

SUPPLEMENTARY EXPERT STATEMENT

IN THE MATTER OF: RESOURCE CONSENT SP/0179/20

3MS of Cambridge Limited Partnership

1863, 1865, 1871 and 1881 Cambridge Road

STATEMENT OF: Cameron Inder, Transportation Engineer

DATE: 21 May 2021

INTRODUCTION

- 1 My name is Cameron Beswick Inder. I am a transportation engineer and the Transportation Engineering Manager at Bloxam Burnett & Olliver (BBO), a firm of consulting engineers, planners and surveyors based in Hamilton. I have been employed by BBO since 2004.

QUALIFICATIONS AND EXPERIENCE

- 2 I hold a Bachelor of Engineering (Honours) degree in Civil Engineering from the University of Auckland (1999). I am a Member of Engineering New Zealand (MEngNZ), a Chartered Professional Engineer (CPEng) and a member of the Engineering NZ Transportation Group.
- 3 I have 20 years' experience in the field of transportation and traffic engineering gained through 16 years of employment in New Zealand and approximately four years employment in the United Kingdom.
- 4 I have experience in transportation and traffic engineering matters associated with resource management, including effects assessment for resource consents,

subdivisions, plan changes and structure plans. I also have experience in the design of traffic infrastructure and facilities, road safety engineering, traffic calming, urban design, subdivision design, and traffic modelling.

- 5 I have appeared as an expert witness at hearings on numerous occasions, most recently including:
- a Shaw Property Holdings, Kaipaki Road sand quarry and clean fill operation resource consent application (November 2020)
 - b Ambury Property Ltd; Submission to Ohinewai Rezoning (June 2020)
 - c Rings Scenic Tours for a private plan change to the Matamata Piako District Plan (Hobbiton, 2019);
 - d Waikato Regional Airport Limited for a private plan change to the Waipa District Plan (Hamilton Airport, 2018);
 - e Otorohanga District Council at the Board of Inquiry in relation to an alteration to designation for Waikeria Prison expansion (2017).

INVOLVEMENT IN THE PROJECT

- 6 I was engaged by Waipa District Council (WDC) in May 2021 to provide independent expert advice on traffic and transportation matters in relation to this application by 3MS of Cambridge Ltd (the “Applicant”) for consent to subdivide land within the C2 Growth Cell in Cambridge (the “Application”).
- 7 In preparing my evidence, I have reviewed:
- a The Assessment of Environmental Effects (AEE) report by Mitchell Daysh Ltd, dated 8 December 2020.
 - b The Integrated Transport Assessment (ITA) report by Stantec (Appendix G of the AEE), dated 2 December 2020.

- c The Section 92 Request for Further Information from WDC in relation to traffic matters (dated 21 March 2021), and the response by Stantec (dated 6 April 2021) to matters raised in the S92 request.
 - d The Council Officer's Section 42A report, dated 26 & 27 May 2021, including the draft proposed conditions of consent.
 - e Read the statements of evidence of expert witnesses that are relevant to my area of expertise, in particular the evidence of Mr Mark Apeldoorn on behalf of the applicant.
 - f Reviewed the submissions received in support and opposition to the Application as they relate to transportation matters or effects.
- 8 I have visited the adjacent road network to the site on a few occasions, most recently on Monday, 17 May 2021. I have not visited the site itself, as there is nothing relevant at the current time for me to view.

EXPERT WITNESS CODE OF CONDUCT

- 9 I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Consolidated Practice Note (2014) and I agree to comply with it.
- 10 I can confirm that the issues addressed in this statement are within my area of expertise. In preparing my evidence, I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed, except when I rely on the evidence of another witness or other evidence, in which case I have explained that reliance. I have not knowingly omitted facts or information that might alter or detract from the opinions expressed.

SCOPE OF EVIDENCE

- 11 The purpose of my evidence is to describe the independent peer review that I have undertaken in relation to the traffic and transportation design and assessment aspects

for the application and provide my recommendations (if any) for consideration by the Commissioners.

12 Specifically, my evidence addresses the following matters:

- a The overarching objectives of the Structure Plan, relating to transport design.
- b Existing Cambridge Road environment
- c Areas where I consider that those Structure Plan objectives for transport design have not been fully achieved, and how these could be addressed.
- d Other peer review findings in relation to transportation engineering matters of the proposal, and where I consider that adequate mitigation has not been provided by the Application.
- e Comment on issues raised by submitters relevant to my area of expertise.
- f Recommendations in relation to the S42A draft conditions of consent.

