

**IN THE MATTER** of the Resource Management Act 1991

**AND**

**IN THE MATTER** of Plan Change 17: Te Rapa North  
Industrial Private Plan Change to the  
Hamilton City Operative District Plan

**STATEMENT OF EVIDENCE OF LEO DONALD HILLS  
ON BEHALF OF EMPIRE CORPORATION LIMITED AND PORTER GROUP**

## 1. EXECUTIVE SUMMARY

- 1.1 My name is Leo Donald Hills, and I am a Director of Commute Transportation Limited. I have prepared this evidence on behalf of Empire Corporation Limited and Porter Group (“Porters”) in relation to transportation matters associated with Plan Change 17 – Te Rapa North Industrial Private Plan Change (PPC17).
- 1.2 My evidence addresses the following:
  - (a) An overview of the existing transport environment and Porters’ land ownership parcels.
  - (b) The approach taken to structure planning and the implications on the delivery of a coordinated transport network
  - (c) The key network constraints in the area
  - (d) The transport effects related to the inclusion of land owned by Empire Corporation Limited and Porter Group within PPC17 and
  - (e) Recommended changes to the proposed provisions of PPC17 to enable the inclusion of the Empire Corporation Limited and Porter Group land within the PPC17.
- 1.3 Porters’ landholdings, totalling approximately **37.9 hectares**, are located immediately east of PPC17 and west of State Highway 1C. Part of this land is subject to Designation A113, which provides for the realignment of Onion Road to connect with Arthur Porter Drive. I consider that this realignment is beneficial to both network safety, particularly in relation to the Ruffell Road rail level crossing, which is currently closed pending safety assessment.
- 1.4 Based on my assessment, I estimate that development of Porters’ land would generate approximately 530 vehicle trips per peak hour, which can be readily accommodated within the surrounding transport network with the proposed upgrades.
- 1.5 The Koura Drive interchange, expected to be the main access point for Porters’ land, currently operates well within capacity and has been constructed to allow for future signalisation if required.
- 1.6 I generally agree with the transport assessment and proposed provisions presented by Mr Cameron Inder on behalf of the applicant. However, I recommend that additional provision triggers be included to secure:

- (a) The realignment of Onion Road prior to development;
- (b) The upgrade of Onion Road to a collector Road standard; and
- (c) Provisions to ensure that an East West corridor is future proofed through Porters' land

1.7 Overall, in my view, the inclusion of Porters' land within PPC17 would:

- (a) Enable a more coordinated staging of development within the "Structure Plan".
- (b) Ensure transport infrastructure upgrades are delivered in an integrated and efficient way and
- (c) Enable the proposed permanent closure or potential re-opening of the Ruffell Road level crossing to be considered in a cohesive and integrated way at the time of future development.

## **2. INTRODUCTION**

2.1 My name is Leo Donald Hills. I am a director of Commute Transportation Limited (Commute). Commute provides a wide-range of transport-related services to the private and public sector clients throughout New Zealand.

### **Qualification and experience**

2.2 I have a Master of Civil Engineering (2000) and a Bachelor of Engineering with Honours (1996), both from the University of Auckland. I am a Chartered Professional Engineer (CPEng) and a Chartered Member of Engineering New Zealand (CMEngNZ).

2.3 I have over 28 years' experience as a specialist traffic and transport engineer. Prior to establishing Commute in 2015, I worked at:

- (a) Traffic Design Group 1996 to 2004;
- (b) Transit New Zealand (now NZTA) from 2004-2005; and
- (c) Traffic Design Group from 2005-2014.

2.4 During my 28 years as a practicing traffic engineer, I have been engaged by local authorities and private companies/individual to advise on traffic and

development issues covering safety, management and planning matters of many kinds. Recent projects that have raised traffic issues similar to that raised in the context of the present application include:

- (a) Numerous Plan Changes in south Auckland including Auranga and Drury Central
- (b) Hamilton City Private Plan Change 7 - Rotokauri North

2.5 I can confirm that in preparing this evidence I have reviewed the following documents:

- (a) Private Plan Change 17 – Te Rapa North, Integrated Transport Assessment prepared by BBO Limited, dated November 2024
- (b) Private Plan Change 17 – Supplementary Information prepared by Harrison Greirson, including a supplementary memo prepared by BBO Limited, dated August 2025
- (c) The Section 42A Hearing Report prepared by Hamilton City Council, September 2025, including a memo prepared on transport matters prepared by Ms Naomi McMinn, Gray Matter, dated 8 September 2025.
- (d) The Primary Statement of evidence (Transportation) prepared by Mr Cameron Inder on behalf of the Applicant.

2.6 I confirm that the issues addressed in this statement of evidence are within my area of expertise.

#### **Code of conduct**

2.7 I have read the Environment Court Code of Conduct for expert witnesses contained in the Environment Court Practice Note 2023 and agree to comply with it. I confirm that the opinions expressed in this statement are within my area of expertise except where I state that I have relied on the evidence of other persons. I have not omitted to consider materials or facts known to me that might alter or detract from the opinions I have expressed.

