

1. INTRODUCTION

This technical note is a follow up to and should be read in conjunction with Technical Note 18: Future Model Preparation. It documents changes that have been introduced to the WRTM for the three step model version 3_V1005 and later, and the four step model 4_V1005 and later.

The base year zone system includes disaggregation of zones in Huntly and Tamahere which have also been carried forward to future years. The refined base year zone system is included here as Appendix A.

The future landuse assumptions have been reviewed in their entirety for Taupo District Council zones such that they match the Taupo Urban Growth Strategy published in 2010. The job landuse data for Hamilton City, Waikato District and Waipa District have also been revised to reflect the Futureproof Regional Policy Statement guidelines published in 2010.

Plots indicating the updated number of households in each zone for 2006, 2021 and 2041 are included here as Appendix B with corresponding job data included as Appendix C. Note these reflect the zone boundaries and totals for the base year zone system.

In the future model years, zones in the key growth areas have been disaggregated further. This was reported for the Peacockes and Rototuna areas in Technical Note 18. Additional disaggregation of Rototuna and Te Rapa has now been introduced to the 2021 and 2041 models. This is reported in the next section and was introduced in version 3_V1006 and 4_V1006 of the model.

The do-minimum roading works to be included in the future models, as agreed with LASS, are reported and replace those from Technical Note 18.

2. DISAGGREGATION OF GROWTH AREAS - HAMILTON

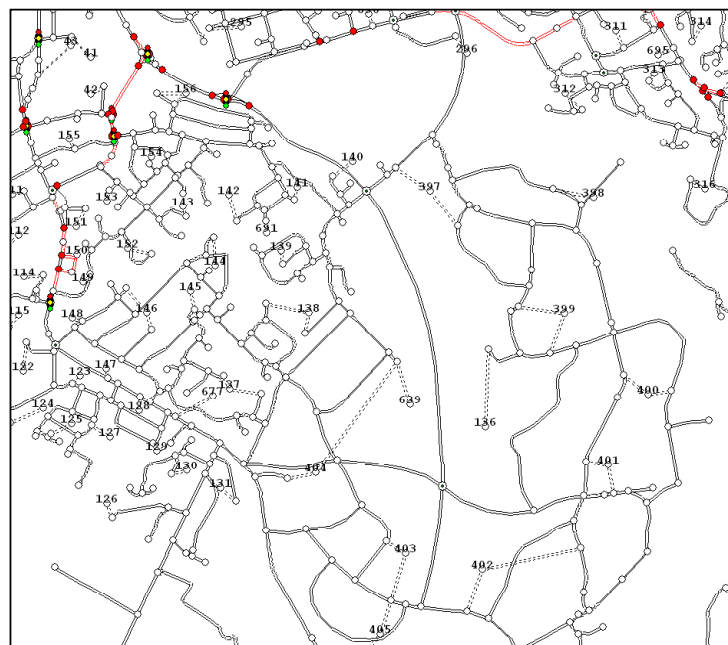
Hamilton has two large future development areas:

1. Peacockes Zone 136
2. Rototuna Zones 218 and 363
3. Te Rapa Zones 361 and 362

These zones have been disaggregated in the future networks to reflect the development and allow the traffic to be loaded more evenly onto the network. The improved distribution of traffic gives a better idea of the impact on the wider network.

Peacockes – Break up of Zone 136			Table 1	
New Zone	2021		2041	
	HH	Jobs	HH	Jobs
136	156	119	156	119
397	0	0	850	0
398	0	0	1000	0
399	0	0	900	0
400	0	0	700	83
401	0	0	0	0
402	0	0	1294	0
403	0	0	1100	0
404	304	25	1200	178
405	0	0	800	24
Total	460	144	8000	404