SUMMARY OF PEER REVIEW FINDINGS

13 The C2 Growth Cell Structure Plan seeks outcomes that reduce reliance on private vehicles for transport in and around the development area.

14 Clause S19.5.3.2(b) states:

A range of transportation choices provided with priority given to walking, cycling and future public transport.

15 And Clause S19.5.3.2(d):

Vehicle, pedestrian and cycling safety promoted through design – with streets designed as public spaces where pedestrians feel safe

16 Furthermore, Clause S19.5.3.3(d) states:

Prioritise pedestrians first, followed by cyclists, then future public transport (buses) and other vehicles at street intersections within the Structure Plan area.

- 17 My peer review findings therefore relate to two key issues. I consider there is a lack in emphasis by the applicant for providing transportation infrastructure solutions that:
- a Prioritise walking and cycling over private vehicle trips, and
 - b Reflect Safe System design principles in both the interim period before the C2/C3 roundabout and collector road is built, and post construction of that strategic infrastructure over the long-term.
- 18 In terms of point “a”, it is my opinion that there appears to be a misinterpretation of the word “prioritise” when it comes to walking and cycling provision in the applicant’s design. In my opinion, “prioritise” does not mean give equal opportunity for access by walking and cycling and vehicles, but it appears to me that this is what is proposed.
- 19 While there is considerable provision of paths adjacent to roads and through some reserves within the site, it is also clear that vehicles will have a high degree of access into and through the subdivision. This is more akin to “equal opportunity” for access rather than prioritising walking and cycling over vehicle trips.
- 20 I interpret the Structure Plans use of the word “Prioritise” as meaning to design infrastructure such that future residents choose or prefer walking or cycling for short / local trips instead of using the car. This would help to create a culture of walking and cycling in Cambridge and reduce Vehicle Kilometres Travelled (VKT) thereby reducing carbon emissions, which Council is obligated to facilitate under the Climate Change Response (zero carbon) Amendment Act 2019.
- 21 In terms of point “b”, while the internal intersections appear to adopt safe system design principles with raised platforms, they do not feature measures to reduce traffic volumes. This relates not only to the point about prioritising walking and cycling but also, allowing full traffic movement everywhere increases traffic volumes and therefore safety risks, particularly for pedestrians and cyclists. People perceive cycling

to be unsafe when traffic volumes are high, irrespective of speed or cycling infrastructure.

- 22 The proposed intersections with Cambridge Road are standard right turn bay intersections and feature a raised platform only on the local road approaches as a form of safe system pedestrian crossing. In current format there are no safe system measures proposed to reduce speeds on Cambridge Road. Right turn in and out movements are at high safety risk due to higher speed and through traffic volumes.

EXISTING CAMBRIDGE ROAD ENVIRONMENT

- 23 The Applicant's site borders approximately 420m of Cambridge Road on the western perimeter of Cambridge township. Cambridge Road was previously part of State Highway 1 before the Cambridge Section of the Waikato Expressway was completed by Waka Kotahi (New Zealand Transport Agency) in December 2015.
- 24 Cambridge Road is now identified as a Major Arterial road in the Waipa District road network hierarchy. The road formation past the site is presently rural, and the surrounding land is predominantly rural and rural-lifestyle except for the presence of Te Awa Life Care retirement village on the opposite side to the applicant's site.
- 25 The existing speed limit on Cambridge Road adjacent to the site is 80 km/h. The most recent daily volume count recorded by Council was March 6th-12th 2020, where the 5 day ADT was recorded as 11,195 vpd with approximately 6% HCV.

3MS PROPOSED TRANSPORT NETWORK

- 26 The transport network proposed by the applicant to support the subdivision of their site deviates in a few key areas from the Structure Plan network for C2 Growth Cell in the Waipa District Plan.
- 27 The most significant of these is the relocation of the future C2/C3 Roundabout and north/south Collector Road. Both are now proposed by the Applicant to be positioned entirely off their site, approximately 120m west of where it is shown on the Structure

plan. The Structure Plan location shows this critical infrastructure almost entirely on the applicant's site.

