

BEFORE THE HEARING PANEL

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER Proposed Plan Change 14 to the Waipa District Plan

STATEMENT OF EVIDENCE OF MARY LOUISE BOURKE

Dated: 5 March 2025

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Introduction

1. My name is Mary Louise Bourke. I am a trustee of the Henmar Trust.
2. I believe it is important that the Hearing Panel understands some of the background and history of the industrial zoning of land within the C10 Growth Cell. This will help to understand the implications of the proposed infrastructure provisions proposed in PC 14, especially the proposed changes to the Bardowie Structure Plan.
3. I will then briefly refer to some of the other key issues raised in the Henmar Trust submission and further submission and ask some questions that I hope the Hearing Panel will seek answers to in considering this plan change. Questions that I don't believe the Section 42A Report has adequately addressed.

Henmar Trust Property – Zig Zag Road

4. Henmar Trust owns approximately 183 hectares of land that is currently used for dairy farming purposes and is located to the north and south of Zig Zag Road, as highlighted red in the aerial photograph below.

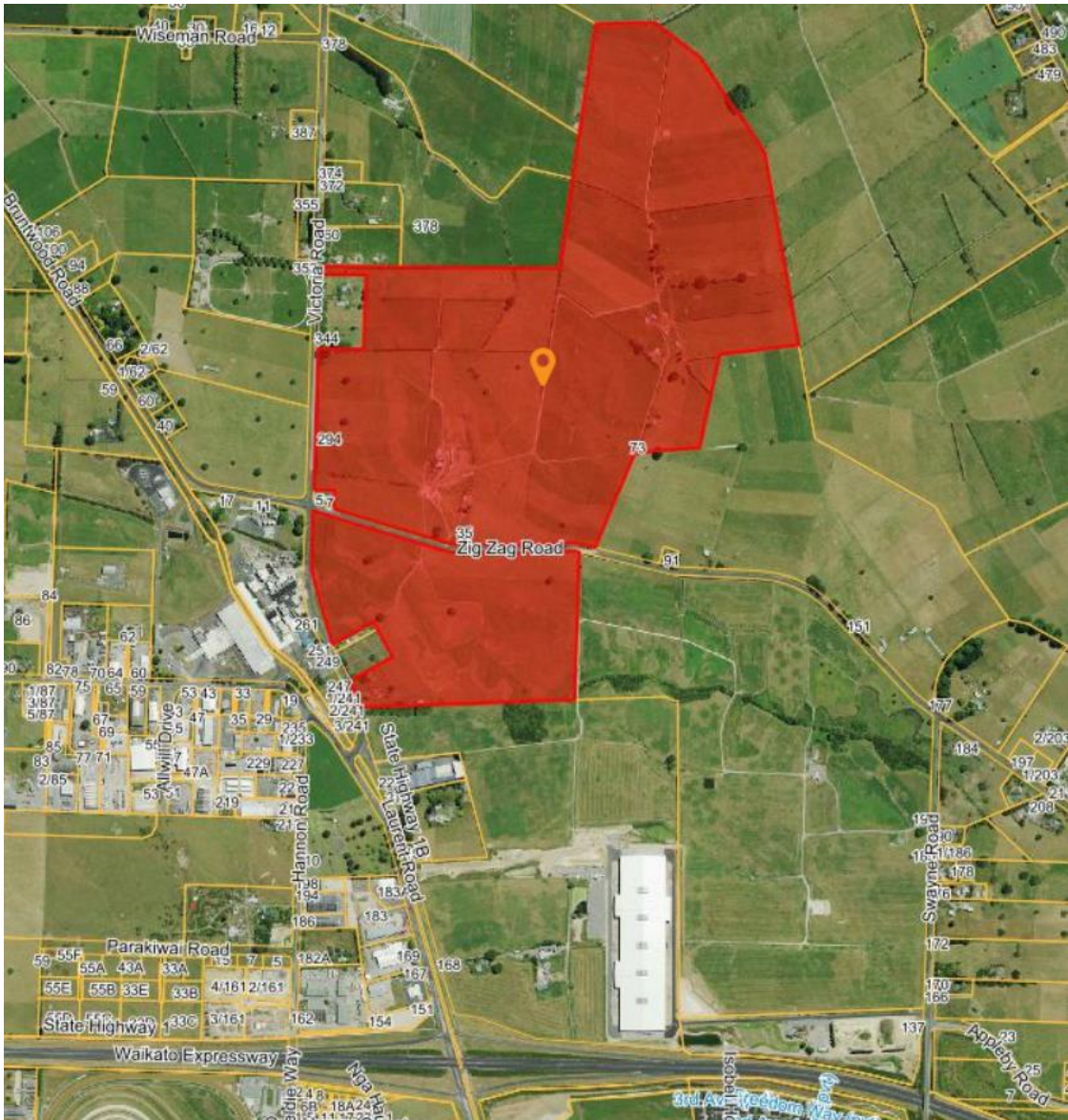


Figure 1: Aerial Photograph of Henmar Trust Land

Proposed Waipa District Plan Review 2012 – M L Bourke Submission

5. Many years ago, I lodged a submission on the Proposed Waipa District Plan 2012 requesting that the Henmar Trust land now located within Growth Cell C10 be rezoned to Deferred Industrial as this land was located within Future Industrial Growth Cell C8.
6. Council rejected this submission, and the land remained within the Rural Zone.

Plan Change 5 – Waipa 2050 Growth Strategy – Removal of Henmar Trust land from Growth Cell C8

7. Plan Change 5 was notified on 15 March 2018 and removed the Henmar Trust land from Growth Cell C8 and renamed it Growth Cell C10.
8. Council subsequently amended the proposed Growth Cell C10 to include all the land originally within Growth Cell C8. It is assumed that the logic for this was discussions with Bardowie Investments Limited regarding their impending Plan Change, PC11.

The Plan Change 11 process and outcome

9. The Henmar Trust was involved in the Plan Change 11 private plan change process that created the Bardowie Industrial Precinct and sought the reinstatement of Industrial Growth Cell C8, renaming it to C10.
10. During the PC 11 hearing, a request was made by the Henmar Trust to hold an immediate meeting with Council and Bardowie representatives in an attempt to resolve some of the submission issues raised by the Trust, as no pre-hearing meeting had been held.
11. The meeting resulted in a series of agreements that were recorded in writing. A copy of that agreement and a document outlining the amendments to the proposed Plan Change to reflect these agreements are attached as Appendix A to this evidence.
12. The primary benefit achieved by the Trust through that agreement was the commitment by Bardowie and the Council to providing a Collector Road with associated infrastructure services through the Bardowie land to meet the southern boundary of the Henmar Trust land, and a roundabout at the junction of the two Collector Roads.
13. In exchange for that outcome, the Henmar Trust relinquished other requests that it had made in its submission. The connectivity to the Bardowie property, including both roading and services, was important to the Henmar Trust and that was achieved through the agreement and through the resulting Bardowie Structure Plan.

Master planning process

14. Following the adoption of PC11, the Council has worked on a master plan for the C10 Growth Cell. At one of the Trust's meetings with council representatives in June 2019 a version of the master plan was presented to Henmar Trust representatives. At that meeting we noted that the proposed connection of the Collector road and services through the Bardowie land to the Henmar Trust property and the agreed roundabout had been removed. This was discussed and Wayne Allen, who had been present in negotiation of the PC 11 agreement at Appendix A, insisted that the connection was reinstated in that draft of the master plan.
15. Later in 2022 the agreed Collector road and services through the Bardowie land to the Henmar Trust property and the agreed roundabout were again removed from the draft master plan. We met with Council staff in November 2022 to discuss this issue and again Wayne Allen insisted that the connection was to be reinstated in the Master Plan.
16. The most recent draft of the master plan contains the roading layout plan that is attached as Appendix B to my evidence. It shows collector road and services connection through the Bardowie land to the southern boundary of the Henmar Trust land, the agreed round-a-bout, wastewater services through the Mangaone Precinct to the eastern boundary of the Henmar Trust land, and water services up to Zig Zag Road and along to the Henmar Trust boundary.
17. It was my understanding that this would be an overarching document that the individual Structure Plans would use as guidance to ensure that **ALL** land within C10 would be serviced and well connected.

Plan Change 14 – Henmar Trust Inclusion

18. During a recent discussion with Mr Skilton of Waipa District Council regarding the issues raised in the Henmar Trust submission, Mr Skilton explained to me that Henmar Trust had the opportunity to be part of PC14 and chose not to. This appears to be one justification for not requiring connectivity between the Henmar Trust property and the Mangaone Precinct, for taking away the connectivity with the Bardowie Precinct to the south, and for not protecting the rural/industrial interface along the boundary with the Mangaone Precinct.

19. All the landowners within Growth Cell C10, including Henmar Trust, were invited to financially contribute to PC14 in exchange for their land being included within the proposed plan change.
20. We had no exact figure of what the cost would be, but the indication was that it would be in the \$100,000's.
21. At a meeting with Council staff, Fonterra representatives, and Bardowie Investments Ltd representative it was clear that Fonterra would be the architect of the Plan Change and that our contribution/input into the process would be merely financial.
22. We were advised that if we did not like what was proposed on the Henmar Trust land we would have the opportunity to submit on it as a submitter once the Plan Change was adopted by Council and notified as a Council Plan Change.
23. As identified in the legal submissions for Fonterra, the close relationship between Fonterra and Council is evident in the close alignment between the Council Officer's S42A Report recommendations and Fonterra's position.
24. The disparity in the roles of the landowners, Fonterra vs Henmar Trust, was obvious so financially investing in PC14, with a role as a minor party, was not considered a desirable option for Henmar Trust. There was no way that Henmar Trust's position would be given equal consideration to that of Fonterra, who has an existing close relationship with Council, and who was already selecting the experts to prepare PC14.

Henmar Trust Submissions

25. Henmar Trust lodged a submission, and a further submission in relation to PPC14. The Henmar Trust submissions sought relief that would provide for;
 - (i) connectivity of roads and services to the Henmar Trust Property to allow for the future development of Growth Cell C10;
 - (ii) protection of the Rural environment while the property is zoned Rural and until such time as it is re-zoned to Industrial; and

- (iii) That Section 4, 7 Survey Office Plan 499872 comprised in Record of Title 811702 and Section 1 Survey Office Plan 499872 comprised in Record of Title 805561 (the Kiwifruit Block) be excluded from the Plan Change, or the Technical Reports be updated to include the future Industrial Development of the “Kiwifruit Block”, with submitters having a further opportunity to submit on this aspect of the proposed plan change.
26. Council staff did not approach Henmar Trust to discuss any of the submissions points with them and the Section42A Report rejected almost all of Hemar Trust’s submission points.

PC14 – Bardowie Industrial Precinct Structure Plan

27. The trustees of the Henmar Trust are concerned that the formed road and the inground services will not be taken to the Henmar Trust boundary as per that agreement, but will be stopped before the Henmar Trust boundary, and that the agreed Collector Road status of that road and inground services and the agreed roundabout will be removed as part of this Plan Change.
28. As outlined in document attached as part of Appendix A, the issues agreed relating to Infrastructure – Roading were reflected on Page 55 of the proposed amendments (this created S19.2.22 of the Bardowie Industrial Precinct Design Guidelines) and the Structure Plan itself. S19.2.22 does not refer to the agreed Collector Road or roundabout and therefore the Structure Plan diagram itself is the only record of this agreement within the District Plan. Therefore, the proposed amendments to the Bardowie Industrial Structure Plan promoted by PC14 undermine this agreement.
29. It has been explained to me, my daughter and our legal counsel by Mr Skilton of Waipa District Council that the essential proposed change to the Bardowie Structure Plan is to remove the Collector Road status of the proposed connection to the Henmar Trust’s southern boundary and to remove any requirement for the in-road services to be extended to the Henmar Trust’s southern boundary.
30. Mr Skilton has since advised via email to our legal counsel that it is Council practice as part of subdivision to require roads and services to be installed to the boundary of adjoining land.

31. This confusion by Senior Planning Staff emphasises the need for the Collector Road and provision of services to the boundary of the Henmar Trust property to remain on the Structure Plan as agreed and **not** be open to staff or consultant interpretation.
32. Question: Why have Council through PC14 reneged on their agreement with Henmar Trust and supported the removal of the agreed Collector Road and services and the agreed roundabout?

PC14 – Mangaone Industrial Precinct Structure Plan

33. The Waipa District Plan recognises that planned and integrated management is essential to the sustainable management of natural and physical resources. As illustrated in the extracts from the District Plan below.

<p>Section 15 - Infrastructure, Hazards, Development and Subdivision</p> <hr/>	
<p>15.1 Introduction</p>	
<p>15.1.1</p>	<p>How and where development and subdivision occurs is critical to the sustainable management of the District's natural and physical resources. This section of the Plan focuses on how development and subdivision will occur. The Strategic Growth section of the Plan provides direction on the location of growth. It must be remembered that every decision made on development and subdivision applications is crucial as it affects the efficient use of land and the efficient management of infrastructure required to service the development.</p>
<p>15.1.2</p>	<p>Planned and integrated development and subdivision will make the best use of the land resource. This Plan anticipates this outcome will be achieved by development occurring in planned locations and in an integrated manner. In key locations, this is to be achieved through the use of structure plans and comprehensive development plans. Each activity will need to occur on a site that is suitable for the intended use, taking account of hazards, flooding, climate change, servicing requirements, location of existing infrastructure and the need for a sustainable design and layout.</p>

Figure 2: Extract from Waipa District Plan

34. This concept of connectivity flows through to the objectives and policies as seen below;

Objective 1.3.2 Planning and integrated development

To ensure that development and subdivision happens in a way and at a rate that is consistent with the anticipated settlement pattern, maximises the efficient use of zoned and serviced land, and is co-ordinated with cost-effective infrastructure provision.

Policy 1.3.2.5 Avoid development and subdivision that compromises the development of Deferred Zones and future growth areas

To ensure that development and subdivision within Deferred Zones and future growth areas does not compromise anticipated future uses.

Objective 15.3.3 Integrated development: efficient servicing

“Achieving the efficient and cost effective servicing of land by ensuring that servicing is provided to areas proposed to be developed.”

Policy 15.3.3.1

“All proposed urban development and subdivision shall be serviced to a level that will provide for the anticipated activities approved in a structure plan, or otherwise anticipated within the zone. Servicing requirements shall include:

- (a) Reserves for community, active and passive recreation; and*
- (b) Pedestrian and cycle connections; and*
- (c) Roads; and*
- (d) Public transport infrastructure, e.g. bus stops; and*
- (e) Telecommunications; and*
- (f) Electricity; and*
- (g) Stormwater collection, treatment and disposal; and*
- (h) Wastewater treatment and reticulation, water provision for domestic and fire fighting purposes; and*
- (i) Anticipating and providing for connections to identified adjacent future growth areas.”*

Policy 15.3.3.4 Roading Infrastructure

“The roading pattern shall ensure connectivity to adjacent land identified as Deferred Zones or future growth areas, and the provision of public transport infrastructure, such as bus stops.”

Policy 15.3.3.5 Standard of Infrastructure

“Infrastructure services shall be provided to a standard that will allow the service to be extended to Deferred Zones or future growth areas.”

35. The Section 42A Hearing Report prepared by Waipa District Council in relation to PC11 that created the Bardowie Industrial Precinct considered it appropriate to require

appropriate provision for road and service corridors to adjoining landholdings and that this should be achieved through the Structure Plan process. Please see extract below from the Waipa Section 42A Hearing Report for PC11.

