

i3 consultants WA  
 PO Box 1638 SUBIACO WA 6904  
 T (08) 9467 7478 | M 0407 440 327  
 www.i3consultants.com  
 ABN 53 745 566 923



Mr Ben Laycock | Associate  
 Altus Planning  
 ben@altusplan.com.au

i3c36202  
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## PROPOSED MIXED USE DEVELOPMENT | LOT 104 LARSEN RD, BYFORD ADDENDUM TO 2018 TRAFFIC IMPACT ASSESSMENT REPORT

Dear Ben,

This Technical Note has been prepared in response to your request to provide a short addendum to the November 2018 Transport Impact Assessment (TIA) report (Ref i3c02904F3) for the proposed development that assesses the impact of the proposed closure of Larsen Rd at the existing railway level crossing on the assessed impacts within the 2018 TIA.

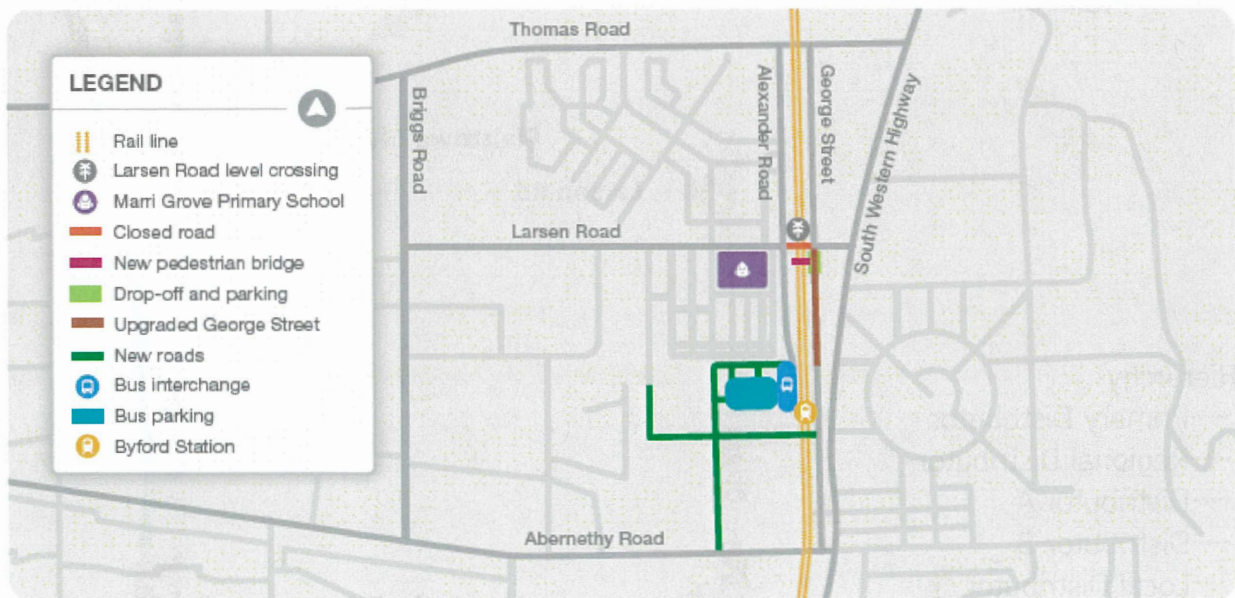


Figure 1 – Extract from Metronet Fact Sheet for Larsen Rd closure





# 1 PROPOSED CLOSURE OF LARSEN RD RAILWAY LEVEL CROSSING

As indicated Figure 1 on the previous page, The State Government intends to remove the railway level crossing on Larsen Rd as part of the Metronet Byford Rail Extension Project. The level crossing will be replaced with a pedestrian bridge. The FAQs within the [Metronet Larsen Road Fact Sheet](#) indicate that drivers requiring access over the railway line will need to choose crossing at either Thomas Road or Abernethy Rd. The Fact Sheet also indicates that George St will be upgraded south of Larsen Rd, resulting in George St linking Larsen Rd with Abernethy Rd.

# 2 IMPACT OF RAILWAY LEVEL CROSSING CLOSURE

There is no known traffic model of the forecast impacts of the proposed closure on the road network. It is recommended that a traffic model is obtained or undertaken by relevant road/ rail authorities to allow for the assessed impact of the road network to be determined, as per Clause 67(t) of the *Planning and Development (Local Planning Schemes) Regulations 2015*. This may necessitate the upgrading of roads and/ or intersections to accommodate the changes in travel movements.