### **3. SCOPE OF EVIDENCE**

3.1 This evidence is provided on behalf of Empire Corporation Limited and Porter Group (referred to herein as '**Porters**') and relates to transportation matters

under Plan Change 17 – Te Rapa North Industrial Private Plan Change ('**PPC17**')

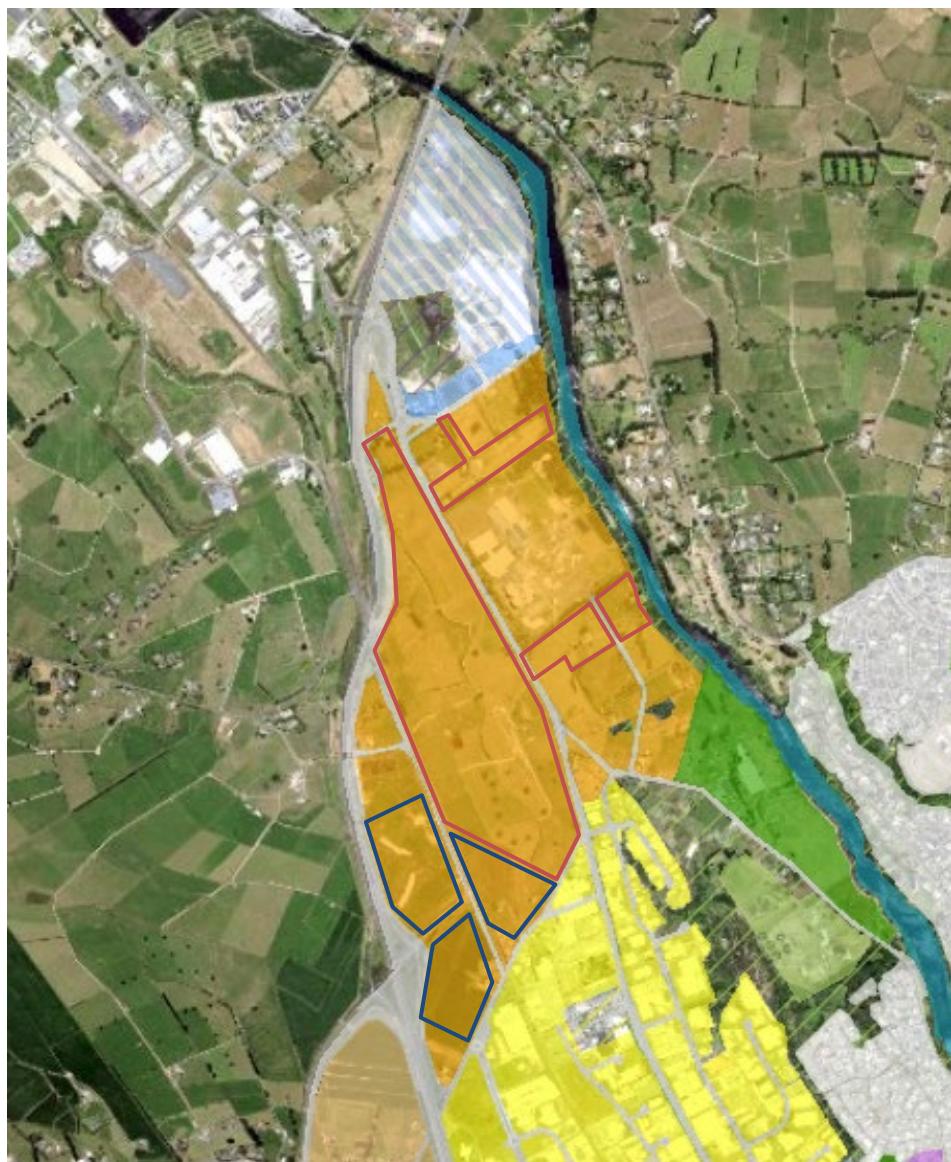
3.2 My evidence will address the following transport matters

- (a) An overview of the existing transport environment and Porters' land ownership parcels.
- (b) The approach taken to structure planning and the implications on the delivery of a coordinated transport network
- (c) The key network constraints in the area
- (d) The transport effects related to the inclusion of land owned by Empire Corporation Limited and Porter Group within PPC17 and
- (e) Recommended changes to the proposed provisions of PPC17 to enable the inclusion of the Empire Corporation Limited and Porter Group land within the PPC17.