36. Section 5.6.6 of the S42A Report for PC11 stated;

“The submissions from the Henmar Trust are accepted in part although the full relief sought is not supported. This matter is discussed further in Section 12 of this report including recommendations on the Structure Plan. It is considered that appropriate provision for road and service corridors to adjoining landholdings is required and that this can be achieved by way of the Structure Plan including some additions and amendments to the timing of vesting for these corridors.”

37. The proposed Mangaone Precinct is located within Industrial Growth Cell C10. The provision for roading and service connectivity to the remainder of Growth Cell C10 through the preparation of PC14 is in my view inadequate.

38. Road and service connectivity is essential to the successful future development of Growth Cell C10.

39. The servicing of the whole of Growth Cell C10 needs to be taken into consideration and accounted for at the time of negotiating and preparing the Development Agreement between Council and the developer to specify all those items of infrastructure that are required to be upgraded at full or partial cost of the developer. This view was supported by Council when assessing PC11.

40. Paragraph 1 of the Report prepared by Bryan Hudson (Road Corridor Manager, Waipa District Council at the time), dated 18 October 2018 and attached as part of Appendix 2 of the Section 42A Hearing Report for PC11, supports this. Paragraph 1 reads as follows;

“... This report discusses the suitability of the proposed connections and new intersections. The BIL transportation structure plan provides only for the BIL development area and further development of the C10 industrial zone would require further new connections and upgrades to roads such as Swayne, Zig Zag and Victoria Roads. The BIL structure plan needs to allow for connections to and through the remainder of the C10 cell.”

41. Additionally, an email from Mr Bax (Acting Infrastructure Development Manager, Waipa District Council at the time), to Matt Smith dated 25 October 2018 regarding services to the land to the north and east of PPC11 also supports the need for connectivity. The email was forwarded to me by Mark Chrisp and reads as follows;

“ ... The BIL team have done a good first cut on servicing the area, but we need to ensure that whatever is built considers how the land to the north up to Zig Zag Road, and to the east up to Swayne Road is also serviced.

As a result of this staff, have agreed to a proposal from McCaffrey Engineering Consultants Ltd to next month commence a high level study and report on how these areas will be serviced, and this will flow onto the sizing of infrastructure within the PC11 cell. The work is expected to be completed by March 2019.”

42. PC14 provides for full connectivity to the west with the Bardowie Precinct, yet they have turned their back on the Henmar Trust property, providing no connectivity, and ignored the C10 Master Plan.

43. PC14 Section 42A Report states that;

4.6.6 Henmar Trust (9/41) have requested an amendment to Rule 15.4.2.91A(d) to include provision of roading and service connections from both the Mangaone Precinct Structure Plan Area to the north of the Mangaone Stream, and from the Bardowie Industrial Precinct Area to their adjoining land. As noted above, the Mangaone Precinct Structure Plan Area is not proposed to have connections to the Henmar Trust property, therefore this requested amendment is not appropriate. It is considered that the Henmar Trust land has sufficient frontage to Zig Zag Road to enable vehicle access to be provided at some future point in time. It is not necessary for road access links to be provided through Fonterra land for the benefit of Henmar Trust

4.13.10 With regard to a connection to the Mangaone Precinct Structure Plan, the submitter is correct that no roading or service connections to the Henmar Trust land is proposed. The application notes this has not been provided due to opportunities for access available from this property to both Zig Zag Road and the connection through to the Bardowie Industrial Precinct Structure Plan area. Council’s Roothing Team have reviewed the proposed roading network and agree with the applications assessment, noting that if a connection was provided this would result in traffic potentially back-tracking to get onto Zig Zag Road. Council staff therefore recommend these submission points be rejected.

Figure 3: Extracts from PC14 S42A Report

44. There is no guarantee ***when or if*** Henmar Trust will ever gain access from the south, and this is not considered to be a valid reason.
45. Although Henmar Trust can gain vehicle access from Zig Zag Road, none of the other services necessary for Industrial development such as water and wastewater are available on Zig Zag Road. These services stop within the proposed Mangaone Precinct, preventing the Henmar Trust property from ever being able to connect to them.
46. As a minimum, all services other than roading should be provided to the Henmar Trust property boundary and a delivery table should be included in the District Plan similar to that recommended for Roading in the Section 42A Report.
47. It is clear from the Masterplan that Council commissioned from McCaffery Engineering that services were to flow freely throughout the Growth Cell, not to be hoarded within gated Industrial Precincts to prevent neighbouring land from developing.
48. Even the recently approved Hautapu Structure Plan provides traffic and service connectivity to Area 7, a new deferred Industrial Zone, that has never been identified for Industrial development before and was not located within a Growth Cell.
49. It is not unusual for developers to try and prevent adjoining properties from developing, but it is Council's duty to manage natural and physical resources in a sustainable manner and that means ensuring connectivity in greenfield developments.
50. Below are the PC11 Structure Plans as originally notified and as adopted into the District Plan. You will see that the original Structure Plan also provided no connectivity to the Henmar Trust property. However, Council required them to provide connectivity, and the plan was amended to show transport and service connectivity with the Henmar Trust property.
51. Below is the Bardowie Industrial Structure Plan as originally notified;

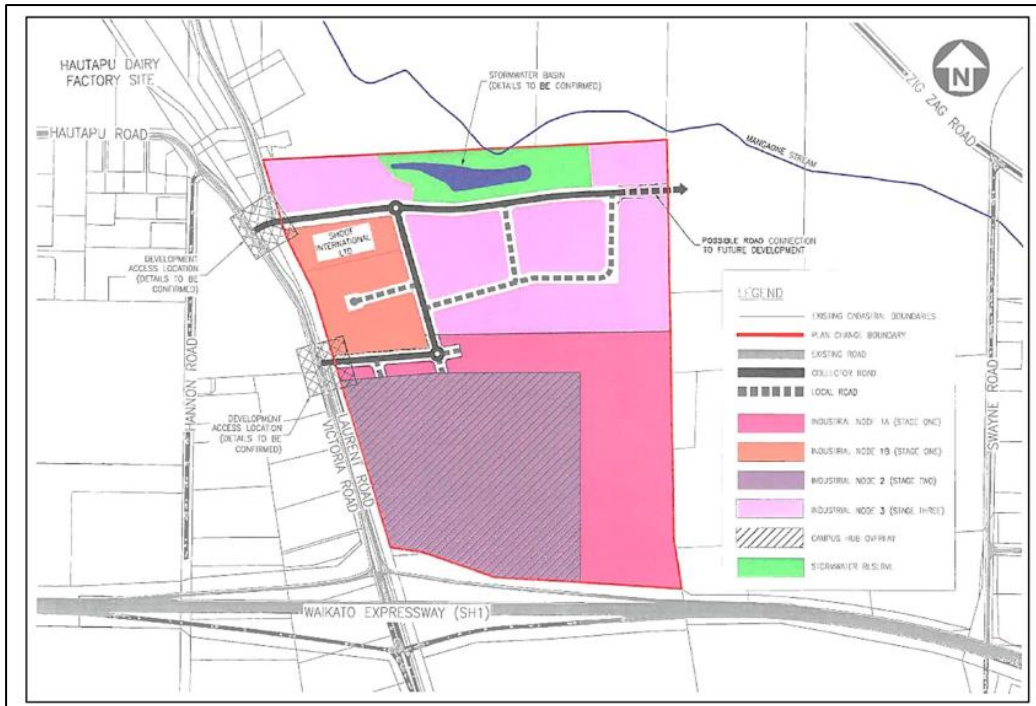


Figure 4: PC11 – Bardowie Industrial Structure Plan as originally notified

52. Below is the amended Bardowie Industrial Structure Plan that was adopted into the Waipa District Plan by PC11. This Plan was amended to provide connectivity to the Henmar Trust property.

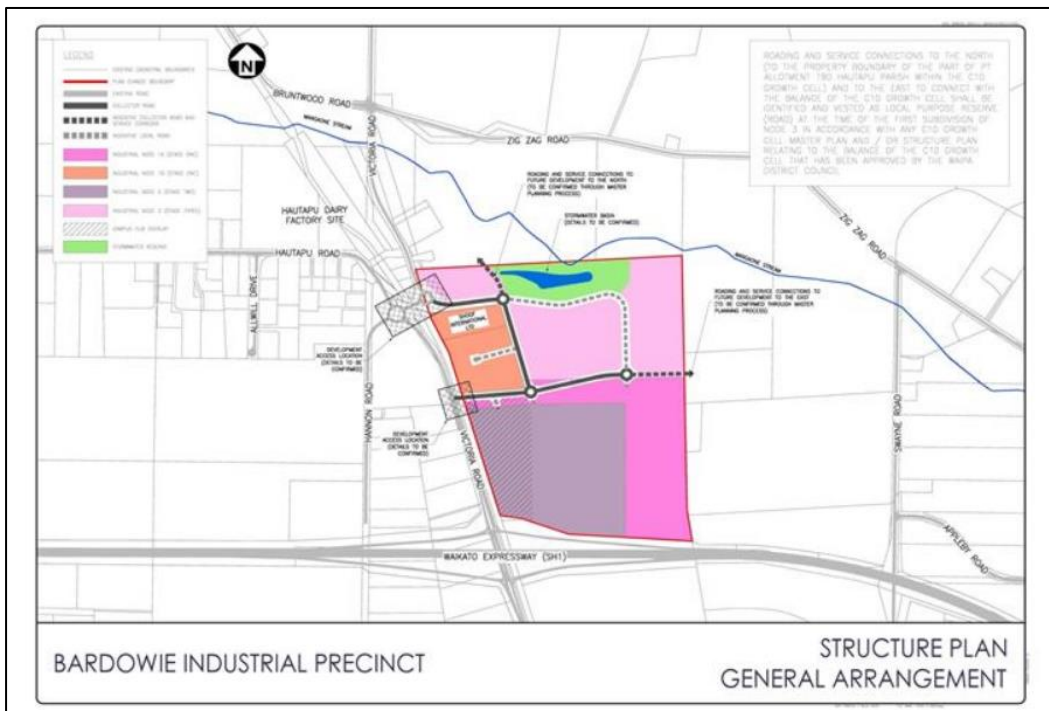


Figure 5: PC11 – Amended Bardowie Industrial Structure Plan adopted into the Waipa District Plan

53. Question: How can the proposed Mangaone Structure Plan be supported when it turns it back on the C10 Growth Cell north of the Mangaone Stream and withholds access to services, keeping them within the Mangaone Precinct property boundaries and solely within their control?
54. Question: How can the Mangaone Precinct Structure Plan as currently presented be considered to be an efficient use of land and an efficient management of infrastructure required to service the C10 Industrial Growth Cell?
55. Question: Why has Council supported a Structure Plan that does not align with the Master Plan or with the District Plan?

Rural Amenity – Performance Standards

56. The preparation of PC14 has provided a higher level of amenity protection for neighbours and motorists where the industrial land adjoins Zig Zag and Swayne Roads, however it has not applied the same approach where it adjoins the Rural Zone.
57. Although part of the Henmar Trust property is located within C10 this does not guarantee that it will remain in that Cell, or will ever be rezoned or the timing of rezoning if that does occur.
58. Council's intention for this land to remain rural is evident by the S42A supporting **NO** connectivity between the Henmar Trust land and the adjoining Mangaone Precinct, and taking away any guarantee of connectivity with the adjoining Bardowie Industrial Precinct. This leaves the block of rural Henmar Trust land isolated within C10.
59. The Henmar Trust land has been a buffer for the Fonterra Dairy Factory at Hautapu for 100 years and must not be a buffer for the Mangaone Precinct, particularly as this would be contrary to the purpose of the RMA 1991 and the Waipa District Plan.
60. Section 7.1.4 of the Waipa District Plan states;

“Industries and industrial areas have, by their nature, a different level of effect than other zones. Industrial areas generally have higher levels of noise, site coverage, and a reduced amount of on-site amenity. While it is important to not unduly restrict how industries develop their sites, a balance is required where industries

adjoin strategic roads and other zones; therefore in these locations, a higher level of amenity is anticipated.”

61. As stated in the District Plan a balance is required where industries adjoin strategic roads and other zones and that in these areas a higher level of amenity is anticipated. This flows through into the Objectives and Policies of the District Plan, in particular Objective 7.3.3 Amenity values: effects on adjoining sites and areas and Policy 7.3.3.2 Protect Amenity of Surrounding Areas.
62. The amenity rules proposed in the Section 42A Report do not manage actual or potential adverse effects on people, buildings, and activities beyond the Industrial Zone and fail to protect the rural interface. The proposed rules are contrary to the existing objectives and policies of the District Plan.
63. The Henmar Trust have five existing residential dwellings within close proximity of the proposed Industrial Precinct that have been given no regard to. The closest being approximately 300 metres, then 360 metres and then the remaining three dwellings approximately 500 metres away from the proposed Industrial Area. Furthermore, the Henmar Trust can establish a dwelling 15 metres from the existing boundary with the Mangaone Industrial Precinct, much closer than any of the existing dwellings on Swayne or Zig Zag Road, yet the proposed rules fails to protect this boundary.
64. The current bulk and location rules along the Rural/Industrial interface in PC14 require a 5 metres setback, with 3 metre landscaping with a 2 metre high hedge, a height in relation to boundary standard of 2 metres and 45 degrees and a maximum height of 20 metres.
65. These bulk and location rules are inconsistent with and significantly less stringent than that used in other Industrial Precincts in the Waipa District, particularly the Hautapu Industrial Precinct.
66. Council recently approved PC17 which created the live zoning of Industrial land (Area 6) and rezoned land Deferred Industrial (Area 7) within the Hautapu Industrial Precinct, approximately 150 metres to the west of C10. See below.