- 28 The relocation means the infrastructure now affects or requires the land of many more landowners along the collector road alignment. In my opinion, this creates greater uncertainty around the timing of construction of the Roundabout and C2/C3 collector. It could significantly add years of delay and may result in greater cost for Council to acquire the land.
- 29 It should be noted that Council has already completed a design of the future roundabout at the position on Structure Plan and includes the urbanisation design for Cambridge Road to the town boundary and with off-road walking and cycling paths either side and active mode underpasses beneath the four approach roads to the roundabout.
- 30 Relocating the C2/C3 roundabout and collector road west by 120m enables the Applicant's transport network design to include:
- a Two new intersections with Cambridge Road to access the site, The Structure Plan shows just one.
 - b Access to Te Awa Life Care reinstated as a Right Turn Bay intersection from Cambridge Road. The Structure Plan position for the roundabout and the subsequent design proposed access for this retirement home from the future C3 road, which is a Collector Road compared with Cambridge Road as an arterial.
 - c Relocation of the future primary school site more internally within the applicant's site.
 - d Relocation of the Neighbourhood Centre to be more internally positioned within the applicant's site.

- 31 The ITA report, s92 responses and EIC of Mr Apeldoorn do not explain any clear transportation benefit to the future C2 Growth Cell for relocating the C2/C3 roundabout or Collector road west. Instead, these primarily focus on:
- a Estimating the predicted trip generation and distribution¹ of the development on the road network for the purposes of determining suitable access arrangements and road cross-sections.
 - b The efficiency/capacity related effects of the two proposed access intersections on Cambridge Road, including measures to mitigate the identified efficiency effects in the short-term period prior to the completion of the key transport infrastructure required to service the first stage of the C2/C3 Growth Cell².
- 32 In my opinion, through both the ITA report and Mr Apeldoorn's EIC, the Applicant has not adequately addressed or provided sufficient mitigation for, the following crucial matters:
- a Safety performance of the proposed intersections forms on Cambridge Road and their alignment with safe system design principles³.
- 33 While Mr. Apeldoorn demonstrates in his assessment⁴ that the proposed intersection configurations (priority T-intersections with auxiliary right-turn bays⁵) will have sufficient capacity in the interim period (i.e. prior to the implementation of the collector road network and C2/C3 roundabout) to accommodate the traffic associated with the proposed subdivision, he has not provided an assessment of the proposed intersection forms from a safety perspective. Both intersections allow full turning

¹ Based on the revised trip generation as noted in paras. 24 to 30 of Mr Apeldoorn EIC, the proposal is predicted to result in an overall trip generation of approximately 750 and 560 trips during the AM and PM peak hours, respectively. Applying the factors assumed in the ITA for active mode and PT trips, the proposed subdivision is anticipated to generate approximately 670 (200 inbound and 470 outbound) and 500 (275 inbound and 225 outbound) vehicle trips during the AM and PM peak hours, respectively.

² Including the north/south collector road within the C2 Growth Cell, the new C2/C3 roundabout on Cambridge Road, urbanisation of Cambridge Road, and a new shared active mode path on the southern side of Cambridge Road.

³ Table 4.7 in Austroads Safe Systems Framework provides the recommended primary and supporting treatments at intersections that are compatible with Safe Systems. These include: grade separation, roundabout, raised platforms, left-in/left-out treatments, banning selected movements and reducing the speed environment/ speed limit.

⁴ Mr Apeldoorn EIC, paras 42 to 55

⁵ Note: the intersection drawings provided in Appendix D of the ITA report do not align with the intersection configuration assessed in SIDRA (refer to the figures in Appendix E of the ITA report). The intersection layout diagrams should be updated accordingly.

movements in the interim period, and there are no safe pedestrian or cycle crossings proposed across Cambridge Road in the current design. The traffic volume on Cambridge Road is predicted to grow at around 4.6% per annum for the next 10 years.

- 34 The intersection designs assume that the planned Cambridge Road urban upgrade will be completed by Council as development progresses and the future speed limit will be 50 km/h. This appears to be relying on Council's upgrade work to provide the safety mitigation for the 3MS intersection forms. ITA in Section 7 on page 14 states:

It is understood³ that it is the intent of WDC to extend the 50km/h speed limit further west as the area becomes more urban. The design of the subdivision and its interface with Cambridge Road should have regard for this. The lowering of the speed limit from 80km/h, combined with the recent changes at the Hanlin Road roundabout can be expected to be beneficial to the safety performance of this area.

