

IN THE MATTER of the Resource Management Act 1991
("RMA" or "the Act")

AND

IN THE MATTER of an application to **HAMILTON CITY
COUNCIL** for private plan change 7
("PC7") to the operative Hamilton City
District Plan by **GREEN SEED
CONSULTANTS LIMITED**

REPLY STATEMENT OF EVIDENCE OF LEO DONALD HILLS

1. INTRODUCTION

- 1.1 My name is Leo Donald Hills. I am a traffic engineer director of Commute Transportation Limited ("**Commute**").
- 1.2 I outlined my qualifications, experience and commitment to comply with the Environment Court Expert Witness Code of Conduct in my evidence in chief ("**EIC**") dated 24 September 2021. I maintain that commitment.
- 1.3 My role in relation to the Rotokauri North development has been, and is, to assist with developing a masterplan, assessing the related traffic effects and providing advice on transportation, road design, access and parking in relation to the private plan change that is now proposed Plan Change 7 ("**PC7**") to the operative Hamilton City District Plan.
- 1.4 I have read the statements of evidence relating to traffic / transportation issues of the following expert witnesses on behalf of submitters to PC7:
- (a) Mr Tindall on behalf of Waka Kotahi (Transport);
 - (b) Mr Wood on behalf of Waka Kotahi (Planning); and
 - (c) Ms Perring on behalf of Rotokauri Landowners¹ (Planning).

Purpose and scope of reply evidence

- 1.5 This statement of reply evidence addresses traffic / transport issues raised in the above statements. It does not restate matters addressed in my EIC but addresses new issues raised in the evidence of other submitters.

¹ A list of submitters whom this evidence represents is attached as Attachment A to Ms Perring's evidence.

- 1.6 The updated PC7 planning provisions as revised following our review of all evidence and completion of all expert conferencing, is provided as Annexure A to the reply evidence of Mr Tollemache / Ms Fraser-Smith.
- 1.7 As the issues raised on behalf of the various submitters are largely independent of each other, I have considered and generally reply to the evidence of each expert separately, following by commenting on the remaining areas of disagreement with the section 42A report contributors, as follows:
- (a) Messrs Tindall and Wood (Waka Kotahi) (Section 2);
 - (b) Ms Perring (Rotokauri Landowners²) (Section 3); and
 - (c) Messrs Black and Gray (section 42A report contributors) (Section 4).
- 1.8 I then provide some brief concluding comments in Section 5.

2. **MESSRS TINDALL AND WOOD (WAKA KOTAHI)**

- 2.1 Mr Tindall notes (at paragraph 4.1 of his evidence) his support of the trigger for the State Highway 39 ("**SH39**") / Collector 1 road roundabout outlined within the second Transport Joint Witness Statement ("**JSW**") dated 5 October 2021.
- 2.2 Mr Wood notes (at paragraph 4.2 of his evidence) that the matters identified in the Waka Kotahi submission have now largely been addressed through the proposed amendments to PC7 contained in the Transport JWS (5 October 2021) and Planning JWS (6 October 2021). Mr Wood supports the amendments and new rules outlined within his evidence, including:
- (a) A new rule requiring the construction of a new SH39 / Collector 1 roundabout at the first new dwelling lot.
 - (b) Amendment to Rule 3.6A.4.7³ Staging Activity Status.
 - (c) New Rule 3.6A.4.2 (f) (ii) Table 1 (5) and (6) – requiring a new pedestrian/cycle connection.
 - (d) A new information requirement – Appendix 1 Broad ITA content for Rotokauri North.
- 2.3 As noted in paragraph 4.3 of Mr Wood's evidence (and also raised in Mr Tindall's EIC), Waka Kotahi's only outstanding issue relates to their perceived need for PC7 to

² A list of submitters whom this evidence represents is attached in Attachment A of Ms Perring's evidence

³ Now renumbered to Rule 3.6A.4.5.

incorporate a segregated shared path (east-west route) approximately parallel to SH39, on the northern edge of the PC7 site.

2.4 This matter was discussed as a part of the recent expert conference session on 12 October 2021. As discussed in detail in Section 2 of the reply evidence from Mr Tollemache / Ms Fraser-Smith, this matter has been resolved by the addition of a specific assessment criteria as drafted during the expert conferencing.

