

Reference: 0772105



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Attention: Thomas Lay

Re: 2-6 Hassall Street, Parramatta – Response to Submissions

Dear Thomas,

I refer to the Site at 2-6 Hassall Street, Parramatta and the Submissions received from City of Parramatta Council (Council) and Transport for New South Wales (TfNSW), regarding the State Significant Development 9670 for the Western Sydney University Innovation Hub (Proposal).

The following presents each of the Submissions with regard for the traffic and transport items raised and provides our response.

Council Comments

Comment (Stormwater)

Must ensure that adequate sight distance in accordance with AS2890.1-2004 is achieved at the basement entry driveway.

Ason Group Response

Noting that Hassall Street is a one-way street in a westbound direction, adequate sight distances can be achieved at the basement entry, in accordance with AS2890.1. This would be confirmed at Construction Certificate stage of development and is expected to form a Condition of Consent.

Comment (Urban Design (Public Domain))

The bollards shown at the driveway crossover of Hassall street footpath are not recommended. These should be replaced with warning TGSIs.

Ason Group Response

These bollards have been provided to ensure the required sight splays are achieved for appropriate driver visibility of pedestrians walking across the driveway, in compliance with Figure 3.3 of AS2890.1. It is necessary to ensure that pedestrians do not occupy this area, therefore it is deemed appropriate to provide a physical barrier in this location to prioritise pedestrian safety.

TfNSW Comments

Pedestrian Impact Assessment Comment

TfNSW requests that the Applicant undertake further assessment of the adequacy of pedestrian facilities including:

- *Fruin analysis of walkways and any pedestrian pinch points along desire lines to public transport nodes.*
- *Measures to improve any constraints or pedestrian safety concerns.*

The analysis should have regard to the potential bunching of pedestrians due to nearby signalised pedestrian crossings and interaction of passengers alighting from public transport and the nearby railway station and interchange.

Ason Group Response

Hassall Street & Station Street East Intersection

As noted by TfNSW, the Ason Group transport assessment (reference: *Transport Assessment Report; Western Sydney University Innovation Hub 2-6b Hassall Street, Parramatta*, Issue 1, 12/04/2019 (Ason 2019 Report)), gave particular regard to the signalised intersection of Hassall Street and Station Street East due to it being the key pedestrian desire line and the key concern with regard to pedestrian impacts. The analysis forecast a Level of Service (LoS) C for this location. To further expand on this analysis, **Table 1** summarises the pedestrian results for the Hassall Street & Station Street East intersection, with the corresponding Zones and Crosswalks shown by **Figure 1** for reference.

Table 1: Hassall Street & Station Street East Intersection Fruin LoS – AM Peak

	Max Volume	Density (Ped/m2)	LoS
Waiting Zone A	15	0.38	A
Waiting Zone B	19	0.32	A
Waiting Zone C	38	0.46	A
Waiting Zone D	40	0.67	A
Crosswalk AB	4	0.07	A
Crosswalk BC	25	0.70	C
Crosswalk CD	57	0.67	C
Crosswalk DA	19	0.19	A