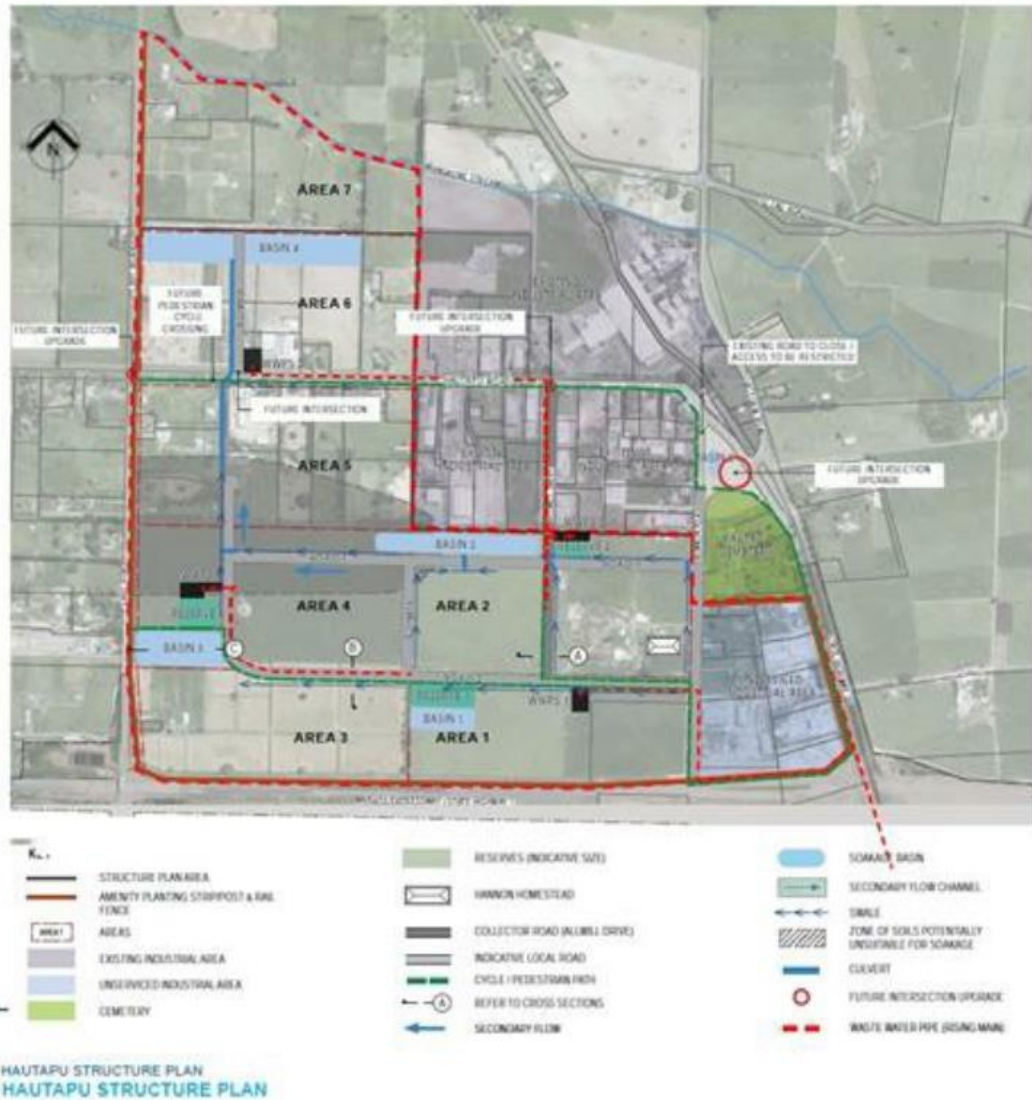


Figure 6: Hautapu Industrial Structure Plan recently adopted by Council

67. The layout of Area 6 was substantially altered to provide connectivity to Area 7 and the stormwater ponds were relocated to mitigate some of the Industrial effects on the land within the Deferred Industrial Zone (area 7). Additionally, a 15-metre setback is required by Rule 7.4.2.2 of the District Plan.

Rule - Minimum building setback from internal boundaries

- 7.4.2.2 The minimum building setback from internal site boundaries that adjoin any zone other than the Industrial Zone shall be 5m, except in the following locations:
- a. Bond Road North Industrial Structure Plan Area - The minimum setbacks from internal site boundaries that adjoin any zone other than the Industrial Zone shall be those as defined on the Landscape Concept Plan within the Bond Road North Industrial Structure Plan Area refer Appendix S12.
 - b. Hautapu 'Area 6' - The minimum setbacks from the Rural Zone boundary shall be 15m.

Provided that no building or eave shall encroach into any access, driveway, or other vehicle entrance.

Activities that fail to comply with this rule will require a resource consent for a discretionary activity.

Figure 7: Rule 7.4.2.2 of the Waipa District Plan

68. The S42A Report for PC17 states that the combination of the relocated stormwater ponds and the required 15-metre setback would provide a buffer of approximately 75m between the area to be live zoned Industrial and the Deferred Industrial Zone. The reasoning for this was the effect rural character and on livestock, in that instance horses, and meeting the requirements of Part 2 of the RMA to consider the effects on the wellbeing of the adjoining landowners.
69. The Deferred Industrial land within this precinct was rezoned from Rural Zone as a result of a submission by the landowners.
70. The Henmar Trust land that adjoins the Mangaone Precinct is part of a working dairy unit and rural character is essential to this use. As part of the dairy activity, livestock including bulls are being grazed on this land. Bulls and cows are sensitive to the effects of Industrial activities, e.g. noise, light, glare etc.
71. Henmar Trust have workers who are required to work with these animals on this boundary and Henmar Trust are required to provide a safe work environment.
72. It is maintained that the proposed 5 metre setback does not avoid, remedy or mitigate these actual or potential adverse effects of the proposed rezoning on the wellbeing of Henmar Trust.
73. The S42A Report for PC17 refers to the 5 metre setback with the Bardowie Precinct as a justification for the proposed 5 metre setback.

74. The S42A Report for PC11 Bardowie Industrial Precinct, recommended a 10-metre building setback from the boundary with the Henmar Trust property. This was reduced to 5 metres as one of the concessions Henmar Trust made in exchange for guaranteed connectivity from the south via the agreed collector road and round-a-about. As outlined in the Bardowie Industrial Precinct Guidelines the whole of this 5 metres setback is to be landscaped, not merely 3 metres as recommended in the S42A Report for PC14. Therefore, in reality it is likely that the setback would be more than the required 5 metres to provide for the landscaping and building maintenance.
75. Furthermore, this was a unique situation since the Master Plan layout for the Bardowie Precinct created an Industrial site where it would have been difficult to establish a 20m high building. That particular site, to the south of Henmar, has a height restriction from Victoria Road and would have to comply with the height in relation to the boundary from the Henmar Trust boundary, the boundary with the collector road connecting to Henmar and the collector road running west east. Therefore, the large-scale Industrial potential of that site, where it adjoins Henmar Trust land, was extremely limited.
76. Additionally, a large section of the boundary between Henmar and Bardowie Precinct is occupied by their stormwater reserve and wetland, similar to that required for Area 6 in PC17.
77. Question: Why has Council required a 75 metre setback between Area 6 (within Industrial zone) and Area 7 (Deferred Industrial zone, with underlying zoning of Rural) in the Hautapu Industrial Precinct and merely a 5 metre setback between the Magaone Precinct (Industrial zone) and the Henmar Trust land (zoned Rural, located within C10)?
78. Question: Why should the Henmar Trust land not be provided with the same rural amenity protection being enjoyed by Area 7 of the Hautapu Industrial Precinct?

Rural Amenity – Character and Visual Amenity

79. None of the proposed rules protecting the character and visual amenity of the local environment, such as building colours, glare, lighting etc. have been extended to include the industrial/rural interface with the Henmar Trust property.

80. Question: Why has Council failed to protect or enhance the rural amenity of industrial/rural interface with the Henmar Trust land and the wellbeing of the Henmar Trust occupiers?

Rural Amenity – Activity Status

81. Henmar Trust submission seeks the addition of several industrial activities to have non-complying activity status. The S42A report states that this is not necessary as any activity not provided for as a Permitted, Restricted Discretionary or Discretionary Activity defaults to a Non-Complying Activity.
82. However, PC14 amends the rules so that “Industrial Activities” are not a Permitted Activity in the Mangaone or Bardowie Precincts and instead provides for “Dry Industries” as a permitted activity.
83. The definition of “Industrial Activities” specifically excludes Mineral Extraction Activities.
84. The definition of “Dry Industries” is so vague that it includes any industrial operation that doesn’t use Council’s water or wastewater systems and is self-sufficient.
85. Furthermore, there is **NO** definition of “Industrial Operation” in the District Plan, further complicating the issue.
86. Therefore, it is maintained that the activities that Henmar Trust sought to have categorised as Non-Complying could in fact be deemed to be Permitted Activities, provided they do not use Council’s water or wastewater systems. It could also be argued that Mineral Extraction Activities could potentially fall within the definition of “Dry Industries”.
87. How does providing for a vague activity, where the definition includes undefined terms, meet the requirements of the RMA and protect and enhance the Mangaone Precinct itself and the surrounding environment?

Stormwater & Flooding – Henmar Trust Property

88. The Waikato Regional Council Best Practice Guide states;

“Stormwater management, when it is provided, is often only considered at the end of the site design process. Because of this poor planning approach, site design almost always provides less than desirable outcome.

For stormwater management objectives to be achieved, stormwater must be incorporated into site design from the outset and integrated into conceptual site planning, just as traffic considerations are. Stormwater impacts may, in some situations, even be a factor in determining the type and extent of land use that is intended at a site.”.

89. The Mangaone Stream runs through the Henmar Trust property and often ponds within the area adjacent to Victoria Road, as the culvert size has been restricted by the controlling authorities to prevent downstream flooding, flooding the Henmar Trust property instead.
90. In this regard, it is imperative that any development upstream of the Henmar Trust property controls their stormwater runoff within their boundaries so that it does not exceed pre-development levels, to avoid further adverse flooding effects on the Henmar Trust property. This is a highly sensitive environment due to the Victoria Road culvert being designed to flood the Henmar Trust property rather than downstream properties, the high water table of the C10 area, and lack of protection from upstream flooding. The Henmar Trust land is C10 will one day be built on and these future buildings and structures will need to be protected from upstream stormwater effects, including flooding.
91. The Stormwater Management Plan prepared by Harrison Grierson dated 12 April 2024 (Stormwater Plan) illustrates an increase in downstream flooding on the Henmar Trust property from development on the Mangaone Precinct alone.
92. This Stormwater Plan states;

“Aside from the culvert along Victoria Road, all other culverts further downstream area observed to experience a decrease in flood levels. In these locations, the decrease in flood levels is more pronounced in the more frequent storm events (10% and 50% AEP).

As previously discussed, red values indicate a small increase in flood depth at the upstream end of Victoria Road culvert and does not propagate to the downstream

floodplan. The slight increase in flood depth is also mitigated by the lower flood level further downstream near the culvers along the railway.”

93. The flooding effects on Henmar Trust land as a result of PC14 are **NOT** mitigated by reductions in flooding downstream.
94. The Stormwater Plan also states that *“The southwest corner of the PC14 Structure Plan is within another subcatchment that drains into the Mangaone Stream approximately 500 metres downstream from Victoria Road.”*
95. It is not clear where this discharge point is. I sought clarification from Mr Skilton who didn't know and advised that I contact the author of the report. I emailed the author of the report and had no response. One indication given to us is that the discharge is actually upstream of Victoria Road, which is within the same subcatchment as the Henmar Trust land.
96. Question: Where is the discharge point? Has this been factored into the stormwater calculations?
97. The Master Plan prepared by McCaffery Engineering Consultants Ltd (attached as Appendix B), clearly illustrates that the stormwater from the Kiwifruit Block comes down the swale along the eastern boundary of the Bardowie Precinct to the stormwater pond that is located on Henmar's southern boundary and then enters the Mangaone Stream at that point.
98. The PC14 technical reports, including the Stormwater Plan, **DO NOT** include the Kiwifruit block, and therefore have not considered the stormwater effects of this land being live zoned Industrial.
99. The Section 42A Report states that the Kiwifruit Block contains existing Industrial activities. This may be true, but this currently includes a stormwater retention pond and very little impervious surface. Therefore, I am not convinced that the existing resource consent applications adequately assessed the downstream stormwater effects of this 15 acre property being live zoned to Industrial where there is no limit on site coverage.

100. Question: How can Council determine whether the Kiwifruit Block is appropriate to be live zoned to “Industrial” with no technical report to consider the downstream stormwater effects of rezoning this approximately 7.5ha property?
101. Another issue of concern is the provision for fish passage. Allowing for fish passage often requires greater flow of water.
102. Question: Has fish passage this been accounted for in the Technical Reports? If not, how has the technical report accurately assessed the potential downstream flooding effects on the Henmar Trust property as fish passage is a legislative requirement and cannot be ignored?
103. It is maintained that to assess the downstream flooding effects on the Henmar Trust property the technical reports need to include;
- the effect of the Kiwifruit block being rezoned to live Industrial and all the Industrial activities that will be able to be undertaken on that land, not just the activities that currently have resource consent; and
 - the effect of the existing Bardowie Industrial Precinct discharge consent; and
 - any increase in stormwater flow to cater for fish passage; and
 - **NO** increase in flooding on the Henmar Trust property.
104. Question: Why would the Council consider it appropriate to rezone to Industrial land that they know creates downstream flooding within the Henmar Trust property, and will receive worse flooding after industrial development?
105. Question: Why did Council request that the Kiwifruit Block be added to the PC14 with **NO** stormwater assessment?
106. It is requested that the Mangaone Precinct Area and the Kiwifruit Block are required to manage stormwater in a manner than results in **NO** increase in flooding on the Henmar Trust property. The Mangaone Precinct and the Kiwifruit Block have sufficient size to provide sufficient on-site retention ponds to ensure that any stormwater runoff into the Henmar Trust property is no more than pre-development levels.
107. The Henmar Trust land is part of a working dairy unit, that will one-day be developed for Industrial activities, not a stormwater basin for the Mangaone Precinct or the Kiwifruit Block.

Traffic Effects & Zig Zag Road Upgrades

108. The upgrades to Zig Zag Road should be required as soon as any activity within the Mangaone Precinct and/or the Kiwifruit Block generate traffic.
109. Limiting these upgrades to subdivision does not address effects. This is evident with the Bardowie Industrial Precinct. Although no subdivision has taken place, large trucks and trailers have been using the Kiwifruit Block's heavy vehicle entrance onto Swayne Road and then travelling down Zig Zag Road to access the Expressway via the Hautapu Interchange. Although the Bardowie Industrial Precinct has yet to be subject to a subdivision it has created significant traffic effects on the local environment for many years.
110. Limiting these upgrades to activities being reliant on the Zig Zag Road access is naïve. To think that 12 tonne trucks using the Swayne Road access won't then go down Zig Zag Road to access the Hautapu Interchange is unrealistic. The only other route would be to go through Cambridge North Residential Area. Additionally, how do you define "reliant"?
111. It is a very real probability that the proposed east-west connector road and the Zig Zag Road access may not be built for many years, with the Swayne Road access being built to provide an Industrial access to the Precinct and then use the existing local roading network, as APL have, with making no contribution to upgrading the existing local roading network.
112. The latest C10 Master Plan we were emailed showed the Mangaone Precinct having a connection into the Kiwifruit Block gaining access to the Kiwifruit Block's existing heavy vehicle entrance on Swayne Road.
113. Question: Has Council considered the traffic effects of 12 tonne trucks using the Swayne Road access prior to the east west collector road or Zig Zag Road accesses being created?
114. Question: Has Council considered the traffic effects of the existing heavy vehicle entrance from the Kiwifruit Block and whether the proposed Mangaone Precinct may connect through to this access in the future?

115. Question: Why did Council request that the Kiwifruit Block be included in PC14 with **NO** traffic assessment?

Conclusion

116. It is requested that the Hearing Panel read the Henmar Trust submission and further submission and adopt the relief sought by the Henmar Trust.

117. It is requested that the Hearing Panel consider the questions I have raised.

118. In the absence of a pre-hearing meeting, the Henmar Trust are open to a meeting to work through the many issues to see if some if not all of these issues can be resolved at this stage of the planning process.


Dated: 5 March 2025

Mary Bourke, Trustee of the Henmar Trust

HEARING MEETING

20 November 2018 – 9am

Wayne Allan, Todd Whittaker, Richard Bax, Bryan Hudson, Matt Smith, Mark Chrisp, Abbie Fowler, Louise Bourke, Mary Bourke

Handwritten notes:

 L.R.B. M.H.P.