#### **4. EXISTING LAND USE AND TRANSPORT ENVIRONMENT**

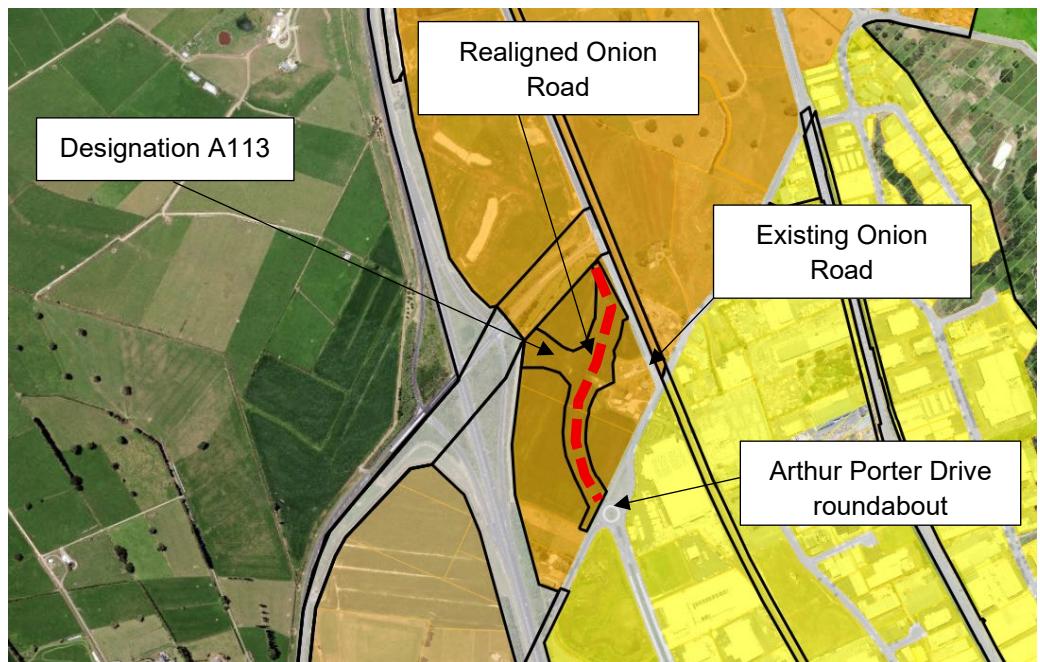
- 4.1 I have read and generally agree with the description of the existing transport environment as described in the lodged Integrated Transport Assessment (ITA).
- 4.2 For ease of reference, in Figure 4-1 I have provided below an image of PPC17 (in red), and I have also shown the land owned by Porters (in blue).

*Figure 4-1: Porters' Land Holdings (in blue)*



4.3 In addition to the information provided in the ITA, I would like to note that there is an existing Hamilton City Council designation (A113), that enables the realignment of Onion Road to connect to Arthur Porter Road as shown in Figure 4-2 below (at existing roundabout). This designation sits wholly within land owned by Porters.

Figure 4-2: Existing Designation for Realignment of Onion Road (A113)



## 5. STRUCTURE PLAN

- 5.1 In general, I consider that a Structure Plan (or similar) that considers the wider area of potential growth and changes should be completed before Plan Change is undertaken to ensure transport is planned and delivered in an integrated, efficient way. It should take a complete view of how the road, public transport, walking and cycling networks connect and perform as a system.
- 5.2 A Structure Plan should identify the key transport corridors and intersections needed to support growth and provide the basis for staging and funding these improvements in step with development.
- 5.3 A Structure Plan that covers only a limited geographic area, can increase the risk of fragmented development, resulting in network inefficiencies, higher retrofits costs, and gaps in transport access and connectivity.
- 5.4 In my view, a comprehensive Structure Plan for the entire Te Rapa North Industrial Zone (TRNIZ) should have been prepared to enable coordinated staging of development and a fair allocation of infrastructure upgrade costs among landowners as plan changes are progressed.
- 5.5 Notwithstanding this, I have reviewed the Structure Plan network considerations that are included in Mr Inder's evidence and in the lodged ITA, and I agree with the identified upgrades.

5.6 I have also provided input to the Structure Plan amendments as shown in the evidence of Ms Belgrave, which identifies the additional transport elements that should be included within the Structure Plan had Porters' land been included in the initial Structure Plan. I will provide further details on this later in my evidence.

## 6. KEY NETWORK CONSTRAINTS

6.1 The following section of my evidence outlines what I consider to be the key transport constraints in the area near Porters' land.

### Rail Level crossing on Ruffell Road

6.2 I have reviewed Mr Inder's evidence with regard to the rail level crossing on Ruffell Road. This crossing is shown in Figure 6-1 below. I note that this crossing is currently closed and as per Mr Inder's evidence is subject to a Level Crossing Safety Impact Assessment (LCSIA). I understand that this work is underway and has yet to be endorsed by Kiwirail or Hamilton City Council.