2.5 I thus have no outstanding matters of disagreement with Messrs Wood or Tindall.

3. **MS PERRING (ON BEHALF OF 'ROKOKAURI LANDOWNERS')**

3.1 I understand that Ms Perring has been engaged as a planning expert by a number of Rotokauri landowners to advise on planning aspects regarding transportation effects. Her evidence outlines a number of transport related concerns from the landowners (as well as herself, as a former resident of the area). In general, these can be broadly categorised as:

- (a) Rotokauri Structure Plan ("**RSP**") (existing);
- (b) Existing transport environment;
- (c) Traffic modelling;
- (d) Upgrade triggers;
- (e) Walking and cycling;
- (f) Exelby Road / Burbush Road sightlines; and
- (g) Effects of construction traffic.

3.2 I will address each in turn.

Rotokauri Structure Plan (existing)

3.3 In regard to the existing RSP, Ms Perring's evidence outlines that:

"the Proposed Plan Change has the effect of removing the protection that the landowners thought they had under the structure plan, as traffic will not be distributed around new roads east of Exelby and Burbush Roads, including the Minor arterial road and connections through to Te Rapa as intended⁴".

⁴ Paragraph 3.7 of Ms Perring's evidence.

- 3.4 Ms Perring considers that the traffic will be concentrated on the existing “*substandard and unsafe rural roads*” for many years, or until the RSP roads are delivered.
- 3.5 In this regard, I refer to the recent modelling I have undertaken which now includes 500 dwellings established within the PC7 land, with access on to SH39. In the 500-dwelling scenario, the modelling outputs indicate minimal increase in traffic expected to utilise the Exelby Road and Burbush Road link.
- 3.6 Rather, the model demonstrates that it is more attractive for residents of the PC7 land with access only to SH39, to travel south using SH39 and SH1 rather than travel back to Exelby Road / Burbush Road. It is only when the internal link to Burbush Road is added within the PC7 land that this route becomes more attractive to residents to travel south.
- 3.7 After 500 dwellings, an upgrade to the Exelby Road / Burbush Road link is proposed, regardless of internal links. However, given the modelling results just outlined, I have suggested the provision be amended so that once any link is made to Burbush Road, the Burbush Road / Exelby Road (south) link must be upgraded. These upgrades comprise:
- (a) Seal widening to achieve a 7.7m sealed width (5.7m carriageway with 1m sealed shoulders) on Exelby Road (south of Burbush Road) and Burbush Road (between Rotokauri North and Exelby Road); and
 - (b) Upgrading of the Exelby Road / Burbush Road intersection, to a single priority intersection with right turn bay.
- 3.8 In my opinion, the modelling demonstrates this provision will adequately address the concern raised in paragraph 3.7 of Ms Perring’s evidence.

Existing transport environment

Safety of Exelby and Burbush Roads

- 3.9 Ms Perring provides commentary regarding the safety of the surrounding roads and specifically Exelby Road and Burbush Road. In this regard, I note as follows:
- (a) I have recognised that there are limitations on these roads. However, in my opinion existing deficiencies in the road network are not the responsibility of new developments unless the proposal noticeably changes the operation of these roads.
 - (b) In this regard I have recommended that upgrades to both Burbush Road and Exelby Road (south) be required:

- (i) After 500 dwellings have been established; or
 - (ii) When any link / access is provided from the PC7 land to Burbush Road (these triggers are explained in the "Upgrade Trigger" section below).
- (c) The factual data shows that the reported crashes in the area over the last 5 years include:
- (i) No reported crashes on Exelby Road (north) between SH39 and Burbush Road;
 - (ii) Two non-injury crashes on Exelby Road from Burbush Road to Rotokauri Road;
 - (iii) Two non-injury crashes on Burbush Road; and
 - (iv) No reported crashes at either Exelby Road / Burbush Road or Exelby Road / Rotokauri Road intersections

3.10 While I recognise that there may be other non-reported crashes in the area, these are likely to be minor in nature (i.e. the New Zealand Police did not need to be called). As such, I consider that this factual data indicates no specific safety concerns for the area.