Issue / Topic	Agreement
Infrastructure - Roading	<ul style="list-style-type: none"> Put in a roundabout with a collector road in black dotted line (same as eastern connection) to the boundary of the Henmar Trust property to the north. Roading and services to be included in the text – text on Structure Plan and the text of the Structure Plan. Waipa District Council prefer the Henmar Trust land (within the C10 Growth Cell) is serviced from the BIL land, not directly off Victoria Road – subject to a Master Plan. Take “possible” out from text on the SP Legend needs to be updated <p>“Roading and service connections to the north (to the property boundary of the part of Pt Allotment 190 Hautapu Parish within the C10 Growth Cell) and the east to connect with the balance of the C10 Growth Cell shall be identified and vested as roads at the time of the first subdivision of Node 3 in accordance with any C10 Growth Cell Master Plan and/or Structure Plan relating to the balance of the C10 Growth Cell that has been approved by the Waipa District Council”</p>
Infrastructure - Stormwater	<ul style="list-style-type: none"> Henmar Trust does not want to be adversely affected by the PC11 development. Hydraulic neutrality will be achieved. Requirement for regional consent, which will control any downstream effects. Waipa District Council has peer reviewed BIL proposal and is comfortable with the approach.
Infrastructure - Electricity and Telecommunication Lines	<ul style="list-style-type: none"> All new powerlines to be underground - and existing lines will be underground at the time of development in the respective Node (the lines that BIL has access to). Telecommunication lines to be treated in the same manner.



J. MHP, Z.R.B. of


Issue / Topic	Agreement
Permitted Activity Rule – Stormwater Ponds and / or facilities	<ul style="list-style-type: none">• No change
Permitted Activity Rule - Water Treatment Facilities	<ul style="list-style-type: none">• Delete reference to water treatment facilities from the PA rule.
Permitted Activity Rule - Spray Irrigation	<ul style="list-style-type: none">• Insert into the Rule “until 31 March 2024”
Permitted Activity Rule - Farming Activities	<ul style="list-style-type: none">• No change
Innovation and Advance Technology Activities	<ul style="list-style-type: none">• No change
Air Discharge	<ul style="list-style-type: none">• No change
Building setbacks and landscaping	<ul style="list-style-type: none">• Issue is confined to the common boundary of the Henmar Trust / BIL property• Agreed - 5 metre setback which to be landscaped.
Height	<ul style="list-style-type: none">• Issue is confined to the common boundary of the Henmar Trust / BIL property• No change
Noise	<ul style="list-style-type: none">• No change




L.R.B. MGS J

Issue / Topic	Agreement
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	<ul style="list-style-type: none"> • Reflectivity – 4.11 – remove the word “significant”. • No change to 2.16 or 5.3. • 4.5 - delete “(particularly in Node 3)”.
Design Guidelines	<ul style="list-style-type: none"> • 4.21 – Add “Solar panels shall be integrated into the design of the building and not deviate more than 15 degrees from the angle of the roofline on which they are located.” • 5.3 - Insert “screening shall not include building materials” • 7.10 – Delete “and small-scale wind generation.”

 M. CHRISP for B/L.

 M. Smith for B/L

M.L. Bourke. MARY LOUISE BOURKE.
(TRUSTEE HENMAN TRUST.)

L.R. Bourke. Louise Bourke, Henman Trust

 Wayne Allan; Dep. Dist. Council



HEARING MEETING

20 November 2018 – 9am

Wayne Allen, Todd Whittaker, Richard Bax, Bryan Hudson, Matt Smith, Mark Chrisp, Abbie Fowler, Louise Bourke, Mary Bourke

Issue / Topic	Agreement	PC11 Page Number
Infrastructure - Roading	<ul style="list-style-type: none"> • Put in a roundabout with a black dotted line (same as eastern connection) to the north. • Roading and services to be included in the text – text on Structure Plan and the text of the structure Plan. • Waipa District Council prefer the Henmar Trust land is serviced from a roading perspective from the road in the BIL land – subject to a Master Plan. • Take “possible” out from text on the SP • Legend needs to be updated <p>“Roading and service connections to the north (to the property boundary of the part of Pt Allotment 190 Hautapu Parish within the C10 Growth Cell) and the east to connect with the balance of the C10 Growth Cell shall be identified and vested as roads at the time of the first subdivision of Node 3 in accordance with any C10 Growth Cell Master Plan and/or Structure Plan relating to the balance of the C10 Growth Cell that has been approved by the Waipa District Council”</p>	Page 55 and Structure Plan
Infrastructure - Stormwater	<ul style="list-style-type: none"> • Hydraulic neutrality will be achieved. • Requirement for regional consent, which will affect downstream effects. • Waipa District Council has peer reviewed and are comfortable with the approach. • Henmar Trust does not want to be adversely affected by the PC11 development. 	N/A
Infrastructure - Electricity and Telecommunication Lines	<ul style="list-style-type: none"> • All new powerlines to be underground - and existing lines will be underground at the time of development in the respective Node (the lines that BIL has access to). • Telecommunication lines to be treated in the same manner. 	Page 55



Issue / Topic	Agreement	PC11 Page Number
Permitted Activity Rule – Stormwater Ponds and / or facilities	<ul style="list-style-type: none"> No change 	Page 14
Permitted Activity Rule - Water Treatment Facilities	<ul style="list-style-type: none"> Delete reference to water treatment facilities from the PA rule. 	Page 14
Permitted Activity Rule - Spray Irrigation	<ul style="list-style-type: none"> Insert into the Rule “until 31 March 2024” 	Page 14
Permitted Activity Rule - Farming Activities	<ul style="list-style-type: none"> No change 	Page 14
Innovation and Advance Technology Activities	<ul style="list-style-type: none"> No change 	Page 14
Air Discharge	<ul style="list-style-type: none"> No change 	Page 16
Building setbacks and landscaping	<ul style="list-style-type: none"> Issue is confined to the common boundary of the Henmar Trust / BIL property Agreed - 5 metre setback which to be landscaped. 	Page 20 (Rule) Page 78 (Structure Plan)
Height	<ul style="list-style-type: none"> Issue is confined to the common boundary of the Henmar Trust / BIL property No change 	Page 21
Noise	<ul style="list-style-type: none"> No change 	Page 27

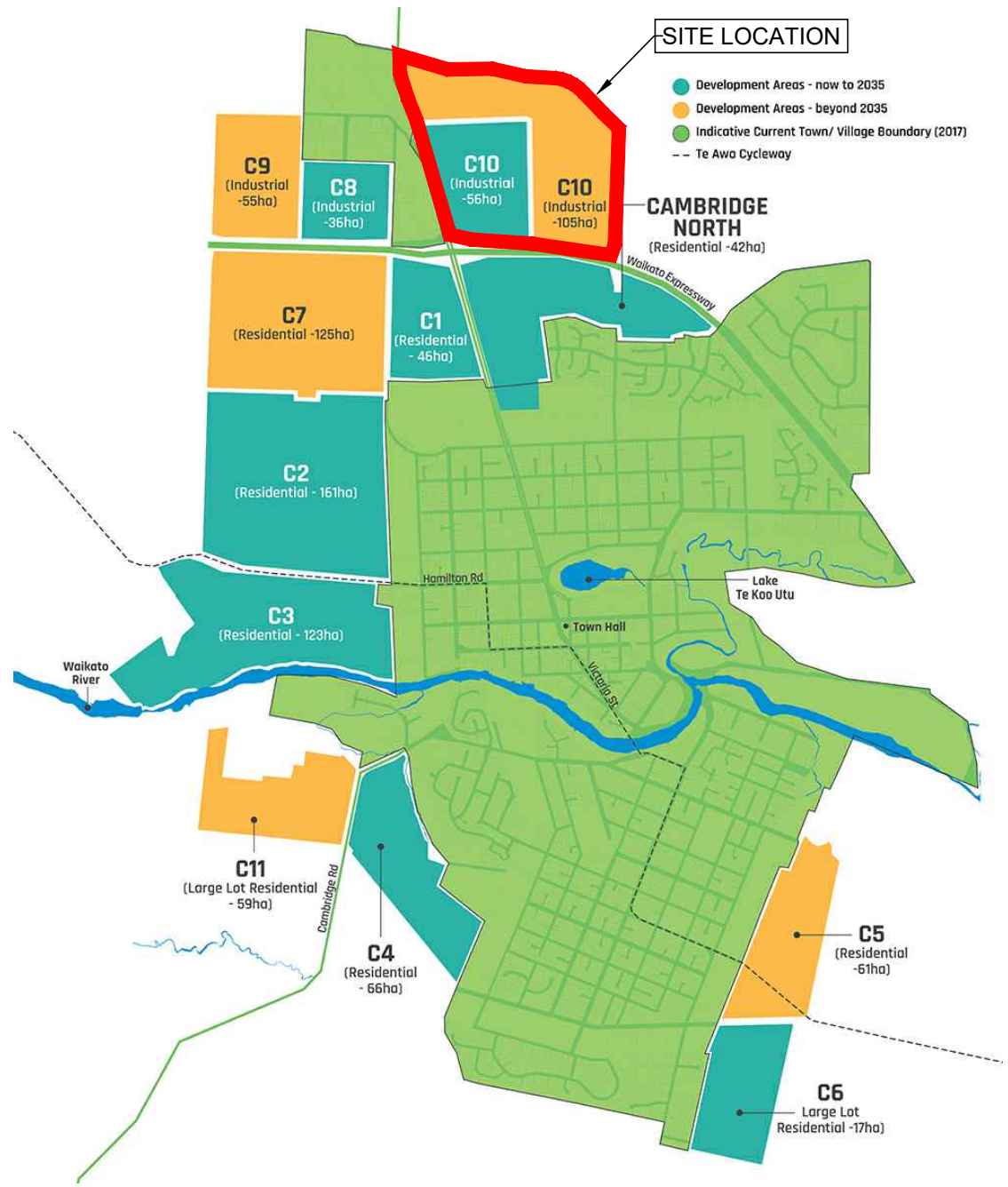


Issue / Topic	Agreement	PC11 Page Number
Design Guidelines	<ul style="list-style-type: none"> • Reflectivity – 4.11 – remove the word “significant”. • No change to 2.16 or 5.3. • 4.5 - delete “(particularly in Node 3)”. • 4.21 – Add “Solar panels shall be integrated into the design of the building and not deviate more than 15 degrees from the angle of the roofline on which they are located.” • 5.3 - Insert “screening shall not include building materials” • 7.10 – Delete “and small-scale wind generation.” 	Page 73-90



PROJECT
C10 GROWTH CELL

PRELIMINARY MASTER PLAN



DWG No.	DRAWING TITLE	REV
18008-C-0000	COVER SHEET	F
18008-C-0002	PRELIMINARY MASTER PLAN LAYOUT	I
18008-C-0003	GENERAL INFORMATION	G
18008-C-0011	PRELIMINARY SITE LEVELS	E
18008-C-0012	PRELIMINARY CUT FILL DIAGRAM	E
18008-C-0013	SITE LEVELS / EARTHWORKS INFORMATION	D
18008-C-0031	PRELIMINARY TRANSPORT NETWORK	E
18008-C-0032	WALKING AND CYCLING STRATEGY	E
18008-C-0033	TRANSPORT NETWORK INFORMATION	D
18008-C-0041	PRELIMINARY STORMWATER STRATEGY	E
18008-C-0042	STORMWATER INFORMATION	D
18008-C-0051	PRELIMINARY WASTEWATER STRATEGY	E
18008-C-0052	WASTEWATER INFORMATION	D
18008-C-0061	PRELIMINARY WATER SUPPLY STRATEGY	E
18008-C-0062	WATER SUPPLY INFORMATION	D
18008-C-0071	PRELIMINARY UTILITY SERVICES STRATEGY	E

PREPARED FOR
**WAIPA DISTRICT COUNCIL &
 BARDOWIE INVESTMENTS LTD**

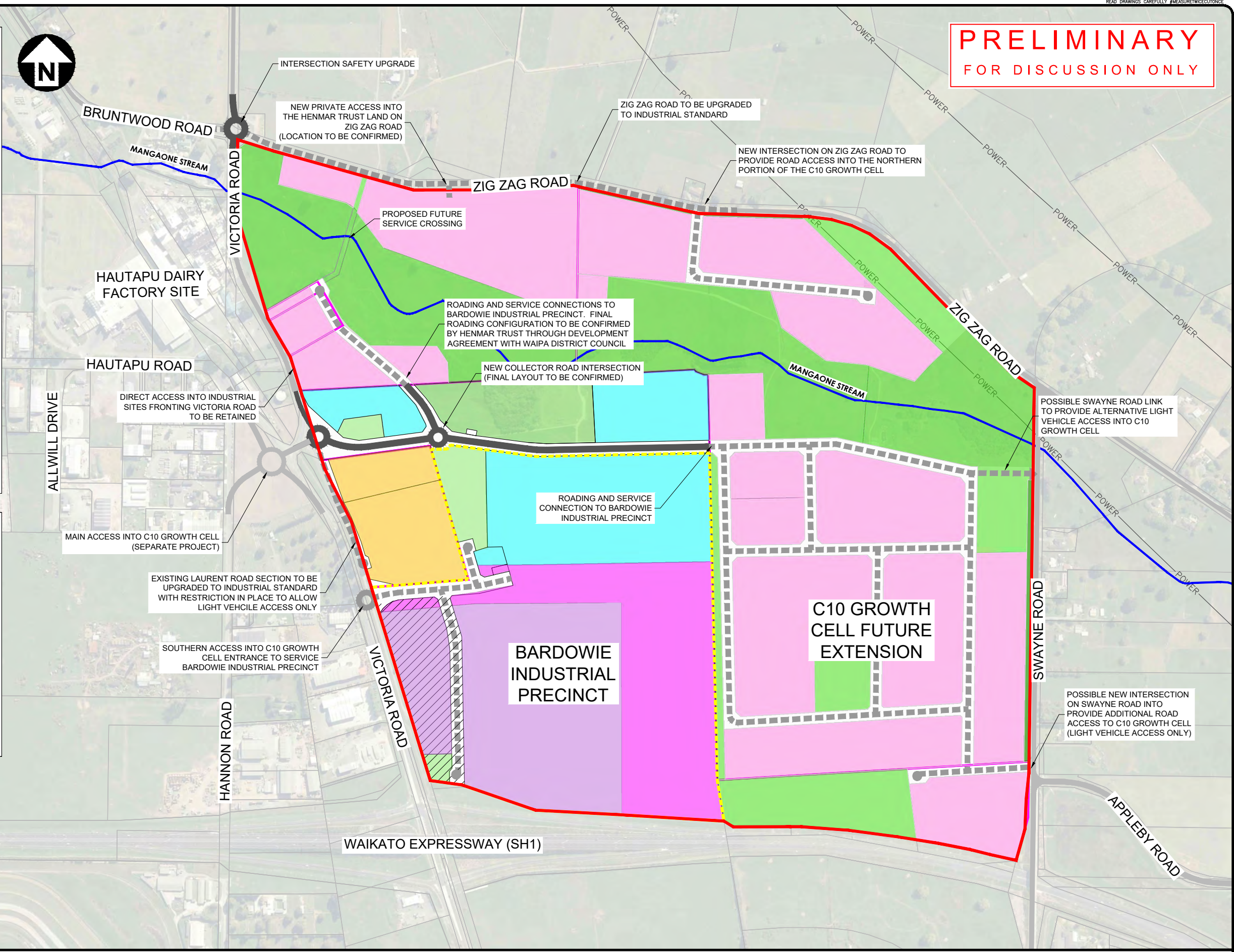
PRELIMINARY
FOR DISCUSSION ONLY

LEGEND

- EXISTING CADASTRAL BOUNDARIES
- C10 GROWTH CELL EXTENTS
- INTERNAL LAND OWNERSHIP EXTENTS
- BARDOWIE INDUSTRIAL PRECINCT
- EXISTING ROAD
- COLLECTOR ROAD
- INDICATIVE LOCAL ROAD
- POWER — OVERHEAD TRANSMISSION POWERLINES
- PC11 NODE 1A (STAGE ONE)
- PC11 NODE 1B (STAGE ONE)
- PC11 NODE 2 (STAGE TWO)
- PC11 NODE 3 (STAGE THREE)
- CAMPUS HUB OVERLAY
- POSSIBLE INDUSTRIAL SITES (FUTURE C10 EXTENSION)
- BALANCE LAND
- ENVIRONMENTAL BUFFER

NOTES

1. MASTER PLAN SHOWN IS PRELIMINARY ONLY AND HAS BEEN PRODUCED FOR DISCUSSION PURPOSES ONLY. FINAL LAYOUT SUBJECT TO FURTHER DEVELOPMENT AND TECHNICAL ASSESSMENT (BY OTHERS)
2. ROADING AND SERVICE CONNECTIONS TO THE NORTH (TO THE PROPERTY BOUNDARY OF THE PART OF PT ALLOTMENT 190 HAUTAPU PARISH WITHIN THE C10 GROWTH CELL) AND TO THE EAST OF THE BARDOWIE INDUSTRIAL PRECINCT MASTER PLAN TO CONNECT WITH THE BALANCE OF THE C10 GROWTH CELL SHALL BE IDENTIFIED AND VESTED AS LOCAL PURPOSE RESERVE (ROAD) AT THE TIME OF THE FIRST SUBDIVISION OF NODE 3 IN ACCORDANCE WITH ANY C10 GROWTH CELL MASTER PLAN AND / OR STRUCTURE PLAN RELATING TO THE BALANCE OF THE C10 GROWTH CELL THAT HAS BEEN APPROVED BY THE WAIPA DISTRICT COUNCIL.



