



# Warkworth South Private Plan Change

Assessment of Economic Effects

23rd December 2022 – Final

m.e  
consulting



# Warkworth South Private Plan Change Assessment of Economic Effects

Prepared for

Classic Developments and Stepping Towards  
Far Limited

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Report author(s): Greg Akehurst, Fraser Church

Director approval: Greg Akehurst (23/12/2022)

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# 1 Introduction

KA Waimanawa Limited Partnership and Stepping Towards Far Limited own strategic blocks of land on the entry into Warkworth from the south. These blocks form part of the Warkworth South Future Urban Land area. The area is identified under the Future Urban Land Supply Strategy to become part of Auckland's residential supply in the first half of Decade Two (2028 – 2032) and is included in the Warkworth Structure Plan. The Land owners are keen to bring development of these blocks forward. This report assesses the economic implications of developing the land ahead of the FULSS schedule.

## 1.1 Objectives and Scope

KA Waimanawa Limited Partnership ('KAW') and Stepping Towards Far Limited ('STFL') together own approximately 165 hectares of land adjacent to SH1 to the south of Warkworth. Approximately 99ha of the land is on the western side of SH1 (Waimanawa Valley) that would be developed as a mix of THAB, Mixed housing Urban and Suburban along with a neighbourhood centre abutting SH1 and a 10ha Sports Park along the Northern edge. Approximately 65ha is to the east of SH1 (Waimanawa Hills), which would be developed into a mixture of THAB, mixed housing urban and suburban, and single house. The most appropriate way to achieve these objectives is to apply for a Private Plan Change to the Auckland Unitary Plan (AUP). KAW and STFL intend to work together to support the PPC application. The PPC at the moment reflects the Warkworth Structure Plan and potentially will change as a result of investigations and negotiations.

The blocks sit within an area of Future Urban Zone earmarked for development from 2028 under the Future Urban Land Supply Strategy (FULSS). The landowners are keen to bring that timeframe forward with the aim to have the first houses completed early to mid-2025 (once the RMA consenting processes are worked through). A key issue is likely to be the timing of development in the Warkworth context and the scale and nature of both the PPC and its links into the rest of Warkworth.

## 1.2 Approach

The objective of this study is to produce an assessment of the economic and growth implications of the PPC in the context of other Warkworth development and Council plans. This work divides relatively neatly into;

- an assessment of the additional of residential development land ahead of schedule in the context of Warkworth's ongoing development, and in light of the NPS-UD and other relevant policies, and
- an assessment of the economic impacts and implications of the development on the local and regional economy.



## Residential Development

We propose to translate residential development yields and potential development timings into household growth and place the proposal into the wider Warkworth growth context. To do this we will rely both on the latest local level projections generated in support of Auckland Transport's work (the ART projections) and any more recent releases of information from Statistics New Zealand (recently the results of the post enumeration survey have been incorporated into population estimates allowing rebasing of projections).

It will be important to the 'Fatal Flaw' assessment, that we are able to provide advice on whether the PPC sits inline with growth projections – or is ahead of anticipated growth in terms of overall scale and location. This might result in advice on staging or typology/zoning mix.

Finally, (in this section) we will assess the role that the proposed sports park plays in meeting a portion of the recreational needs of the wider Warkworth public. This is an important community facility that is being accommodated under this PPC, so its effects need to be included in the assessment.

We propose to work closely with the landowners and the wider team of advisors to ensure that the most appropriate mix and timing of residential development forms the basis of the PPC and that Council and its advisors fully understand the scale and nature of the PPC and its impacts.

## Economic Assessment

Developments of this scale generate a range of large-scale economic effects on the local and regional economies. We propose to use estimates of the scale and timing of the PPC development to estimate impacts on the local and regional economies. In addition, the scale and timing of residential development has implications for the scale, type and location of the proposed centre.

The proposed development will stimulate the construction sector in both the local (Warkworth) and regional economies. Additional construction sector demand stimulates output from a wide range of supplying industries, while wages and salaries paid to workers in these sectors are spent in the economy generating further rounds of activity. The construction sector is unique in that its output is made up by adding together the expenditure on the large number of discrete projects that occur across the region over the course of the year. This means that every project or development contributes to the output of the sector and that employment sustained by each project and the surplus and Value Add it generates are valid contributions to the local and regional economy. It is not the case that construction effects can be dismissed because they are short term, the sector is comprised of short-term impacts.

We propose to use a range of economic models to estimate the impact of the development on the economy. In the first instance common output ratios will be applied to development costings to translate them into construction sector output and employment estimates (by year). These estimates will be run through a multi-regional Input-Output model of the Auckland economy to trace the flow on effects of the construction sector shock. It will be important to place these effects into context – total construction sector output and an understanding that the growth was not caused by the development, rather the development provided space and opportunity to facilitate the growth. These are important aspects of the EIA that will be drawn out in the reporting.

Outputs of this aspect of the economic assessment will be estimates of gross output impact on the construction sector, employment impacts – in construction sectors and across the economy as a whole along with contribution to regional GDP.



The second component of the economic assessment will focus on the proposed local centre, its likely make-up and scale and potential impacts on the retail centre network. This will involve translating household growth into retail demand by type and determining the proportion that is best met at a local centre compared with the large town centre in central Warkworth and the other proposed developments to the north (PC40). These estimates will be translated into sustainable GFA by type for the local centre as well as the amount of floorspace growth accommodated in the development will be sustaining elsewhere in Warkworth over time.



## 2 Statutory background

There are a number of statutory documents that have been adopted at various governance levels that guide how the proposed development should be considered and implemented. There is a hierarchy of documents that need to be considered as part of the PPC application process. These range from legal documents at the top, down to the advisory documents near the bottom.

The hierarchy of these documents is important, in that documents lower down the list can be superseded by those above. For example, requirements under the national policy statement must be recognised even if documents further down the list were developed prior to the development of specific national policy statements.

### 2.1 Statutory Documents and status

#### Resource Management Act (RMA) 1991

The RMA is the main piece of legislation that governs how New Zealand's environment should be managed and protected. It is based on sustainable management principles with an aim to balancing current requirements with environmental protection. The RMA is the most important piece of legislation for considering, dictating the framework under which each of the other statutory documents have been written. There are several sections of the RMA that are particularly relevant to the PPC at Warkworth South. Section 5(1) of the RMA states that the purpose of the Act is to promote the sustainable management of natural and physical resources. Sections 74 and 75 of the RMA govern the contents of district plans and plan changes. Section 75(3) states that a district plan must give effect to any national policy statements, amongst other requirements. This is especially relevant given the status and objectives of NPS-UD 2020, outlined below.

#### National Policy Statement on Urban Development (NPS-UD) 2020

The NPS-UD is a recently adopted document which dictates how local authorities are to make decisions relating to urban environments. It aims to place a greater emphasis on managing growth through 8 objectives, ranging from consideration of social, economic and cultural wellbeing through to affordability, climate change awareness and Treaty of Waitangi obligations. Of particular note is objective 6, which states that

*Local authority decisions on urban development that affect urban environments are:*

- a) integrated with infrastructure planning and funding decisions; and*
- b) strategic over the medium term and long term; and*
- c) responsive, particularly in relation to proposals that would supply significant development capacity.*





Objective 6 informs Policy 8:

*Local authority decisions affecting urban environments are responsive to plan changes that would add significantly to development capacity and contribute to well-functioning urban environments, even if the development capacity is:*

- a) unanticipated by RMA planning documents;*
- b) or out-of-sequence with planned land release.*

Adding to this, subpart 2 (responsive planning) clause 3.8 states indicates that regulatory bodies must consider unanticipated or out-of-sequence developments that provide significant development capacity, such as the PPC proposed for Warkworth South.

### *3.8 Unanticipated or out-of-sequence developments*

- 1. This clause applies to a plan change that provides significant development capacity that is not otherwise enabled in a plan or is not in sequence with planned land release.*
- 2. Every local authority must have particular regard to the development capacity provided by the plan change if that development capacity:*
  - a. would contribute to a well-functioning urban environment; and*
  - b. is well-connected along transport corridors; and*
  - c. meets the criteria set under subclause (3); and*
- 3. Every regional council must include criteria in its regional policy statement for determining what plan changes will be treated, for the purpose of implementing Policy 8, as adding significantly to development capacity.*

Together, the objectives, policies, and clauses within the NPS-UD say that regulatory bodies *must* carefully consider out-of-sequence developments, such as the private plan change request put forward by CD and STFL for Warkworth South.

### Auckland Unitary Plan - Operative in Part (AUP) 2016

The Auckland Unitary Plan was developed and enacted under the framework prescribed by the RMA (above). The AUP describes how Auckland's natural and physical resources can be used by determining what can be built and where. It contains rules around zoning, including development requirements. The AUP contains the updated regional policy statement (RPS), the regional plan, and the district plan. Together these documents state the objectives for the use, management, and development of Auckland's natural and physical resources within the AUP. They also give policies implemented to achieve the objectives, and any rules that are required in support of those policies. These documents generally replace previous individual iterations of each of those documents, apart from portions of the AUP that are under appeal. The AUP is the main document detailing specific requirements across Auckland from the region-wide objectives down to the individual zoning rules and overlays relevant to individual portions of land.



The AUP identifies areas earmarked for greenfield development through Future Urban Zoning (FUZ) under the district plan portion of the document. Approximately 1,000 hectares of land was zoned FUZ within the AUP. FUZ zoning indicates an intention for the land to change from existing rural uses to alternative urban uses. The zone is therefore a transitional zone, with the requirement for a plan change to rezone the land from FUZ to alternative zoning. Both the Western and Eastern sites are located within FUZ.

The AUP is required to give effect to national policy statements in section 75(3)(a) of the RMA, regardless of the fact that the NPS-UD was adopted after the AUP. This is especially important in light of clause 3.8 of the NPS-UD described above. Out-of-sequence or unanticipated developments (such as the proposed PPC) *must* be adequately considered.

### Future Urban Land Supply Strategy (FULSS)

The Future Urban Land Supply Strategy is a document that outlines a programme to sequence future urban land development over a 30 year period from 2017. It has been developed with reference to the AUP and the greenfield land that was earmarked for development within it. The strategy is used to inform Council infrastructure asset funding, management, and planning priorities, which then has flow-on effects for other public and private sector stakeholders. The FULSS estimates dwelling capacities and timings for a range of greenfield across the region, including for Warkworth South where the PPC is located. The FULSS indicates residential capacity of 3,700 dwellings alongside a new local centre in Warkworth South, with development from 2028-2032 (the first half of Decade Two). Warkworth South's staging comes primarily as a result of efficient staging requirements for wastewater infrastructure upgrades.<sup>1</sup> Attempting to bring the PPC development forward from decade two will have an impact on infrastructure planning and management.