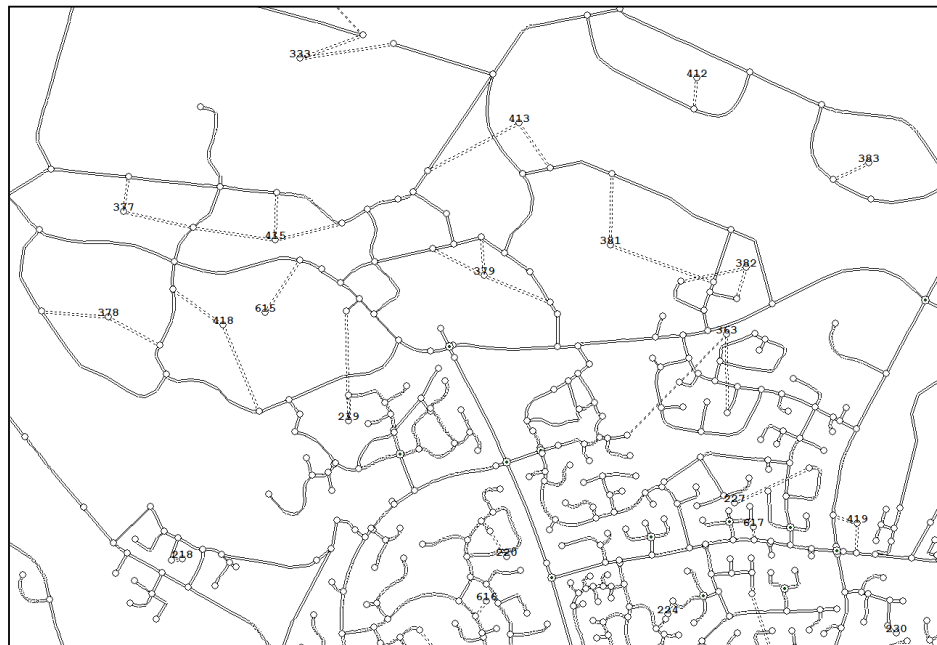
Peacockes Structure Plan and Zone System – Figure 1



The Rototuna Structure Plan area was disaggregated into 8 zones as documented in Technical Note 18. It has now been disaggregated further into 12 zones. This further disaggregation comes into effect for WRTM versions 3_V1006 and 4_V1006 and later.

Rototuna – Break up of Zones 218 & 363			Table 2	
New Zone	2021		2041	
	HH	Jobs	HH	Jobs
218	1001	66	1007	75
363	669	153	670	193
377	188	0	188	3
378	545	0	545	9
379	114	70	139	295
381	407	0	407	3
382	330	0	330	9
383	0	0	340	3
412	0	0	340	0
413	710	0	939	0
415	434	0	449	0
418	442	0	442	0
Total	4840	289	5796	590

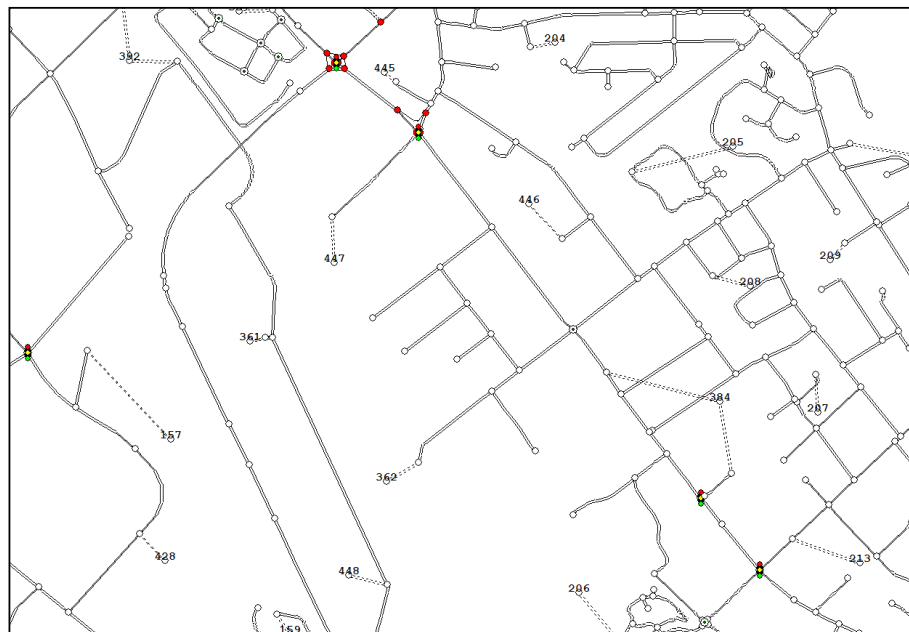
Rototuna Structure Plan and Zone System – Figure 2