C10 GROWTH CELL PRELIMINARY MASTER PLANNING

PRELIMINARY MASTER PLAN LAYOUT GENERAL ARRANGEMENT

GENERAL OVERVIEW

The C10 growth cell is a future industrial area within the township of Cambridge; located in Hautapu on the northern side of Cambridge (refer to figure below). This growth cell, along with the C8 growth cell, are expected to provide for industrial development for local industry up to 2035.



Part of the C10 growth cell, know as the 'Bardowie Industrial Precinct', was re-zoned under a private plan change (Plan Change 11) and is currently under development. The balance of the C10 growth cell (also referred to as 'C10 Extension') is current zoned as rural and is yet to undergo a formal plan change to realise its potential as an industrial development area.

DOCUMENT SCOPE AND PURPOSE

This preliminary master plan has been developed to provide an initial estimate of servicing requirements and potential development yield for the future extension of the C10 growth cell. Information contained within this document is preliminary only and has been developed for the following purposes;

1. To provide a baseline to allocate shared development costs associated strategic infrastructure required to service the wider C10 growth cell area
2. To provide an initial estimate of additional capacity required within key infrastructure to service the wider C10 growth cell area

Development layouts and infrastructure concepts have been developed based on consultation with affected landowners and high-level assessment of servicing requirements. Further technical assessment is required to confirm assumptions noted within this document.

Final confirmation of master plan and infrastructure requirements for the C10 Extension area to completed in the future as part of a separate plan change process (by others).

PRELIMINARY LAYOUT ASSESSMENT

The following is summary of the preliminary layouts developed for overall C10 growth cell, both the Bardowie Industrial Precinct and the C10 Extension areas;

	Bardowie Investments Ltd	Shoof International	Fonterra Ltd	Henmar Trust	Anne and William Kerr	C10 GROWTH CELL
Industrial (Ha)	44.1	5.0	39.7	10.8	0.2	99.8
Road (Ha)	4.8	0.2	8.5	0.5	0.1	14.1
Balance land (Ha)	10.3	-	23.3	12.9	-	46.5
Environmental Buffer (Ha)	-	-	0.8	-	-	0.8
TOTAL AREA (Ha)	59.2	5.2	72.3	24.2	0.3	161.2

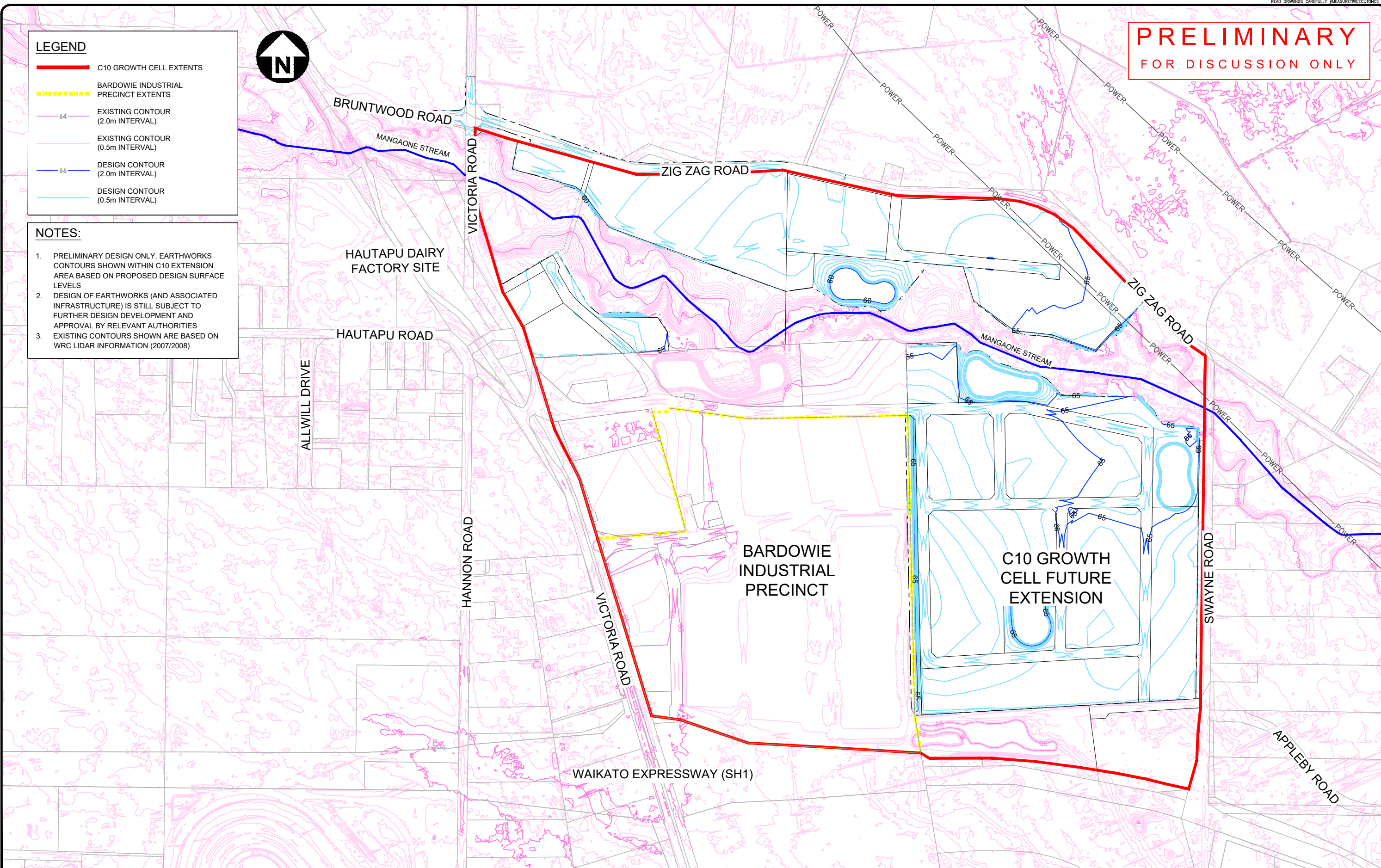
PRELIMINARY
FOR DISCUSSION ONLY

LEGEND

- C10 GROWTH CELL EXTENTS
- - - BARDOWIE INDUSTRIAL PRECINCT EXTENTS
- 64 EXISTING CONTOUR (2.0m INTERVAL)
- EXISTING CONTOUR (0.5m INTERVAL)
- 66 DESIGN CONTOUR (2.0m INTERVAL)
- DESIGN CONTOUR (0.5m INTERVAL)

NOTES:

1. PRELIMINARY DESIGN ONLY. EARTHWORKS CONTOURS SHOWN WITHIN C10 EXTENSION AREA BASED ON PROPOSED DESIGN SURFACE LEVELS
2. DESIGN OF EARTHWORKS (AND ASSOCIATED INFRASTRUCTURE) IS STILL SUBJECT TO FURTHER DESIGN DEVELOPMENT AND APPROVAL BY RELEVANT AUTHORITIES
3. EXISTING CONTOURS SHOWN ARE BASED ON WRC LIDAR INFORMATION (2007/2008)



C10 GROWTH CELL PRELIMINARY MASTER PLANNING

PRELIMINARY SITE LEVELS

PRELIMINARY
FOR DISCUSSION ONLY

LEGEND

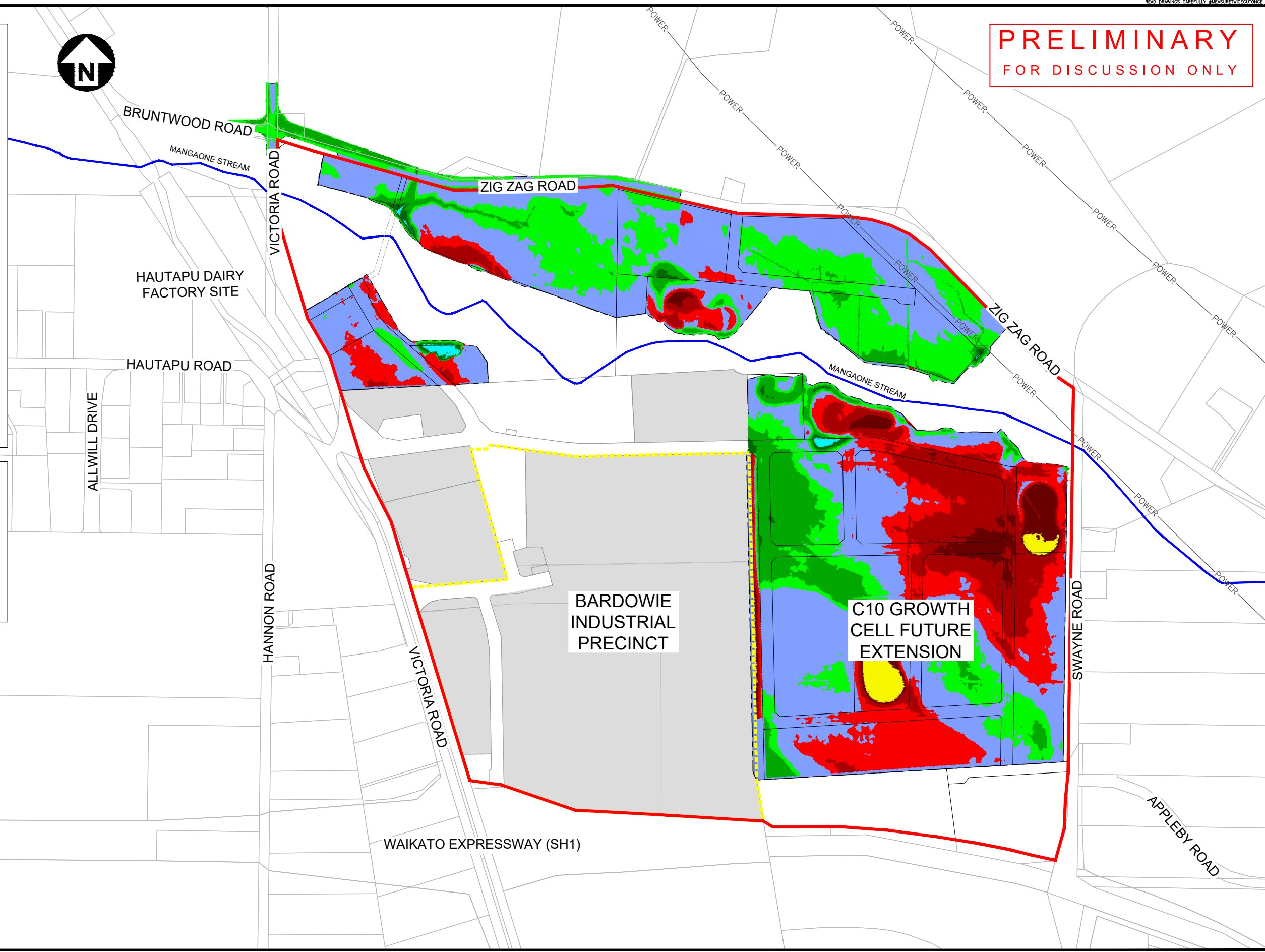
- C10 GROWTH CELL EXTENTS
- BARDOWIE INDUSTRIAL PRECINCT EXTENTS

EARTHWORKS (CUT/FILL AREAS)

- > 4m CUT
- 3.0m TO 4.0m CUT
- 2.0m TO 3.0m CUT
- 1.0m TO 2.0m CUT
- 0.5m TO 1.0m CUT
- SITE CONTOURING (<0.5m)
- 0.5m TO 1.0m FILL
- 1.0m TO 2.0m FILL
- 2.0m TO 3.0m FILL
- 3.0m TO 4.0m FILL
- >4.0m FILL

NOTES:

- PRELIMINARY DESIGN ONLY. EARTHWORKS CONTOURS SHOWN WITHIN C10 EXTENSION AREA BASED ON PROPOSED DESIGN SURFACE LEVELS
- CUT/FILL DIAGRAM SHOWN IS FOR COMPARISON PURPOSES. CUT/FILL AREAS ARE BASED ON SURFACE TO SURFACE LEVELS WITH NO ALLOWANCE FOR VOLUMETRIC ADJUSTMENTS OF ANY KIND
- EXISTING LEVELS USED ARE BASED ON WRC LIDAR INFORMATION (2007/2008)



**C10 GROWTH CELL
PRELIMINARY MASTER PLANNING**

**PRELIMINARY
CUT FILL DIAGRAM**

SITE LEVELS / EARTHWORKS OVERVIEW

A preliminary assessment of the existing site topography has been completed to assess potential constraints and earthworks required to achieve industrial development sites within the C10 Extension area. The concept developed considered both engineering requirements and feedback from the individual land owners. The following are some key assumptions used to develop the preliminary site contouring for the C10 Extension area;

- Groundwater modelling completed as part of Plan Change 11 (Bardowie Industrial Precinct) shows existing groundwater levels in the south-eastern side of the C10 growth cell are expect to high relative to the existing ground levels (refer to figure below).