It should be noted that although the FULSS is one of the key documents guiding development planning, it does not share the same legal status as the RMA, NPS-UD or AUP. Although the FULSS has been developed and adopted by Auckland Council, it is an *advisory* document which may be superseded by objectives and policies in documents higher up the hierarchy. This being the case, M.E still intend to place the PPC in the context of the FULSS (and the Warkworth Structure Plan), but that does not mean that these documents are inalienable.

### The Warkworth Structure Plan

The Warkworth Structure Plan (WSP) sets out a comprehensive pattern of land use within the Future Urban Zoned land around Warkworth. The WSP was published in 2019, two years after the publication of the FULSS and sets out the general residential and business zoning patterns in the FUZ land. It indicates that the Warkworth South area has capacity for 4,100 dwellings, an increase of 400 on the 3,700 identified within the FULSS. Notably, the Warkworth Structure Plan identifies slightly less dwelling capacity overall than the FULSS – 7,500 dwellings versus the 7,600 previously. This indicates that there was a re-allocation

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<sup>1</sup> Auckland Council, Future Urban Land Supply Strategy, p. 37. <https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/topic-based-plans-strategies/housing-plans/Documents/future-urban-land-supply-strategy.pdf>



of capacity around Warkworth during the publishing of the two documents. According to the WSP, development staging was reviewed but it was decided that *“the Warkworth Structure Plan does not propose to change the sequencing identified in the Future Urban Land Supply Strategy ... due to significant infrastructure funding issues combined with the wider Auckland compact city focus on redevelopment of brownfield areas”*.<sup>2</sup>

As with the FULSS (above), the WSP is mainly an advisory document, helping to provide information for development management purposes rather than a legislated document. This means that the zoning and timings are indicative only, and may be subject to change.

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<sup>2</sup> Auckland Council. Warkworth Structure Plan, pp. 86-87.



## 3 Residential Development

The proposed plan change covering the Waimanawa Valley and Waimanawa Hills sites needs to be put into the context of the local Warkworth and wider Auckland context. The addition of the proposed 1,606 dwellings around the town would have a significant impact on the urban form on the satellite town. It is important to explore the impact that these 1,606 dwellings would have on the area, as well as the impact that bringing the development timing forward would have.

### 3.1 Warkworth Size and Growth

Warkworth was identified in the Auckland Plan 2050 as a satellite town. The town is a key node that services a large rural catchment to the north of the Auckland Region. The town is located on State Highway 1, nearly 60km north of Auckland CBD. Historically the town has been viewed as an outlying rural town but as the main Auckland urban area has sprawled and transport connectivity has increased, Warkworth has become more accessible to a larger population base. This is reflected in the growth in population size in and around the town.

Statistics New Zealand estimates indicate a 115% increase in Warkworth's population between 2001 and 2022, from 3,070 people to 6,610. The increase of 3,540 people over the 21-year period represents an average of 5.5% growth annually.<sup>3</sup> Much of this growth has occurred in the last 10 years, with population increasing by 2,150 between 2013 and 2022 (from 4,460 to 6,610). This indicates that population growth has also been increasing, from an annual average increase of around 116 people in the 2001-2013 period, to around 239 people on average in the 2013-2022 period.

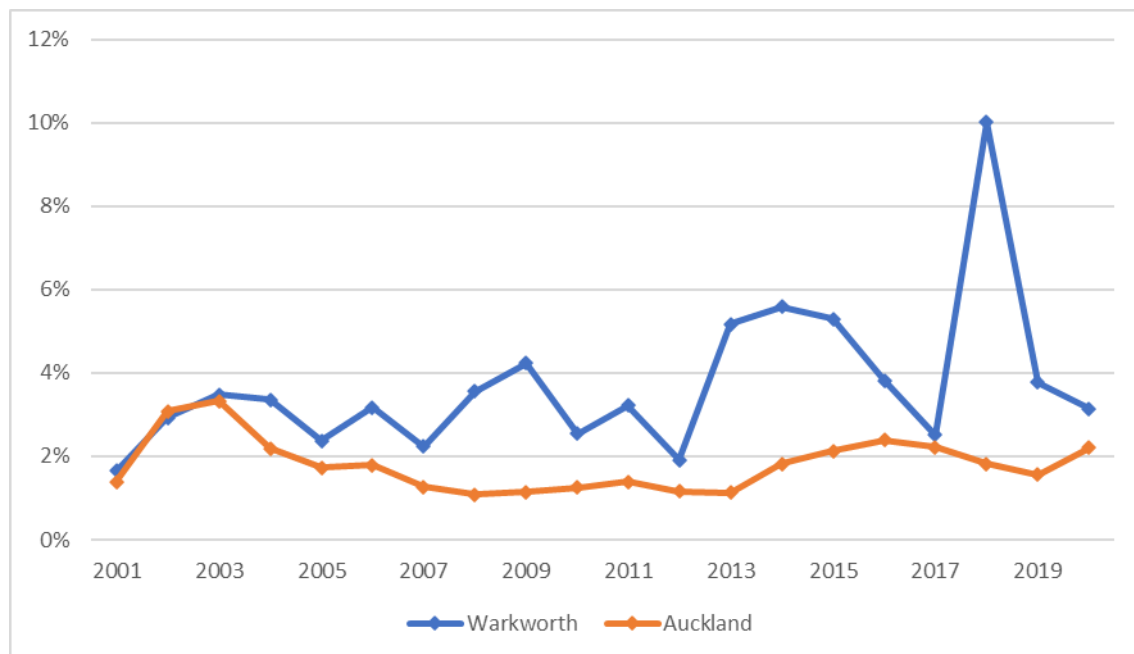
The annual population change in Warkworth is higher than Auckland as a whole since 2000 (Figure 3.1). This indicates that there is a larger share of the overall population growth going to Warkworth than would otherwise be expected, based on the town's size.

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<sup>3</sup> Statistics New Zealand, Subnational population estimates (TA, SA2), by age and sex, at 30 June 1996-2022 (2020 boundaries). [http://nzdotstat.stats.govt.nz/OECDStat\\_Metadata/ShowMetadata.ashx?Dataset=TABLECODE7980&ShowOnWeb=true&Lang=en](http://nzdotstat.stats.govt.nz/OECDStat_Metadata/ShowMetadata.ashx?Dataset=TABLECODE7980&ShowOnWeb=true&Lang=en)



Figure 3.1: Annual population change for Warkworth and Auckland, 2001-2020



Census estimates of dwellings mirror the trend in population, with an 80% increase in occupied dwellings from 1,155 to 2,094 between the 2001 and 2018 censuses. Approximately 265 further dwellings were consented in Warkworth town between March 2018 (census night) and March 2021, as well as those under construction at the time of the last census. On average, the number of dwellings consented annually has been on an upward trend over the last 20 years, mirroring demand created by population increases.

Together, this information suggests that Warkworth has experienced growth over the past 20 or so years, with strong acceleration in the last 10 years. This comes largely as a result of increases in accessibility to Warkworth through investment in a range of roading infrastructure projects, as well as increases in housing stock availability alongside expanding urban sprawl within Auckland generally.

## 3.2 Future Growth Projections

Growth projections used in this assessment have been derived from Auckland Council’s Auckland Regional Transport (ART) Model.<sup>4</sup> This model produces a set of projections across 596 areas in and around the Auckland region. We have focused on the household projections within the i11 modelling, as these closely reflect the number of dwellings that might be expected in an area.<sup>5</sup> There are 8 key ART zones (numbers 8 to 15) that make up the existing and future urban extent of Warkworth represented in Figure 3.2.

<sup>4</sup> We have used Scenario I Modified, version 11.6.

<sup>5</sup> Dwellings and households are not necessarily 1-to-1, as some dwellings are retained as holiday homes, left unoccupied, or used for other purposes (e.g. AirBnB). As well as this, more than one households may occupy one dwelling at a time.

Figure 3.2: Warkworth ART Zones



Household growth projections for Warkworth show continued strong growth into the future, as to be expected with the FUZ zoning and structure planning. The impact of structure plan timings (from the FULSS and WSP) can clearly be seen in the spatial distribution of growth through time in Figure 3.3.



**Figure 3.3: Household Growth projections for Warkworth 2018-2051**

Area		2018	2021	2026	2031	2036	2041	2046	2051
Warkworth Urban Area	Projected Households	2,230	2,460	3,090	3,840	4,230	4,390	4,540	4,600
	% of Total	90%	90%	88%	87%	65%	53%	53%	52%
Warkworth South	Projected Households	120	130	150	170	1,740	3,380	3,490	3,610
	% of Total	5%	5%	4%	4%	27%	40%	40%	41%
Warkworth North	Projected Households	140	150	260	400	500	590	610	630
	% of Total	6%	5%	7%	9%	8%	7%	7%	7%
<b>Total</b>		<b>2,490</b>	<b>2,740</b>	<b>3,500</b>	<b>4,410</b>	<b>6,470</b>	<b>8,360</b>	<b>8,640</b>	<b>8,840</b>

Auckland Council ART Model

Household growth over the next 15 years is projected to mainly occur within the Warkworth Urban Area (areas 8, 9, 10 and 12), with some growth in the North (areas 11 and 13) and low growth in the South (areas 11 and 13). Post-2031 it is expected that there will be rapid growth in households in the Warkworth South area as the infrastructure within the Warkworth Structure Plan is installed and enables development in the area. It is projected that the Warkworth South area will eventually home 41% of total households in Warkworth by 2051, an increase of almost 3,500 from 2021.

Figure 3.4 shows the period growth by each of these areas. This again indicates that there is a reasonable amount of growth within the Warkworth Urban Area over the short-medium term, while growth in the Southern cell outstrips this significantly in the period 2031 to 2041 with between 75% and 90% of all Warkworth’s growth occurring in the cell.