*Figure 6-1: Ruffell Road level crossing*



6.3 Mr Inder's evidence identifies that a number of safety improvements are needed in order to open the currently closed Ruffell Road Level Crossing. These safety improvements include:

(a) Closing Onion Road at Ruffell Road thereby deleting the intersection;

- (b) Realignment of Ruffell Road to reduce the crossing skew angle; and
- (c) Management of heavy vehicles turning left out and right into the access at Old Ruffell Road/Rufell Road intersection to manage movements.

6.4 I agree with the Supplementary Transport Memo prepared by Mr Inder, that the closure of Onion Road at this location would improve safety outcomes at the level crossing. I also agree that the other improvements such as resolving the skew and the access arrangements would improve safety outcomes. I have not undertaken any further assessment of other safety upgrades as this work will be completed as part of the LCSIA.

6.5 However, I note the closure and the realignment of the skew are both dependant on Onion Road being realigned to meet with Arthur Porter Drive (Figure 4-2 above) which requires a portion of Porters' land and is not included in PPC17.

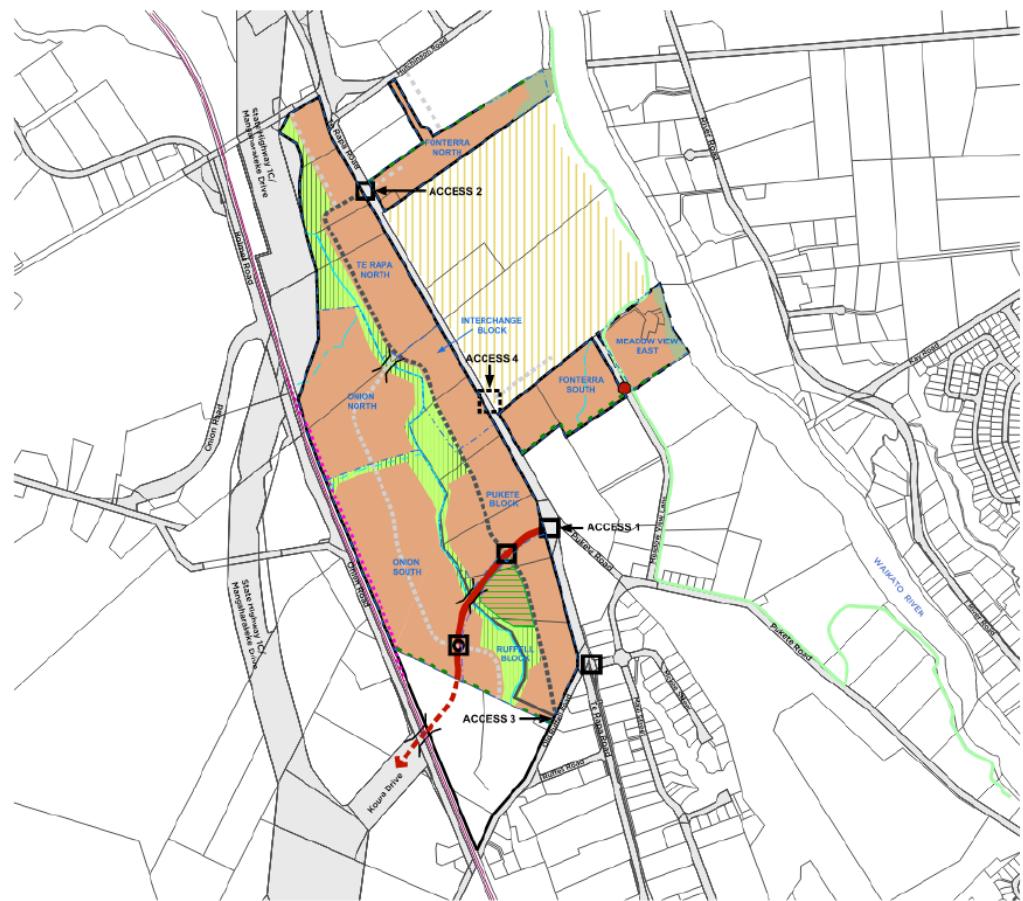
6.6 I also note that all modelled scenarios used to inform PPC17 appear to have assumed that the realignment of Onion Road has occurred and that Onion Road is connected to Arthur Porter Drive roundabout (as per Figure 4-2 above).

6.7 With the reopening of the Ruffell Road level crossing being a core assumption of later stages of development, and a key trigger once vehicles movements in the PM peak exceeds 790 vehicle movements, in my view it would be appropriate to include this land within PPC17 to enable these upgrades.

#### **East West Road**

6.8 As shown on the Structure Plan, the East West Road travels from Te Rapa Road in the east through to Koura Drive in the west (to the interchange), via Porters' land. This is shown as the "red" road in Figure 6-2 below.

*Figure 6-2: Structure Plan east west road*



6.9 I agree with Mr Inder that the modelling he has undertaken demonstrates that the full corridor is not required to address the effects of PPC17 as lodged.

