GTAconsultants
now
Stantec

Transport Engineering

REF: N174701

DATE: 20 December 2021

Department of Education
School Infrastructure NSW
Level 8, 259 George Street
SYDNEY NSW 2000

Attention: Jack Bruderlin (Project Director – School Infrastructure)

Dear Jack,

RE: NEW LIVERPOOL PRIMARY SCHOOL SSD-10391 RESPONSE TO TRANSPORT RELATED SUBMISSIONS

A State Significant Development (SSD) application has been submitted for the New Liverpool Primary School project at 18 Forbes Street, Liverpool. GTA, now Stantec completed a Transport and Accessibility Impact Assessment and Student Transport Plan, both dated 11 June 2021, to support the SSD application.

Subsequent to the SSD application being lodged and additional requested information by stakeholders being responded to, DPIE have provided additional queries in relation to traffic and transport for further clarification. This letter has been prepared to specifically provide a response to DPIE's additional queries. The relevant queries are reproduced in Attachment 1 together with detailed responses. Attachment 2 provides swept path assessments.

Should you have any questions or require any further information, please do not hesitate to contact me on (02) 8448 1800.

Yours sincerely

GTA, NOW STANTEC

Karen McNatty
Senior Principal Transportation Engineer

encl.
Attachment 1 – Response to Submissions

Attachment 2 – Swept Path Assessments

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ATTACHMENT 1

Response to Submissions

Table 1: DPIE Comments and Responses

Comment	Responses
Department of Planning, Industry and Environment (DPIE)	
The Waste Hardstand Site Plan (Appendix K) includes details of a medium rigid vehicle (MRV) turning circle, which would access the site for waste collection in the future. However, the Department notes that the allocated hardstand space is not sufficient for MRV manoeuvring and that the MRV would encroach into the bike rack area and the ELC play area. Please address this issue and relocate/resize the hardstand area or relocate the vehicle turning circle area to allow for adequate manoeuvring of MRV within the site.	The hardstand area is part of a separate application that is still processing through detailed design. The design has been modified by the architect and can accommodate waste vehicles turning around on site and therefore can enter and exit the site in a forward direction. Updated swept path review attached.
Parking facility for the preschool users would be required or else an alternate area is to be identified where parents can park during arrival / departure (when coinciding with the school drop-off/pick-up times). Please address this issue, as the opposite side of Burnside Drive has a 'No Stopping' zone and parents cannot park on this street at any time.	From a traffic operational perspective, the preschool pick up/ drop off times need to occur outside of the school drop off/ pick up times. There will be dedicated signposted spaces for preschool within the Burnside Drive drop off/ pick up area to accommodate longer parking times outside of the peak school pick up and drop off times. The operator of the preschool is not yet known; however, it is expected that the centre will operate on a longer day than the school day. Designated preschool parking spaces of 15mins length of stay will be provided between the hours of 7am to 8:15am and 4pm to 6pm adjacent to the school on Burnside Drive. Unrestricted on-street parking spaces are located in the surrounding local road network on Lachlan Street and Hart Street, should carers choose to collect/ drop preschool children during the school pick up/ drop off times they would need to obtain an on-street parking space. It is recommended that these times are avoided.