**Figure 3.4: Household change for Warkworth 2018-2051**

Area		2018	2021	2026	2031	2036	2041	2046	2051
Warkworth Urban Area	Household Growth		230	630	750	390	160	150	60
	% of Total		92%	83%	82%	19%	8%	54%	30%
Warkworth South	Household Growth		10	20	20	1,570	1,640	110	120
	% of Total		4%	3%	2%	76%	87%	39%	60%
Warkworth North	Household Growth		10	110	140	100	90	20	20
	% of Total		4%	14%	15%	5%	5%	7%	10%
<b>Total</b>			<b>250</b>	<b>760</b>	<b>910</b>	<b>2,060</b>	<b>1,890</b>	<b>280</b>	<b>200</b>

Auckland Council ART Model

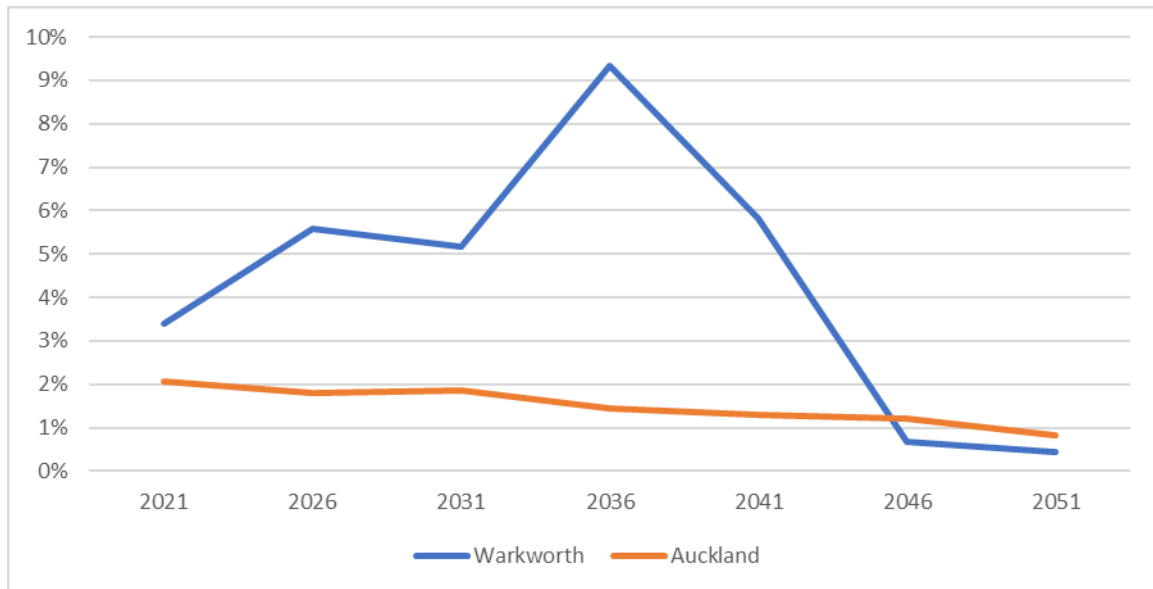
It should be noted that some of this growth is allocated based on land availability. This means that the i11 projections assume that parts of the FUZ land will become available at a certain point in time, which then means that households may be allocated to those areas. What this means is that there is a kind of feedback loop in terms of land availability driving growth and vice versa. With this in mind, it makes sense to look at Warkworth’s growth as a whole, especially in light of the fact that the proposed PPC aims to bring development of a specific part of Warkworth forward.

As with the historic growth trends, Warkworth’s average annual household growth rate is projected to outstrip that of the total Auckland region for the majority of the next 30 years. Figure 3.5 shows the projected average annual growth rate for Warkworth and Auckland. Warkworth’s growth rate is on a general trend upward to 2036 where it peaks at over 9% and declines from then on. Auckland’s household growth rate is on a general trend downward for the whole period 2021 to 2051, starting near 2% and dipping below 1% at the end of the projection series. This mirrors the historic trend that Warkworth has experienced, whereby the town has attracted a greater share of household demand than might be



expected when looking at the general trends for Auckland. This means that the town is growing relatively fast and requires the infrastructure and housing to do so.

**Figure 3.5: Projected annual household growth rate, Warkworth and Auckland 2018-2051**



### 3.3 Warkworth Structure Plan

As described in Section 2.2 above, the Warkworth Structure Plan (WSP) is an advisory document published in June 2019 that details the proposed zoning for the future urban zone around Warkworth. Approximately 1,000 hectares of future urban zone has structure plan zoning applied. Figure 3.6 shows the indicative zoning for the whole of Warkworth.

The southern portion of the structure plan area ('Warkworth South') contains the largest contiguous area of FUZ around Warkworth. As discussed in Section 2.2, the WSP indicates capacity in the area of around 4,100 dwellings, an increase of 400 dwellings from the FULSS assessment published 2 years prior. The proposed zoning in Warkworth South makes provision for terraced housing, mixed housing urban and suburban, and single house dwelling typologies. The zoning takes account the topography of the area, with the THAB zone being located around some of the flattest land area in Warkworth. The THAB zoning here represents the entirety of the THAB zoning within Warkworth, and is expected to yield in the region of 400 dwellings. The THAB zoning is surrounded by Mixed Housing Urban and Suburban zoning in concentric rings.

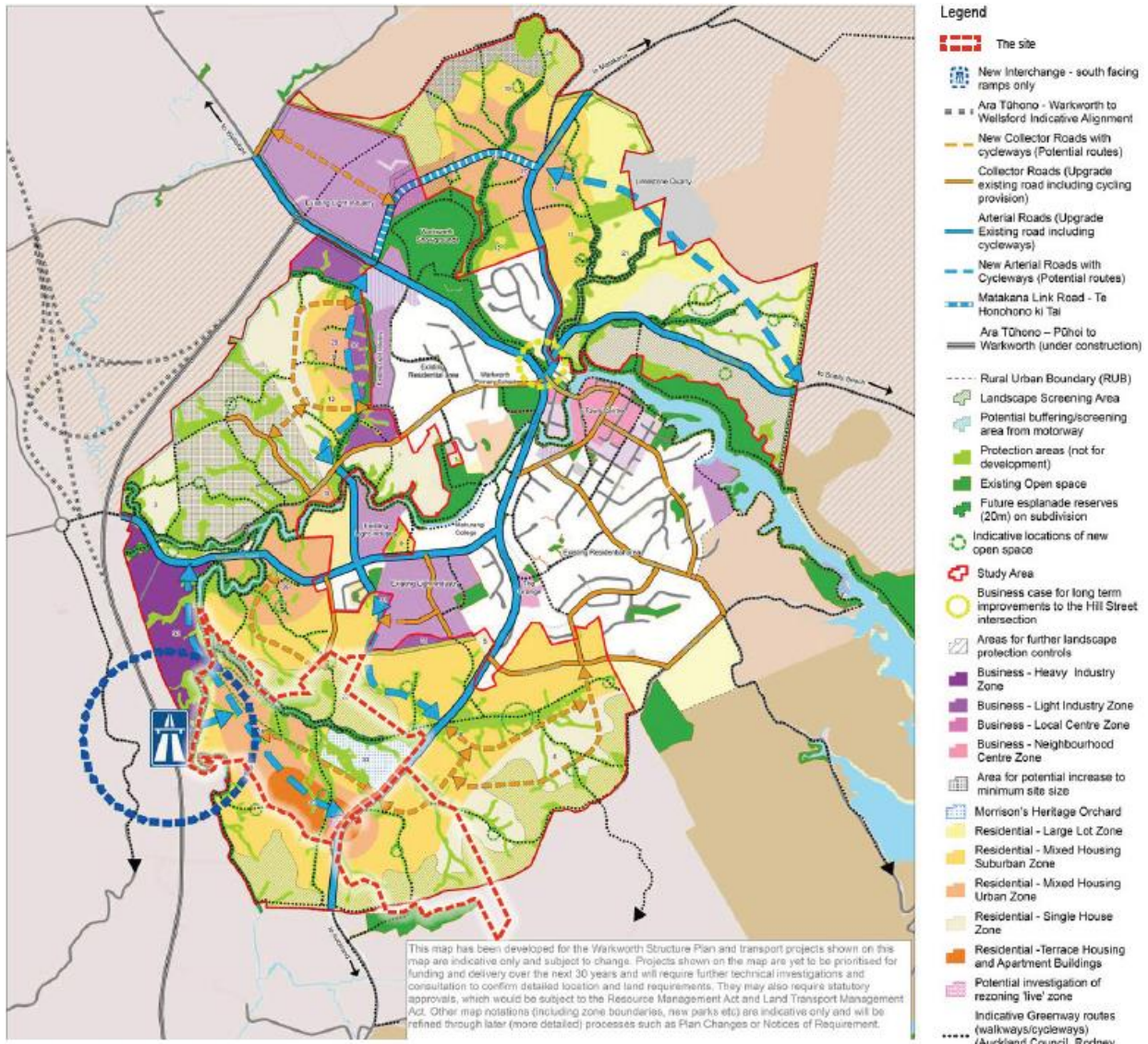
At the centre of the THAB zoning is provision for a 1ha local centre in the south aimed at serving the majority of southern area, as well as providing space for a public transport interchange. The proposed interchange will be serviced by the new Wider Western Link road, connecting State Highway 1 with Woodcocks Road in the north of the cell. This is complemented by an improvement in the SH1 transport



corridor itself. A 10ha sports park is also proposed in the south, large enough to support the requirements of a significant residential catchment. Morrison’s Heritage Orchard is to be retained in the south.

The zoning in the southern portion of the Warkworth Structure Plan area has been used to inform the Waimanawa private plan change put forward by Classic Developments and Stepping Towards Far Limited.

