

11 May 2021

QB400-22F03 Roma Street-Traffic Noise (r1).docx

Cross River Rail - Roma Street Worksite - Traffic Noise Assessment - Revised Traffic Volumes

We refer to the construction traffic noise assessment for the Cross River Rail project-Roma Street worksite prepared in January 2021 (Our Ref: QB400-22F02 Roma Street-Construction Traffic Noise (r4), dated 21st January 2021). The review focused on the impacts from the increase in spoil haulage traffic on Sundays between 6:30am to 6:30pm.

The assessment was based on November 2020 intersection counts conducted over a 12-hour period and forecasted increase of 10 heavy vehicles per hour advised by Cardno and CBGU JV. The base/existing traffic data used in the report was:

- Total vehicles along Roma Street: 4,133
- Heavy Vehicles along Roma Street: 162 (3.9%)

The report was submitted to the Cross River Rail Delivery Authority and the Brisbane City Council as part of Request for Project Change 10.

In response, the Brisbane City Council issued the following RFI (Ref: CO04206-2021, dated 24th March 2021):

Traffic & Transport and Traffic Noise Assessment – Technical Review

CRRDA provided Council with the Traffic & Transport and Construction Traffic Noise Assessment on 25 January 2021 for each worksite. In a subsequent meeting on 15 February 2021, Council provided feedback that the traffic data collected in November 2020 would not accurately represent Sunday traffic volumes and requested technical assessment to be updated to reflect 2021 data. See Table 2 below.

Table 2 Comparison of Traffic Volumes for 12 Hr Period

Road Segment	12hr period Traffic Volumes (20/11/2020)	12 hr period Traffic Volumes (07/03/2021)
George Street	4208	5555
Mary Street	2277	3471
Edward Street	5685	4092
Roma Street	4133	6649

Council notes the traffic volumes' variation will make a negligible impact on the road network's operation within the CBD. Council would request that the Traffic Noise modelling undertaken by Renzo Tonin & Associates be revisited for each site to ensure noise emission level does not change by 2 dBA as stated in Section 2.2.6 Construction Road Traffic Noise of the CRR 2011 EIS (Page 11).

We understand Council requires a revised assessment using 6,649 vehicles instead of 4,133 vehicles. We note that Council provided total vehicles only (i.e. 6,649) but did not supply the heavy vehicle composition. For this re-assessment, we have estimated the heavy vehicle composition to be 261 [=162*(6,649/4,133)]. The updated traffic data shown in Table 1 was used in the re-assessment.

Table 1: Traffic volumes summary

Worksite	Road Segment	12-hour day period					
		Existing Total	Existing Heavy Vehicles	Additional Vehicles due to Construction	Additional Heavy Vehicles due to Construction	TOTAL	Heavy Vehicles
Roma Street	Roma Street	6,649	261 (3.9%)	120	120	6,769	381 (5.6%)

This predicted overall increase in traffic is shown in Table 2.

Table 2: Predicted overall increase in traffic noise

Worksite	Road Segment	Predicted overall increase in noise levels, dBA
		L _{A10(12hour)} (6:30am to 6:30pm) Sunday
Roma Street	Roma Street	+0.7dBA

Table 2 shows the predicted increase in road traffic noise levels due to additional traffic on Sundays at the Roma Street worksite is predicted to be less than 2dBA.

Using the updated traffic volume provided by Council and the estimated heavy vehicle composition, the increase in traffic noise is expected to be less than calculated in our previous January 2021 assessment, i.e. +0.7dBA increase instead of +1dBA increase.

We trust that this information is adequate for your purposes at this stage. Should you require any further information, please do not hesitate to contact us.

19 May 2021

QB400-23F03 Albert Street-Traffic Noise (r0)

Cross River Rail - Albert Street Worksite - Traffic Noise Assessment - Revised Traffic Volumes

We refer to the construction traffic noise assessment for the Cross River Rail project-Albert Street worksite prepared in January 2021 (Our Ref: QB400-23F02 Albert Street-Construction Traffic Noise (r4), dated 21st January 2021). The review focused on the impacts from the increase in spoil haulage traffic on Sundays between 6:30am to 6:30pm.