Comment	Responses
The submitted Traffic Report proposes reduction in car usage in the adjacent high schools in the future, to improve the performance of the Lachlan Street/Hart Street roundabout. However, the current Student Transport Plan only applies to the proposed new school and not the high schools adjacent to the site. You are requested to clarify how the reduction in the car usage for the high schools would be achieved, reviewed, monitored in the context of the current development application of the primary school. The Department has requested this information previously, however a suitable response has not been provided. You are also requested to demonstrate the practical feasibility of this mitigation measure to enable the improvement of the level of service of the Lachlan Street/Hart Street intersection. The Traffic Report states that, in order to ensure intersection performance improvements in 2033, an alternative physical mitigation measure may be proposed, which includes an additional short approach lane on the northern approach of the roundabout on Lachlan Street / Burnside Drive / Hart Street. Currently the RTS does not clearly iterate whether the high school modal shift or this physical mitigation would be pursued. Please confirm whether this mitigation measure is proposed to be pursued in 2033 and if the modal shift is the preferred option, how would that be implemented and under what circumstance would it trigger the need for physical upgrade to this intersection. The Department also notes that the Traffic Report has already considered a physical infrastructure upgrade at the Lachlan Street/ Burnside Drive/ Hart Street roundabout. Despite this upgrade, the intersection appears to be performing in LoS D, in 2033. Please clarify this issue and provide clear information regarding the level of service at this intersection in the future years as well as the proposed mitigation measures.	The High School project is only just commencing so the potential mode shift resulting from the High School project at this stage is unknown. The physical infrastructure mitigation measure is proposed to be pursued in 2033 should a modal shift from the high schools have not been achieved by this time and the traffic conditions require improvement at this intersection. There is no School Travel Plan for the high school at this point as Planning for the high school is only commencing. In 2033 without the school and no mitigation measures the roundabout at Hart Street/ Lachlan Street would operate at a LoS C - with the school changes and no mitigation measures this would operate at a LoS D. Noting this is reporting on the worst movement which is the Hart Street approach only. Both the Lachlan Street and Burnside Drive approaches operate at LoS A. With the proposed infrastructure mitigation measures the roundabout would operate in 2033 at LoS A. As above we are proposing to allow for the opportunity of a mode shift prior to 2033 instead of committing to the infrastructure improvements at this stage as they may not be required. This would be monitored and if traffic conditions in 2033 warrant infrastructure improvements these can be implemented.
Liverpool City Council (Council) previously commented that the existing facilities are fragmented and do not sufficiently provide key trunks of safe cycling infrastructure, appropriate for all ages. It includes the recommended cycling infrastructure, in alignment with the Liverpool City Council Bike Plan. Council recommended that Department of Education consults with Council in this regard and provides for cycling infrastructure. However, satisfactory information has not been provided regarding cycling infrastructure and/or any consultation that has been undertaken with Council in this regard, although the Student Transport Plan relies on cycling to reduce the overall car usage at the school.	The School Travel Plan was developed in consultation with the transport Working Group which included Council. The STP Section 1.7.2 outlines key infrastructure improvements for cycling. It is envisaged that as part of Council ongoing Capital Works including cycling infrastructure would be carried out by Council, including that identified in the STP.
the current bike parking location results in bikes being transported through the courtyard or the hardstand gate. The bike parking should be relocated closer to the student entry and away from the waste area to encourage a modal shift in the future.	Review of entry locations has been undertaken, including considering moving bike parking closer to student entry location. However, there are conflicting other services required in these locations that prevent this outcome further. SINSW prefer the bike

Comment	Responses
	storage area to be located further away from the courtyard. It is noted that the waste hardstand area will be fenced and separated from the bike parking area.
It is noted that the proposed roundabout at the southern end of Burnside Drive forms part of a separate application. However, further information is required regarding the relationship between the primary school staff car park and the roundabout. The details of the vehicles using the roundabout, should also be provided.	The new roundabout is proposed to facilitate turnaround for vehicles originating from the north of Burnside Drive to access the pickup and drop off bays located on the western side of Burnside Drive. Access to the staff car park will be via a left in/ left out arrangement with vehicles originating from the north using the roundabout to access the staff car park driveway.
Please confirm whether Burnside Drive is wide enough to allow for bus access or whether an alternative access is proposed.	Bus access is not proposed from Burnside Drive. A bus zone is proposed on Lachlan Street north of the existing Liverpool Boys High School. A swept path assessment has been undertaken that demonstrates buses can turn around at the existing Hart Street/ Lachlan Street roundabout to access the southern side of Lachlan Street. Refer to Attachment 2.

ATTACHMENT 2

Swept Path Assessment

FUTURE PRESCHOOL
UNENCUMBERED PLAY SPACE
285m²

GOAL POSTS

SEWER PUMP OUT PIT

17985

15720

2100H FENCE

OSD TANK BELOW FINAL SIZE AND EXACT LOCATION TBC

BIKE RACKS

BIKE SIDE QUANTITY TBC

GA STORE

ENSURE MINIMUM 7.5m WIDE SLIDING GATE IS MAINTAINED TO ACCOMMODATE VEHICLE SWEPT PATHS

SLIDING GATE 7.5

DRIVE

BURNSIDE

PRE SCHOOL STUDENT UNENCUMBERED PLAY SPACE 7M2
40 STUDENTS = 280sqm

PROVIDED OUTDOOR PLAY SPACE = 285sqm

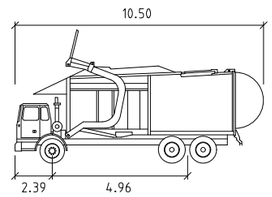
PROVIDED INDOOR PLAY SPACE = 286sqm

N

SWEPT PATH KEY

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 500mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h



Garbage 10.5m - Front

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 4.0
Steering Angle	: 34.4

BASE DRAWING 1 (SCHOOL'S SURVEY IN DARK GREY)
DRAWING 97814
BY JOHN LOWE AND ASSOCIATES PTY LTD
DATED 03.12.2018

BASE DRAWING 2 (ARCHITECTURAL BASE IN BLUE)
DRAWING NPLS-AR-DRG-0203
REVISION P3
BY NBRS
DATED 15.12.2021

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PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY
SUBJECT TO CHANGE WITHOUT NOTIFICATION

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

DESIGNED	R.ZHANG
DESIGN CHECK	M.BRINUMS
APPROVED BY	K.McNATTY
DATE ISSUED	16 DECEMBER 2021
CAD FILE NO.	N174701-10-P3.DWG