Figure 3.6: Warkworth Structure Plan (Auckland Council, 2019)



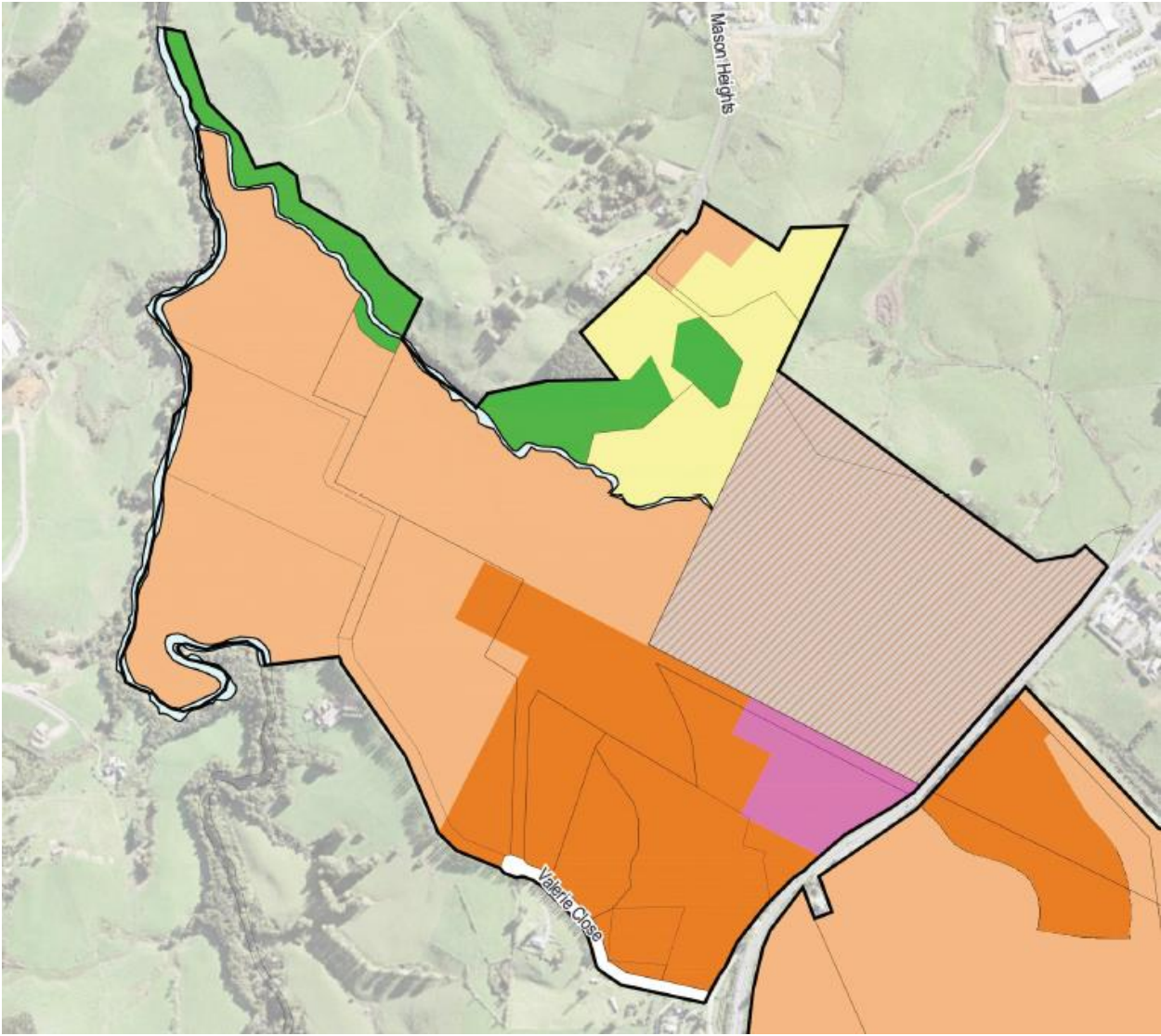
### 3.4 The Waimanawa Valley site development

The Waimanawa proposed private plan change is split between two areas, the original Endean Farm Limited site is to the west of State Highway 1 (Waimanawa Valley) and the original NZPC site is directly opposite to the east of State Highway 1 (Waimanawa Hills).



The Waimanawa Valley is approximately 99.5 hectares in size and covers much of the terraced housing and mixed housing (urban and suburban) area in Warkworth South (Figure 3.7). The masterplan proposes about 66ha of residential zoning, split between THAB (19.6ha), mixed housing urban (38.4ha) and large lot housing (7.9ha). Together these zones will accommodate a total of 915 dwellings<sup>6</sup>, 472 in the THAB zones (apartments and lots), 352 in the MHU zone (lots), 68 apartments in the Local Centre Zone, 12 in the Rural Mixed Rural zone and 11 lots in the Large Lot zone. THAB zoning is located on the eastern part of the site adjacent to the existing SH1, while the mixed housing zones are in the centre and north-west. Around three hectares of local centre zoning is located on the eastern-most portion of the site, adjacent to the new public transport interchange, upgraded SH1 and new Wider Western Link road intersection. Approximately 5.7ha of land is retained as Open Space – Conservation preserving native bush reserves and stream edge native reserves. Finally, the Morrison Heritage orchard is marked as Rural Mixed Rural Zone (22ha).

**Figure 3.7: The Waimanawa Valley Site proposed zoning**









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<sup>6</sup> Assuming one dwelling per lot in MHU zones.



#### Legend

-  Plan Change Extent
-  Residential- Large Lot Zone
-  Residential- Single House (minimum lot size 1,000m<sup>2</sup>)
-  Residential- Mixed Housing Urban Zone
-  Residential- Terrace Housing and Apartment Building Zone
-  Business- Local Centre Zone
-  Open Space- Conservation Zone
-  Rural-Mixed Rural Zone

### The Waimanawa Valley Masterplan versus Warkworth Structure Plan

Overall, the residential component of the Waimanawa Valley part masterplan is largely consistent with the Warkworth Structure Plan zoning although there are some differences in the mix of typologies proposed. The THAB zoning is anchored by a local centre in the eastern part of the site, with mixed housing urban and suburban typologies located around this area. The WSP indicates capacity of approximately 940 dwellings in the area covered by the Waimanawa Valley development, 560 in mixed housing and 380 in THAB zones. This is only 25 more than that proposed by the masterplan (915 versus 940). The masterplan puts more emphasis on terraced housing and apartments than the WSP, with 540 THAB dwellings proposed (164 more) and 375 mixed housing dwellings (192 less).

Overall, the differences in dwelling capacity versus proposed is minor.

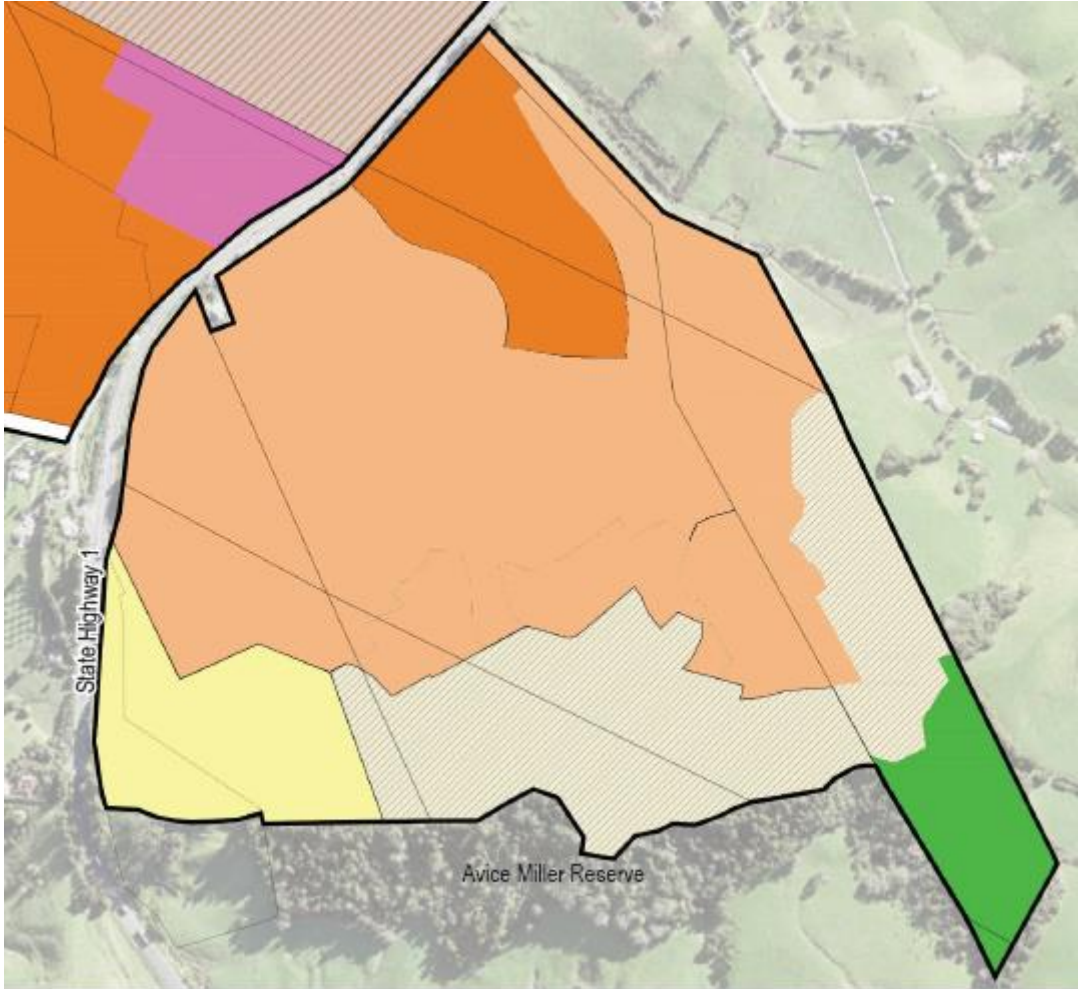
The proposed local centre in the masterplan is three times the size of that in the WSP. The WSP indicates a local centre of approximately 1ha while the masterplan proposed a 3ha centre. This is a fairly significant difference. The proposed centre is similar in scale to The Grange local centre to the north (2.5ha). If the aim, however, is to provide a local centre for the whole of Warkworth South – approximately 4,100 dwellings – as well as providing for passing traffic and a public transport interchange, then a centre this large may not be exceptional.

The large recreational park proposed is consistent with that outlined in the WSP. The location adjacent to Morrison's Heritage Orchard matches that within the WSP. The park will provide many of the same features as other suburb parks (walking, cycling etc).

### 3.5 The Waimanawa Hills site development

The Waimanawa Hills site land sits to the east of State Highway 1. The site is approximately 65 hectares, with a mix of terraced housing, mixed housing urban, single house, and large lot zoning (Figure 3.8).<sup>7</sup> The THAB zoning in the north covers approximately 5.8 hectares with 183 lots, and is located in the flattest part of the site. The rest of the site is split between mixed housing urban (36hectares, 455 lots), single house zoning (14.5 hectares, 41 lots) and 6ha of Large Lot zoned land yielding 12 dwellings. Assuming that each lot is equivalent to one dwelling, Waimanawa Hills represents 691 dwellings. Unlike the Waimanawa Valley land, the Waimanawa Hills land does not have any provision for non-residential zoning. Rather, the residential development there will be served by the local centre proposed on the western side. Most of the Waimanawa Hills land is located within the FUZ, with a small portion within the Rural Production zone. The rural production area is earmarked for single house zoning with lots above 1,000sqm.








Figure 3.8: The Eastern Site proposed zoning



<sup>7</sup> We have selected Option 1 as the preferred option. Option 2 proposes slightly fewer lots – 497 rather than 514.