6.10 In my view, the provision of the East West corridor running through the Plan Change area would reduce movements at the Ruffell Road rail crossing and I note that this is currently future proofed via the PPC 17 provisions.

6.11 The connection of this corridor to Koura Road runs through Porters' land, although I note this is not currently designated.

6.12 The inclusion of this land within the Structure Plan would therefore support better land use transport integration and provide for infrastructure options that support safety outcomes at the rail crossing.

6.13 I also support the provisions proposed by Mr Inder to prevent build out of the initiative east-west route for this corridor. I support the retention of provisions related to this and thus recommend that these should apply to Porters' land and any other land within the PPC17.

### **Overall**

6.14 As such the inclusion of Porters' land (particularly the southern two lots) will enable either option of Onion Road level crossing to remain in that:

- (a) In the event that the crossing is to re-open, it requires Onion Road to be realigned through Porters' land; and
- (b) In event that the crossing is to remain closed, the east-west road through Porters' land enables an eastern alternative connection.

## **7. INCORPORATION OF LAND OWNED BY EMPIRE CORPORATION LIMITED AND PORTER GROUP**

### **General**

7.1 This section of my evidence sets out the ability to include of land owned by Porters within the southwestern part of the TRNIZ.

7.2 As shown in Figure 4-1 above, Porters' land is immediately adjacent to PPC17.

7.3 As I have identified above, there are several key roading interfaces that require coordination with land holdings outside of the PPC17. It is my view that inclusion of Porters' land would enable this coordination to occur and provide improved network outcomes in the long term.

7.4 At a finer grain level, I have considered the local roading infrastructure that would need to be considered should Porters' land be included in the PPC.

### **Traffic Generation from Porters' Land**

7.5 To provide an indication of the quantum of additional traffic that could result from Porters' land, I have undertaken a first principles estimate of the traffic generation of Porters' land.

7.6 The general assumptions I have used to develop the likely trip generation are

- (a) The developable land is assumed to be 70% of the total lot size – assuming that 30% will be required for roading, stormwater and other infrastructure. This is considered to be a conservative provision given the infrastructure requirements within Porter's land are significant and include the realignment of Onions Road and the East West

corridor. I note that this is consistent with the original ITA assumptions of developable area for PPC17 (69% developable, or 63ha). This was later reduced to 53ha (58% developable). I am comfortable that 70% is an appropriate starting point to assess traffic generation for a plan change.

- (b) Trips are expected to be in the region of 20 trips per hectare in the peak hour. This is a general rate for industrial activities. This is considered to be conservative as a portion of Porters' land that is subject to the Onion Road designation has already been included within the regional modelling completed by the Applicant. I note that this is more conservative (higher) than the rate utilised by Mr Inder in the ITA, specifically 16.3 trips/ha (net developed land). I am comfortable that both rates are within a typical range for industrial developments.
- (c) As industrial activities, trips are likely to be split 50% inbound and 50% outbound in each peak hour.

*Table 8-1: Trip Generation of Porters' Landholding*

Gross Area (ha)	Net Area (ha)	Inbound Peak Hour Trips	Outbound Peak hour trips
37.9	26.5	265 trips	265 trips
Total Trips		530 trips per hour	

#### **Traffic Distribution from Porters' Landholding**

- 7.7 Based on the existing and proposed networks, I have assumed that vehicles wishing to travel north or south on State Highway 1C would travel via Onion Road and Koura Road to link directly to the Koura Road / SH39 interchange as this is by far the quickest / most direct route to / from the site.
- 7.8 Vehicles that wish to travel to the wider Te Rapa area are most likely to travel via Onion Road to the Arthur Porter Road roundabout and access the area via Te Kowhai Road.
- 7.9 Given the surrounding landuse, trips are assumed to be distributed
  - (a) 75% will utilise Koura Drive and utilise SH1C to travel north and south on the strategic network

(b) The remaining 25% will utilise the arterial road network, split 80% to the south and 20% to the north.

7.10 Based on the above distributions, the volume of additional trips expected to travel through the surrounding network is summarised in Table 8-3.