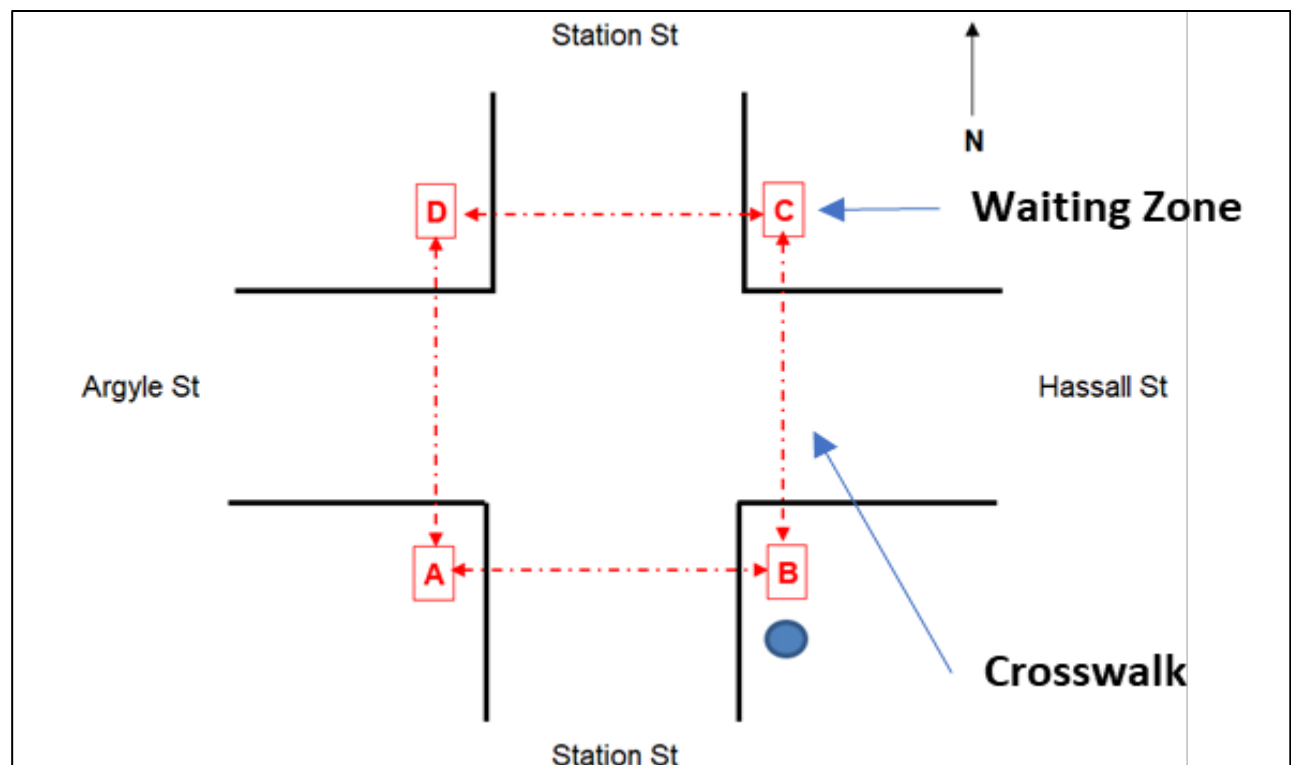


Figure 1: Zones and Crosswalks Assessed

As is shown by Table 1, the intersection is performing at acceptable levels with densities of LoS C for crosswalks and LoS A for walkways.

The crosswalks are performing at acceptable levels with the worst movements resulting in a Walkway LoS C between B/C and C/D. The LoS C found for Crosswalk C/D is most likely due to the opposing flow of pedestrians heading to the Interchange and to the Site. The performance of Crosswalk C/B is most likely due to the small crossing catering for moderate contra-flows of patronage.

The Waiting Zones all perform at acceptable levels, with LoS A. Unsurprisingly, the highest density of 0.67ped/m² found at Waiting Zone D was due to the high demand for access from the Interchange, to the Site. This greater acceptability for higher densities is due to the Queueing LoS scales facilitating a greater tolerance for a higher volume of pedestrians when they are standing and waiting compared to moving. Additionally, these measurements also consider pedestrians ‘passing-by’ the Waiting Zone of the opposite side. This is likely to occur as this is not a scrambled crossing of movements to C from D and B simultaneously.

Footpath Analysis

With regard to analysis of footpath capacity, the Flow Rate has been considered with the findings for each of the key areas along the footpaths in the vicinity of the Site. The surveys undertaken for the assessment, and detailed in the Ason 2019 Report, demonstrated a peak flow factor of 31% (i.e. of the 730 pedestrian recorded in the AM peak by the surveys, 31% of these were recorded in a peak 15 minute period between 08:15-08:30AM). On this basis, **Table 2** summarises the LoS for each section of footpath, following the addition of pedestrians generated by the Proposal.

Table 2: Footpath LoS

	Footpath Width	Flow Rate (ped/m/min)	LoS
Station Street (Western Side)	2m	19	A
Hassall St near Intersection	4m	9	A
Hassall St past Site	3.8m	10	A
Hassall St East of Site	2.9m	5	A

The section of footpath along the western side of Station Street, as identified by TfNSW, has at least a width of 2m. On this basis, the peak flow rate of 19 has been recorded. This results in LoS A for this section of footpath.

As shown in Table 2, all locations are expected to operate with acceptable LoS, the Proposal is therefore acceptable and no further measures are required to improve conditions.

Finally, it is notable that the Proposal would improve the pedestrian infrastructure along the Site frontage, with provision of a plaza area on the Ground Floor which, traverses north-south through the Site, as well as running along the Site frontage with Hassall Street, effectively widening the footpath in this location by approximately 4m.

While it is recognised that the Proposal would generate additional pedestrian demand, the Fruin analysis has demonstrated that the pedestrian infrastructure can accommodate these additional trips. Further, the Proposal would serve to improve the pedestrian environment in and around the Site. It is therefore concluded that the Proposal is acceptable from a pedestrian impact perspective.

Freight & Servicing

It is recommended that the Applicant provides an assessment of the projected freight and servicing movements (number and type by day) and a draft management plan to better understand the requirements for freight and how these movements would be managed.

A Draft Loading Dock Management is provided as **Attachment 1**, which details the expected freight and servicing demands of the Proposal. It is noted that, based on the known operational data of 1PSQ, Western Sydney University has provided the servicing requirements for the Proposal, taking into account the maximum size vehicle that can access the Site. This suggests that 3 servicing vehicles could require access to the development in the servicing peak.

The recent data with regard to actual servicing requirements for commercial development is currently limited. Some data has been provided by the Sydney Coordination Office with regard to office developments with Sydney CBD. Application of this information to the commercial element of the Proposal suggests that 6 servicing vehicles could require access to the development in the servicing peak.

Therefore, in total, 9 servicing vehicles could require access to the basement during the servicing peak hour, which equates to approximately 1 vehicle every 15 minutes for each of the bays. Of these, it is anticipated that 3 would be couriers and 3 would be trucks. Noting that some Couriers, of who would become familiar with the development following regular servicing runs, would require less than this time to deliver goods; the proposed servicing bays are therefore deemed to be sufficient to accommodate the servicing demands of the development.

I trust the above satisfies the areas which have requested further information and addresses the recommendations and comments raised. Should you have any queries, please contact the undersigned.

Yours sincerely,



Traffic Engineer – Ason Group

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Attachment 1

Loading Dock Management Plan