#### Legend

-  Plan Change Extent
-  Residential- Large Lot Zone
-  Residential- Single House (minimum lot size 1,000m<sup>2</sup>)
-  Residential- Mixed Housing Urban Zone
-  Residential- Terrace Housing and Apartment Building Zone
-  Business- Local Centre Zone
-  Open Space- Conservation Zone
-  Rural-Mixed Rural Zone

### Waimanawa Hills development versus Warkworth Structure Plan

The Waimanawa Hills proposal is largely in line with the WSP. Specific comparisons between dwelling yields are not possible to make given the relatively general nature of the structure plan in the area. In general terms however, the 65ha of land at the Eastern site represents approximately 17% of the 388ha of the total residential land in the southern part of the WSP. At the same time, the development would provide dwellings also equal to 17% of the total capacity estimated in Warkworth South. This indicates that the proposed development is in line with estimates from the WSP. The location of the proposed zoning is also generally consistent with the WSP. Zoning the flattest part of the land THAB, and surrounding this with MHU is consistent with the pattern described within the WSP. These two factors together indicate that the proposed Waimanawa Hills development is the appropriate size and in approximately the appropriate location according to Auckland Council's work.

## 3.6 Implications

Given the minor differences between the scale and location of the proposed development and the WSP, the crux of this assessment comes down to the different timeframes associated with each. As described in Section 2.1, the WSP aims to enable development in the Warkworth South area between 2028 and 2032. The PPC aims to bring development forward so that the first dwellings are enabled around the middle of 2024. This would require Council to make a significant commitment in the form of re-allocation of funding and works programs, most notably for water infrastructure. This is particularly important given the fact that the staging was reviewed and maintained between the FULSS and WSP.

There is justification in bringing the development of the Waimanawa sites forward. Warkworth has experienced a relatively high level of population and household growth over the past 20 years, and especially in the previous 10 (Section 3.1). This growth has continued even though there have been few (if any) major consolidated residential developments in the Warkworth area. M.E note that in recent times consent has been granted to Warkworth North and Clayden Road plan changes which have added capacity to the north of Warkworth. Up until recently, most of the development to date has been organic and ad hoc. This suggests that there has been a high level of demand for housing in and around the town.



This trend looks set to continue into the future based on Auckland Council's own population and housing modelling (the i11 modelling carried out for AT). Going by the historic and projected future trends for Warkworth, bringing forward the development of Warkworth South would provide significant levels of additional capacity in a high-demand market. What this means is that the new housing stock would likely be purchased quickly and help to alleviate supply pressures and assist in reducing house prices. Flowing on from this, enabling development in the short to medium term would likely help maintain affordability in an increasingly unaffordable housing market such as Auckland's. Adding to this, enabling the development of the 1,600 dwellings on the Waimanawa sites could act as an anchor to develop the rest of Warkworth South (an extra 2,500 dwellings in the WSP). This would help to further alleviate supply and affordability issues.

Enabling development early would also bring about a number of other benefits outside of supply and affordability aspects. Enabling the provision of the local centre would potentially provide a wider range of goods and service options to local and passing customers and help meet the needs of the entire Warkworth South catchment.

The NPS-UD requires that Council's carefully and adequately assess unanticipated or out-of-sequence developments such as the one proposed at Warkworth South. What this means is that Council is required to consider the merits of the proposed PPC. Based on the reasons given above, the development at Warkworth South is appropriate in terms of location, scale, and timing.



## 4 Economic Effects of Development

A key aspect to consider are the economic effects of development and early development. This arises from two sources; the construction effect of providing the housing, infrastructure and associated commercial support to these areas and, the longer-term ongoing effects of developing these areas in terms of retail expenditure in the community, workforce and economic activity associated with the suburbs over time.

These effects have been divided into those that occur through the development phase and those that impact over the medium to longer term

### 4.1 Development Economic Effects

Development economic effects can be further separated between those associated with construction of the developments within the very local Warkworth economy and those that have a more regional focus. In order to estimate these effects a financial model of both developments has been generated based on information provided by the developers. This model translates the number of dwellings proposed by type, into a construction cost total. To this is added the costs associated with shared infrastructure and the development of the local centre on State Highway 1.

These are then run through a 48 sector multi-regional economic model of the Auckland economy to translate the direct expenditures into a series of impacts on Gross Output, Value Added Employment and Household Incomes.

#### 4.1.1 Development Costing

The developers have provided area maps of their holdings along with development plans and likely yields. On the Waimanawa Valley land, a total of 99.5ha is likely to deliver some 915 dwellings once fully developed. This is a mix of standalone dwellings on land zoned Mixed Housing Urban and Large lot Zone and Terraced housing on Terraced Housing and Apartment Building Zone land (Figure 4.1).



**Figure 4.1: The Waimanawa Valley Development Profile**

Zoning		Land (Ha)	% of Total Site	Residential Yeild	
				Lots	Apartments
Residential	THAB	19.6	20%	367	105
	Mixed Housing Urban	38.4	39%	352	
	Single House Zone	0	0%	0	
	Large Lot	7.9	8%	11	
	<i>Sub-total</i>	<i>65.9</i>	<i>66%</i>	<i>730</i>	<i>105</i>
Business	Local Centre	3.4	3%		68
	<i>Sub-total</i>	<i>3.4</i>	<i>3%</i>		<i>68</i>
Open Space	Conservation	5.7	6%		
	<i>Sub-total</i>	<i>5.7</i>	<i>6%</i>		
Rural	Rural-Mixed Rural	22.0	22%	12	
	<i>Sub-total</i>	<i>22.0</i>	<i>22%</i>	<i>12</i>	
Existing	Others (streams etc)	2.5	2%		
	<i>Sub-total</i>	<i>2.5</i>	<i>2%</i>		
<b>Total</b>		<b>99.4</b>	<b>100%</b>	<b>742</b>	<b>173</b>

The land on the eastern side of State Highway 1 (Waimanawa Hills) is smaller in extent at 65.5ha, and is expected to deliver fewer dwellings at 691, due to the different nature of the terrain (Figure 4.2).

**Figure 4.2: Waimanawa Hills Residential Development Profile**

Zoning	Land (Ha)	% of Total Site	Res. Yeild
			Lots
THAB	5.78	8.8%	183
Mixed Housing Urban	35.80	54.7%	455
Single House Zone	14.50	22.1%	41
Large Lot Zone	6.00	9.2%	12
Other - Open Space	3.40	5.2%	0
<b>Total</b>	<b>65.5</b>	<b>100.0%</b>	<b>691</b>

The above dwelling numbers have been converted into approximate construction costs based on the information contained in the QV Cost Builder. This provides estimates of costs on a square metre basis for different residential building typologies of different quality standards in different markets across New Zealand. The QV Cost Builder provides different average cost estimates based on dwelling size and distinguishes between single and multi-storey dwellings within each type. Finally, the QV Cost Builder provides estimates of the major elements that make up a residential dwelling build (and other builds) to allow detailed analysis if required.

A table of the ratios applied in this study is contained in Appendix X. Note that the QV cost builder provides estimates based on national averages. However, they also provide a range of values for the total figures





for the larger regions. This allows the Auckland figures to be factored up to reflect the additional costs associated with development in the largest economy.

In terms of timings, we have assumed that the development and building will begin in 2024 with the first homes available early to mid 2025 and fully built out over the next 10 years – depending on market demand.

#### 4.1.2 Infrastructure Costing

In addition to the residential development costings, there are shared infrastructure costings associated with the development of the residential areas. These include costs borne by the developer for roading, bulk wastewater, water, footpaths and cycle lanes. In total these amounted to almost \$31m (Figure 4.3). The majority of these costs are met early in the process – ahead of the build costs for residential.

**Figure 4.3: Infrastructure Costing Summary**

Element	Section Cost
State Highway 1 upgrade	\$ 9,998,000
Western Link Rd	\$ 3,991,000
Footpath and Cycle Lane upgrade	\$ 3,311,000
Wastewater	\$ 3,379,000
Water	\$ 6,466,000
Sub-Total Physical Works	\$ 27,145,000
Onsite overheads	\$ -
Sub-Total Gross Construction	\$ 27,145,000
Contingency - Risk	\$ 3,635,000
Sub-Total Gross Construction	\$ 30,780,000
Professional Fees	\$ -
Other fees	\$ -
Total Cost Estimate	\$ 30,780,000

#### 4.1.3 Total construction expenditure

The construction sector is made up from a large number of individual developments, which may only last from a few weeks to a number of years. Any single development will not guarantee employment or create jobs that last for a working life, however collectively, construction projects – such as the Waimanawa project will ensure a healthy and productive construction sector continues to operate.

In total, the proposed developments on the Waimanawa Private Plan Change land will pump approximately \$1.25bn into Auckland’s Construction sector over a 3-10 year period (Figure 4.4 and Figure 4.5).



Figure 4.4: Western Site Residential Development Costs

Development Zone	Lot Size	Dwelling Size	Build Cost per dwelling	Total Dwellings	Total Construction Cost
Terrace Housing and Apartment Buildings	0	100	\$ 305,370	173	\$ 52,829,000
Terrace Housing and Apartment Buildings	150-180	180	\$ 621,270	61	\$ 37,897,000
Terrace Housing and Apartment Buildings	>300	200	\$ 690,300	11	\$ 7,593,000
Terrace Housing and Apartment Buildings	200-300	220	\$ 759,330	295	\$ 224,002,000
Mixed Housing Urban	400-450	200	\$ 748,800	302	\$ 226,138,000
Mixed Housing Urban	600-800	300	\$ 1,544,400	50	\$ 77,220,000
Mixed Housing Suburban	800-1000	350	\$ 2,538,900	23	\$ 58,395,000
<b>Total</b>				<b>915</b>	<b>\$ 684,074,000</b>

Figure 4.5: Eastern Site Residential Development Costs

Development Zone	Lot Size	Dwelling Size	Build Cost per dwelling	Total Dwellings	Total Construction Cost
Terrace Housing and Apartment Buildings	>300	180	\$ 621,270	183	\$ 113,692,000
Mixed Housing Urban Zone	300	200	\$ 690,300	285	\$ 196,851,000
Mixed Housing Urban Zone	400	220	\$ 759,330	170	\$ 128,959,000
Single House Zone	600	300	\$ 1,544,400	41	\$ 63,320,000
Single House Zone	min 1,000	350	\$ 2,538,900	12	\$ 30,467,000
<b>Total</b>				<b>691</b>	<b>\$ 533,289,000</b>

This injection will sustain employment, generate profits and tax revenue for the government and help ensure the construction sector remains in good health. In addition, the residential dwellings that emerge from the process add to supply in an overheated market – thereby assisting in improving housing affordability by meeting demand (discussed in Section 3, above).