Safety of Exelby Road / Lee Road intersection

3.11 Ms Perring has expressed concerns regarding the Exelby Road intersection with Lee Road (at paragraph 4.13 of her evidence). This concern appears to relate specifically to poor visibility to the north due to the vegetation on the adjacent property which forces drivers to edge right up to the carriageway before they can get a clear view. She also notes that visibility is also restricted by vertical curvature to the north.

3.12 This is an existing issue at an existing intersection – my review of crash records indicates that no crashes have been recorded at this intersection over the past 10 years, thereby indicating no existing crash trends.

3.13 I also note that Lee Road is identified in the RSP Stage 1 and is on the boundary of the 'Rotokauri Rise' development being undertaken by Tainui Group Holdings. In my opinion any existing upgrade / safety issues with respect to Lee Road fall to be addressed as part of those projects and do not relate to PC7 in any way.

3.14 I further note that from my review of the sight lines, it appears that visibility to the north is restricted by vegetation that is within the road reserve (i.e. the property to the north has located their fence and planting within the road reserve). This is an existing issue that in my opinion can easily be rectified by Hamilton City Council ("**HCC**"). Again, it is not relevant to PC7 or the responsibility of the PC7 applicant.

Need for speed reductions on Exelby and Burbush Roads

- 3.15 Ms Perring (at paragraph 7.9 of her evidence) notes that HCC should bring forward speed reductions for Exelby and Burbush Roads, as well as that section of Rotokauri Road between Rotokauri Heights and Exelby Road. In this regard, while the existing crash record (as outlined above) does not generally support the safety concerns she raises, a reduction of the posted speed limit along these rural roads has the potential to mitigate these concerns. However, this is outside the control of Green Seed (or any future developer). That is because it is only HCC, as the relevant Road Controlling Authority, that has the ability to change speed limits. To that end, Mr Black has advised he understands that HCC are about to review speed limits in the area, with a likely reduction to 60km/hr.

Safety of Exelby Road / Rotokauri Road intersection

- 3.16 Ms Perring has provided a video of the existing roading environment which is attached to her evidence. Paragraph 4.6 of her evidence outlines that the first 0-31 seconds films the intersection of Exelby Road and Rotokauri Road which "*demonstrates the strong curvature and restricted visibility, as well as drivers making split second visual assessments of whether its clear to turn*". She also noted the burnout tyre markings from 'boy racers'.
- 3.17 In this regard, my view is as follows:
- (a) I agree that the video does show one vehicle turning right after what appears to be brief check for oncoming traffic. However, I note this intersection shows no crashes in the past five years and only one crash in the past 10 years (which involved a vehicle turning left on Rotokauri Road at the bend and did not relate to vehicle movements to or from Exelby Road).
 - (b) Ms Perring's comment regarding 'boy racers' is not relevant to the PC7 site and any mitigation required to avoid such activity should be undertaken by HCC / the Police (not a developer).

Need for upgrades to wider transportation network

- 3.18 Ms Perring notes (at paragraph 3.10 of her evidence) that the landowners she represents consider that the PC7 applicant should cater for the demand generated by the Rotokauri North Development within the wider transport network, by funding upgrades based on a robust and peer reviewed Integrated Transportation Assessment ("**ITA**").

- 3.19 In my opinion, the modelling outputs clearly show that, with the addition of 500 dwellings, there is little demand generated by development of the PC7 land along these rural roads and therefore no upgrades are considered necessary.
- 3.20 I do, however, recognise that as development within PC7 progresses the amount of traffic on the Exelby Road / Burbush Road link will also increase and an upgrade will be necessary. I therefore consider that upgrades to this link are required, as outlined at paragraph 3.5 above. I note that these upgrades will be temporary until such time the development to the south occurs and the roads are fully urbanised.

Safety of crossing of Kauri Lane / 55 Exelby Road

- 3.21 Ms Perring has outlined (at paragraph 4.6 of her evidence) some concerns relating to vehicle crossings along Exelby Road and in particular at the crossing of Kauri Lane / 55 Exelby Road. I note that the crash database does not support these concerns as no crashes have been recorded over the past five years relating to vehicles entering or leaving a site. I do not consider any issues regarding this crossing relate to PC7.