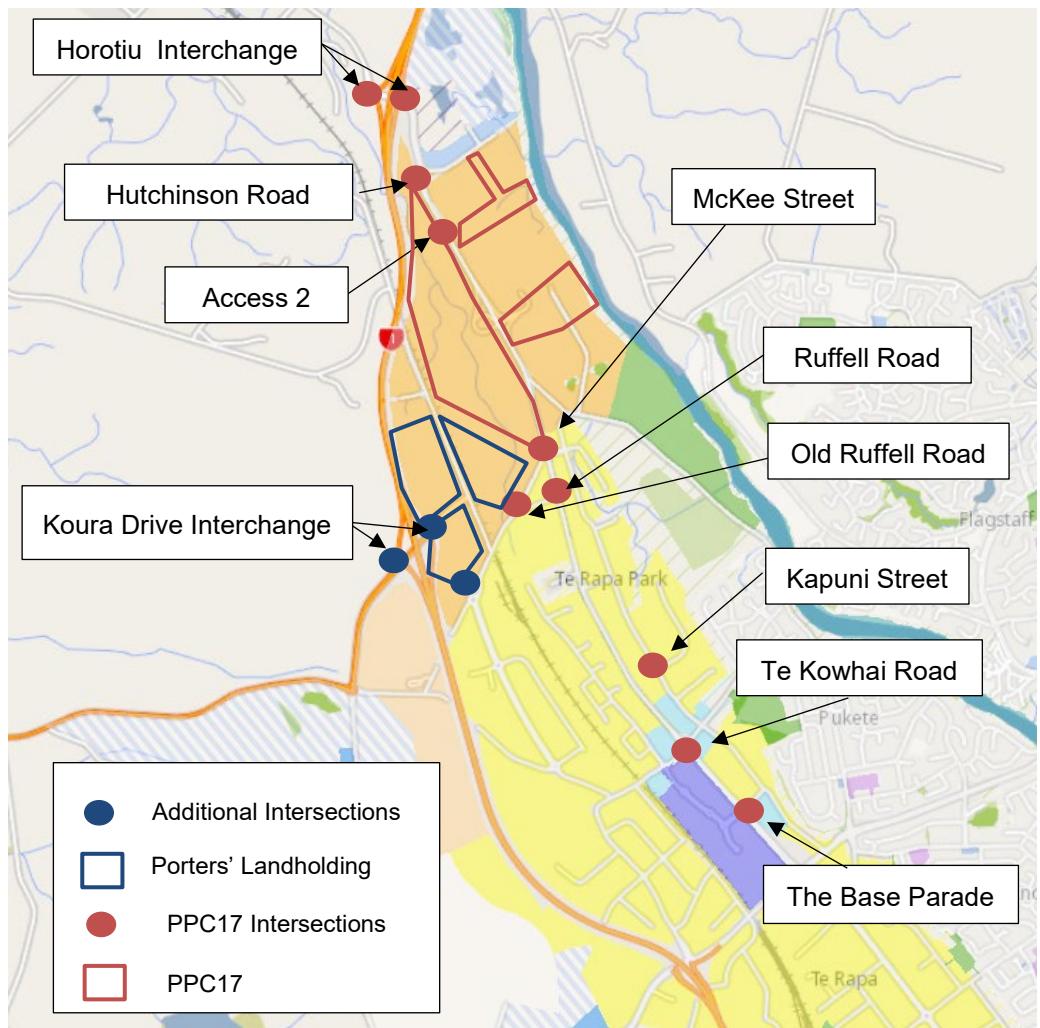
*Table 8-2: Additional Trips from Porters' Landholdings*

<b>Total Peak Trips</b>	<b>Trips Travelling to SH1 (75%)</b>		<b>Trips Travelling on local Arterial network (25%)</b>	
	<b>Inbound</b>	<b>Outbound</b>	<b>Inbound</b>	<b>Outbound</b>
<b>530 trips</b>	199	199	66	66

### **Network Modelling**

7.11 In the figure below, I have summarised the intersections tested within the applicants ITA, Supplementary Assessment, and Mr Inder's evidence, and identified the intersections that I consider require further analysis relating to Porters' land.

Figure 7-1: Intersections Assessed as part of PPC17 and additional intersections



7.12 Table 8-2 below summarises my review of the intersections already assessed in PPC17 (ie “red” intersections) grouped by area.

Table 8-3: Intersections Assessed by the Applicant as part of PPC17

Intersection	Comment/Assessment
<b>Northern Intersections</b> <ul style="list-style-type: none"> <li>• SH1C Horotiu interchange</li> <li>• Te Rapa Road and Hutchinson Road</li> <li>• Te Rapa Road and Access 2</li> </ul>	Trips from Porters' land holdings unlikely to utilise these intersections given the proximity to Koura Drive interchange. <b>No additional assessment necessary.</b>
<b>Central Intersections</b>	Mr Inder's evidence addresses the performance of these intersections. With the proposed

Intersection	Comment/Assessment
<ul style="list-style-type: none"> <li>• Te Rapa Road and McKee Road</li> <li>• Te Rapa Road and Ruffell Road</li> <li>• Old Ruffell Road and Ruffell Road</li> </ul>	<p>upgrades, these intersections are expected to perform well with reasonable capacity available. Mr Inder's evidence identifies the following intersection upgrades that would enable the Porters' land to be included within PPC17:</p> <ul style="list-style-type: none"> <li>• Additional storage/capacity at the McKee Street intersection</li> <li>• Additional through lanes at Te Rapa Road.</li> </ul> <p>I agree that confirmation of the necessity of these upgrades should be investigated via a Broad ITA as recommended by the provisions attached to Mr Inder's evidence.</p>
<p><b>Southern Intersections</b></p> <ul style="list-style-type: none"> <li>• Te Rapa Road and Kapuni Street</li> <li>• Te Rapa Road and Te Kowhai Road</li> <li>• Te Rapa Road and the Base interchange</li> </ul>	<p>Not considered to be materially impacted by development of the Porters' land, given the low proportion of traffic expected to travel on the local road.</p>

7.13 The following outlines my assessment of the additional intersections in Figure 8-1 (blue intersections).

#### **Intersection of Onion Road and Arthur Porter Drive**

7.14 In my opinion, 132 additional trips on the Onion Road/Athur Porter Drive roundabout (66 in each direction) are unlikely to affect the performance of the existing roundabout.