In order to estimate the effects of these developments it is necessary to model the development (in a financial sense) within a model of the Auckland economy. This allows the Auckland economy to adapt and adjust output and employment to meet the increased needs stimulated by the developments in Warkworth.

#### 4.1.4 MRIO

There are a number of modelling approaches that are able to be applied to assess these effects, but the most cost effective model – and the one that provides more detailed insights into the pathway of change, is the Input-Output model. In this case a Multi-Regional version of an Input-Output ('IO') model. A detailed description of the IO modelling process is contained in Appendix 2 to this report.

In summary, an IO model allows the estimation of the changes required in the wider economy to meet the additional needs of a particular development (such as that enabled by the Plan Change). As the construction businesses increase their output when they build new dwellings and associated infrastructure, the businesses demand additional raw materials and prefabricated products such as timber beams and plywood, wall panels and roofing along with tonnes of aggregate, concrete and all the fixtures and fittings required to complete the dwellings. These products (in the main) come from the manufacturing sector and (via imports). Each manufacturing business must increase its output (or draw from stores) to meet the



increased orders, thereby employing additional staff (or paying overtime) and demanding additional raw materials from their suppliers.

The IO framework is a buy/sell matrix of the Auckland economy set within a buy/sell framework of the North Island and National economies. This allows changes in final demands (that is from the building of new dwellings) to be translated into changes in intermediate demands (businesses buying from each other to produce final products) and primary demands (businesses buying raw materials from forests or quarries) to produce intermediate goods.

At each step of the process, additional employment is sustained (either through new jobs or additional work hours), wages are paid, profits made and taxed and surpluses either re-invested or taken as profits.

The MRIO provides a number of different measures of economic impact, including;

- **Gross Output:** this is the broadest measure of economic effects, or impacts. It captures the total value of all transactions required to support the development. While it defines the outer parameters of effect, it is a poor predictor of activity that leads to benefits in the wider economy. For example, a tourist souvenir shop that imports all its goods from overseas to sell to tourists might have sales of \$1m, but half of that goes directly offshore to pay for the goods being sold, leaving a small portion of the money in the local economy. Contrast that with a souvenir shop that sells goods made locally. The \$1m in sales might support \$800,000 - \$900,000 of local activity. This money then flows back through the economy as those families buy goods and services to live and pay mortgages. In Gross Output Terms, both these examples have the same value – yet have very different effects.
- **Value Added:** this is the measure of economic effect that is most closely aligned with GDP. Value Added, as the name suggests, measures the amount of value that is added within a sector and collectively, within an economy. It is the sum of the wages and salaries, profits, taxes and depreciation within each sector. It is the most appropriate measure of economic impact.
- **Household Incomes:** this is a subset of Value Added, and captures only the portions of Value Add that contribute to households wellbeing. It is a combination of the wages and salaries paid (less tax) and the portion of operating surplus captured by business owners (again, less tax).
- **Employment:** employment is actually an employment equivalence measure. It captures that amount of full time employee years that a particular volume of activity sustains. It is measured in Modified Employee Count or MEC, terms. An MEC is a combination of an employee (as defined by Statistics New Zealand) and the working proprietors who are not recorded as employees (for tax purposes) by the IRD. The numbers of working proprietors in this category are generally higher in sectors with a large proportion of self employed workers – such as the construction sector. Therefore, it is important to capture their employment effect – an effect that would be lost by simply relying on Statistics New Zealand’s measure of employment (the EC).

Each measure provides a slightly different way of looking at the impacts of the development and all are reported on below.



## 4.1.5 Economic Impact Assessment Process

This EIA has been completed using conventional approaches. The first steps are associated with identifying net additional 'direct expenditure' change and then this change is allocated to economic sectors. In this instance, the change is the development of the 2 sites, converting them from rural activities into residential extensions of Warkworth. The net direct change is then used to model total economic change, i.e. by how much must the local and non-local businesses respond to deliver the lift in goods and services demanded by the development of the sites. Total economic change or total economic impact includes all the upstream supply chain linkages across three main regions (Auckland, the Rest of the North Island and rest of New Zealand) across 48 economic sectors.

The total economic effects or impacts (direct plus flow-on effects) are presented in Gross Output, Value Added, Household Income and employment terms.

Key steps have been to:


- Translate developable land into likely future residential dwelling numbers
- Compiling information on the cost of infrastructure and residential development from both Waimanawa and its predecessors and outside sources such as QV Cost Builder (October 2021 data).
- Multiplying cost ratios by dwelling numbers by type and adding infrastructure costs to generate total build expenditure.
- Distribute expenditure over time to reflect a most likely development path.
- Deflate the expenditure to match the 2015/16 timeframe of the MRIO model
- For each development year, run the estimated expenditures through the Auckland MRIO to translate the direct expenditure to total impact at the regional, North Island and National levels.
- Analysis of the direct and total (direct, indirect and induced) impacts (in terms of Value Added, Household Incomes and employment), calculated through the EIA models.

The basic operation of these IO models is described in Appendix 2. The outputs of the EIA modelling are direct, indirect and induced impacts reported as Value Added sustained in the Auckland Regional economy as the development progresses, and the estimated average annual employment sustained. Impact results are expressed in \$2016 and employment terms (i.e. are not re-inflated to dollars of the day).

## 4.1.6 Limitations and Caveats

This assessment relies heavily on the financial estimates prepared by M.E and the wider project team . The estimates of CAPEX are projections of future costs to inform this EIA. They are broad order of magnitude estimates and should not be taken as a comprehensive financial summary of each proposed component of the development. The inputs to the modelling are focussed on the key components of costs that can be supported by external data.

The following outlines key limitations and caveats of this economic assessment.

- 
- CAPEX costs have been estimated by M.E and the wider project team and are likely to change during more detailed assessments and planning. So, this assessment is based on indicative costs. M.E has not reviewed or audited the input information provided (originally) to M.E from Endean Farms (initially) or have audited the QV Cost Builder estimates. However, the most recent QV Cost Builder estimates have been applied (October 2021) and updated to reflect 2022 costs (17% residential construction cost increase).
  - Changing any of the input costs, or the overall concept of the developments – such as the mix of dwelling typologies or areas will affect the results presented in this report.
  - There is always a degree of uncertainty associated with new projects, future conditions and the assumptions used. This report uses a 5-year time period and best estimates of expenditure timing (i.e. development staging, uptake and occupancy rates).
  - For the purpose of this report, a single model of expenditure has been developed - no sensitivity analysis around key assumptions has been applied at this time.
  - All expenditure is exclusive of GST and expressed in dollars of the day (\$2021) unless otherwise stated. The EIA does not inflate future costs. Prior to running through the model, the expenditure is deflated to \$2016 using the Statistics NZ Producers Price Index (PPI) for each of the 48 sectors.
  - Many (but not all) EIAs assess a 'lift' (above the baseline) of economic activity that would not arise without a specific intervention or investment. In such cases, the 'lift' resulting from the interventions would truly be 'net additional' to the economy once the counterfactual spending or growth was deducted. The EIA model developed for this report does not make the same assumption. This EIA assesses the economic footprint of proposed activity on the sites (including flow-on impacts arising from that net direct expenditure). While the approach has taken into account transfer effects (specifically the counterfactual impact or the spending under the do-nothing or status quo), the EIA does not consider transfer effects or additionality in a wider district sense – i.e. whether these same economic impacts could or would be achieved elsewhere, if not on this site in Warkworth as a result of investment by a similar developer.
  - This is a more complex issue. Key considerations include:
    - a. It may reasonably be suggested that, for example, the development (including co-located businesses) is responding to market demand. Therefore, if Waimanawa did not develop then other developers/businesses would take the same or similar opportunity in another location (or spread over multiple locations) in the area. This assumes that suitable alternative land was available (in terms of zoning scale, location and price) and such development was able to be approved and funded. Only if these conditions can be met elsewhere in the area at this time (i.e. a willing and experienced developer with a suitable site and available funding) would none of the economic impacts of the proposed development in this report be net additional to the (future) Auckland economy. The probability of this alternative outcome is estimated by M.E to be low.
    - b. There are however economic impacts generated by construction and the operation of new businesses (as a component of expected growth). M.E has focussed on the spending associated with these activities. The key caveat being that the economic impacts are



assumed to be similar irrespective of where the equivalent activities occurred in the district (i.e. they are not specific to this site) because this report does not consider market demand/supply issues.

- c. The Subdivision results in a net increase in dwellings in Auckland. As above, these dwellings account for a portion of projected growth in dwellings and may not drive net additional dwelling growth. The supply of new dwellings broadly translates to an increase in resident households. The resident households are expected to originate from elsewhere in the region (i.e. a transfer from one dwelling in the district to another) or from outside the region or be newly formed households. While M.E's approach to the EIA is limited to the economic footprint of the development, to be conservative, any spending by these future resident households (excluding those that moved from within the district) on goods and services has been excluded from the regional EIA. However, the amount of retail and services expenditure they represent will have a material impact on the Warkworth township. This has been quantified below.
- It is possible that development of this part of Warkworth South may cater for demand that would not be catered for elsewhere in Warkworth. If that were the case, the economic benefits would be greater than predicted in this report and would include spend by net additional households.

#### **4.1.7 Economic Effects of Construction**

Construction spend estimated in the current economy of \$1.31bn, translates to \$949m in \$2016 – the dollars used in the model. This represents the shock to the Auckland economy (spread over 3 years). In total, this level of spending sustains direct value add of approximately \$244m (in \$2016). Once the flow on effects are included as supporting businesses increase their output to meet the needs of the development, value added increases to \$591m over the development timeframe.

Households Incomes – the portion of value added that potentially is felt most strongly in the local community given it is made up from wages and salaries and the portion of Operating Surplus that businesses owners retain as earnings, rises from \$206m in direct terms to \$427m once the flow on effects are included (Figure 4.6).



Figure 4.6: Summary of Construction Economic Impacts on the Auckland Economy, \$2016m

Category of Impact	\$2016m	
	Total	
Spend	\$	1,317.9
Shock in 2016 terms	\$	948.7
Direct Value Added	\$	244.0
Direct + Indirect Value Added	\$	572.1
Direct, Indirect + Induced Value Added	\$	590.5
Household Incomes (HI) Direct	\$	205.5
Direct + Indirect HI	\$	415.9
Direct, Indirect + Induced HI	\$	427.0
Employment Direct (MECs)		3,960
Direct + Indirect Employment (MECs)		8,567
Direct, Indirect + Induced Employment		9,446

In terms of employment sustained, the development of the sites as modelled will sustain the employment equivalent to 3,960 MEC's working for one year (synonymous with FTE's) – but spread over the construction timeline. However, as the construction sector is a key driver of (mostly) industrial and transport activity, the indirect effects (those associated with the manufacture of the intermediate goods and raw materials used in the construction sector) more than double the direct effects – to almost 8,567 MECs (for one year equivalent). The induced effects – those associated with workers in direct or indirect effect industries spending wages and salaries sustain a further 880 MECs.