Zones 361 and 362 in the vicinity of Te Rapa industrial area have been disaggregated to improve traffic distribution. There is no reliable data to apportion jobs, so they have been split evenly for future years as shown in **Figure 3**. This change has come into effect from versions 3_V1006 and 4_V1006 and later of the WRTM.

Te Rapa – Break up of Zones 361 & 362			Table 3	
	2021		2041	
New Zone	HH	Jobs	HH	Jobs
361	0	968	0	1121
362	11	1239	14	1391
446	0	1239	0	1391
447	0	1239	0	1391
448	0	968	0	1121
Total	11	5653	14	6415

Te Rapa Structure Plan and Zone System – Figure 3



3. 2021 DO MINIMUM PROJECTS

The following projects have been included in the Do Minimum options of the future networks. The location of these works are marked on the network diagram in **Figure 4** and **Figure 5**.

- A. Avalon Drive Bypass
- B. Church to Avalon Drive
- C. Waikato Expressway 4 lane (pictured in green)
- D. Mangatawhiri Township Deviation
- E. Piarere-Oak Tree Bend Realign
- F. Kopu Bridge Replacement (SH25)
- G. Tararu Stream Bridge Replacement
- H. Te Puru Stream Bridge Replacement
- I. Tahuna Road Roundabout
- J. Harbour Link
- K. Pyes Pa Bypass
- L. Fairy Springs 4L Stage 2
- M. Mangorewa Stream North & South Bridge Widening
- N. Mill Street Intersection upgrade
- O. East Taupo Arterial
- P. Malfroy/Randolf Roundabout
- Q. Foreman to Crawford link
- R. Cobham/ E1 2 lane Roundabout
- S. Normandy/ Bader Signals
- T. Wairere Drive 4 lane from Pukete to River with Signals at Pukete
- U. Wairere Drive extension 2 lane from Hukanui to Crosby with Wairere/ Crosby/ Gordonton 2 lane Roundabout
- V. Onion Road extension
- W. Wairere extension 2 lane from Crosby to Cobham
- X. Wairere extension Signals at Powells, East, Clyde, Naylor, Ruakura

