TDG, now Stantec
Level 21, 141 Walker Street
North Sydney 2060, NSW, Australia
Phone: +61 2 9493 9700 www.tdgaustralia.com.au

Chris Millet
Manager Land Use
Roads and Maritime Services
Southern Region

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Dear Chris,

Picton High School Redevelopment – SIDRA Assessment

The following provides a summary of the SIDRA modelling undertaken for the redevelopment of Picton High School. This is to be read in conjunction with the 'Traffic and Accessibility Impact Assessment' which provides a detailed traffic assessment of the project.

TDG now Stantec assessed the intersection performance of the following intersections:

- The Northern School Access / Argyle Street,
- The Southern School Access / Argyle Street, and
- Wonga Road / Argyle Street intersections

The following scenarios were assessed using SIDRA Intersection Analysis Software:

- Scenario 1A: Existing Traffic (Base Case) - This scenario includes the 2017 traffic survey volumes modelled over the existing road network and intersection configuration. This analysis has been performed for the morning and evening peak periods;
- Scenario 1B: Existing Traffic (Base Case) with the Proposed School Expansion - This scenario includes the 2017 Traffic volumes, and the additional school traffic based on 1,500 students. The layout of the relevant intersections is based on the existing road layout of Argyle Street, and with School access via Wonga Road;
- Scenario 2A: Year 2028 without the Proposed School Expansion - This analysis incorporates a 3.0% per annum increase in the background traffic volume up to the year 2028. The layout of the relevant intersections is based on the existing road layout of Argyle Street;
- Scenario 2B: Year 2028 with the Proposed School Expansion - This analysis incorporates a 3.0% per annum increase in the background traffic volume up to the year 2028, and the additional school traffic based on 1,547 students. The layout of the relevant intersections is based on the existing road layout of Argyle Street;
- Scenario 3A: Year 2040 without the Proposed School Expansion - This analysis incorporates a 3.0% per annum increase in the background traffic volume up to the year 2040. The layout of the relevant intersections is based on the existing road layout of Argyle Street.
- Scenario 3B: Year 2040 with the Proposed School Expansion - This analysis incorporates a 3.0% per annum increase in the background traffic volume up to the year 2040, and the additional school traffic based on 2,000 students. The layout of the relevant intersections is based on the existing road layout of Argyle Street;
- Scenario 4A: Year 2040 without the Proposed School Expansion - This analysis incorporates a 3.0% per annum increase in the background traffic volume up to the year

2040. The layout of the relevant intersections is based on the proposed road layout of Argyle Street; and

- Scenario 4B: Year 2040 with the Proposed School Expansion - This analysis incorporates a 3.0% per annum increase in the background traffic volume up to the year 2040 and the additional school traffic based on 2,000 students.

The performance criteria for intersections are based on the RTA (RMS) Guide to Traffic Generating Developments.

For the above analysis the SIDRA default values have been used, excluding the assessment of the Wonga Road and Argyle Street intersection analysis. The gap acceptance values for right turning vehicles from Wonga Road have been reduced to 5.0 seconds and 3.0 seconds for the critical gap and follow-up headway. The reductions are based on the on-site observations and traffic surveys and reflect the Austroads values.

A copy of the SIDRA intersection models are provided in electronic format for review by RMS and Council.

If you have any queries please feel free to contact us.

Yours sincerely
Traffic Design Group Ltd

Kirk Martinez
Principal Traffic Engineer
Kirk.martinez@tdgaustralia.com.au

Michael Willson
Senior Associate / NSW Branch Manager
Michael.willson@tdgaustralia.com.au