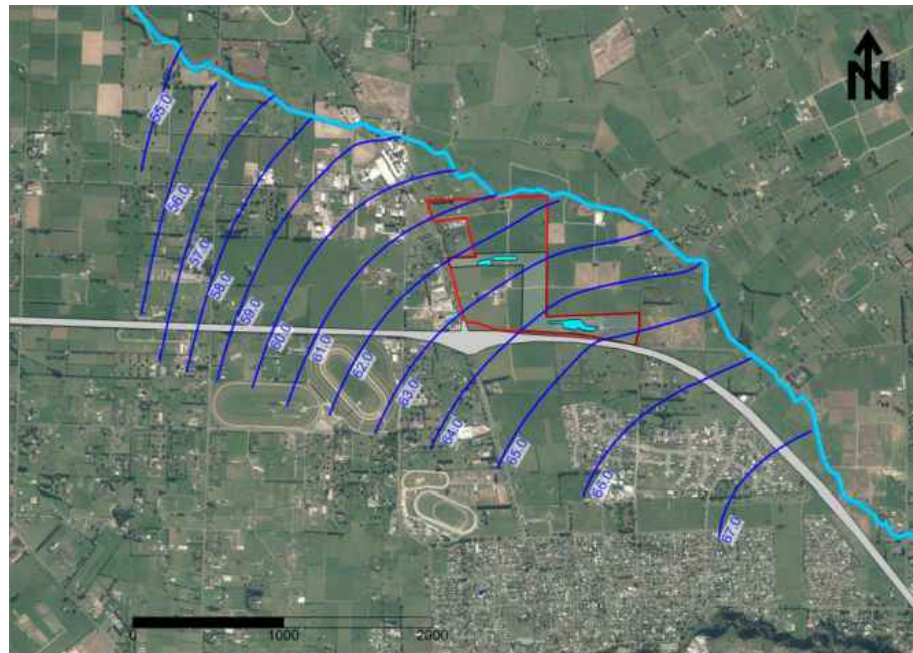


Figure 0013-1 - interpolated groundwater contours (Hydrological Assessment Report: Bardowie Industrial Precinct, Beca Ltd, December 2018)

These existing groundwater levels will form a constraint of the finished levels that must be achieved to enable development can occur within this area. It is expected that earthworks contouring will be required across most of the C10 Extension area to accommodate stormwater drainage requirements (i.e. defined overland flow paths)

- Based on previous soil investigations carried out on the adjacent Bardowie Industrial Precinct site the subsurface profile in the south eastern part of the C10 Extension is expected to be "typical of the HINUERA FORMATION comprising a thin layer of TOPSOIL/uncontrolled FILL overlying natural SANDs with interbedded thin SILT/CLAY layers of varying density/consistency" (Bardowie Industrial Precinct - Geotechnical Assessment, BCD Group, July 2018).

- It is expected that a significant amount of imported material may be required in low lying areas in the south eastern part of the C10 Extension area. Imported fill material may also be required where SILT/CLAY material is encountered or as engineering fill for the preparation of building possible platform sites.

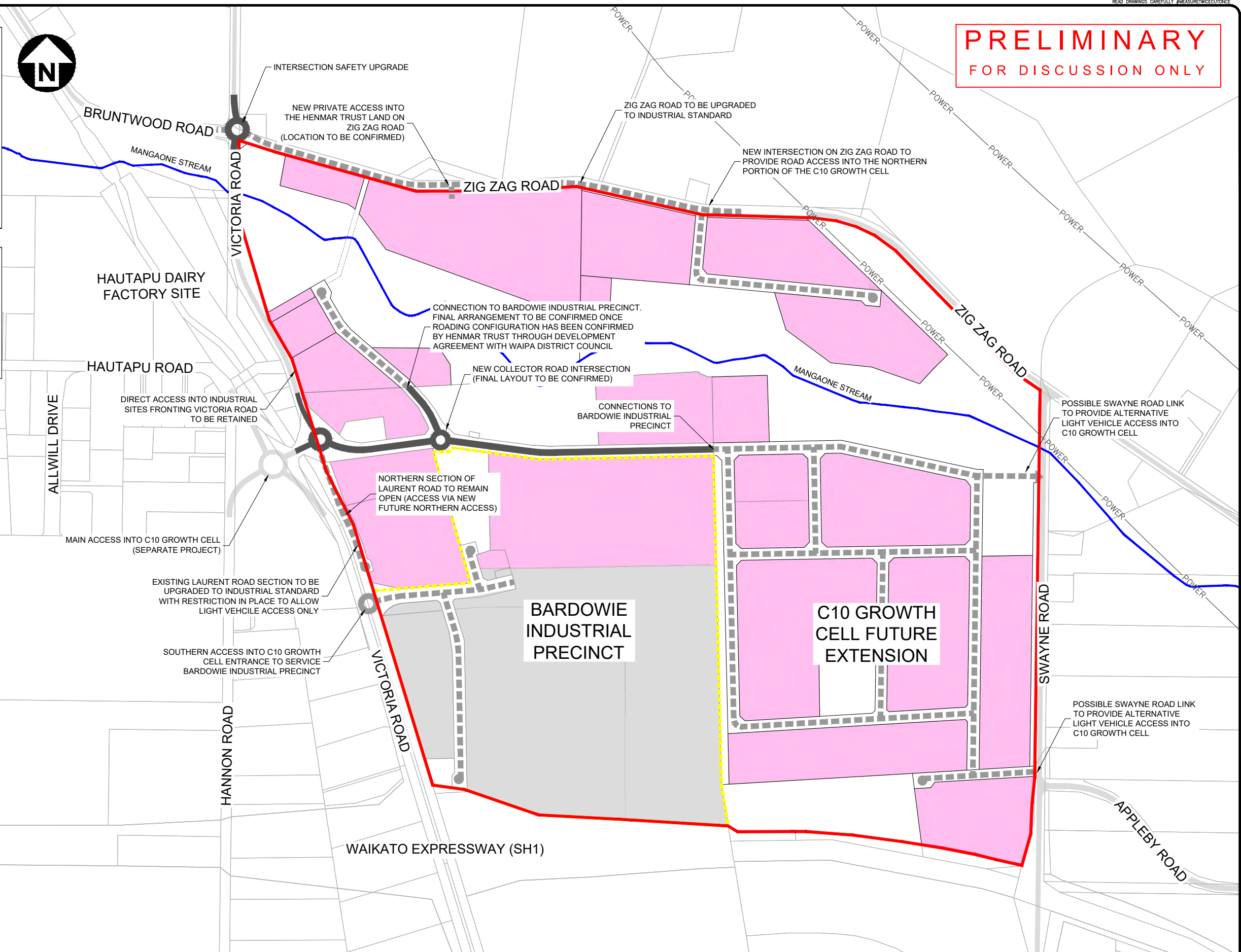
PRELIMINARY
FOR DISCUSSION ONLY

LEGEND

- EXISTING CADASTRAL BOUNDARIES
- C10 GROWTH CELL EXTENTS
- BARDOWIE INDUSTRIAL PRECINCT
- POSSIBLE INDUSTRIAL SITES
- EXISTING ROAD
- COLLECTOR ROAD
- INDICATIVE LOCAL ROAD

NOTES:

- ROADING NETWORK LAYOUT SHOWN IS PRELIMINARY AND HAS BEEN DEVELOPED FOR DISCUSSION PURPOSES ONLY
- DESIGN OF THE FINAL TRANSPORT NETWORK IS STILL SUBJECT TO FURTHER DESIGN DEVELOPMENT AND APPROVAL BY RELEVANT AUTHORITIES
- CADASTRAL BOUNDARIES SHOWN HAVE BEEN SOURCED FROM LINZ DATA SERVICE











C10 GROWTH CELL PRELIMINARY MASTER PLANNING

PRELIMINARY TRANSPORT NETWORK

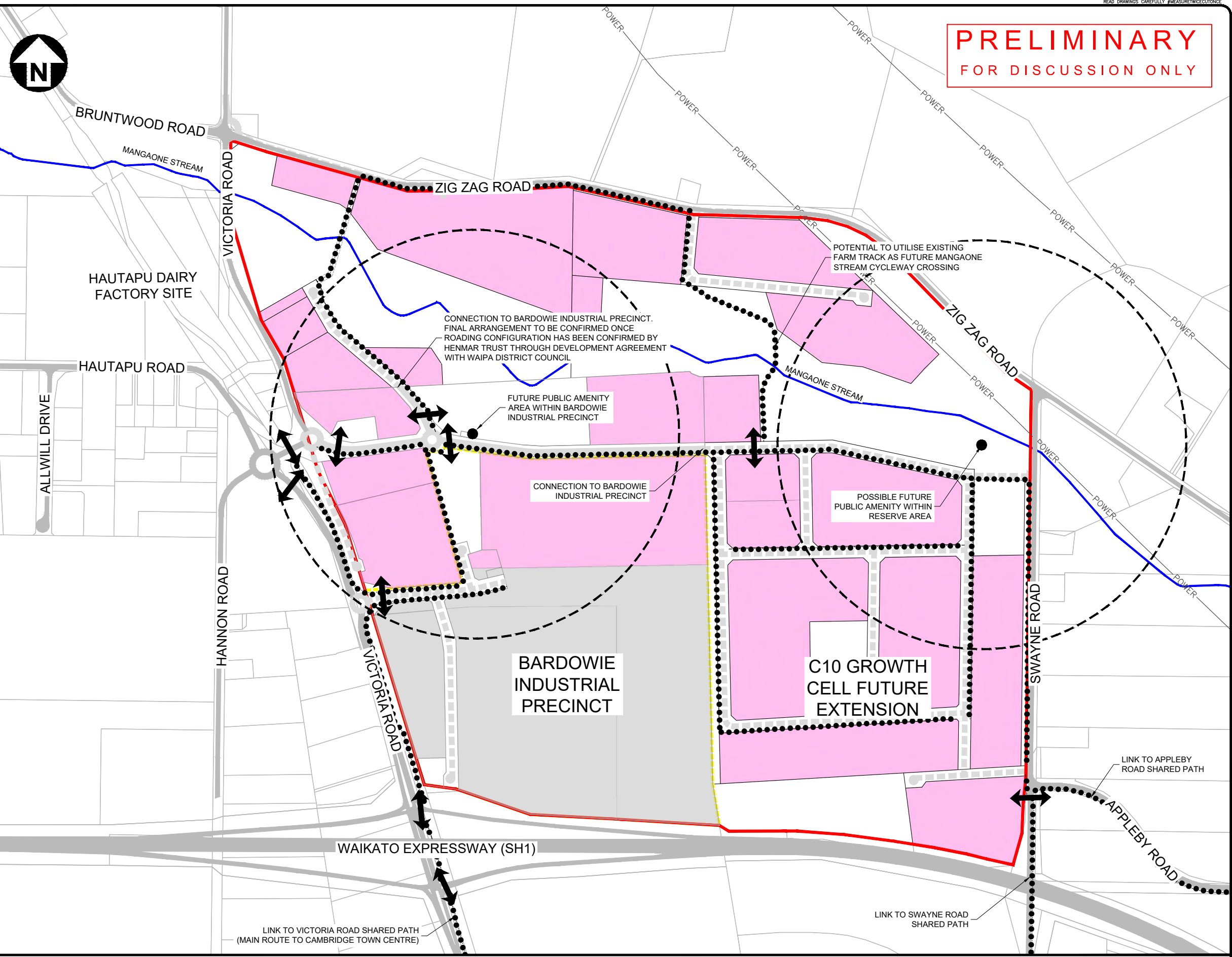
PRELIMINARY
FOR DISCUSSION ONLY

LEGEND

-  EXISTING CADASTRAL BOUNDARIES
-  C10 GROWTH CELL EXTENTS
-  BARDOWIE INDUSTRIAL PRECINCT
-  POSSIBLE INDUSTRIAL SITES
-  AMENITY SPACE
-  SHARED PATH NETWORK (WALKING / CYCLING)
-  KEY ROAD CROSSING (WALKING / CYCLING)
-  PEDESTRIAN SHED (400m RADIUS / 5min WALK)

NOTES:

1. ROADING NETWORK AND SHARED PATH LAYOUT SHOWN IS PRELIMINARY AND HAS BEEN DEVELOPED FOR DISCUSSION PURPOSES ONLY
2. DESIGN OF THE FINAL TRANSPORT NETWORK IS STILL SUBJECT TO FURTHER DESIGN DEVELOPMENT AND APPROVAL BY RELEVANT AUTHORITIES
3. CADASTRAL BOUNDARIES SHOWN HAVE BEEN SOURCED FROM LINZ DATA SERVICE



C10 GROWTH CELL PRELIMINARY MASTER PLANNING

PRELIMINARY WALKING AND CYCLING STRATEGY

TRANSPORT NETWORK OVERVIEW

The preliminary transport network developed to service the C10 Extension area is based on the following key assumptions used to develop the preliminary transport layout for the C10 Extension area;

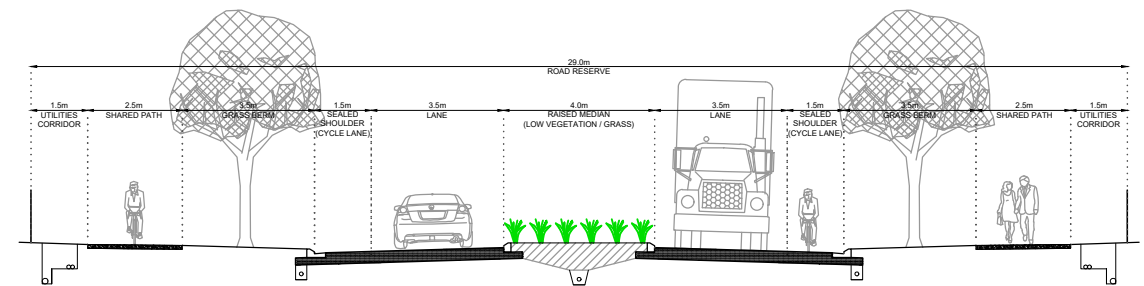
- Main access into the C10 growth cell to be via Victoria Road; on the western side of the growth cell. This approach promotes the traffic movements generated by the new growth cell to utilise established arterial routes within local network (i.e. Victoria Road). These access locations were established as part of Plan Change 11 Structure Plan (Bardowie Industrial Precinct) along with roading connections into the C10 Extension area.
- Two main access locations have been established into the C10 growth cell;
 1. **Southern Access** - established to provide access into the Bardowie Industrial Precinct. This entrance crosses the existing rail designation and requires a 'licence to occupy' agreement with Kiwirail to allow it to operate. This agreement has the following long-term implications in the event Kiwirail wish to re-establish rail services in this location; either the access must be removed, or it may be modified to accommodate a rail crossing.
 2. **Northern Access** - access in this location is expected to be established in the later stages of the Bardowie Industrial Precinct development and is considered main access for the C10 Growth Cell. Final configuration of this junction is to be considered alongside a re-configuration of the adjacent intersection serving the wider Hautapu industrial area.
- It is proposed that access to the C10 growth cell via Swayne Road to be considered to provide additional links to the surrounding transport network.
- Northern section of Laurent Road is to remain open to provide access existing properties in this location.

Access to new industrial development in the north part of the growth cell (across Mangaone Stream to be direct access via Zig Zag Road. It is expected that safety improvements to the existing SH1B / Victoria Road intersection (separate project) and the upgrade of Zig Zag Road to an industrial standard will need to be completed to allow development to proceed in this part of the growth cell. Consideration to a north-south connection across the Mangaone Stream should be considered (as shown) however this is not considered essential.

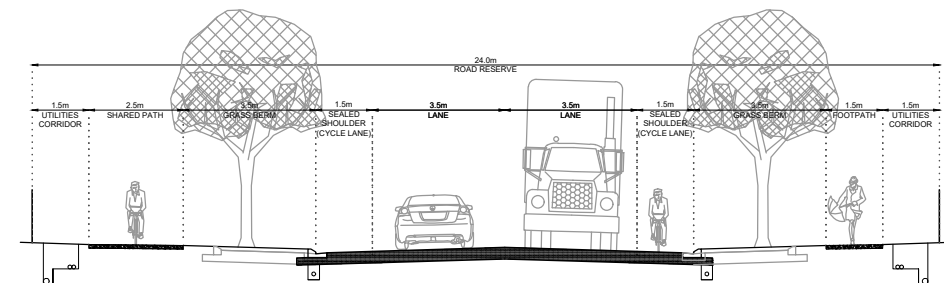
TYPICAL CROSS SECTIONS

To ensure consistency across the entire C10 growth cell it is proposed that the following typical cross sections established as part of the Bardowie Industrial Precinct be adopted within the C10 Extension area.