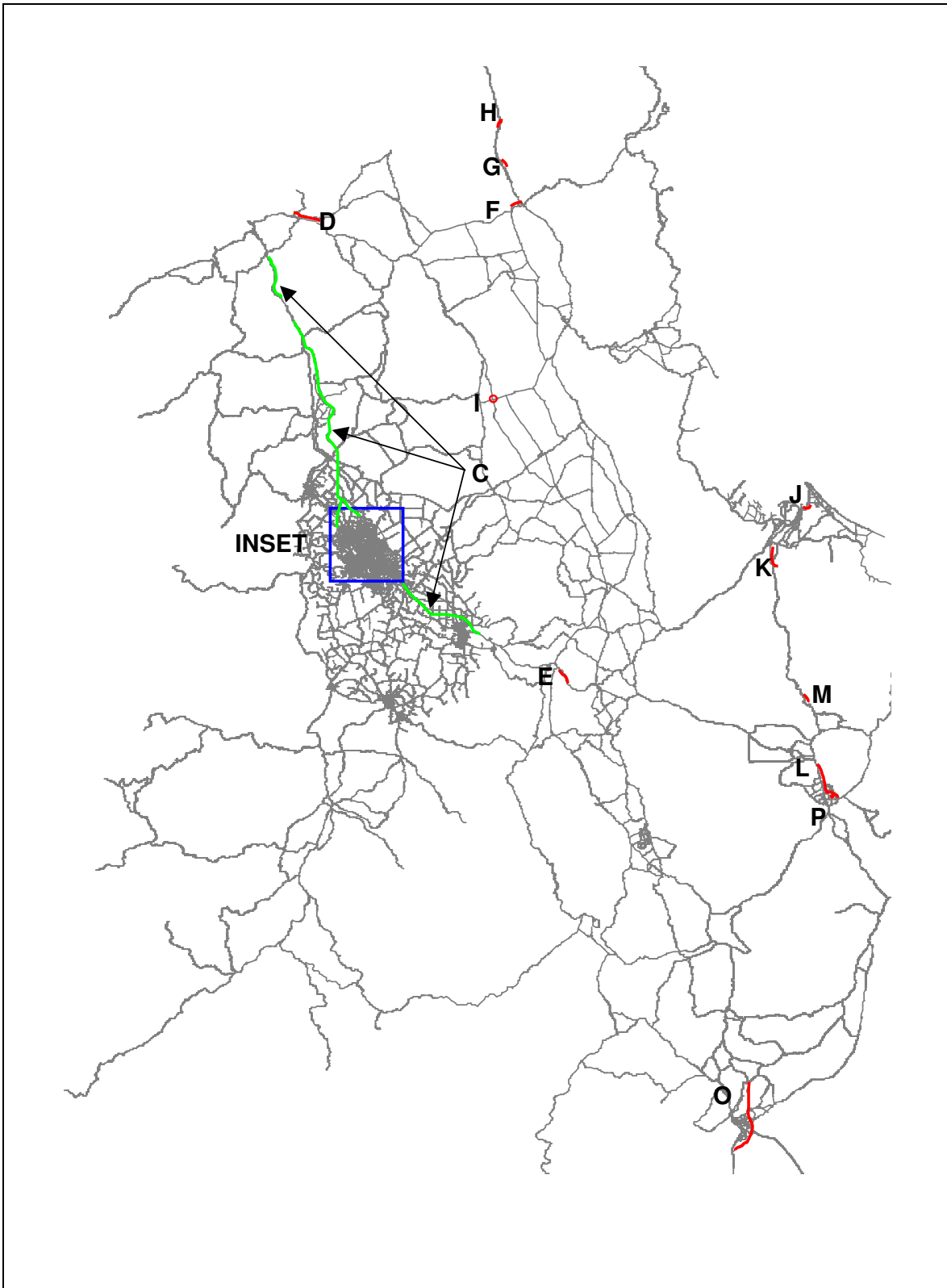
- Y. Wairere extension 2 lane Roundabout at Fifth
- Z. Ruakura 4 lane Peachgrove to Wairere extension
- AA. Rototuna Structure Plan roading with Resolution Drive extension to Expressway

Note that G, H and M are essentially upgrades to existing corridors, which do not add significant capacity. As such they have not been coded in the model but have been noted here for completeness

