Patrick Galbraith-Robertson

From: Development Northern <development.northern@rms.nsw.gov.au>
Sent: Friday, 15 November 2019 5:23 PM
To: Caroline Horan
Cc: Patrick Galbraith-Robertson
Subject: RE: 10.2019.0546.01 - CSU Stage 2B - Additional Information - Urgent request for comment
Attachments: NTH14_00020 - RMS Response - Stage 2B Charles Sturt University Port Macq....pdf

Importance: High

Hi Caroline and Patrick,

Thank you for seeking comment from Roads and Maritime in relation to the applicant's submission. My apologies for the delay in responding.

I refer to your below email of 29 October 2019 and our previous advice of 27 August 2019 (attached).

I provide the following comments to assist Council's assessment and inform the JRPP's determination;

1. We understand that Council is further investigating future infrastructure requirements for surrounding roads; and that Council accepts the applicant's response that the additional traffic generated by this stage of the development represents a small percentage of overall demand on these roads.
2. I refer to the TEF Consultant's response to RMS RFI No. 2 responding to our letter dated 27 August 2019. The TEF response included the following statement;
   "It is noted that the only relevant intersection included in the OHC is the intersection of Oxley Hwy/John Oxley Dr/Wrights Rd. It is also noted that the latest available document on the TfNSW website (Oxley Highway Draft Corridor Strategy, OHDCS) identifies this intersection as operating at the Level of Service A (refer to the extract from this document overleaf). This does not appear to correspond to Council's views that this intersection requires an upgrade at present, let alone in the near future.

   We highlight that the applicant's analysis of the primary connection with the State road network has been dismissed on the basis of a draft document released in March 2016. The dismissal of analysis of development impacts on the Oxley Highway and Wrights Road intersection without consideration of existing conditions is not acceptable. We wish to emphasise that TEF should have consulted with the relevant Road Authorities to verify the availability of relevant contemporary data prior to dismissal of impacts on this critical intersection. CSU is a development of regional significant attracting trips from across the wider Port Macquarie catchment and surrounding region. The development is reliant on connectivity to the Oxley Highway for a significant proportion of the trips generated by the staged development.
3. In 2017, the Oxley Highway corridor study found the existing Wrights Road Oxley Highway John Oxley Drive intersection would theoretically operating at LOS D in the 2020 AM peak and LOS F in the 2020 PM peak. During 2019, Roads and Maritime has been updating the Oxley Highway Corridor Model in consultation with Council to take into consideration the most recent land use growth and road network data to inform future infrastructure requirements for the Oxley Highway corridor and planned connections to the adjoining road network. This work is not complete and a priorities for road infrastructure remain unknown and unfunded. We reiterate our recommendation of 27 August 2019 that consideration be given to the impact of the Stage 2 B on the Oxley Highway and Wrights Road intersection and that consideration also be given to deferral of any further stages of the development until suitable upgrades have been both identified and funded.
4. The TIA informing the Stage development makes minimal provision for travel demand management through encouraging patronage for alternate travel modes. The preparation and adoption of a Green Travel Plan (GTP) could assist in influencing the travel demand by providing suitable facilities and promoting initiatives to reduce the share of trips made to/from the campus by private vehicles.

   A GTP could include the following:

- A detailed action plan comprising specific tasks needed to complete the proposed actions, the person/s responsible for completion of the task, completion date and anticipated costs.
- Quantitative data and targets for appropriate sustainable transport mode share targets;
- An implementation checklist to achieve the proposed initiatives;
- Alternative actions to undertake where targets are not achieved; and
- The set-up of a steering group or committee of relevant internal and external stakeholders to inform future targets and the ongoing monitoring and revision of the GTP for five years.

It is requested that the Determining Authority give consideration the benefits of the development adopting a GTP and the merit of including a requirement for the preparation and adoption of a GTP.

Please contact me if you have any further questions in relation to the above comments.

Best Regards

Matt Adams
Manager Land Use Assessment
Regional Customer Service | Northern Region
Regional & Outer Metropolitan Division
T 02 6640 1362 **M** 0400 474 068
E development.northern@rms.nsw.gov.au

Roads and Maritime Services
Level 1, 76 Victoria Street
Grafton NSW 2460
www.rms.nsw.gov.au

From: Caroline Horan [mailto:Caroline.Horan@pmhc.nsw.gov.au]
Sent: Tuesday, 29 October 2019 9:29 AM
To: Greg Sciffer; Matt Adams
Cc: Patrick Galbraith-Robertson
Subject: 10.2019.0546.01 - CSU Stage 2B - Additional Information - Urgent request for comment

Matt,

I attach the additional information received from CSU for RMS comment.