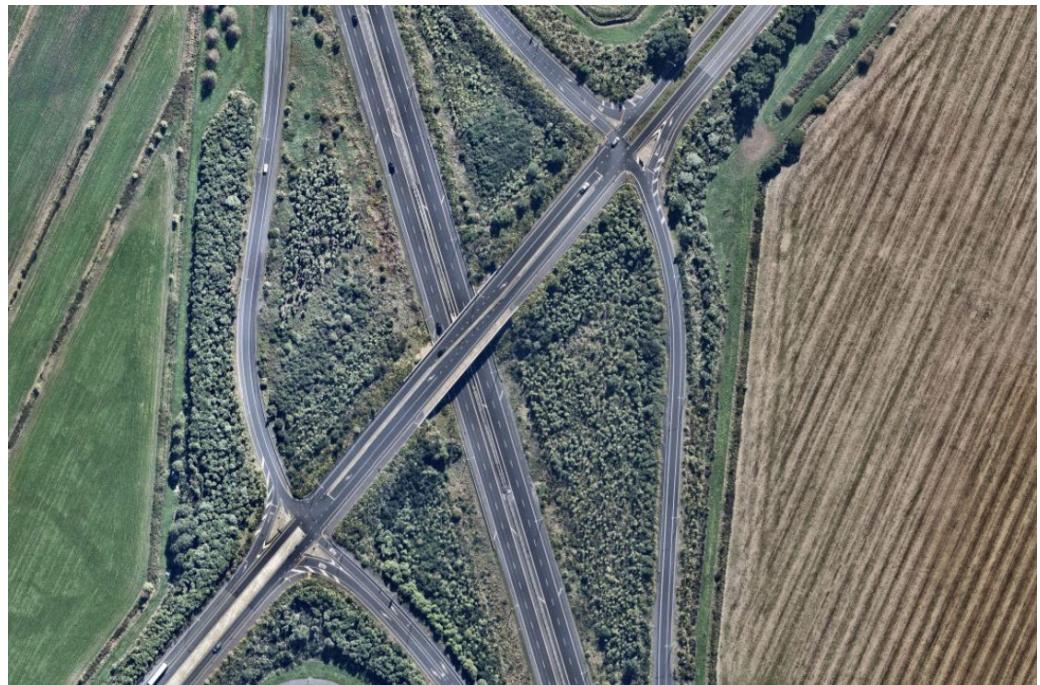
7.15 Traffic volumes on Arthur Porter Drive are recorded to be in the region of 5,500 vehicles per day (HCC,2023 Counts). An additional 132 trips would equate to 2.3% of the daily traffic on Arthur Porter Drive and as such considered to be negligible.

#### **Koura Road Interchange**

7.16 As stated above the interchange with Koura Road and SH1C is expected to be the primary access point to the Porters' landholdings.

7.17 This interchange is shown in Figure 7-3 shows the current design of the Koura Road Interchange. The interchange is a simple diamond interchange with the two intersections being priority controlled.

*Figure 7-2: Koura Road interchange*



7.18 On-site observations show that this interchange has significant amount of spare capacity with little / no queuing in the peak hours. I also note that this interchange appears to have been constructed to allow for the two intersections to be signalised in future in a similar way as the SH1 / Mill Road interchange in Bombay south Auckland has recently been upgraded.

7.19 Overall, given the current space capacity and the future proofing of the interchange, I consider the additional traffic generated by Porters' land can easily be accommodated.

### **Onion Road realignment**

7.20 As identified above, I consider that the realignment of Onion Road will provide improved safety outcomes at the Ruffell Road level crossing. This realignment should be a key trigger included within the provisions of the Porters' land as shown in Mr Inder's evidence.

## **8. PROPOSED CHANGES TO PPC17 PROVISIONS**

8.1 Given the above, I recommend that triggers related to the inclusion of the Porters' land be included as below:

(a) Identify the Porters' land as the Southern Block in the PPC17 documentation indicatively as shown in Figure 4-1 of my evidence.