- 35 In my view, the speed of 50 km/h is a significant assumption. It is not guaranteed, and it could well be that a posted speed limit of 60 km/h is appropriate in future given this is a Major Arterial with limited access on this section. The posted speed limit might only reduce to 70 km/h in the interim period before the C2/C3 roundabout is built due to the lack of side-friction and urban built environment to help "engineer" a lower speed. Even so, the proposed intersection forms as illustrated in the ITA by the Applicant do not promote reduced speeds for Cambridge Road traffic. A side impact crash at the intersections at 50 km/h or 60 km/h could easily result in serious injury, or death depending on the vehicles involved.

- 36 In my opinion, the addition of right-turn bays at the intersection as illustrated, on the already cluttered Cambridge Road/Hamilton road corridor is far from an ideal outcome safety-wise, especially given the existing high volumes, and significantly greater future demand expected on Cambridge Road. This will cause issues with safe gap selection, particularly for elderly people. A retirement precinct is proposed as part of the Applicants development. The Structure Plan envisaged just one intersection to Cambridge Road, and with the roundabout and collector road to be built first to support development, the intersection could have been a left in/left out only access from the start or converted to such very early on in the development staging once the roundabout was built.

- 37 As demonstrated in the S92 Response and para.54 of Mr Apeldoorn’s EIC, the critical movements at the proposed two access intersections (identified as the right-turn movements in and out) are expected to reach unacceptable level of services (LOS) prior to 2031 (approximately 10 years) if development occurs and traffic volumes increase at the assessed rates.
- 38 In the interim period where there are no alternative routes for residents and visitors accessing this site, the increased vehicle delay will result in drivers accepting shorter gaps at peak times, increasing the road safety risks at both intersections in the short to medium term before the average delay reaches Level of Service E.
- 39 As touched on earlier, there is also a lack of safe and prioritised walking and cycling connections across the following key roads:
- a Cambridge Road: While the Master Plan shown in Appendix B of the ITA (Drawing 17001-C-0207) illustrates a “strategic” walking/cycling connection with an arrow across Cambridge Road, the ITA or Mr. Apeldoorn EIC do not provide any detail related to the type and location of the proposed crossing facility or when it will be constructed.
 - b Internal to the site, the proposed crossings over Road 2, 10, 11 and 20 should give clearer priority to pedestrians and cyclists as these will be frequently used crossings in future given they are primary connections to the commercial/sports field/ playground areas, the shops and school.
 - c Lack of measures to prioritise walking and cycling through minimising vehicle kilometres travelled (VKT):
 - d The internal roading network within the proposed Structure Plan does not minimise use of private vehicles for short trips (e.g., Road 10 connects between two high volume roads (the East/West Collector and Cambridge Road, creating a potential rat-run especially for trips associated with the school or people entering or leaving C2 and wanting to avoid queues at the C2/C3 roundabout

in future. Full vehicle access design like this does not align with minimising VKT or prioritising walking and cycling in my opinion.

- e The internal connection to Kelly road should exclude vehicles as it creates another potential rat-run, particularly with the Cambridge Road intersections as proposed. The safety risks then transfer to the Kelly Road / Cambridge Road intersection if that vehicle connection is provided.
- f The new location of the neighbourhood centre in the Applicants Structure Plan is less obvious and decentralised from C2 Growth Cell compared to the location shown in the original structure plan, potentially resulting in people choosing to drive to the shops as its not a clear an obvious point of reference in the community, which it would be adjacent to the Collector Road. This could encourage short trips by car and it will draw more traffic into the local streets of the applicants site, increasing traffic volumes where people are being encouraged to walk and cycle.
- g The proposed Master Plan lacks detail around methods for the management of vehicle access internally (e.g., the use of mode-filters at intersections or other methods to discourage private vehicle trips). In my opinion, these details are necessary at this subdivision consent stage, particularly at strategic locations where rat-running or short trips to the shops or school would be prevented by car, thus walking and cycling is preferred.
- h Effects associated with relocating the north/south collector road and C2/C3 roundabout west of the location indicated in the Structure Plan, more specifically, the impact on safe access to neighbouring properties located on the southern side of Cambridge Road (i.e., Te Awa Lifecare retirement village and Chartwell Properties).
- i The additional right-turn bay intersection for access to Te Awa Lifecare village is a direct result of the roundabout shift westwards. In my opinion, the alternative access arrangement that is shown in Drawing 17001-C-0208 in

Appendix B of the ITA is not an equivalent safe long-term access arrangement for Te Awa residents as provided by the Structure Plan roundabout location.

