Transport for New South Wales



Michelle Niles Key Sites & Regional Assessments Department of Planning and Environment Locked Bag 5022 PARRAMATTA NSW 2150

TfNSW Reference: SYD21/00989/04 DPE Reference: DA 9876 MOD 1

RE: REMOVAL OF A DECELERATION LANE ON CASTLEREAGH ROAD AT LUGARD STREET CNR-52322 - DA 9876 MOD 1

20 March 2023

Dear Michelle,

Reference is made to the Department of Planning and Environment (DPE) correspondence dated 15 March 2023, regarding the abovementioned modification application which was referred to Transport for NSW (TfNSW) for comment.

TfNSW has reviewed the submitted documents and does not support the modification proposal to remove condition 23 (b) that requires the developer to provide the left turn lane from Castlereagh Road into Lugard Street, due to the potential impact on traffic flow on Castlereagh Road.

The information provided in the traffic report does not provide a qualitative assessment of the impacts of removing the left turn lane and further information and amendments are required to allow TfNSW to assess the proposal. TfNSW have provided comments regarding the assessment in **Attachment A**.

If you have any further inquiries in relation to this development application Mr Nav Prasad would be pleased to provide further information via email: development.sydney@transport.nsw.gov.au. I hope this has been of assistance.

Sincerely,

Pahee Rathan Senior Land Use Assessment Coordinator Planning and Programs Greater Sydney



Attachment A

• It is noted that this development was determined by Land & Environment Court with the conditions relating to the road works required as part of condition 23 shown below:

Road Works

- C23. Prior to the commencement of construction for each stage referred to in (a)-(c) below, the Applicant must submit plans and technical specifications for that stage, to the satisfaction of the relevant roads authority, for the following works:
 - (a) left turn deceleration lane from Old Castlereagh Road to the approved northern entry road (Road 3) at Stage 6;
 - (b) left turn deceleration lane from Castlereagh Road to Lugard Street at Stage 9; and
 - (c) shared pedestrian and bicycle pathway on the south side of Lugard Street from the site to Castlereagh Road to be delivered in Stage 1.
- The traffic assessment prepared by McClaren concludes that states that from their SIDRA assessment:

Based on the results presented above, there is no nexus between the approved development and the construction of a left-turn deceleration lane on Castlereagh Road on the approach to Lugard Street. The construction of this lane is, therefore, not required and the relevant condition should be removed.

- TfNSW notes that whilst SIDRA outputs are provided, electronic SIDRA files have not been provided to TfNSW for review to validate the findings of the traffic report. From the SIDRA outputs the following is noted:
 - that the intersection has been modelled as an isolated site rather than a networked site and therefore consideration has not been given to upstream or downstream conditions.
 - it is unclear if the traffic signal timings used in the model have been validated with SCATS data.
 - If the model has been calibrated.

The items above would be factors that could greatly influence the results of the model.

 The trip generation in the traffic report is provided as: As shown above, in accordance with the GHD Report assumptions, the proposed development is estimated to generate 1877 trips in the AM peak period (1608 in, 269 out) and 1755 trips in the PM peak period (236 in, 1519 out). The traffic distribution used in the traffic report is based on the two network access points to the site:



Peak Time	Direction	North Approach Castlereagh Rd		South Approach Castlereagh Rd		West Approach Lugard St	
		Right Turn	Through	Through	Left Turn	Right Turn	Left Turn
АМ	IN	15%		5%	25%		
	OUT		5%			15%	25%
РМ	IN	15%		5%	25%		
	OUT		5%			15%	25%

TABLE 4: TRAFFIC DISTRIBUTION

Based on this distribution, 1608 inbound trips generated in the AM peak of which 30% or 482 vehicle trips use Castlereagh Road northbound to access the site of which 402 vehicles turn left into Lugard Street. The SIDRA model results for the *2036 Background Only + Full Yield AM* models indicates that the model has been inputted with 124 vehicles turning left which is substantially lower than the 30% of development traffic i.e., 402 vehicles. It is not clear why the LT volume decreases from 134 LT vehicles in the 2026 model to 124 in the 2036 model. In this regard there seems to be a major error in the models which has affected the results and therefore the conclusions made.

- Table 5 and 6 of the traffic report provide summaries of the modelling related to the with and without left turn lane. The tables are based on the average intersection delays for Lugard Street and not the Castlereagh Road approach which is of concern to TfNSW. The table is misleading in that it as does not clearly indicate the change in left turn movement values such as changes in queue lengths and changes in delays to all movements and requires the reader to go to the SIDRA outputs to find this information. Furthermore Table 6 relates to traffic in Lugard Street approach which has no relevance to the removal of the left turn lane in Castlereagh Road.
- Sidra results aside, from a traffic efficiency perspective TfNSW disagrees that with the McClaren conclusion that there would be no network benefits with the left turn lane that the developer has been conditioned to provide as:
 - The current traffic signal operation allows the left turn into Lugard Street to operate during two phases of the traffic signal cycle and therefore the additional left turn lane would allow for these vehicles to enter Lugard Street in approximately 80% of the total cycle time whereas in the current arrangement all it would take is for a vehicle in the kerbside lane travelling northbound to prevent this movement from occurring.
 - The left turn lane allows for the storage of left turning vehicles when pedestrians cross Lugard Street in A phase and therefore still allow for two through lanes northbound in Castlereagh Road to be maintained without impediment.