for every 200 square metres of any new gross floor area that is on the ground floor level of the building, and

(b) in respect of any other part of the building—

(i) at least one car parking space is provided for every 100 square metres of any new gross floor area that is to be used for the purposes of retail premises, and

(ii) at least one car parking space is provided for every 150 square metres of any new gross floor area that is to be used for any other purpose.

Based on these requirements, the parking requirements are summarized in the following table:

Level	Floor space identified in the Plan Schedule	LEP requirement	LEP required spaces	Parking spaces proposed
Ground Level	1,018m ²	1 space per 200m ²	5	5
Above Ground Level	24,144m ² comprising			

	21,243m ² (Commercial)	1 space per 150m ²	142	125
	2,901m ² (Hotel)	1 space per 150m ²	20	20
Phase B/C Total			167	150

The parking provision has been reallocated to provide 20 spaces for the hotel use, which is compliant with the LEP, and an allocation of 130 spaces to the commercial component based on the following transport considerations.

Visitors to the hotel will be able to travel to / from the hotel via public transport (and airport shuttle services etc.) or active travel given the proximity to surrounding retail, dining, and services within the CBD. While this addresses the majority of visitors, it is important to accommodate a base level parking demand generated by those who travel by car and on this basis, 20 spaces are to be allocated to the hotel to provide a level of flexibility.

This means that of the total parking provision, the allocation to the commercial office component will comprise the remaining 125 spaces, which represents a shortfall of 17 spaces. This shortfall is a slight deviation from the LEP requirements but must be assessed in the context of the site location, the proximity to the CBD and the broader planning/transport aims associated with reducing car usage in preference of more sustainable transport options.

Clause 4.6 of the Liverpool Local Environmental Plan (LEP) of 2008 states the following objectives

(a) to provide an appropriate degree of flexibility in applying certain development standards to particular development,

(b) to achieve better outcomes for and from development by allowing flexibility in particular circumstances.

The parking shortfall seeks to apply the degree of flexibility stated in Clause 4.6 (a), with the intent of achieving a better outcome as stated in Clause 4.6 (b).

The outcome of the shortfall will be to discourage the vehicle trips associated with 17 parking spaces. This can be achieved through the extensive transport options available to travel to and from the development. The TIA presents the range of transport options available including Liverpool Station, which is located 350 metres (walking distance) from the site and concludes that the site is well served.

In this regard, the development given its location achieves one of the aims of the LEP described in Clause 1.2 (e), being:

(e) to concentrate intensive land uses and trip-generating activities in locations most accessible to public transport and centres

This is consistent with the move towards limited parking provisions as a tool for managing traffic growth and mode shift, as demonstrated in the planning controls of City of Sydney (1 space per 3,300m² GFA, or part thereof, for the first 50,000m²), North Sydney (1 space per 400m²) and more recently Parramatta Council (A maximum of 1 parking space to be provided for every 100m² of gross floor area), all of which present maximum parking provision relating to commercial office use.

The proposed parking provision of 130 spaces for the commercial office component provides the flexibility for the building to accommodate a base parking demand regardless of the floor area, while encouraging the use of other transport modes and a reduction in traffic activity.

We trust that this information will assist, however if further detail is required, please do not hesitate to contact me.

Your faithfully

A handwritten signature in blue ink, appearing to read 'AM', followed by a horizontal line.

Andrew Morse
Managing Director