j Mr. Apeldoorn concludes in his EIC⁶ that the proposed form and location of Road 10 in relation to the Chartwell Properties intersection is appropriate given that Road 10 is safely separated from the intersection⁷, and that the location of Road 10 is generally consistent with the original Structure Plan. However, an important aspect that because Mr. Apeldoorn has not considered is the level of traffic that was anticipated on Road 10, and the envisaged intersection form. The traffic demand along Road 10 without the north/south collector road would be significantly more than what is originally anticipated for the road, and WDC have stated that Road 10 would have likely been designed as left-in, left-out only from the outset or early on in the subdivision with the roundabout and collector road built earlier than is likely to be the case now under this proposal.

k The provision of the transport infrastructure in accordance with the staging plan set out in the Structure Plan. Rule 14.4.1.9 in the District Plan sets out the need for infrastructure to be in place before development, or alternatively that Council is satisfied that there is a solution that can be delivered to provide the necessary infrastructure. Given that the timing of the roundabout and C2/C3 collector is inherently less certain with this proposal, the interim transport solutions proposed by the Applicant need to stand alone and meet modern transport planning best practice through to development completion. In my opinion, the current design as lodged is not capable of performing for the long term without Council provided infrastructure (Cambridge Road upgrade and C2/C3 roundabout and Collector Road. It therefore fails Rule 14.4.1.9.

⁶ Mr Apeldoorn EIC, paras 33 to 41

⁷ By approximately 80 m

PROPOSED MITIGATION MEASURES

- 40 I attended a meeting with the applicant, Council and Mr Apeldoorn on Monday 17 May 2021, where these core findings of my peer review were discussed.
- 41 I subsequently met with mr Apeldoorn on Wednesday 19 May 2021 to work through the issues and see if we could align with appropriate solutions. I am pleased to report we agreed on the following:
- a There is a need to actively slow traffic on Cambridge Road to support the development from the outset, in addition to the urban upgrade treatments by Council. We agreed on the need for both Tee intersections (Road 11 and Road 10 with Cambridge Road) in the pre and post roundabout scenarios, for the applicant to include raised platforms on all approaches (or entirely raise the intersections) in accordance with industry Safe System design principles.
 - b The applicant should provide a signalised pedestrian and cycle crossing on a raised platform in an appropriate location between the two intersections. This provides the safe connectivity in the interim period, and offsets the effect on pedestrians of the relocated roundabout further west in the long term. The crossing location should be confirmed at detailed design in agreement with Council. There are pros and cons for locating it centrally between the intersections or close to one of the intersections, in terms of desireline connection, and traffic flow metering effects to enhance safety at the Tee intersections. The location needs to be carefully considered and tested through the design safety audit process with Council involvement.
 - c Given the added uncertainty around timing of the C2/C3 Roundabout and Collector Road due to locating it westwards, we agreed there is a need for a consent condition or other appropriate mechanism requiring that if by 31 December 2027 (6 years from now) the roundabout and sufficient length of Collector Road to allow access from the applicants site is not established, the consent holder would upgrade one of the Cambridge Road intersections into a signalised intersection with pedestrian crossing facilities. The other

intersection would be modified to Left In and Left out. Determination of which treatment for which intersection is subject to Council agreement, and likewise the need for such upgrades should be subject to Council discretion at the time. (For instance, Council might agree not to signalised if the roundabout is expected in year 7, or there is a more suitable alternative to signalling)

d Mr. Apeldoorn agreed to give some further consideration to strategic internal and perimeter network measures to further prioritise walking and cycling over vehicle trips to reduce vehicle volumes both by local residents and through traffic rat-running. Measures were to consider both pre and post C2/C3 Roundabout and Collector road scenarios.

e I agreed to follow up with Mr. Bryan Hudson, Transportation Manager for Waipa District Council about Council's ability to commit to bringing forward the urban upgrade of Cambridge Road to coincide with initial housing development by the applicant. This upgrade impacts on how the intersections can be designed with safe system treatments if they are constructed ahead of Council's urbanisation upgrade.

42 In respect of point "e", I understand Council has budgeted for the Cambridge Road upgrade with detailed design in year 1 (2021), and construction in years 2 and 3. I have not managed to speak to Mr Hudson about accelerating this in the 48 hours since discussion with Mr Apeldoorn and writing my evidence. However, I expect Mr Hudson can provide an answer at the hearing.