In addition to the above values, the development generates other flow on effects in the rest of New Zealand as the construction sector in Auckland buys raw materials and intermediate goods from across the country. This adds a further \$95m in total value added (across the three years) and sustains the employment equivalent to 1,180 MECs for a year.

Construction effects are important to understand as they represent a significant short term jump in economic activity brought about by the development. However, the presence of a significant number of new households located on the southern side of Warkworth has a longer term impact on the local economy.

## 4.2 Longer term Economic Effects

The presence of an additional 1,606 households (once the two sides are fully developed, including apartments) generates a wide range of additional economic effects across the community. These are likely to be felt most strongly within Warkworth itself, but also the surrounding areas. Resident households purchase retail goods and services from the established centres while new residents will set up new business locally and be employed at existing businesses who are likely to be expanding in response to the increased demands they are facing.

Warkworth is one of the two rural Town Centres that are earmarked to accommodate significant growth over the next 2-3 decades. The influx of households and workers will require new businesses and provide



support for services that may currently be marginal. This can lead to an improved level of amenity for existing residents as local access is likely to improve.

In this section, we quantify ongoing retail demand and likely working age population with a view to identifying the amount of floorspace and business land the development will be able to sustain both locally (within a local centre) and more widely within Warkworth itself.

### 4.2.1 Household Demand

Household numbers have been applied to Market Economics Retail demand models to translate growth into retail demand (\$m). This is subsequently translated into Gross Floor Area (GFA) and business land requirements. As described above, households that will reside in the Warkworth South development will support retail stores and employment both locally and within other centres tied to travel patterns (journey to work or school). In Figure 4.7 below, retail floorspace by centre type sustained by residential development on the Waimanawa land is presented. This is based on regional averages (sqm GFA/household), so may not be exactly the position for households in the Warkworth South environment. For example, Warkworth township fulfils many of the Metropolitan Centre roles for Warkworth residents as the Metropolitan Centres do within Urban Auckland. Therefore, it is likely that a portion of floorspace sustained by Warkworth South households in Metropolitan Centres will be met by Warkworth Town Centre – rather than households travelling south to shop at Albany Metropolitan Centre or in the Central City.

**Figure 4.7: Sustainable GFA by Centre Type, Waimanawa Residential Development**

Centre Type	Food & Liquor	Comparison Retail	Hospitality	Core Retail and Hospitality	Household Services	Professional Services	Total (incl. other)
CBD	74	268	252	594	19	663	1,337
CBD Fringe	44	109	92	245	14	91	385
Metropolitan	404	1,343	240	1,987	66	311	2,763
Town	627	767	263	1,657	58	298	2,257
Local	568	211	287	1,066	43	209	1,585
Neighbourhood	134	108	97	339	25	136	594
All Other	594	420	273	1,287	36	369	2,287
<b>Total</b>	<b>2,445</b>	<b>3,226</b>	<b>1,504</b>	<b>7,175</b>	<b>262</b>	<b>2,076</b>	<b>11,209</b>

Once fully developed, the residential households in the development areas will sustain 11,210 sqm of Retail and service GFA across all centre types. Of this, some 7,175sqm GFA is Core Retail and Hospitality and the balance household and professional services aimed at households.

The largest amount of floorspace is supported at the Metropolitan Centre level but a portion of that is likely to be met at Warkworth Town Centre (see caveat discussed above). At the local and neighbourhood level, the 1,606 dwellings are expected to sustain around 1,406sqm GFA of Core Retail and Hospitality space. In addition to this, they would support a further 410 sqm of Household and professional services within the business zoned land proposed (office based). This level of demand is adequately met at the proposed Local Centre.





Assuming all the Town Centre demand and between half and all of the Metropolitan Centre demand is focused on Warkworth, then the development will sustain between 3,640sqm and 5,020sqm GFA in Warkworth Town Centre.

## 4.2.2 Wider Warkworth South Demand

The Warkworth Structure Plan identifies total household growth in the area will be around 4,100 dwellings – once fully developed. The Structure Plan also identifies only 1 Local Centre in the south (the one on the Western site land adjacent to State Highway 1). This means that it will be important to ensure that the land zoned for the Local Centre is sufficient to meet the local and neighbourhood needs of the entire Warkworth South area – rather than simply the Waimanawa development. Figure 4.8, below presents total demand for retail and service sector floorspace sustained by Warkworth South growth.

**Figure 4.8: Sustainable GFA by Centre Type, Warkworth South SP Residential Development**

Centre Type	Food & Liquor	Comparison Retail	Hospitality	Core Retail and Hospitality	Household Services	Professional Services	Total (incl. other)
CBD	188	685	644	1,517	49	1,692	3,413
CBD Fringe	113	278	234	625	36	232	984
Metropolitan	1,032	3,428	612	5,072	169	794	7,054
Town	1,602	1,958	671	4,231	149	760	5,762
Local	1,451	538	733	2,722	111	533	4,047
Neighbourhood	341	277	248	866	64	347	1,517
All Other	1,516	1,073	696	3,285	92	943	5,838
<b>Total</b>	<b>6,243</b>	<b>8,236</b>	<b>3,839</b>	<b>18,318</b>	<b>669</b>	<b>5,300</b>	<b>28,615</b>

In total, Warkworth South development will sustain 28,620sqm GFA in retail and service sector categories across all centre types. Of this, some 18,320sqm GFA is in Core Retail and Hospitality sectors and a further 5,670sqm in service sector GFA.

Demand likely to be focused on the Local and Neighbourhood centres amount to 5,560sqm GFA – of which 3,590sqm will be retail and hospitality and the balance household and professional services. I note that this is the combined Local and Neighbourhood Centre demand for Warkworth South – and it is unclear if another neighbourhood centre will be developed outside of the Waimanawa land. This could mean that the neighbourhood centre demand would be split between 2 centres, reducing demand at the proposed local centre by approximately 750sqm GFA.

Warkworth Town Centre is relatively constrained with respect to providing additional retail opportunities within the current retail area. There are a few expansion opportunities that would require careful negotiation and potentially rezoning (Bowling Club land and the land opposite it on Mill Lane). There are expansion opportunities for retail on Neville St that would require redevelopment. However, there are no easy options to cater for growth. This may mean that the portion of metropolitan expenditure that would normally be focused on the Warkworth Town centre will be focused elsewhere (closer to Auckland, or be split should a Large Format Retail centre develop on the outskirts of Warkworth that attracts a high proportion of spend).



However, a more economically efficient outcome in this situation would be for the Local Centre proposed at Waimanawa take on a higher order role and meet a wider range of Town Centre and potentially higher needs. Currently 3ha is allocated for Local Centre Business uses. This has the potential to provide for more than the local and neighbourhood needs of the Waimanawa development.

### 4.2.3 Local Centre Land

Translating Centre GFA estimates to business land requirements depends on likely plan provisions. In an average sense, multiplying sustainable GFA by a factor of 2 provides estimates of the site area the centre requires. Added to this are other factors such as dedicated parking areas, streetscape allowances plus and land required for activities that are not captured in the demand assessment. This will potentially include making allowance for;

- Commercial Office space: This is not required to meet the needs of residents in the Warkworth South structure Plan area, rather as a business location for a range of businesses
- Transport Infrastructure: There is likely to be a collocated Public Transport Interchange of some description.
- Other Retail: Given the proximity of the Warkworth South Local Centre to the rural hinterland, there may be demand for rural demand focused retail to co-locate with retail aimed at the residential development. An example of this is the Farmlands Store located in Albany Village. This outlet is targeted at households in the rural hinterland as it offers stock feed, farm tools, clothing and equipment not aimed at urban households. It's location on the urban edge but within a retail area means it can benefit from co-location with other retail and still meet needs from outside the immediate catchment.

Land directly required to accommodate 5,560sqm GFA at WW South Local Centre is 1.1ha. Taking the above into consideration (Some Commercial Office, Transport infrastructure and other retail), land requirements increase to between 1.67ha and 1.95 ha (assuming between 50% and 75% extra could be sustained). Note that this assumes the Local Centre on the Waimanawa land meets the Local Centre needs for the entire Warkworth South area. Given 3.4ha of land is proposed to be zoned for business purposes, there is scope for this centre to capture a higher proportion of spend.

This may be important given Warkworth as a centre is relatively constrained. The centre is located in the most appropriate position to take advantage of passing trade on SH1 and to meet the wider needs of Warkworth South. It provides excellent access to the Waimanawa residents and is at the junction of strong transport linkages to the rest of Warkworth.



## 4.3 Rural Economy Effects

The final component of the economic assessment is to quantify or at least identify the type and nature of impacts and effects on the existing rural economy as a result of the proposed development proceeding ahead of schedule.

Currently the development site is predominantly pastoral farmland. A small amount is what appears to be stock finishing or grazing units and the balance, small holding rural lifestyle lots. The land is classified as LUC 3w3 which means it does not qualify as Highly Productive soil. The land is in the main flat in the western site, so could potentially be used for dairy production, although the size of the farm is small (65ha in terms of the contiguous flat land) so is not likely to be financially viable given that the average production size for a commercial dairy farm is 153ha.

On the Eastern site on the eastern side of SH1, there does not appear to be productive activity currently. The land is classified as LUC 3e3, which does not contain any special high-quality soils of significance.

### 4.3.1 Potential Rural Land Use

Potentially the land could be used for a number of productive rural activities, although they may not generate significant productive income for their owners – primarily because of their small size. While the Waimanawa Valley land is flat and would lend itself to dairy production, at 65ha (the area to be developed for residential) it is too small for that. The Waimanawa Hills land is smaller still and has more variable topography. Both areas could be used for livestock grazing, but at between \$171 and \$300/ha in Net Profit after Tax (NPAT) returns, this is insufficient to sustain a farming family (between \$19,300 and \$33,800 annually). Bringing forward the development by 5 years would mean a total loss of between \$100,000 and \$170,000, a minor loss overall to the economy.