Collector Road (Divided)










Local Industrial Road



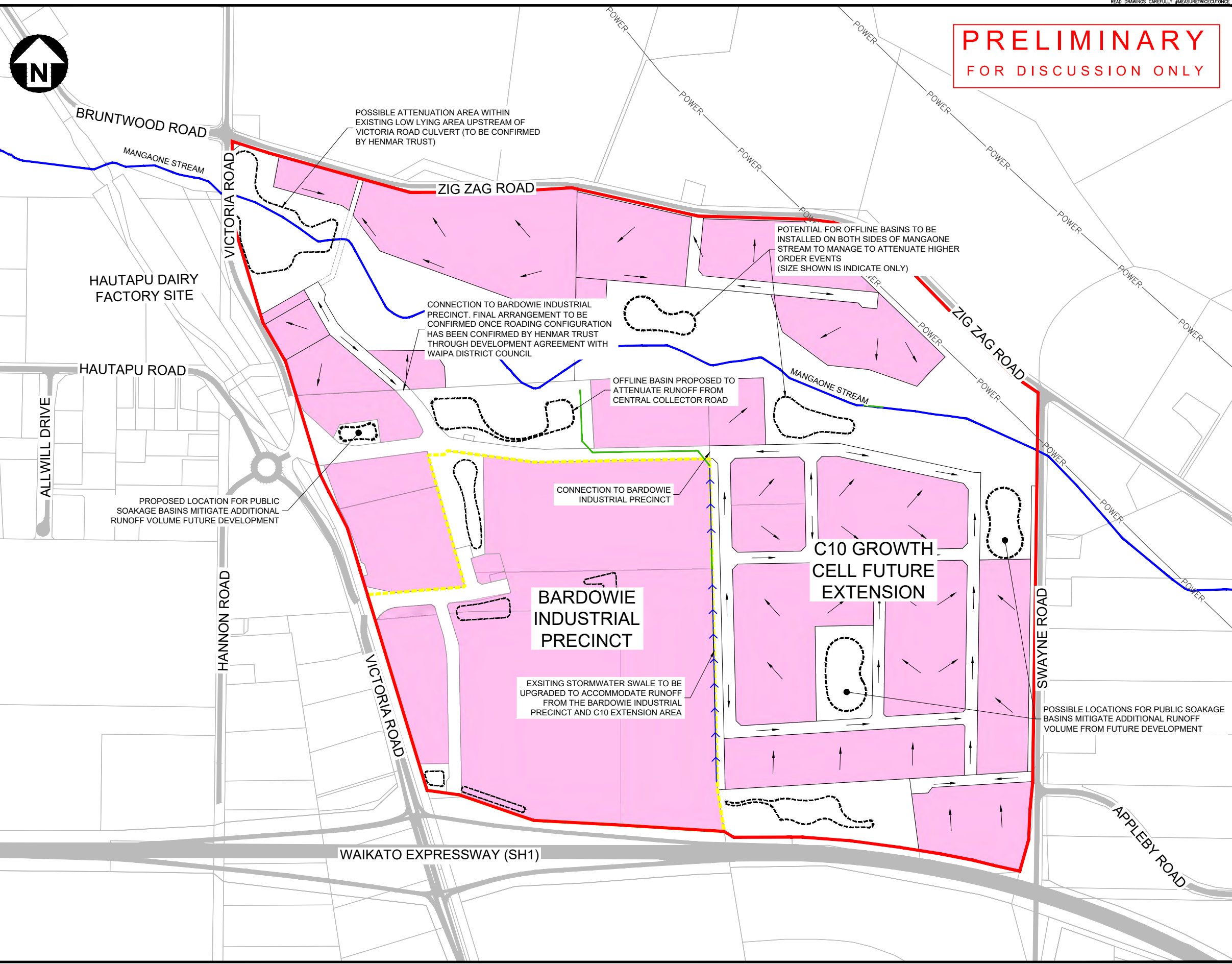
PRELIMINARY
FOR DISCUSSION ONLY

LEGEND

-  EXISTING CADASTRAL BOUNDARIES
-  C10 GROWTH CELL EXTENTS
-  BARDOWIE INDUSTRIAL PRECINCT
-  POSSIBLE INDUSTRIAL SITES
-  POSSIBLE STORMWATER DEVICES
-  OPEN SWALE DRAIN
-  OVERLAND FLOW PATH

NOTES:

1. STORMWATER NETWORK SHOWN IS PRELIMINARY AND HAS BEEN DEVELOPED FOR DISCUSSION PURPOSES ONLY
2. DESIGN OF THE FINAL STORMWATER SOLUTION IS STILL SUBJECT TO FURTHER DESIGN DEVELOPMENT AND APPROVAL BY RELEVANT AUTHORITIES
3. ALL STORMWATER DEVICES AND PLANTING TO BE IN GENERAL ACCORDANCE WITH THE REGIONAL INFRASTRUCTURE TECHNICAL SPECIFICATION (RITS)



**C10 GROWTH CELL
PRELIMINARY MASTER PLANNING**

**PRELIMINARY
STORMWATER STRATEGY**

STORMWATER OVERVIEW

The preliminary assessment of the stormwater network for the C10 Extension has focused on determining how developed sub-catchments will be managed as part of the post-development scenario. It is expected that the stormwater management approach adopted for the Bardowie Industrial Precinct will be used within the C10 extension area. The following table is a summary of the key performance criteria expected to apply (extract from 'Bardowie Industrial Precinct - Stormwater Assessment', Harrison Grierson, February 2019);

STORM EVENT (ARI)	PROVISION	GUIDANCE
All events	First flush – pre-treatment	Regional SW Guidance, RITS on-site water efficiency measures,
1/3 2yr	Water Quality Treatment	TP 10, RITS and SW guidance
2yr	Soakage Disposal up to 72hrs from road reserves	RITS
10yr	Primary drainage conveyance within the industrial precinct	RITS
10yr	Soakage Disposal up to 72hrs on private lots	RITS, NZBC E1, Regional SW Guidance
10yr	Balance of pre and post total runoff volume	WRC Drainage Board
100yr	Secondary conveyance through the site – no people or property at risk	RITS and Regional rainfall runoff guidance
100yr	Attenuate peak flow and volume to the Mangaone Stream	HCC ITS + Regional Stormwater Guidance

Specific considerations noted as part of the development of a preliminary stormwater network for the C10 Extension area;

- Soakage disposal to be provided within communal public devices (similar to approach adopted within the Bardowie Industrial Precinct). This requirement has been adopted based on feedback Waikato Regional Council in relation to management and maintenance of private soakage systems.
- A central stormwater swale is been included in the southern area to manage overland flow in accordance with existing site topography. It is expected that this could be coordinated with stormwater corridor proposed on the eastern side of the Bardowie Industrial Precinct.

- Existing flooding areas associated with the Mangaone Stream will need to be accomodated as part of future development in this area. The existing culvert under Victoria Road is expected to form a constraint on the overall C10 stormwater networks (unless advised otherwise).
- An initial groundwater assessment completed as part of Plan Change 11 (Bardowie Industrial Precinct) shows existing groundwater levels in the south-eastern side of the C10 growth cell are expected to be high relative to the existing ground levels (refer to figure below). This is a key risk associated with the development of stormwater solutions to service the C10 Extension area and may limit the area available for industrial sites.

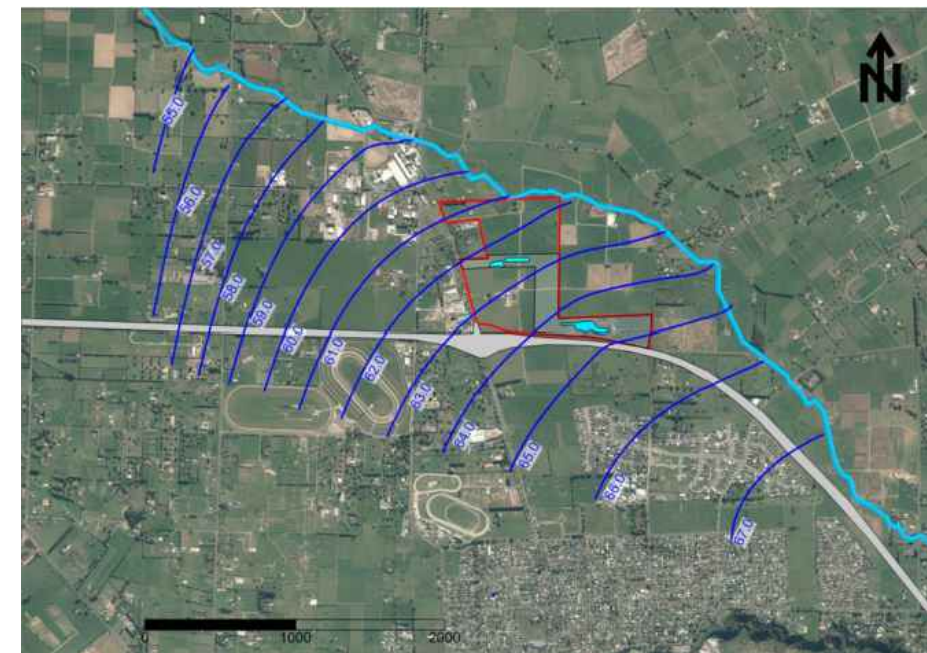


Figure 0042-1 - Interpolated groundwater contours (Hydrological Assessment Report: Bardowie Industrial Precinct, Beca Ltd, December 2018)

Please note that no stormwater modeling was undertaken as part of the preliminary master planning for the C10 Extension area. Further groundwater investigations and technical assessment is required to size and confirm the feasibility of specific stormwater solutions to service the C10 Extension area.

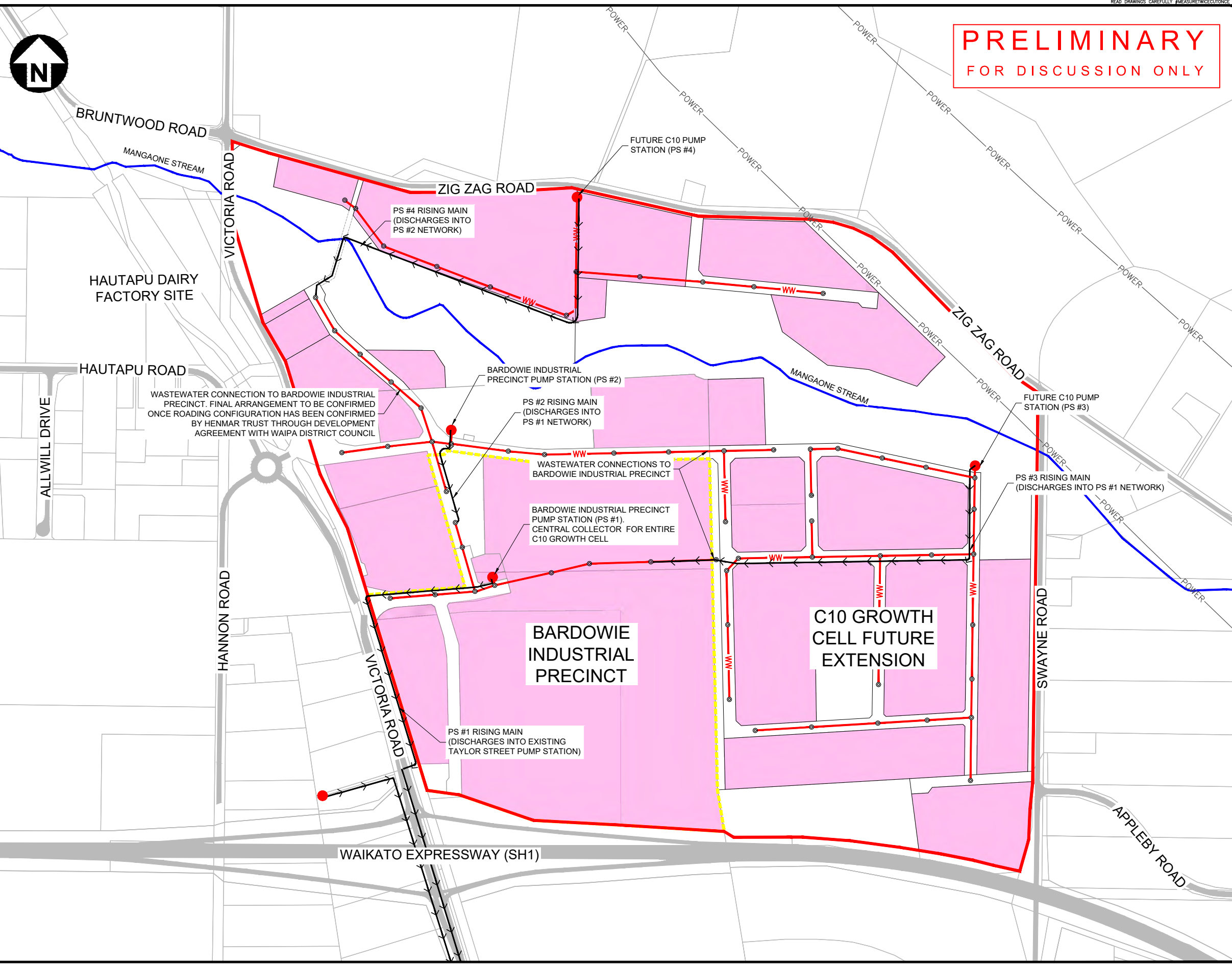
PRELIMINARY
FOR DISCUSSION ONLY

LEGEND

- EXISTING CADASTRAL BOUNDARIES
- C10 GROWTH CELL EXTENTS
- BARDOWIE INDUSTRIAL PRECINCT
- POSSIBLE INDUSTRIAL SITES
- WW — EXISTING WASTEWATER PIPE
- WW — NEW WASTEWATER PIPE
- — EXISTING WASTEWATER RISING MAIN
- — NEW WASTEWATER RISING MAIN
- ⊙ EXISTING WASTEWATER MANHOLE
- ⊙ NEW WASTEWATER MANHOLE
- EXISTING WASTEWATER PUMP STATION
- NEW WASTEWATER PUMP STATION

NOTES:

1. WASTEWATER NETWORK SHOWN IS PRELIMINARY AND HAS BEEN DEVELOPED FOR DISCUSSION PURPOSES ONLY
2. DESIGN OF THE FINAL WASTEWATER SOLUTION IS STILL SUBJECT TO FURTHER DESIGN DEVELOPMENT AND APPROVAL BY RELEVANT AUTHORITIES
3. ALL PUMP STATIONS AND ASSOCIATED PIPELINES TO BE IN GENERAL ACCORDANCE WITH THE REGIONAL INFRASTRUCTURE TECHNICAL SPECIFICATION (RITS)



C10 GROWTH CELL PRELIMINARY MASTER PLANNING

PRELIMINARY WASTEWATER STRATEGY

WASTEWATER OVERVIEW

The preliminary wastewater network developed for the C10 Extension is based on the initial strategy adopted as part of Plan Change 11 (Bardowie Industrial Precinct). Wastewater sub-catchments within the development will be reticulated using localised gravity networks and collected with an associated pump station. The wider C10 Extension area is expected to serviced by several pump stations which will discharge into a central collector pump station established as part of the first stage of the Bardowie Industrial Precinct (pump station #1). The central collector pump station will be sized to covey all wastewater flows within the C10 growth cell into the public wastewater network via a discharge into the existing pump station on the corner of Victoria Road and Taylor Street.