In the absence of a detailed traffic model, it is necessary to undertake an assessment of the likely impact of the Larsen Road Railway Level Crossing in the context of the 2018 TIA for the proposed development. A preliminary assessment of the changed routes suggests significant increases to volumes along Plaistow Blvd and the right turns into and out of Plaistow Blvd at the Thomas Rd Give-Way controlled T intersection, as well as changes in volumes at up to 10 other intersections, as shown in Figure 2 below.

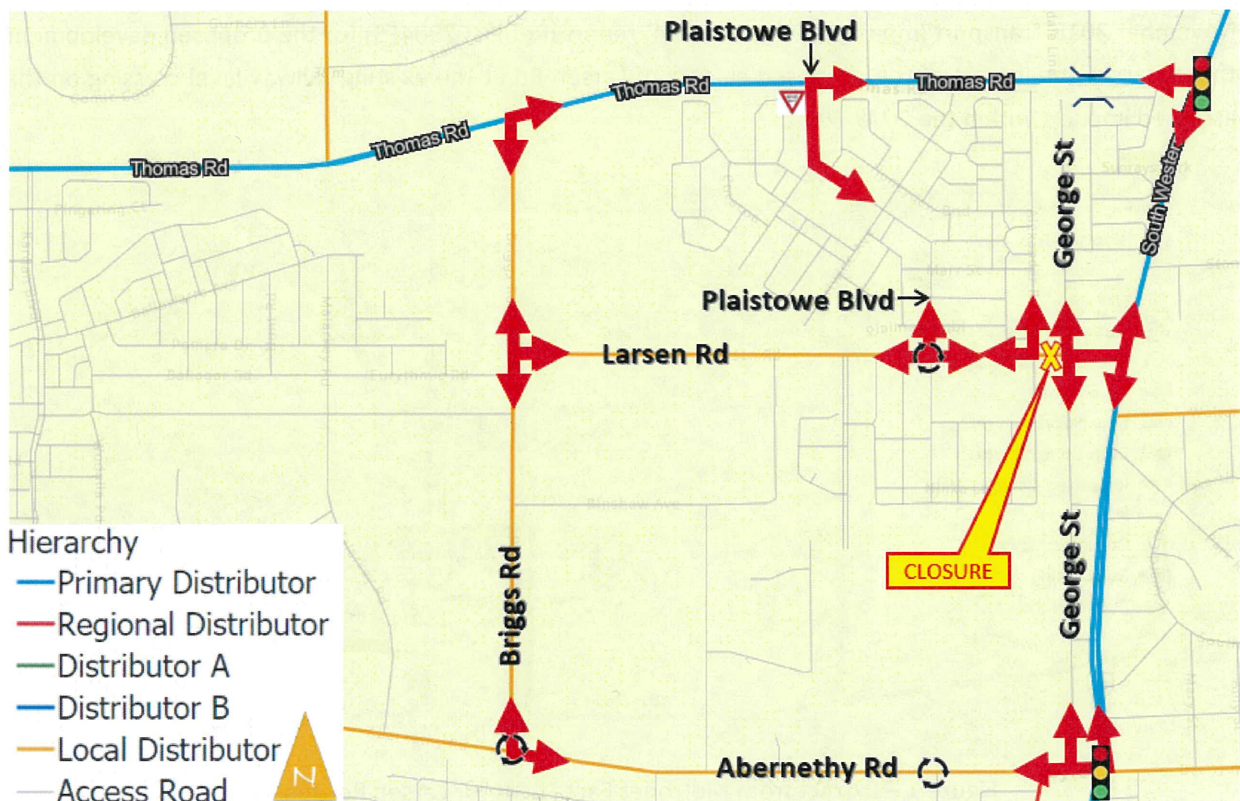


Figure 2 – Assessed impacts on road and intersection volumes on the network with Larsen Rd closure



### 3 ASSESSED IMPACT OF RAILWAY LEVEL CROSSING CLOSURE

The 2018 TIA includes existing traffic volume data through the Larsen Rd/ George St and Larsen Rd/ South Western Hwy intersections during the two mid-week PM peak hours (1-2 PM & 4-5 PM) and the Saturday mid-day peak hour (12 noon – 1 PM), as shown in extracts provided below.