The assessment was based on November 2020 intersection counts conducted over a 12-hour period and forecasted increase of 10 heavy vehicles per hour advised by Cardno and CBGU JV. The base/existing traffic data used in the report was:

- Total vehicles along:
 - George Street: 4,208
 - Mary Street: 2,277
 - Edward Street: 5,685
- Heavy Vehicles along:
 - George Street: 18 (0.4%)
 - Mary Street: 16 (0.7%)
 - Edward Street: 33 (0.6%)

The report was submitted to the Cross River Rail Delivery Authority and the Brisbane City Council as part of Request for Project Change 10.

In response, the Brisbane City Council issued the following RFI (Ref: CO04206-2021, dated 24th March 2021):

Traffic & Transport and Traffic Noise Assessment – Technical Review

CRRDA provided Council with the Traffic & Transport and Construction Traffic Noise Assessment on 25 January 2021 for each worksite. In a subsequent meeting on 15 February 2021, Council provided feedback that the traffic data collected in November 2020 would not accurately represent Sunday traffic volumes and requested technical assessment to be updated to reflect 2021 data. See Table 2 below.

Table 2 Comparison of Traffic Volumes for 12 Hr Period

Road Segment	12hr period Traffic Volumes (20/11/2020)	12 hr period Traffic Volumes (07/03/2021)
George Street	4208	5555
Mary Street	2277	3471
Edward Street	5685	4092
Roma Street	4133	6649

Council notes the traffic volumes' variation will make a negligible impact on the road network's operation within the CBD. Council would request that the Traffic Noise modelling undertaken by Renzo Tonin & Associates be revisited for each site to ensure noise emission level does not change by 2 dBA as stated in Section 2.2.6 Construction Road Traffic Noise of the CRR 2011 EIS (Page 11).

We understand Council requires a revised assessment using 5,555 vehicles for George Street, 3,471 vehicles for Mary Street and 4,092 vehicles for Edward Street.

We note that Council provided total vehicles only but did not supply the heavy vehicle composition. For this re-assessment, we have applied the heavy vehicle composition provided by Cardno, i.e.:

- George Street: 0.4%
- Mary Street: 0.7%
- Edward Street: 0.6%

The updated traffic data shown in Table 1 was used in the re-assessment.

Table 1: Traffic volumes summary

Worksite	Road Segment	12-hour day period					
		Existing Total	Existing Heavy Vehicles	Additional Vehicles due to Construction	Additional Heavy Vehicles due to Construction	TOTAL	Heavy Vehicles
Albert Street Worksite	George Street	5,555	24 (0.4%)	120	120	5,675	144 (2.5%)
	Mary Street	3,471	24 (0.7%)	120	120	3,471	144 (4%)
	Edward Street	4,092	24 (0.6%)	120	120	4,212	144 (3.4%)

This predicted overall increase in traffic is shown in Table 2.

Table 2: Predicted overall increase in traffic noise

Worksite	Road Segment	Predicted overall increase in noise levels, dBA
		L _{A10(12hour)} (6:30am to 6:30pm) Sunday
Albert Street	George Street	+1
	Mary Street	+1.3
	Edward Street	+1

Table 2 shows the predicted increase in road traffic noise levels due to additional traffic on Sundays at the Albert Street worksite is predicted to be less than 2dBA.

Using the updated traffic volume provided by Council and the estimated heavy vehicle composition, the increase in traffic noise is expected to be the same as calculated in our previous January 2021 assessment along George Street and Edward Street. The increase in traffic noise is expected to be less than previously calculated along Mary Street, i.e. +1.3dBA increase instead of +2dBA increase.

We trust that this information is adequate for your purposes at this stage. Should you require any further information, please do not hesitate to contact us.