*Table 9-1: Proposed amendments to the PPC17 provisions*

Minimum Infrastructure Requirement	Implementation Trigger
<p>xv. Completion of items i-xiv, above</p> <p>xvi. A Level Crossing Safety Impact Assessment (LDSIA) for the Ruffell Road level crossing that demonstrates the further upgrades (if any) required to safely reopen the temporary closure of the level crossing</p> <p>xvii. Completion of the identified safety upgrades to the satisfaction of Kiwirail and Hamilton city council, and the reopening of level crossing to traffic in both directions</p>	<p>To be completed prior to</p> <p>i. Any industrial/commercial activity in the Te Rapa North Structure plan area that generates a cumulative average weekday pm peak traffic volume exceeding 685 vehicles per hour (two way) and</p> <p>ii. The average weekday am peak hour eastbound approach entering the Te Rapa Road / Te Kowhai Road roundabout exceeds 790 vehicles per hour</p>
<p>xviii.</p> <p><u>Where fronting development, Onion Road is upgraded to a Collector standard consistent with the typical cross section shown in the Figure 3.9.2.5c</u></p> <p><u>The realignment of Onion Road and provision of Onion Road to standard consistent with the Collector standard as shown in Figure 3.9.2.5c</u></p>	<p>To be completed prior to</p> <p><u>Any section 224c certification for subdivision under the Resource Management Act 1991 (RMA) being issued that develops land within the Southern Block.</u></p>

8.2 I note that Mr Inder's evidence states that in his opinion the remainder of the TRNIZ land not included in the PPC17, located to the east of the railway line, can be implemented subject to the following infrastructure upgrades

(a) *The construction of the east/west section of the NRC between Koura Drive and the Te Rapa Road including an intersection with Te Rapa Road or*

(b) *In the absence of the east / west described above, some or all of the following transport infrastructure upgrades may be needed:*

- i. An additional southbound through movement lane at Te Rapa Road/ Ruffell Road intersection*
- ii. Reopening the Ruffell Road rail level crossing*
- iii. Capacity/queue storage increases at the signalised Te Rapap Road /McKee Street intersection*
- iv. Additional walking, cycling and public transport connectivity to facilitate greater travel choices and/or*
- v. Financial contribution toward the future BRT service.*

8.3 I have provided comment on each of these elements and in my view if they are considered necessary to address effects related to the inclusion of the Porters' land within PPC17 in Table 9-2 below.

*Table 9-2: Proposed Infrastructure Upgrades*

Proposed Infrastructure Upgrade	Comment on Necessity
<p>The construction of the east/west section of the NRC between Koura Drive and the Te Rapa Road including an intersection with Te Rapa Road or</p>	<p>I agree that this additional link would support traffic outcomes in the PPC17, however note that the delivery of the connection including the intersection with Te Rapa cannot be delivered without the agreement of landowners with PPC17 as no designation is currently in place.</p> <p>I support the requirement for building restrictions to future proof the delivery of this corridor.</p>
<p>An additional southbound through movement lane at Te Rapa Road/ Ruffell Road intersection</p>	<p>The requirement for this upgrade is already captured in the proposed provisions (xiv) following development of up to 42ha or 685 average weekday pm peak traffic volumes per hour (two way).</p>

	<p>There is a requirement for a Broad ITA assessment with reference to this intersection subject to 3.9.3.2 (xvi)-(xvii).</p>
Reopening the Ruffell Road rail level crossing	<p>The requirement for this upgrade is already captured in the provisions.</p>
Capacity/queue storage increases at the signalised Te Rapa Road /McKee Street intersection	<p>The modelling of this intersection shows that the queue lengths at this intersection are significant and that lane reallocation would be beneficial as part of PPC17.</p> <p>I note that this upgrade is not included within the provisions but could be required as minor design change when the signals are implemented as part of the Te Awa Lakes development.</p> <p>There is a requirement for a Broad ITA assessment with reference to this intersection subject to 3.9.3.2 (xvi)-(xvii).</p>
Additional walking, cycling and public transport connectivity to facilitate greater travel choices and/or	<p>All roading upgrades would need to be consistent with the overarching provisions within the proposed PPC17 provisions.</p>
Financial contribution toward the future BRT service.	<p>Any financial contribution towards significant regional infrastructure should be determined following consideration of beneficiaries and fair cost allocation.</p> <p>In my view it would be inappropriate for such a trigger to be included within a plan change provisions.</p>

## 9. CONCLUSION

9.1 Overall, in my opinion, I generally agree with Mr Inder relating to his overall assessment and the proposed Plan Change provisions (in his evidence) are appropriate.

9.2 I do however consider that the land owned by Empire Corporation Limited and Porter Group can and should be included within the Plan Change. In particular inclusion of this land will:

- (a) Enable a more coordinated staging of development within the "Structure Plan".
- (b) Ensure transport infrastructure upgrades are delivered in an integrated and efficient way.
- (c) Enable the proposed permanent closure or potential re-opening of the Ruffell Road level crossing to be considered in a cohesive and integrated way at the time of future development.

**Leo Hills**

**30 October 2025**