Council is under pressure to have this one ready for JRPP within a week. Apologies for now putting you under pressure for RMS comment.

In an effort to assist, here is my take on the additional information received extracted from our reporting. I look forward to your comments.

TRAFFIC & TRANSPORT
The application includes a Traffic Impact Assessment from TEF consulting on 16 July 2019. Findings of the study determined:

- All critical intersections have substantial spare capacity, particularly after the upgrades planned by Council.
- The additional traffic generated by the proposed Stage 2B development constitutes minor increases in estimated 2024 and 2029 flows at the critical intersections.
- There will be no negative impacts on the operation of the road network as a result of Stage 2B CSUPMC development.

Council & RMS queried a number of details in the report namely:

1. The baseline data:

TEF confirmed the figures used in the report were from actual surveys conducted in March 2018 with Stage 1 of CSU fully operational.
TEF confirmed that they did not utilise any of the existing models:

- SMEC(2013) - by 2018 the comparison between the model and actual was significantly different
- Area Wide Traffic Study - was deemed mesoscopic and did not provide detailed data for specific intersection modelling.
- Orbital Road Project is under developed and relies on information from the Area Wide Traffic Study.
- Oxley Highway Corridor Studies deemed the LOS of Oxley Dr/Wrights Road operating at a LOS A, which does not correspond to existing delays at this intersection.

TEF determined that the additional traffic generated by CSU traffic was much lower than what would be required to effect any change in operation of the wider network intersections; as a result TEF concentrated their TIA on the impact to Major Innes Road and John Oxley Drive intersections.

Intersection	AM Peak			PM Peak		
	Total 2028, veh/h	Additional Stage 2A, veh/h	%	Total 2028, veh/h	Additional Stage 2A, veh/h	%
Oxley Hwy - John Oxley Dr - Wrights Rd	6399	43	0.67%	6098	47	0.77%
John Oxley Dr - Bulky goods	2807	43	1.53%	2562	47	1.83%
John Oxley Dr - Kingfisher Rd	2594	45	1.73%	2329	49	2.10%
John Oxley Dr - Major Innes Rd	2560	50	1.96%	2218	57	2.57%
Major Innes Rd - Ellis Pde	1815	80	4.41%	1452	81	5.58%

Intersection	AM Peak			PM Peak		
	Total 2029, veh/h	Additional Stage 2A+2B, veh/h	%	Total 2029, veh/h	Additional Stage 2A+2B, veh/h	%
Oxley Hwy - John Oxley Dr - Wrights Rd	6526	77	1.18%	6214	76	1.22%
John Oxley Dr - Bulky goods	2865	77	2.69%	2607	76	2.92%
John Oxley Dr - Kingfisher Rd	2652	81	3.05%	2379	79	3.32%
John Oxley Dr - Major Innes Rd	2604	86	3.30%	2265	92	4.06%
Major Innes Rd - Ellis Pde	1851	86	4.65%	1481	80	5.40%
Major Innes Rd - New Exit	1489	77	5.17%	1098	98	8.93%

Council is currently conducting a Traffic Study of this area, which TEF has confirmed that they would be happy to remodel the network based on the new information. Councils study is due to be completed early November 2019.

2. TIA did not clearly identify trips generated by the development.
TEF Consulting provided the following table to identify the trips generated by the CSU development stages, making assumptions that the new proposed access road south of Ellis Pde is expected to attract a significant proportion of CSU traffic to/from the south, thus reducing traffic flows for the right hand turns into and left hand turns out of Ellis Pde, which would have previously have been assigned to Ellis Pde in Stage 2A TIA.

	Total	In, veh/h	Out, veh/h	In, %	Out, %
Stage 1 (2018) actual					
CSU Trips Morning peak - Existing	**153**	144	9	94%	6%
CSU Trips Afternoon peak - Existing	**149**	75	74	50%	50%
Stage 2A					
CSU Trips Morning peak - Additional	**84**	79	5	94%	6%
CSU Trips Afternoon peak - Additional	**81**	41	40	50%	50%
Total Stage 1(2018)+Stage 2A (morning peak)	**237**	**223**	**14**		
Total Stage 1(2018)+Stage 2A (afternoon peak)	**230**	**116**	**114**		
Stage 2B					
CSU Trips Morning peak - Additional	**58**	55	3	95%	5%
CSU Trips Afternoon peak - Additional	**57**	29	28	50%	50%
Total Stage 1(2018)+Stage 2A+Stage 2B (morning peak)	**295**	**278**	**17**		
Total Stage 1(2018)+Stage 2A+Stage 2B (afternoon peak)	**287**	**144**	**143**		