The following tables has been developed as an initial assessment of the catchments associated with individual pump stations and the developments they service.

	CONTRIBUTING CATCHMENT* (INDICATIVE ONLY)					TOTAL (Ha)
	Bardowie Investments Ltd (Ha)	Shoof International Ltd (Ha)	Fonterra Ltd (Ha)	Henmar Trust (Ha)	Anne and William Kerr	
Pump station #1 (Collector)	30.7 (44.1)	1.8 (3.5)	- (39.7)	- (10.8)	- (0.2)	32.5 (98.3)
Pump station #2	10.2	1.7	3.6 (14.1)	2.2 (10.8)	0.2 (0.2)	17.9 (37.0)
Pump station #3	3.2	-	25.6	-	-	28.8
Pump station #4	-	-	10.5	8.6	-	19.1

* Catchment areas noted above indicate the amount of net industrial sites (i.e. not including roads or reserves) contributing to each pump station. The number in brackets is the cumulative catchment area for pump stations with upstream pumped discharges

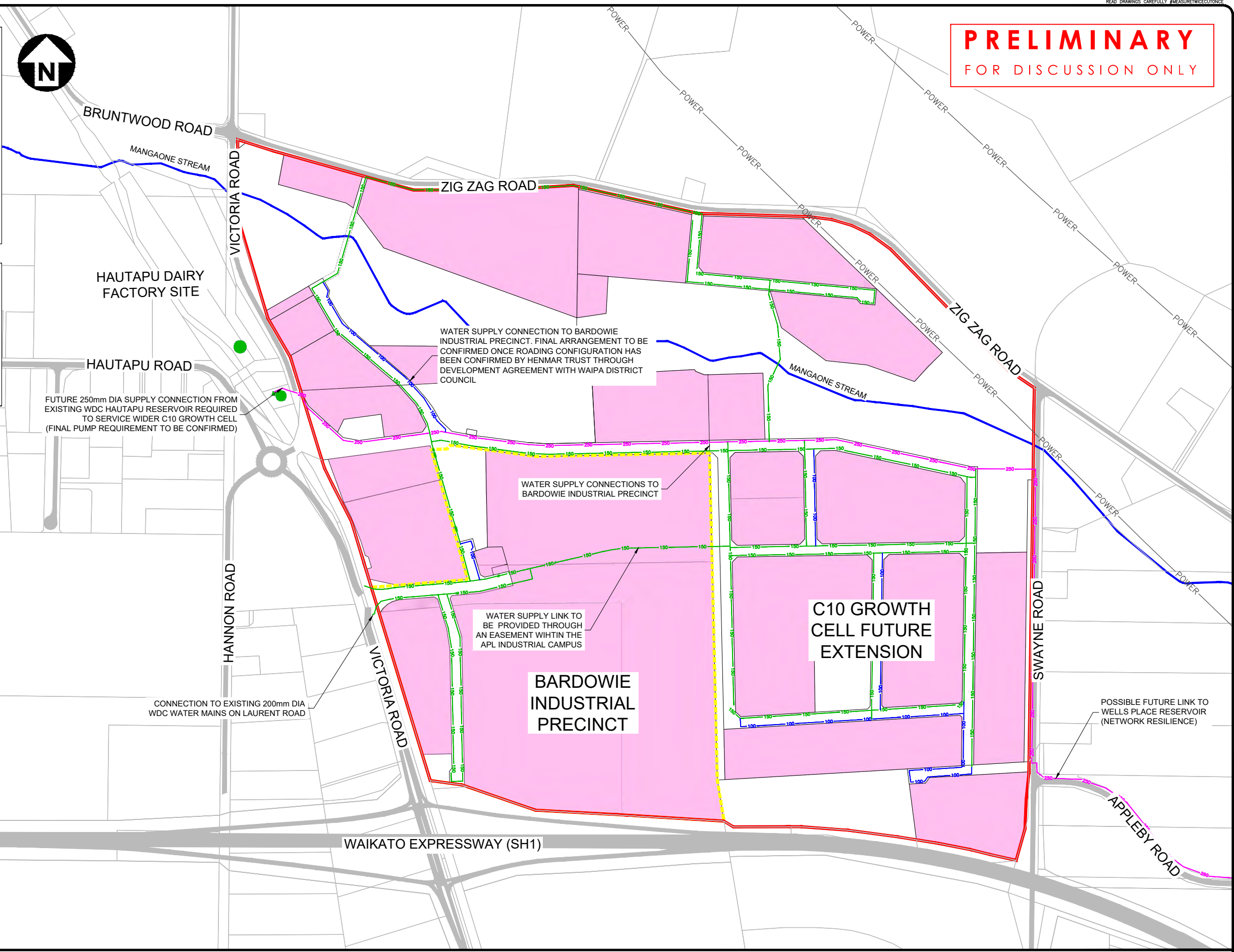
PRELIMINARY
FOR DISCUSSION ONLY

LEGEND

- EXISTING CADASTRAL BOUNDARIES
- C10 GROWTH CELL EXTENTS
- BARDOWIE INDUSTRIAL PRECINCT
- POSSIBLE INDUSTRIAL SITES
- W — EXISTING WATERMAIN
- 250 — 250mm PRINCIPAL WATERMAIN
- 150 — 150mm PRINCIPAL WATERMAIN
- 100 — 100mm PRINCIPAL WATERMAIN

NOTES:

1. WATER SUPPLY NETWORK SHOWN IS PRELIMINARY AND HAS BEEN DEVELOPED FOR DISCUSSION PURPOSES ONLY
2. DESIGN OF THE FINAL WATER SUPPLY SOLUTION IS STILL SUBJECT TO FURTHER DESIGN DEVELOPMENT AND APPROVAL BY RELEVANT AUTHORITIES
3. ALL PUMP STATIONS AND ASSOCIATED PIPELINES TO BE IN GENERAL ACCORDANCE WITH THE REGIONAL INFRASTRUCTURE TECHNICAL SPECIFICATION (RITS)



FUTURE 250mm DIA SUPPLY CONNECTION FROM EXISTING WDC HAUTAPU RESERVOIR REQUIRED TO SERVICE WIDER C10 GROWTH CELL (FINAL PUMP REQUIREMENT TO BE CONFIRMED)

WATER SUPPLY CONNECTION TO BARDOWIE INDUSTRIAL PRECINCT. FINAL ARRANGEMENT TO BE CONFIRMED ONCE ROADING CONFIGURATION HAS BEEN CONFIRMED BY HENMAR TRUST THROUGH DEVELOPMENT AGREEMENT WITH WAIPA DISTRICT COUNCIL

WATER SUPPLY CONNECTIONS TO BARDOWIE INDUSTRIAL PRECINCT

WATER SUPPLY LINK TO BE PROVIDED THROUGH AN EASEMENT WITHIN THE APL INDUSTRIAL CAMPUS

CONNECTION TO EXISTING 200mm DIA WDC WATER MAINS ON LAURENT ROAD

POSSIBLE FUTURE LINK TO WELLS PLACE RESERVOIR (NETWORK RESILIENCE)

C10 GROWTH CELL PRELIMINARY MASTER PLANNING

PRELIMINARY WATER SUPPLY STRATEGY

WATER SUPPLY OVERVIEW

The preliminary water supply network developed for the C10 Extension is based on the initial strategy adopted as part of Plan Change 11 (Bardowie Industrial Precinct). The C10 growth cell is to be supplied from the existing Waipa District Council Hautapu reservoir located on Victoria Road just north-west of the site. A new supply main installed as part of initial stage of the Bardowie Industrial Precinct is expected to provide the capacity within the existing reservoir to service the C10 Extension area.

The preliminary water supply network developed to service the C10 Extension area is based on the following key assumptions;

- Main access main supply feeds to be provided on the western side the C10 growth cell through the Bardowie Industrial Precinct. Service connection locations were established as part of Plan Change 11 Structure Plan (Bardowie Industrial Precinct) to bring these water mains into the C10 Extension area.
- The local reticulation network is only expected to supply water to a maximum of fire water classification of FW2. Any additional fire design requirements will need to be provided by private networks within individual industrial sites.
- Consideration of a future link to the existing Waipa District Council reservoir at Wells Place located to the east of the site. This would provide further resilience to the local supply networks and better integrate the site with the district wide reticulation network.

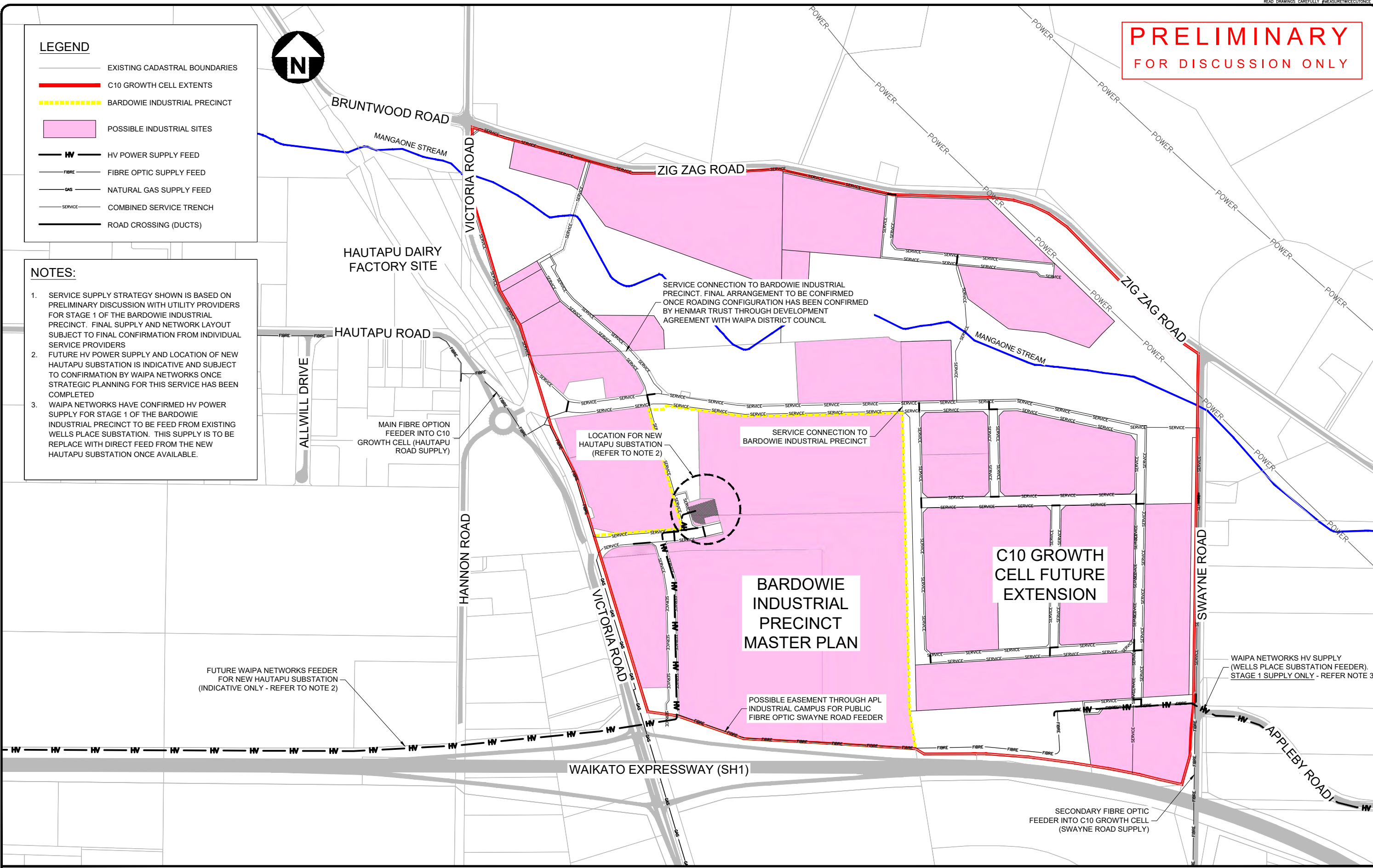
PRELIMINARY
FOR DISCUSSION ONLY

LEGEND

- EXISTING CADASTRAL BOUNDARIES
- C10 GROWTH CELL EXTENTS
- BARDOWIE INDUSTRIAL PRECINCT
- POSSIBLE INDUSTRIAL SITES
- HV POWER SUPPLY FEED
- FIBRE OPTIC SUPPLY FEED
- NATURAL GAS SUPPLY FEED
- COMBINED SERVICE TRENCH
- ROAD CROSSING (DUCTS)

NOTES:

1. SERVICE SUPPLY STRATEGY SHOWN IS BASED ON PRELIMINARY DISCUSSION WITH UTILITY PROVIDERS FOR STAGE 1 OF THE BARDOWIE INDUSTRIAL PRECINCT. FINAL SUPPLY AND NETWORK LAYOUT SUBJECT TO FINAL CONFIRMATION FROM INDIVIDUAL SERVICE PROVIDERS
2. FUTURE HV POWER SUPPLY AND LOCATION OF NEW HAUTAPU SUBSTATION IS INDICATIVE AND SUBJECT TO CONFIRMATION BY WAIPA NETWORKS ONCE STRATEGIC PLANNING FOR THIS SERVICE HAS BEEN COMPLETED
3. WAIPA NETWORKS HAVE CONFIRMED HV POWER SUPPLY FOR STAGE 1 OF THE BARDOWIE INDUSTRIAL PRECINCT TO BE FEED FROM EXISTING WELLS PLACE SUBSTATION. THIS SUPPLY IS TO BE REPLACE WITH DIRECT FEED FROM THE NEW HAUTAPU SUBSTATION ONCE AVAILABLE.



SERVICE CONNECTION TO BARDOWIE INDUSTRIAL PRECINCT. FINAL ARRANGEMENT TO BE CONFIRMED ONCE ROADING CONFIGURATION HAS BEEN CONFIRMED BY HENMAR TRUST THROUGH DEVELOPMENT AGREEMENT WITH WAIPA DISTRICT COUNCIL

LOCATION FOR NEW HAUTAPU SUBSTATION (REFER TO NOTE 2)

SERVICE CONNECTION TO BARDOWIE INDUSTRIAL PRECINCT

BARDOWIE INDUSTRIAL PRECINCT MASTER PLAN

C10 GROWTH CELL FUTURE EXTENSION

POSSIBLE EASEMENT THROUGH APL INDUSTRIAL CAMPUS FOR PUBLIC FIBRE OPTIC SWAYNE ROAD FEEDER

FUTURE WAIPA NETWORKS FEEDER FOR NEW HAUTAPU SUBSTATION (INDICATIVE ONLY - REFER TO NOTE 2)

WAIPA NETWORKS HV SUPPLY (WELLS PLACE SUBSTATION FEEDER). STAGE 1 SUPPLY ONLY - REFER NOTE 3

SECONDARY FIBRE OPTIC FEEDER INTO C10 GROWTH CELL (SWAYNE ROAD SUPPLY)

**C10 GROWTH CELL
PRELIMINARY MASTER PLANNING**

**PRELIMINARY
UTILITY SERVICES STRATEGY**