Transport modelling

- 3.22 As referred to in paragraph 5.2 of Ms Perring's evidence, additional modelling has now been undertaken for the year 2021 and is provided in Attachment A of the Transport JWS dated 14 October 2021. This includes two additional model runs whereby 500 dwellings and 2000 dwellings are proposed within the PC7 land respectively (the 500 dwellings all gaining access to the proposed SH39 roundabout and the 2000 dwelling scenario essentially being a model of the full development on the 2021 network). These outputs have been used to further assess the trigger of an upgrade of Burbush Road and Exelby Road using the 2021 base, as it does not contain any future new roads or land use.
- 3.23 At paragraph 3.14 of her evidence, Ms Perring states "*my professional opinion is that a specific transportation model should have been created to an agree spatial area of effects, built from baseline physical traffic surveys*".
- 3.24 As outlined at paragraph 2.2 of her evidence, Ms Perring is a planner, not a transport engineer. In my professional opinion as a fully registered and chartered specialist traffic and transportation engineer, the model that has been used to assess the proposal (Waikato Regional Transport Model ("**WRTM**")), together with industry standard SIDRA intersection modelling is both fit for purpose and has been specifically developed by Waikato Regional Council to assess the effects of future developments / land use in the region. As such I completely disagree with Ms Perring's comment and reiterate that I consider that the model used is fit for purpose.

- 3.25 Ms Perring has expressed reservations (at paragraph 5.3 of her evidence) over whether the modelling will be totally adequate because she does not consider it took account of traffic associated with the proposed Business zone. I am not aware what the source of this assertion is.
- 3.26 However, for avoidance of doubt, I can confirm that all of the model runs with 2,000 dwellings have made allowance for a neighbourhood centre. I would further note that a neighbourhood centre generally has a positive effect on wider network traffic volumes in that it enables residents to access key amenities without having to travel outside the PC7 land (and thus should reduce traffic in the wider sense).

Upgrade triggers

- 3.27 Ms Perring considers (at paragraph 7.6 of her evidence) that the upgrade of Exelby Road and Burbush Road should be undertaken at the first new dwelling / lot within the proposed Rotokauri North Structure Plan (as part of PC7) and that it should include:

"Seal widening to achieve a 7.7m sealed width (comprising 5.7m carriageway plus 1m sealed shoulders), and construction of a temporary footpath (compacted gravel) along the Hamilton City side and adjacent to these widened carriageways.

The design of the temporary footpath shall be submitted to Hamilton City Council's Transportation Manager for approval prior to works commencing."

- 3.28 I disagree. The modelling outputs have identified that, with 500 dwellings established within the PC7 land (with access only to SH39), the traffic volumes on this road would still be below the level typically associated with a collector road. Therefore, in my opinion, one lot with a connection on SH39 only will not create any discernible effects to the volumes or pedestrian movements on these roads. I consider the trigger to widen these rural roads of 500 dwellings is appropriate and this trigger has been derived using the modelling outputs extracted from the WRTM for the year 2021 and 2041.
- 3.29 Taking the above into account, I consider that it is reasonable that the relevant sections of Burbush Road and Exelby Roads be upgraded (by widening to 7.7m) when traffic volumes reach the status of Collector Road (i.e. changes classification), that is approximately 2,500 vpd. I note that even with 500 dwellings within the site, the maximum level of volumes predicted along Burbush Road or Exelby Road (south of Burbush Road) remains below the 2,500 vpd (in 2021). A requirement for an upgrade of this corridor at 500 dwellings is therefore, in my opinion, appropriate.
- 3.30 However, I note that the additional modelling undertaken for the purposes of expert conferencing has identified that should a connection from the PC7 land to Burbush Road

be established, then the Burbush Road / Exelby Road (south) route would become much more attractive to residents of PC7. As a result, I have revised my position and now recommend that the 7.7m seal widening of this route should be required to occur once any connection from the PC7 land to Burbush Road is made. This is reflected in the Transportation JWS dated 14 October 2021.