3. Modelled conditions were based on future updates to John Oxley Drive Precent Model
TEF responded that the most critical intersection for the TIA is the intersection of Major Innes Dr/Ellis Pde. This was modelled without upgrades in the TIA. In response to the current request, the roundabout of John Oxley Dr / Major Innes Rd was modelled without improvements. Base 2024 and Base 2029 scenarios assume annual growth of general traffic by 2.5%, without CSU Stages 2A and 2B. The results are presented below. They show that The John Oxley Dr / Major Innes Rd roundabout will need to be upgraded by 2024 (based on the assumed traffic growth) regardless of further CSU development. The intersection of Major Innes Rd/Ellis Pde does not require an upgrade (it is noted that the model assumes good driver discipline with regard to the "KEEP CLEAR" restriction).

Intersection	Existing									
	AM					PM				
	AVD	LOS	DS	Queue, m	Movement	AVD	LOS	DS	Queue, m	Movement
John Oxley Dr - Major Innes Rd	24.6	B	0.73	26.9	JODr T NB	15.3	B	0.62	22.8	JODr L SB
Major Innes Rd - Ellis Pde	10.5	A	0.30	3.2	MIRd R NB	8.6	A	0.29	4.1	EPde L WB

Intersection	Existing+2A+2B									
	AM					PM				
	AVD	LOS	DS	Queue, m	Movement	AVD	LOS	DS	Queue, m	Movement
John Oxley Dr - Major Innes Rd	38.5	C	0.86	45.5	JODr T NB	18.7	B	0.72	30.1	JODr L SB
Major Innes Rd - Ellis Pde	13.8	A	0.36	4.0	MIRd R NB	10.9	A	0.34	5.2	EPde L WB

Intersection	Base 2024									
	AM					PM				
	AVD	LOS	DS	Queue, m	Movement	AVD	LOS	DS	Queue, m	Movement
John Oxley Dr - Major Innes Rd	251.5	F	1.23	254.9	JODr T NB	29.2	C	0.86	48.0	MIRd L WB
Major Innes Rd - Ellis Pde	15.1	B	0.45	3.6	EPde L WB	12.7	A	0.38	5.9	EPde L WB

Intersection	Base 2024+2A+2B									
	AM					PM				
	AVD	LOS	DS	Queue, m	Movement	AVD	LOS	DS	Queue, m	Movement
John Oxley Dr - Major Innes Rd	267.6	F	1.25	269.3	JODr T NB	46.4	D	0.96	81.1	MIRd L WB
Major Innes Rd - Ellis Pde	17.6	B	0.46	4.1	EPde L WB	15.0	B	0.51	8.4	EPde L WB
Major Innes Rd - New access road	20.7	B	0.43	0.8	MIRd R NB	19.6	B	0.32	1.4	MIRd R NB

Intersection	Base 2029									
	AM					PM				
	AVD	LOS	DS	Queue, m	Movement	AVD	LOS	DS	Queue, m	Movement
John Oxley Dr - Major Innes Rd	611.5	F	1.64	518.1	JODr T NB	134.5	F	1.10	83.0	MIRd L WB
Major Innes Rd - Ellis Pde	18.2	B	0.87	4.2	EPde L WB	15.3	B	0.59	6.9	EPde L WB

Intersection	Base 2029+2A+2B									
	AM					PM				
	AVD	LOS	DS	Queue, m	Movement	AVD	LOS	DS	Queue, m	Movement
John Oxley Dr - Major Innes Rd	623.9	F	1.66	528.0	JODr T NB	210.0	F	1.20	83.0	MIRd L WB
Major Innes Rd - Ellis Pde	21.5	B	0.87	4.9	EPde L WB	18.5	B	0.61	9.9	EPde L WB
Major Innes Rd - New access road	21.7	B	0.48	0.9	MIRd R NB	24.3	B	0.36	1.6	MIRd R NB

In conclusion, Council is in agreement that the additional traffic generated by development in comparison to the background traffic is a small percentage of the overall traffic. Council has recognised that the level of service of many of the intersections in the John Oxley Drive/ Major Innes precinct are deteriorating as a result of significant growth in this area. Council is currently completing an area TIA for the design of future upgrades to both John Oxley drive and Major Innes Road. The design works have commenced with the intention to construct and stage the works over the coming years (approx.. 5 -15 years).

Please let me know if you have any queries.

Kind Regards

Caroline Horan B.E. (Civil)
Development Engineer
Development & Environment

PORT MACQUARIE-HASTINGS COUNCIL

p (02) 6581 8690

NSW GOVERNMENT | Transport Roads & Maritime Services

Before printing, please consider the environment