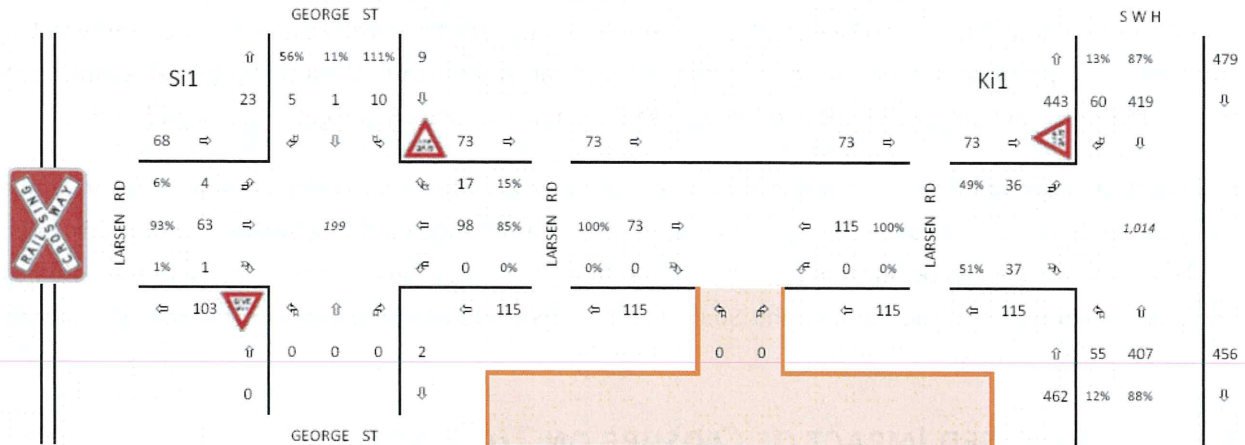


Figure 3 - Existing midweek PM Peak Hour Traffic Volumes (1-2 PM April 2018)

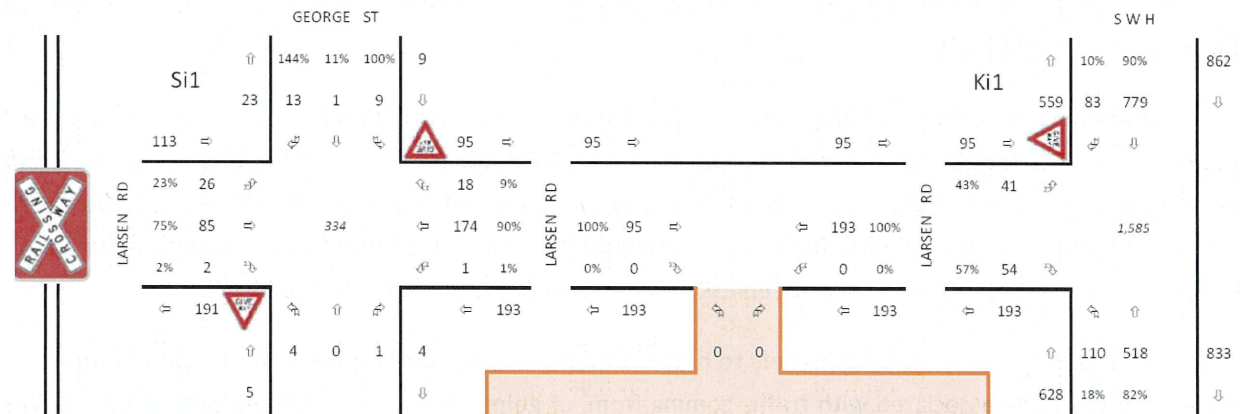


Figure 4 - Existing midweek PM Peak Hour Traffic Volumes (4-5 PM April 2018)