- 3.31 The additional modelling has again shown that the increase in traffic (under all scenarios) is minimal on Exelby Road (north of Burbush). While I recognise traffic models are not 100% accurate, they do provide good indications as to changes and in this case, there is expected to be little to no change on this section of road as a result of PC7. I have recognised that Exelby Road (north of Burbush Road) is below current local road standards. However, as PC7 does not materially change its operation / function, I do not consider PC7 should be responsible for essentially fixing a road to current HCC standards that has existing deficiencies.
- 3.32 I also note that, through expert conferencing, the final level of traffic on the Burbush Road / Exelby Road (south) link and the appropriate upgrade has been questioned. Specifically, with all 2000 dwellings occupied, the volume of traffic on this link is expected to be approximately 5,000 vehicles per day (vpd) assuming no other links / development of Rotokauri Stage 1 is included. With this level of development, the upgrade to widen the carriageway to 7.7 m would already be triggered.
- 3.33 I have reviewed this upgrade / traffic volume and have concluded that the upgrade is still appropriate given the following:
- (a) The scenario with 2,000 dwellings with no other development / roading links in the south is very unlikely to ever eventuate (i.e. other development and roads will be constructed in the south). More likely, over time new development and roading connections would be established in the south (Rotokauri Stage 1) and thus provide additional connections.
 - (b) It is highly likely that HCC's review of the altered situation will result in the speed limit being reduced (likely to 60km/hr). As such, this would not be a typical 80-100km/hr rural road.
 - (c) A road catering for approximately 5,000 vpd is still within Collector Road standard.
 - (d) PC7 proposes to expand / clarify the District Plan requirements for a Broad ITA specified in 25.14.4.3 m). This includes consideration of demand, safety, levels of service and options for mitigation specifically on both Burbush Road and Exelby Road (between Rotokauri North and the Rotokauri Road / Exelby Road intersection). As such the operation and safety of this route will need to be

specifically considered again at resource consent stage (and as development progresses and the exact wider development / roading links change).

- 3.34 I have outlined my reasons why I do not consider the Rotokauri Road / Exelby Road intersection requires upgrading by PC7 in paragraphs 8.16 – 8.21 of my EIC. Essentially, this intersection has no apparent safety record, no apparent efficiency issues, is some 3km from PC7, and the increase in traffic is likely a result of cumulative effects from vehicles from the neighbouring developments (as well as the PC7 site). In this regard, I have undertaken further SIDRA analysis of this intersection using the recent 2021 modelling results (with all 2,000 dwellings). The results show the intersection can cater for all the expected PC7 traffic with the critical PM peak showing overall delay as 8.6 seconds, and queue lengths of around 6 vehicles. As I have noted previously, this scenario (all of PC7 developed without any additional southern links) is unlikely and the additional ITA considerations include this intersection.

Walking and cycling

- 3.35 PC7 includes a comprehensive cycling and walking network within the site. In addition, prior to the occupation of any dwelling within the site, it is proposed to provide a temporary two-way shared path between the site and the Te Kowhai Road / Burbush Road roundabout and along one-side of Te Kowhai Road (east of Burbush Road) thereby connecting the site to the SH1 shared path.
- 3.36 I refer to paragraph 7.3 of Mr Wood's EIC, which outlines that:

"this connection will enable more direct connections to the Waikato Expressway Cycle Path (further east of PPC7) and will contribute to the outcomes sought by the Hamilton-Waikato Metro Area Mode Shift Plan5 (2020); in particular Key Focus Area 2 - "Making shared and active modes more attractive"."

- 3.37 In my opinion, this level of connectivity is appropriate until such time development to the south of the site occurs and these corridors are urbanised to provide pedestrian footpaths.
- 3.38 Ms Perring has also suggested (at paragraph 7.6 of her evidence) that for the rural road upgrades, a temporary footpath should be included. In my opinion, a temporary footpath in this rural road environment is unnecessary. There are no other such footpaths in other surrounding rural areas and the key routes from the PC7 land to the wider network have been considered and included in provisions. I note that HCC's traffic engineer Mr Black also does not support such a provision.