The flat land could potentially be used for horticultural purposes. However, even at the highest NPAT of \$530/ha for small seed, irrigated crop, the 65ha Western site land would only return \$34,500 annually or \$172,300 over a 5-year period. In reality, there likely be a lower return as the land is unirrigated. The Eastern site land is not suitable for most horticulture crops as the topography is too variable. Industry experts also suggest that horticulture ventures on farms less than 50ha are of low viability economically, further ruling out the Eastern site land.



## 5 Conclusions

We have assessed the combined effects of the proposed Private Plan Change at Warkworth South. Our analysis suggests that moving the timeline of development forward from 2028-2032 to 2023 – 2025 would have positive impacts on residential supply and demand and tangible economic effects.

Population and households within Warkworth and surrounds have been on an upward trend over the past 20 years. In the last 10 especially, household growth has increased, consistently above the general growth rate for all of Auckland. This trend implies that Warkworth has become an increasingly desirable place to live over time. Based on Auckland Council modelling, this trend is set to continue into the future. Past household growth has proceeded organically and ad hoc in the past, without large-scale developments to drive capacity. Enabling timely comprehensive supply such as that proposed within the PPC is of net benefit.

In terms of residential supply, the proposed development fits within the scale and location of dwellings as indicated within the Warkworth Structure Plan. The provision of 1,606 dwellings across a range of THAB, Mixed Housing Urban Single House and Large lot dwellings is consistent with the structure plan. Bringing the timing forward from 2028-2032 to 2023-2025 would add supply to an already in-demand market, helping to maintain affordability in the increasingly unaffordable Auckland market. It also ensures that zoning and development are maintained broadly in-line with structure plan goals.

Enabling a 3ha local centre early has benefits for the local community in terms of an increased range of goods and services, while facilitating construction of recreational parks and other community infrastructure provides valuable amenity space for a large catchment years ahead of time.

# Appendices

## Appendix 1: QV Cost Builder Residential Build Ratios

Element/Element Group Houses	House, One Storey: 90-130m2, Standard quality		House, One Storey: 90-130m2, Rental or investment typ		House, One Storey: 100-250m2, Medium quality		House, Two Storey: 150-300m2, Medium quality		House, Two Storey: 250-350m2, High quality		House, Large: 200-600m2, Executive quality		Multiple units, low rise: 2/3 Storey Townhouse		Multiple units, low rise: Small Apartment, 50-100m2	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
Site Preparation	\$ 32.70	1.3%	\$ 28.31	1.1%	\$ 32.18	1.1%	\$ 24.98	0.7%	\$ 27.38	0.6%	\$ 53.35	0.8%	\$ 62.24	1.9%	\$ 14.39	0.5%
Substructure	\$ 259.10	10.3%	\$ 229.09	8.9%	\$ 280.80	9.6%	\$ 267.64	7.5%	\$ 292.03	6.5%	\$ 560.20	8.4%	\$ 262.08	8.0%	\$ 270.56	9.4%
Frame	\$ 118.23	4.7%	\$ 118.40	4.6%	\$ 111.15	3.8%	\$ 96.35	2.7%	\$ 109.51	2.4%	\$ 293.44	4.4%	\$ 45.86	1.4%	\$ 37.44	1.3%
Structural Walls	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%
Upper Floors	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ 124.90	3.5%	\$ 95.82	2.1%	\$ -	0.0%	\$ 153.97	4.7%	\$ 66.22	2.3%
Structure	\$ 410.03	16.3%	\$ 375.80	14.6%	\$ 424.13	14.5%	\$ 513.86	14.4%	\$ 524.75	11.6%	\$ 906.98	13.6%	\$ 524.16	16.0%	\$ 388.62	13.5%
Roof	\$ 191.18	7.6%	\$ 231.66	9.0%	\$ 207.68	7.1%	\$ 214.11	6.0%	\$ 305.72	6.8%	\$ 466.83	7.0%	\$ 150.70	4.6%	\$ 100.74	3.5%
External Walls	\$ 256.58	10.2%	\$ 319.18	12.4%	\$ 307.13	10.5%	\$ 442.49	12.4%	\$ 396.98	8.8%	\$ 386.80	5.8%	\$ 144.14	4.4%	\$ 253.31	8.8%
Windows & Doors	\$ 254.07	10.1%	\$ 218.79	8.5%	\$ 245.70	8.4%	\$ 278.34	7.8%	\$ 337.66	7.5%	\$ 600.21	9.0%	\$ 173.63	5.3%	\$ 169.83	5.9%
External Fabric	\$ 701.82	27.9%	\$ 769.63	29.9%	\$ 760.50	26.0%	\$ 934.95	26.2%	\$ 1,040.36	23.0%	\$ 1,453.84	21.8%	\$ 468.47	14.3%	\$ 523.87	18.2%
Stairs	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ 64.23	1.8%	\$ 45.63	1.0%	\$ -	0.0%	\$ 39.31	1.2%	\$ 83.48	2.9%
Internal Walls, Partitions	\$ 60.37	2.4%	\$ 64.35	2.5%	\$ 55.58	1.9%	\$ 71.37	2.0%	\$ 63.88	1.4%	\$ 120.04	1.8%	\$ 216.22	6.6%	\$ 83.48	2.9%
Internal Doors	\$ 188.66	7.5%	\$ 182.75	7.1%	\$ 178.43	6.1%	\$ 181.99	5.1%	\$ 159.71	3.5%	\$ 213.41	3.2%	\$ 160.52	4.9%	\$ 135.25	4.7%
Floor Finishes	\$ 72.95	2.9%	\$ 69.50	2.7%	\$ 99.45	3.4%	\$ 157.01	4.4%	\$ 269.22	5.9%	\$ 266.76	4.0%	\$ 144.14	4.4%	\$ 143.91	5.0%
Wall Finishes	\$ 213.82	8.5%	\$ 223.94	8.7%	\$ 289.58	9.9%	\$ 324.68	9.1%	\$ 360.48	8.0%	\$ 553.53	8.3%	\$ 396.40	12.1%	\$ 264.77	9.2%
Ceiling Finishes	\$ 166.02	6.6%	\$ 164.74	6.4%	\$ 157.95	5.4%	\$ 217.68	6.1%	\$ 205.34	4.5%	\$ 353.46	5.3%	\$ 157.25	4.8%	\$ 109.40	3.8%
Fittings & Fixtures	\$ 155.96	6.2%	\$ 141.57	5.5%	\$ 283.73	9.7%	\$ 235.52	6.6%	\$ 200.77	4.4%	\$ 373.46	5.6%	\$ 258.80	7.9%	\$ 325.26	11.3%
Internal Finishing	\$ 857.79	34.1%	\$ 846.85	32.9%	\$ 1,064.70	36.4%	\$ 1,252.49	35.1%	\$ 1,305.02	28.8%	\$ 1,880.66	28.2%	\$ 1,372.64	41.9%	\$ 1,145.55	39.8%
Sanitary Plumbing	\$ 108.17	4.3%	\$ 126.13	4.9%	\$ 146.25	5.0%	\$ 196.27	5.5%	\$ 123.20	2.7%	\$ 260.09	3.9%	\$ 153.97	4.7%	\$ 143.91	5.0%
Mechanical Services	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ 301.16	6.7%	\$ 613.55	9.2%	\$ 55.69	1.7%	\$ 69.09	2.4%
Fire Services	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ 351.35	7.8%	\$ 293.44	4.4%	\$ 52.42	1.6%	\$ 66.22	2.3%
Electrical Services	\$ 80.50	3.2%	\$ 74.65	2.9%	\$ 119.93	4.1%	\$ 157.01	4.4%	\$ 264.65	5.8%	\$ 153.39	2.3%	\$ 157.25	4.8%	\$ 103.60	3.6%
Lifts & Escalators	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ 46.04	1.6%
Special Services	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ 20.01	0.3%	\$ -	0.0%	\$ -	0.0%
Drainage	\$ 25.16	1.0%	\$ 41.18	1.6%	\$ 23.40	0.8%	\$ 42.82	1.2%	\$ 54.76	1.2%	\$ 113.37	1.7%	\$ 26.21	0.8%	\$ 11.52	0.4%
Services	\$ 213.82	8.5%	\$ 241.96	9.4%	\$ 289.58	9.9%	\$ 396.10	11.1%	\$ 1,095.12	24.2%	\$ 1,453.84	21.8%	\$ 445.54	13.6%	\$ 440.39	15.3%
External Works	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%
Sundries	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ 93.37	1.4%	\$ 32.76	1.0%	\$ -	0.0%
External Works & Sundries	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ 93.37	1.4%	\$ 32.76	1.0%	\$ -	0.0%
Preliminaries	\$ 176.09	7.0%	\$ 180.18	7.0%	\$ 204.75	7.0%	\$ 249.80	7.0%	\$ 277.29	6.1%	\$ 466.83	7.0%	\$ 229.32	7.0%	\$ 201.47	7.0%
Margin	\$ 118.23	4.7%	\$ 120.98	4.7%	\$ 137.48	4.7%	\$ 167.72	4.7%	\$ 214.46	4.7%	\$ 313.44	4.7%	\$ 153.27	4.7%	\$ 135.25	4.7%
Contingency	\$ 37.73	1.5%	\$ 38.61	1.5%	\$ 43.88	1.5%	\$ 53.53	1.5%	\$ 68.45	1.5%	\$ 100.04	1.5%	\$ 49.14	1.5%	\$ 43.17	1.5%
Prelims, Contingency	\$ 332.05	13.2%	\$ 339.77	13.2%	\$ 386.10	13.2%	\$ 471.04	13.2%	\$ 560.20	12.4%	\$ 880.31	13.2%	\$ 431.73	13.2%	\$ 379.90	13.2%
<b>Total</b>	<b>\$ 2,515.50</b>	<b>100.0%</b>	<b>\$ 2,574.00</b>	<b>100.0%</b>	<b>\$ 2,925.00</b>	<b>100.0%</b>	<b>\$ 3,568.44</b>	<b>100.0%</b>	<b>\$ 4,525.44</b>	<b>100.0%</b>	<b>\$ 6,669.00</b>	<b>100.0%</b>	<b>\$ 3,275.30</b>	<b>100.0%</b>	<b>\$ 2,878.32</b>	<b>100.0%</b>
<i>Auckland range</i>	<i>2,340</i>	<i>2,691</i>	<i>2,399</i>	<i>2,750</i>	<i>2,750</i>	<i>3,101</i>	<i>3,393</i>	<i>3,744</i>	<i>3,978</i>	<i>5,148</i>	<i>6,084</i>	<i>7,254</i>	<i>3,101</i>	<i>3,452</i>	<i>2,703</i>	<i>3,054</i>