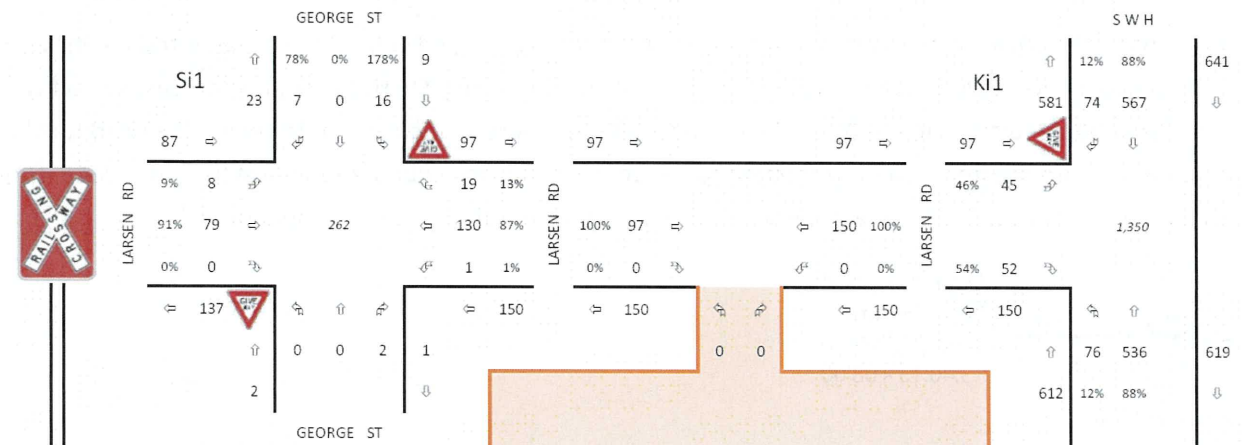


Figure 5 - Existing Saturday mid-day Peak Hour Traffic Volumes (12 noon – 1 PM April 2018)





The Figures on the previous page indicate that there are up to 304 rail crossings in the midweek PM Peak Hour (113 + 191) and up to 224 rail crossings in the Saturday mid-day Peak Hour. The majority of these are through movements between the crossing and South Western Hwy, i.e., 259 (85%) in the midweek PM Peak Hour (85 + 174) and 209 (93 %) in the Saturday mid-day Peak Hour. The higher percentage during the Saturday Peak Hour is due to the lack of School and Child Care Centre generated traffic during this time.

Whilst the closure will result in the loss of all the above through traffic, it will also result in changes to the surveyed turning volumes at the Larsen Rd/ Geroge St and Larsen Rd/ South Western Hwy intersections due to the redistribution of impacted traffic and the desired trip routes, as shown in Figure 2 on page 2.

As indicated in **Section 2**, it is not possible to assess the extent of the overall reduction in traffic volumes along Larsen Rd and associated changes to volumes through the indicated intersections without a traffic model for the closure. It is certain however, that these changes will result in a significant reduction in volumes on Larsen Road between the Railway and South Western Hwy and minor changes to the overall volumes through the intersections.

#### 4 ASSESSED IMPACT OF CLOSURE ON TIA FINDINGS

The 2018 TIA assesses the forecast performance of the road network with and without the proposed development. It concludes:

*"This TIA has determined that the proposed development is likely to generate up to 200 trips during its busiest hours. Up to 70% of these trips are likely to be from passing traffic. The existing Larsen Rd approach to South Western Hwy is currently very close to capacity during the road network midweek PM and Saturday peak hours, hence any increase in traffic, including that associated with annual growth and other development in the area, is likely to push this to capacity unless changes are made to this intersection."*

The closure of the railway crossing is likely to have an impact on the forecast 200 trips as up to 50 of these were expected to be associated with traffic coming from, or going to, areas on the west side of the railway crossing.

In summary, the 2018 TIA assesses impacts based on higher background volumes and higher trip generation than expected when Larsen Road is closed at the railway level crossing. On this basis, the forecast impact will be less than that indicated in the 2018 TIA. It is possible that these reductions could negate the need for the Larsen Rd/ South Western Hwy intersection to be upgraded (as described and indicated in the 2018 TIA) however, it is not possible to determine this without a detailed traffic model for the proposed closure.

Digitally signed by  
 David Wilkins  
 Date: 2023.09.20  
 13:40:13 +08'00'

David Wilkins

Principal & Senior Traffic Engineer – i3 consultants WA

Accredited Senior Road Safety Auditor - Crash Investigation Team Leader - Roadworks Traffic Manager

T (08) 9467 7478 | M 0407 440 327 | E [dwilkins@i3consultants.com](mailto:dwilkins@i3consultants.com) | Skype i3consultantswa

T (08) 9467 7478 | [www.i3consultants.com](http://www.i3consultants.com) | [LinkedIn](#)