SCALE A3 0 1.25 2.5 5 1:250

NEW LIVERPOOL PUBLIC SCHOOL

SWEPT PATH ASSESSMENT

DRAWING NO. N174701-10-01 SHEET 01 OF 01 ISSUE P3

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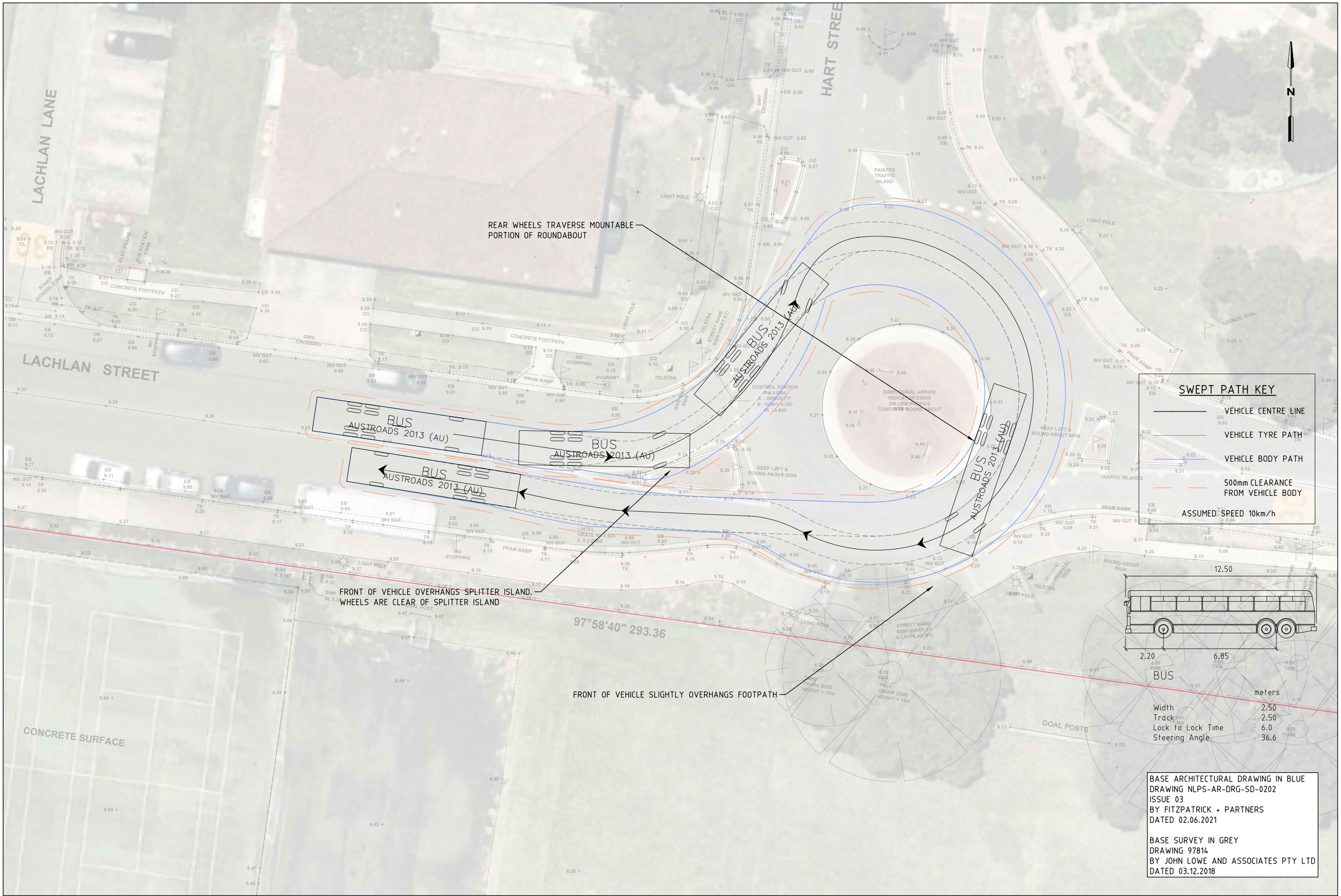

\\GTA.COM.AU\PROJECTFILES\PROJECTFILESSYD\NT1400-1749\NT1701 LEP - NEW LIVERPOOL PRIMARY (LACHLAN ST)\CAD\NT1701-07-P1.DWG PLOTTED BY ERIC YE ON 07/06/2021 AT 16:21

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DESIGNED E.YE	DESIGN CHECK K.McNATTY
APPROVED BY K.McNATTY	DATE ISSUED 7 JUNE 2021

SCALE A3 0 1.25 2.5 5 1:250

CAD FILE NO. N174701-07-P1.DWG

NEW LIVERPOOL PUBLIC SCHOOL

BUS SWEPT PATH ASSESSMENT

DRAWING NO. N174701-04-03 SHEET 03 OF 04 ISSUE P1