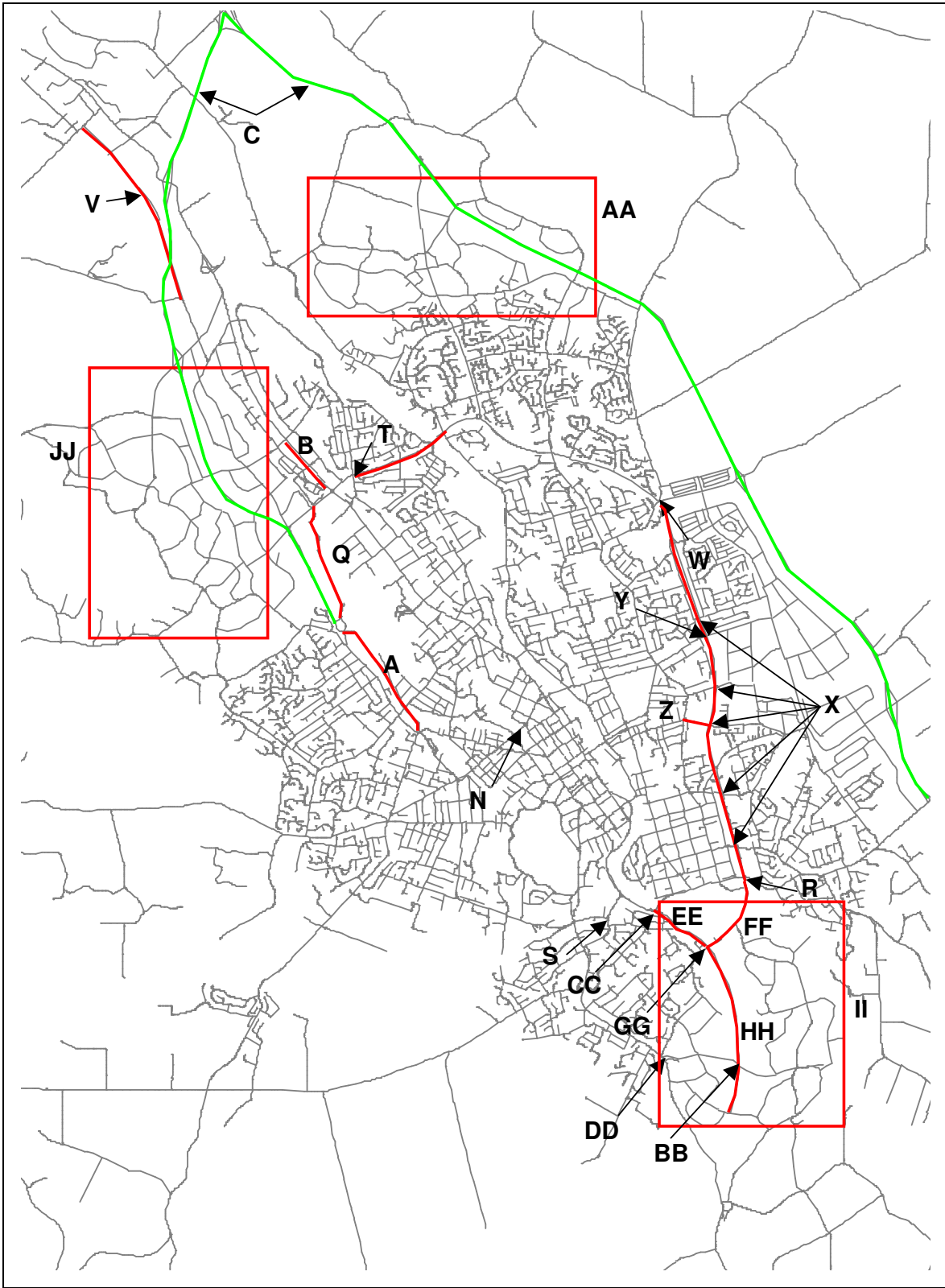
4. 2041 DO MINIMUM PROJECTS

The following projects have been included in the Do Minimum options of the future networks. The location of these works are marked on the network diagram in **Figure 4** and **Figure 5** below.

- BB. Peacocke North-South Arterial/East-West Arterial 2 lane Roundabout
- CC. Cobham/Peacocke link signal with southbound ramp
- DD. SH3 Ohaupo/Dixon/Peacocke link 2 lane Roundabout
- EE. Cobham/Peacocke link 2 lane
- FF. Cambridge/E1/ Peacocke link 2 lane
- GG. Peacocke North-South Arterial/Cobham link/E1 link 2 lane Roundabout
- HH. Peacocke North-South Arterial 2 lane
- II. Peacocke East-West Arterial 2 lane and Structure Plan roading
- JJ. Rotokauri Structure Plan roading



Waikato Regional Transportation Model	Do Minimum Works	Figure 4
Gabites Porter Traffic Design Group		



Waikato Regional Transportation Model	Do Minimum Works Inset	Figure 5
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