SUBMISSIONS IN SUPPORT AND OPPOSITION

43 I have read the submissions and find that those in opposition are consistently around the issues associated with the relocated roundabout and collector road, and the effect this has on certainty of timing and the ability for those submitters who are affected to either stay living where they are or to subdivide. None are specific to transport issues.

44 I have addressed what I consider to be the transportation related effects of this proposed relocation including the potentially increased uncertainty for this key infrastructure, and how that affects the applicant's proposal, in my evidence.

RECOMMENDED DRAFT CONDITIONS OF CONSENT

45 Based on my peer review and meetings with the applicant, Council and Mr Apeldoorn, if the Hearings Panel is of the view to approve the consent, I recommend the following conditions be included for transportation effects mitigation purposes:

SAFE TRAVEL MANAGEMENT PLAN

46 The consent holder shall provide a Safe Travel Management Plan, from a suitably qualified Transportation Engineer to Council's Team Leader – Development Engineering for certification and shall be at the consent holder's expense. The purpose of the submitted plan is to demonstrate the transport network design aligns with Vision Zero principles, and incorporates strategic infrastructure supporting the Structure Plan objective of prioritising walking and cycling over vehicle trips. This shall include, but is not limited to:

- a Methods to encourage residents to choose walking and cycling over vehicular trips within and through the network for short local journeys. In addition to walking and cycling paths and crossing, it includes strategic prevention of certain movements by vehicles to provide 'Rat run' mitigation while enabling full access by walking and cycling
- b Safety System design features of intersections, both internal and connecting to Cambridge road; including but not limited to providing raised platform intersections of Road 11 and Road 10 with Cambridge Road
- c Provision of a safe system road crossing for pedestrians and cyclists across Cambridge Road between Road 11 and Road 10 intersections, strategically

positioned to prioritise and encourage walking and cycling, and transport safety.

- d Any proposed transport infrastructure amendments with Trigger points/scenarios for implementation (eg. Infrastructure specific to pre and/or post C2/C3 roundabout and collector road construction including but not limited to Right Turn movement bans, and/or signalization of intersections with Cambridge Road;
- e Recommended Speed limits internally and on Cambridge Road; and
- f CPTED requirements.

SUBMIT ROADING DESIGN DRAWINGS

- 47 The consent holder shall submit Design/construction plans for the roads to vest Lots 510 and 511 as shown on the SP/0179/20. The Design/Construction plans shall be based on the Safe Travel Management Plan under **Condition x** – Safe Travel Management Plan above and shall be submitted to Council for acceptance prior to carrying out any construction work required by this consent, and at the consent holders expense. This plan shall be submitted to Council no less than 2 months prior to detailed engineering design drawings being submitted to Council acceptance.
- 48 The submitted road design plans shall include, but is not limited to appropriate:
 - a Pavement design;
 - b Connection to existing infrastructure;
 - c Fixed entrance locations;
 - d Maintenance access tracks;
 - e Tracking curve analysis;
 - f Line marking and signage;

- g Longitudinal sections;
- h Common services trench details;
- i Surface treatments;
- j Streetscape & berm planting; and
- k Traffic volume management (rat-run / short vehicle trip mitigation) and speed calming measures.

TRIGGER CONDITION

49 In the event the C2/C3 Roundabout and sufficient length of Collector Road for the consent holder's development to connect into is not under construction by 31 December 2027, the consent holder shall upgrade either Road 11 or Road 10 intersection with Cambridge Road to a raised platform traffic signal intersection with signalised pedestrian and cycle crossings, to provide improved safety for right turners. The other intersection with Cambridge Road shall be modified to Left In and Left out only with a solid median island installed on Cambridge Road.

50 All works shall be at the consent holders expense and shall be completed no later than 8 months following written confirmation by Council that they are required.

51 Determination of which treatment is applied to which intersection is subject to Council agreement, and likewise Council shall retain discretion as to the need for and appropriateness of such upgrades at the time.

Advice note: This enables Council to confirm the works are not necessary if the roundabout and internal connection to the Collector Road are soon to be constructed.

52 Given that the final 224C could potentially be issued before this trigger date, it would be appropriate for Council to require a bond from the consent holder.

CONCLUSION

- 53 If this subdivision consent is approved subject to the above recommended conditions being accepted, I consider that the transportation effects of this development can be adequately mitigated to acceptable levels for both the pre and post C2/C3 Roundabout and Collector Road implementation.

Signed



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Cameron Inder