Exelby Road / Burbush Road sightlines

- 3.39 Ms Perring notes (in paragraph 5.8 of her evidence) that I have not provided a sightlines assessment at the intersection of Exelby Road / Burbush Road. In this regard, it is relevant to note that this is a plan change and that such fine details such as this would typically be undertaken / confirmed at resource consent / engineering approval stages.
- 3.40 However, I have reviewed the sight lines at this intersection (with my suggested upgrade⁵). I can confirm that the upgrade I have proposed can meet appropriate sight distance requirements based on traffic speeds I have observed (noting they will likely reduce with the reduction in speed limit). Regardless of this and upgrade to this intersection would require a detailed design and safety audit which would review in detail these aspects.

Effects of construction traffic

- 3.41 Potential adverse traffic effects relating to construction traffic has been identified as a key concern for the landowners Ms Perring represents. Based on paragraph 5.4 of Ms Perring's evidence, I understand that there has been a high volume of construction traffic using Exelby and Burbush Road (some resulting in damage to the road surface) over the past 18 months.
- 3.42 In this regard, I agree with Ms Perring that construction traffic should utilise arterial roads such as SH39 as much as possible rather than rural roads such as Burbush Road and Exelby Road. However, in my opinion, and based on my experience in producing numerous Construction Traffic Management Plans ("**CTMP**"), this level of detail can (and should be) be dealt with at resource consent stage through a CTMP. This is addressed in more detail in the reply evidence of Mr Tollemache / Ms Fraser-Smith.

4. MESSRS BLACK AND GRAY (SECTION 42A REPORT CONTRIBUTORS)

- 4.1 As reflected in the various Transport JWS, the only remaining matters of disagreement between myself and Messrs Black and Gray (as contributors to the section 42A report for HCC) as at the close of the transport conferencing on 14 October 2021 were as follows:
- (a) The need to upgrade the Rotokauri Road / Exelby Road intersection, and Exelby Road (north of Burbush Road), as a result of PC7;
 - (b) The form of the Exelby Road / Burbush Road intersection upgrade; and

⁵ Figure 13 of my EIC.

- (c) The final upgrade of the Exelby Road (south) / Burbush Road. In the JWS Mr Black agrees with the interim upgrade; however, expresses concern regarding final upgrade and requested that I provided additional commentary.
- 4.2 In my view, for the reasons I have set out above and in my EIC, the traffic generated by PC7 does not result in the requirement to upgrade the Rotokauri Road / Exelby Road intersection, and Exelby Road (north of Burbush Road).
- 4.3 While there is agreement between myself and Messrs Black and Gray regarding the trigger for upgrading of the Exelby Road / Burbush Road intersection, at the time of preparing the Transport JWS dated 14 October 2021, they considered this upgrade should be a roundabout. Mr Sharman has now advised (by email dated 15 October 2021, sent to all participants in the transport conferencing) that Messrs Black and Gray now agree this upgrade should be a single priority intersection with right-turn bay only, as I propose. So, this issue is now resolved, as I understand Mr Sharman will confirm when he presents at the hearing.
- 4.4 In terms of the ultimate upgrade of Exelby Road (south) / Burbush Road route I have provided additional commentary / analysis in paragraphs 3.32 – 3.33 above and thus consider the proposed upgrade to be appropriate.

5. **CONCLUDING COMMENTS**

- 5.1 I have no outstanding matters of disagreement with Messrs Wood or Tindall for Waka Kotahi.
- 5.2 A number of matters raised by Ms Perring remain unresolved. However, for the reasons I have stated above I consider Ms Perring's issues are unfounded or overstated and / or are covered by the proposed provisions.
- 5.3 There are only limited matters of disagreement between myself and Messrs Black and Gray as contributors for the section 42A report. These relate to some of the required transport triggers and upgrades. For the reasons outlined, I consider the provisions in this regard included in the revised PC7 provisions attached to the reply evidence of Mr Tollemache / Ms Fraser-Smith are appropriate.
- 5.4 Overall, for the reasons outlined above, nothing raised in the transportation-related evidence filed on behalf of the submitters to PC7 has changed or altered the conclusions set out in my EIC. I therefore continue to have the opinion that there is no traffic engineering related reason to decline PC7.

Leo Donald Hills

15 October 2021